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Panasonic®

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■ VNMIX1 2023-IXG

Panasonic

General Catalogue 2024 - 2025

Panasonic

GENERAL CATALOGUE

Electrical
Construction
Materials

2024–2025

Edition for Vietnam market

TO THE NEXT STAGE

Panasonic has been presented in the Vietnam market over many years. During all this time, our customers have come to appreciate Panasonic and our extensive range of products from Home Appliances to Wiring Devices. Playing a key role in Panasonic company history since 1918, Panasonic has established a reputation for safety, durability and comfort around the world.

As Panasonic continues to develop new product technologies along with highly advanced manufacturing abilities, our concepts regarding safety and comfort continue to evolve. Panasonic's uncompromising commitment makes it possible to offer our Vietnam customers a higher level of satisfaction with any of our diverse product categories.

CONTENTS

P.15 WIRING DEVICE Moderva

P.27 WIRING DEVICE MINERVA

P.35 WIRING DEVICE Halumie

P.49 WIRING DEVICE Gen-X

P.53 WIRING DEVICE WIDE Refina A-TYPE

P.59 WIRING DEVICE WIDE Refina BS-TYPE

P.63 WIRING DEVICE WIDE

P.69 WIRING DEVICE FULL-COLOR

P.74 WIRING DEVICE INDUSTRIAL SOCKET

P.88 WIRING DEVICE EXTENSION CORD WITH SAFETY SHUTTER & BREAKER

P.90 WIRING DEVICE FLOOR OUTLET SERIES

P.97 PASSIVE INFRARED SENSOR

P.102 SMOKE DETECTOR

P.103 FIRE ALARM SYSTEM

P.105 AUTOMATIC TIME SWITCH

P.109 DISTRIBUTION BOX

P.115 ELB BREAKER

P.117 MCB/MCB 63AF (10kA)/ RCBO/RCCB/ SPD

P.124 CONTACTOR

P.125 MCCB/GD BREAKERS

P.149 WHITE CONDUIT

P.155 FULL-2WAY REMOTE LIGHTING CONTROL SYSTEM

P.157 KNX

P.163 FACTORY LINE SYSTEMS

COMPANY PROFILE

Since the Panasonic Corporation was founded in 1918, it has based corporate activities on a Basic Management Objective. Through its business activities, Panasonic strives to help society progress and develop so as to improve the well-being of people throughout the world. By focusing on people, we intend to enrich their lifestyles as we move forward together with our customers.

Panasonic Electric Works Company handles diverse businesses. The Electrical Construction Materials & Living Energy Business supplies everything from wiring devices and distribution switchboards to photovoltaic modules, storage battery systems and energy management devices. The Lighting Business innovates illumination in an energy-efficient manner with LED lighting bulbs, fixtures and other devices.

We are helping to create an environment in which people around the world can live in comfort while minimizing environmental harm. Harmoniously combining ecology and comfort is our vision. We seek to achieve this by creating solutions in residential and non-residential (buildings and public facilities) fields, leveraging Panasonic Group's extensive product lines. As we address issues our worldwide customers face with Panasonic solutions, we contribute to realizing a sustainable society.

PANASONIC DEDICATED TO ECO-CONSCIOUS MANUFACTURING

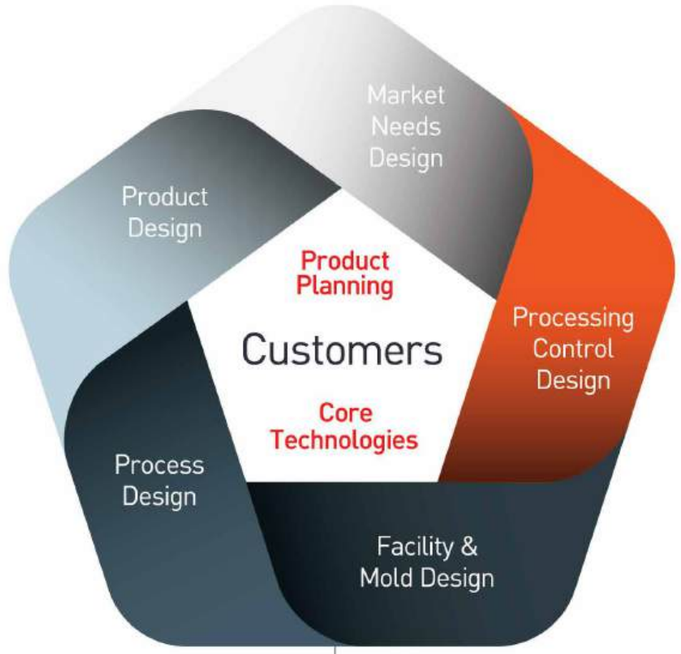
Manufacturing eco-conscious products that do not harm humans and the environment have always been a priority for Panasonic.

Conforming to the RoHS directive originating from the EU, Panasonic restricts the usage of hazardous substances that might adversely affect the environment and humans such as lead, cadmium, chromium and mercury, etc. Panasonic contributes to creating a greener environment with lead-free welding, cadmium-free contacts and hexavalent chromium-free plating.

Panasonic Electric Works Company (Osaka, Japan)

PANASONIC'S FIVE ELEMENTS DESIGN CONCEPT

The integrated system that our product development process is based on makes it possible to produce consistently high-quality products. It begins with assessing market needs accurately goes on to develop advanced basic technologies and extends to product planning, design and production, all the way to sales and after-sales activities.



Product Technologies

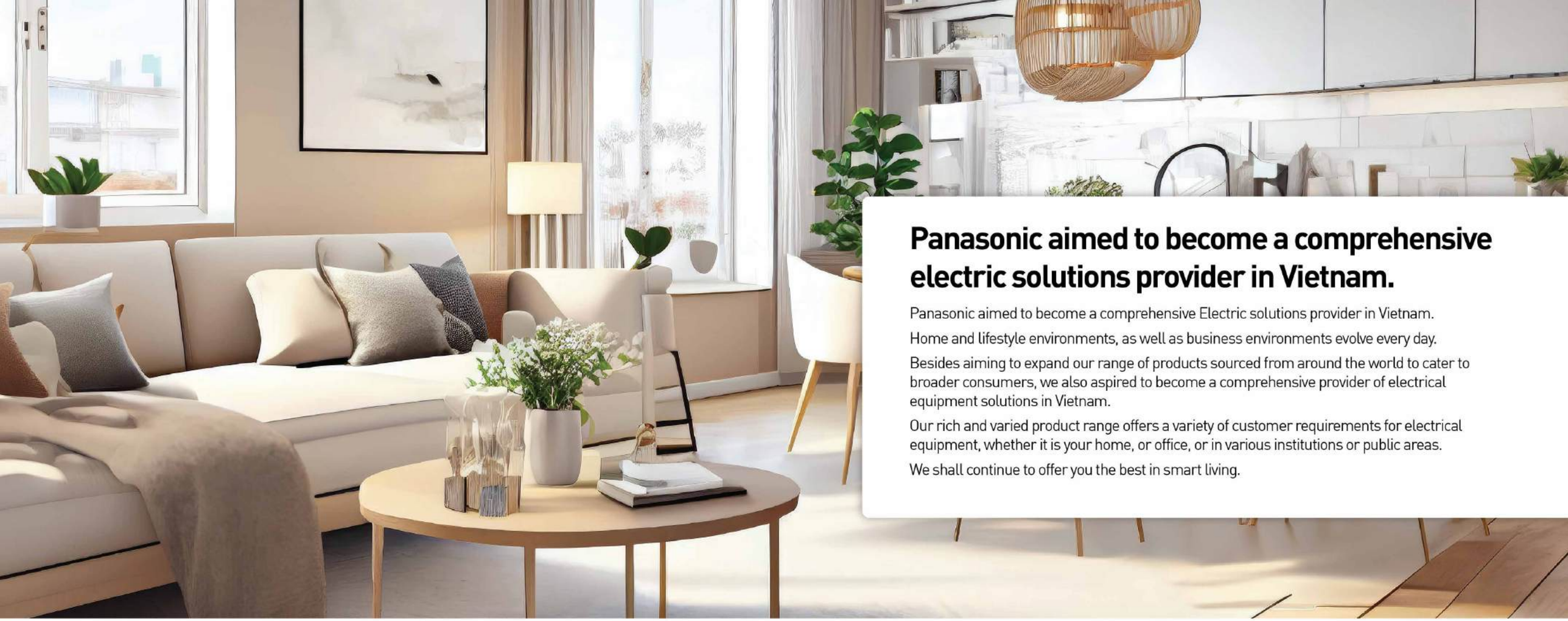
- Sensing technology
- Mechanism technology
- Sound technology
- Information and Telecommunication technology
- Imaging technology
- Wireless technology
- Semiconductor technology

Evaluation Technologies

- Durability evaluation technology
- User interface evaluation technology
- Offending evaluation technology
- Substance analysis technology

Manufacturing Technologies

- Component processing technology
- Assembly technology
- Environmental compatibility technology
- Process development technology
- Measurement technology



Panasonic aimed to become a comprehensive electric solutions provider in Vietnam.

Panasonic aimed to become a comprehensive Electric solutions provider in Vietnam.

Home and lifestyle environments, as well as business environments evolve every day.

Besides aiming to expand our range of products sourced from around the world to cater to broader consumers, we also aspired to become a comprehensive provider of electrical equipment solutions in Vietnam.

Our rich and varied product range offers a variety of customer requirements for electrical equipment, whether it is your home, or office, or in various institutions or public areas.

We shall continue to offer you the best in smart living.

HOME

- MINERVA
- HALUMIE
- ELB BREAKERS
- MCB/RCBO/SPD
- DISTRIBUTION BOX
- EXTENSION CORD

CONDOMINIUM

- MODERVA
- MINERVA
- GEN-X
- MCB/RCBO/RCCB/SPD
- DISTRIBUTION BOX
- FLOOR OUTLET
- SMOKE DETECTOR
- FIRE ALARM SYSTEM
- KNX

OFFICE

- MODERVA.
- HALUMIE.
- WIDE.
- MCB/RCBO/RCCB/SPD
- DISTRIBUTION BOX
- FLOOR OUTLET
- SMOKE DETECTOR
- FIRE ALARM SYSTEM
- EXTENSION CORD
- KNX

FACTORY

- HALUMIE
- WIDE
- INDUSTRIAL SOCKET
- FLOOR OUTLET
- PIR SENSOR
- TIMESWITCH
- MCB/RCCB/RCBO
- MCCB
- FACTORY LINE
- DISTRIBUTION BOX

SHOPPING CENTER

- MODERVA
- HALUMIE
- TWIST LOCK
- FLOOR OUTLET
- AUTOMATIC TIME SWITCH
- MCB/RCCB/RCBO
- MCCB
- DISTRIBUTION BOX

WORLDWIDE STANDARDS

Safety design conforming to IEC standards

Based on Internationally Accepted Standards

Manufactured based on the industrial norms for environmental conservation and quality assurance prescribed by ISO . We undertake the manufacture of products using processes with high quality and high safety which have cleared the IEC .

Examination and registration card.

ISO9001 ISO9001 ISO9001

Panasonic MCB BD-63R and RCBO BDE-63R are tested by Vietnam Quality Asurance and Testing Center 3 (Quatest 3), in comply with IEC60898-1 (BD-63R), IEC61009-1 (BDE-63R).

Applying advanced technologies that truly make life better, we live by an unparalleled commitment to product quality. Our approach to product development originates in the DNA of Japanese craftsmanship. Panasonic is building on the Japanese tradition of uncompromising quality control worldwide, developing and manufacturing fine products and delivering them to customers everywhere.

ELECTRICAL CONSTRUCTION MATERIALS

EASY TO INSTALL

Panasonic — designing one-touch action products that are easy to install

The All One-Touch Action design concept to assemble devices to Cover Plate and Body Plate. Making the installation process easier than ever, saving both time and labour.

1-TOUCH Construction

■ Device & Body Plate

■ Body Plate & Cover Plate

Highly efficiency, because of improvements in the utility box.

Sufficient space has been provided to house the connectors, and this has resulted in a higher efficiency than ever before.

VARIOUS TERMINALS AVAILABLE

We offer a wide range of terminals to suit the electrical cabling requirements of every country

Panasonic has made available various terminals to suit the cabling environment anywhere in the world. With a structure which can be handled with more safety than ever before. Connections can be smoothly made, which leads to labor saving.

■ **Types of Electrical Cables and Terminals**

Terminal	ICON	APPLICABLE WIRE
Quick Connect Terminal	Quick & Safety Solid Wire only: 1.5-2.5mm²	Solid OK
	Quick & Safety II Solid Wire: 1.5-2.5mm² Stranded Wire: 1.5-2.5mm²	Solid Stranded OK

Terminal	ICON	APPLICABLE WIRE
Global Terminal	Solid Wire: 1.5-4.0mm² Stranded Wire: 1.5-4.0mm²	Solid Stranded OK
Pillar Terminal II	★ 1.5-4.0mm² Solid, Stranded and Flexible wire	Solid Stranded Flexible OK

Note: Please check wire or cable standard, size and recommended wiring method in the installation manual supplied with the product before installation.

SAFETY

Safety design conforming to IEC standards

Switches conform to the IEC60669-1 standard (16A 250V~).
Receptacles conform to the IEC60884-1 standard.
All devices guarantee protection against electric shock and are designed for endurance, service longevity and safety.

Switches

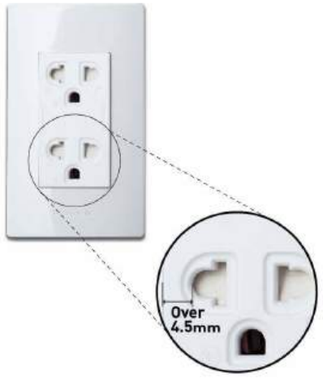
- Designed for long service life (compliant with IEC standard) with 40,000 testing operations at 16A 250V~ full rating.
- Heat-resistant, highly conductive material used for the terminal plate reduces temperature increases in the terminal section.

■ **Terminal Section Temperature Rise**

IEC60669-1 Standard value		Conditions
Initial	45K max.	20A current
Use as 40,000 testing operations		16A current

Receptacles

- Wide Receptacles secures insulation distance between contacts and external metal parts improving safety. (Compliant with IEC standard which requires insulation distance over 4.5mm)
- Long-life design, capable of 10,000 strokes at 16A 250V~ full rating.
- Heat-resistant, highly conductive material is used for the blade receptacles and terminal point to reduce temperature increase.



■ **Terminal Section Temperature Rise**

IEC60884-1 Standard value		Conditions
Initial	45K max.	20A current
After 10,000 Strokes		16A current

■ **Withdrawal Forces**

IEC60884-1 Standard value		
After 10,000 Strokes	3 blades	54N max.
	2 blades	50N max.
	Single blades	2N min.

■ **Insulation Resistance**

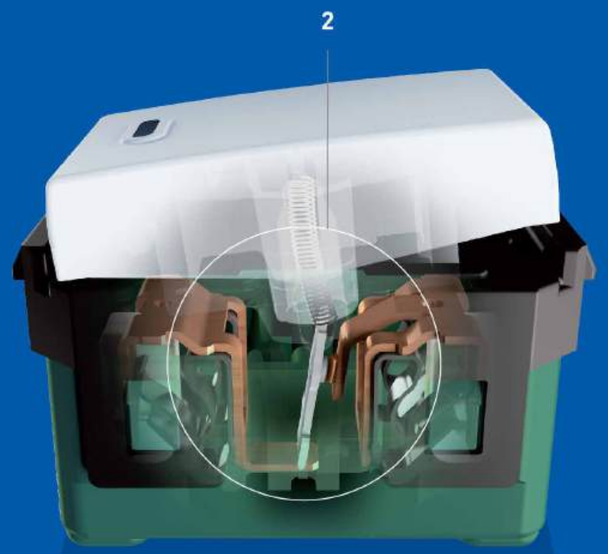
EC60884-1 Standard value	
Initial	5M Ω min.
After 10,000 Strokes	

■ **Electric Strength**

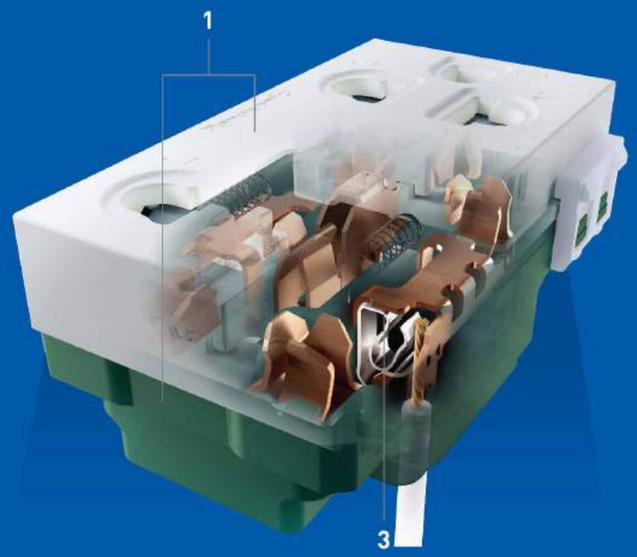
IEC60884-1 Standard value	
Initial	2,000V 1 min.
After 10,000 Strokes	1,500V 1 min.

SECURITY AND COMFORT

SWITCH



RECEPTACLE

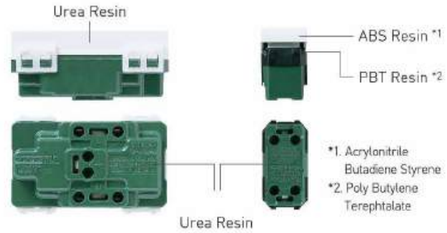


1

Flame-retardant Material
Urea Resin

Utilizing urea resin improves flame resistance and outstanding anti-tracking prevents electric shocks.

Completely Insulated Construction



■ Protection Against Electric Shock

Enclosure Material Characteristics (Reference)

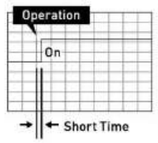
	Urea	PBT	Polycarbonate
Tracking Performance	**Excellent**	Good	Poor
Heat Deformation	**Good**	Good	Fair
Self-Extinguishment	**Good**	Good	Good

2

Durable & Smooth Operations
Direct Driving Mechanism

Panasonic's proprietary method helps stabilizing the pressure applied to the contacts to ensure low heat and minimalize the arc energy.
This process reduces the risk of contact fuse and provides longer lasting resistance.

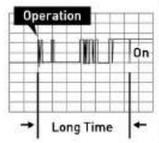
■ Direct Driving Mechanism



Since the bound time of the contact is short when it is switched "ON", low arc energy is produced.

The contact does not fuse easily, and therefore its consumption is low.

■ Seesaw Type of Switching System



Since the bound time of the contact is long, a considerable amount of arc energy is produced.

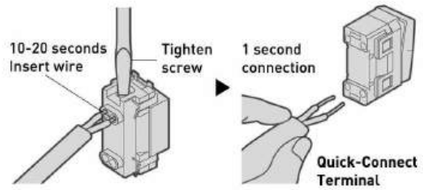
The contact fuses easily, creating high consumption.

3

Quick & Secure Connect
Quick-Connect Terminal

These terminals improve site construction quality since fewer tightening screws are required, simplifying connections.

Reduces the execution time considerably



■ Tensile strength after connection

IEC60669-1 IEC60884-1 Standard Value	FULL-COLOR WIDE SERIES / Halumie	
IEC Standard	Wire	Strength
30N min.	1.5mm² 4.0mm²	30N min. or more

PRODUCT POSITIONING

Series of wiring devices

Whether living room, office, public space or any other facility, Panasonic enhances its appearance. A wide range of switch and receptacle product series, each with its distinctive designs, color variations and operational ease is offered to ideally match installation requirements.

Moderva NEW

A modern and lean design to set the foundation and support architectural space to reach out expected concept.

MINERVA

The new Luxury Square Type
Wiring Device series from Panasonic

Halumie NEW

New slim designs to harmonize with any living space

Gen-X

Exclusive switch series with ultrathin panel and refined appearance adding elegance to your interiors

Refina FULL COLOR WIDE SERIES

Wide color range suits modern interiors

FULL COLOR WIDE SERIES

The beauty of simplicity

FULL-COLOR SERIES

The standard of excellence for any installation

Moderva NEW

Snow White | Metallic Pearl Gold | Metallic Pearl Gray

MODERN MATCH FOR ALL ARCHITECHTURES

With modern design, Moderva will fit all architechtures to build a variety of concepts.

Balance and asymmetric design

The 1:2 frame is thin at the top and thick at the bottom, which naturally conveys a sense of security and stability

Smart design that connects devices smoothly

The upper and lower frames that sense of connection in the horizontal direction, which enhances the sense of unity without interruption.

Fits a variety of architectural styles

With modern design and moderate in application, Moderva can be the perfect match for all architectures, from residential to hotel and resort projects.

Moderva NEW

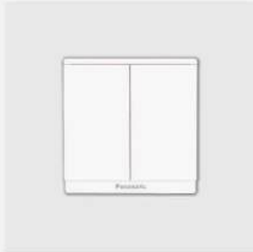
★ **Pillar Terminal**

Solid, Stranded
1. Switch 10AX:1.0mm²-2×2.5mm²
2. WMF535 □□□ -VN: 1.5mm²-4.0mm²
3. WMF984 □□□ -VN/WMF936 □□□ -VN:0.5mm²-2.5mm²
4. WMF132 □□□ -VN: 2.5mm²-4.0mm²

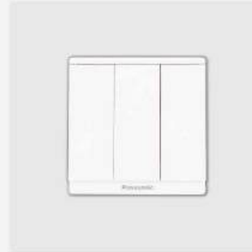
Solid, Stranded, Flexible
5. WMFV503307 □□□ :2.5mm²-6.0mm²

SWITCHES & ACCESSORIES

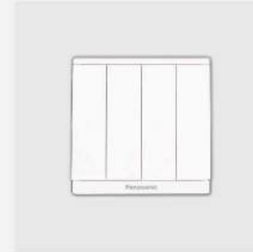
WMF501-VN ★
Switch"B", Single Pole
1-Gang 1-Device
Pillar Terminal 10AX 250V~



WMF503-VN ★
Switch"B", Single Pole
1-Gang 2-Devices
Pillar Terminal 10AX 250V~

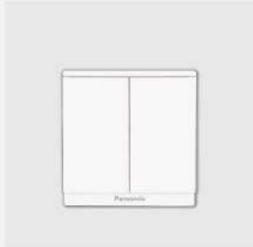


WMF505-VN ★
Switch"B", Single Pole
1-Gang 3-Devices
Pillar Terminal 10AX, 250V~

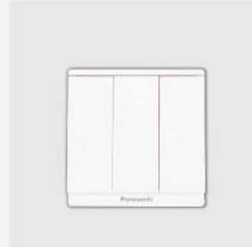


WMF507-VN ★
Switch"B", Single Pole
1-Gang 4-Devices
Pillar Terminal 10AX, 250V~

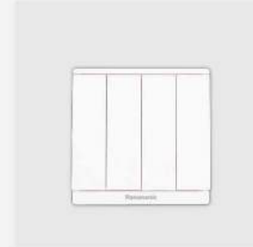
WMF502-VN ★
Switch"C", 3 Way
1-Gang 1-Device
Pillar Terminal 10AX, 250V~



WMF504-VN ★
Switch"C", 3 Way
1-Gang 2-Devices
Pillar Terminal 10AX, 250V~



WMF506-VN ★
Switch"C", 3 Way
1-Gang 3-Devices
Pillar Terminal 10AX, 250V~



WMF508-VN ★
Switch"C", 3 Way
1-Gang 4-Devices
Pillar Terminal 10AX, 250V~

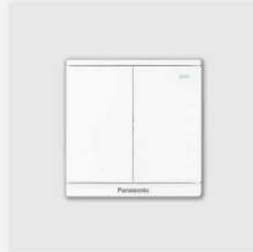
WMF511-1VN ★
Phosphorescent indicator Switch "B",
Single Pole, 1-Gang 1-Device,
Pillar Terminal 10AX 250V~

WMF513-1VN ★
Phosphorescent indicator Switch "B",
Single Pole, 1-Gang 2-Device,
Pillar Terminal 10AX 250V~

WMF515-1VN ★
Phosphorescent indicator Switch "B",
Single Pole, 1-Gang 3-Device,
Pillar Terminal 10AX 250V~

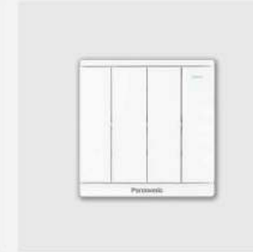
WMF517-1VN ★
Phosphorescent indicator Switch "B",
Single Pole, 1-Gang 4-Device,
Pillar Terminal 10AX 250V~

WMF512-1VN ★
Phosphorescent indicator Switch"C"
3 Way, 1-Gang 1-Device
Pillar Terminal
10AX 250V~



WMF514-1VN ★
Phosphorescent indicator Switch"C"
3 Way, 1-Gang 2-Devices
Pillar Terminal
10AX 250V~

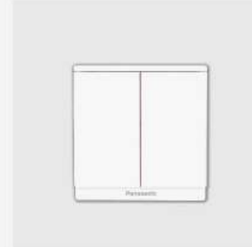
WMF516-1VN ★
Phosphorescent indicator Switch"C"
3 Way, 1-Gang 3-Devices
Pillar Terminal
10AX 250V~



WMF518-1VN ★
Phosphorescent indicator Switch"C"
3 Way,1-Gang 4-Devices
Pillar Terminal
10AX 250V~

WMFV503307 ★
Glow Switch "D", Double Pole
1-Gang 1-Device
Pillar Terminal
20A 250V~

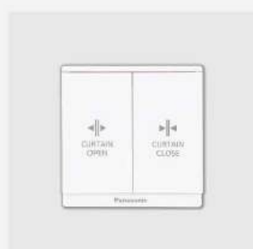
WMF594-VN ★
Switch"E", 4 Way
1-Gang 1-Device
Pillar Terminal
10AX 250V~



WMF596-VN ★
Switch"E", 4 Way
1-Gang 2-Devices
Pillar Terminal
10AX 250V~

WMF223-VN ★
Bell push button switch
1-Gang 1-Device
Pillar Terminal
10AX 250V~

WMF224-VN ★
Unlock push button switch
1-Gang 1-Device
Pillar Terminal
10AX 250V~



WMF533-VN ★
Curtain Switch
10AX 250V~

WMF535-VN ★
Electronic Key Card Switch
Pillar Terminal

Moderva NEW

★ **Pillar Terminal**

Solid, Stranded
1. Switch 10AX:1.0mm²-2×2.5mm²
2. WMF535 □□□ -VN: 1.5mm²-4.0mm²
3. WMF984 □□□ -VN/WMF936 □□□ -VN:0.5mm²-2.5mm²
4. WMF132 □□□ -VN: 2.5mm²-4.0mm²

Solid, Stranded, Flexible
5. WMFV503307 □□□: 2.5mm²-6.0mm²

SWITCHES & ACCESSORIES

WMF984-VN ★
Hotel Use Switch for
Indication for "Don't Disturb,
Make UP Room, Please wait"
10AX 250V~

WMF936-VN ★
Hotel Use Bell Switch
with Indication for Don't Disturb,
Make Up Room, Please Wait
3A 250V~

WMF132-VN ★
Shaver Receptacle
Input: 220~230V
Output: 230V/115V 20VA

WMF301-VN
DIN Type Television Terminal

WMF311-VN
High-Shield Television Terminal (CATV)

WMF403-VN
Telephone Modular Jack

WMF421-VN
CAT5E Data Modular Jack

WMF422-VN
1-Gang 2-Devices CAT5E
Data Modular Jack

PLATES *COMPATIBLE WITH FULL-COLOR WIDE SERIES MODULE

WMFV7811
1-TOUCH PLATE,
1-Gang 1-Device

WMFV7812
1-TOUCH PLATE,
1-Gang Center 2-Devices

WMFV7813
1-TOUCH PLATE,
1-Gang 3-Devices

WMF6891-VN
1-TOUCH PLATE, 1-Gang Cover

SWITCHES & ACCESSORIES

WMF501MYH-VN ★
Switch"B", Single Pole
1-Gang 1-Device
Pillar Terminal 10AX 250V~

WMF503MYH-VN ★
Switch"B", Single Pole
1-Gang 2-Devices
Pillar Terminal 10AX 250V~

WMF505MYH-VN ★
Switch"B", Single Pole
1-Gang 3-Devices
Pillar Terminal 10AX, 250V~

WMF507MYH-VN ★
Switch"B", Single Pole
1-Gang 4-Devices
Pillar Terminal 10AX, 250V~

WMF502MYH-VN ★
Switch"C", 3 Way
1-Gang 1-Device
Pillar Terminal 10AX, 250V~

WMF504MYH-VN ★
Switch"C", 3 Way
1-Gang 2-Devices
Pillar Terminal 10AX, 250V~

WMF506MYH-VN ★
Switch"C", 3 Way
1-Gang 3-Devices
Pillar Terminal 10AX, 250V~

WMF508MYH-VN ★
Switch"C", 3 Way
1-Gang 4-Devices
Pillar Terminal 10AX, 250V~

WMF511MYH-1VN ★
Phosphorescent indicator Switch "B",
Single Pole, 1-Gang 1-Device,
Pillar Terminal 10AX 250V~

WMF513MYH -1VN ★
Phosphorescent indicator Switch "B",
Single Pole, 1-Gang 2-Device,
Pillar Terminal 10AX 250V~

WMF515MYH-1VN ★
Phosphorescent indicator Switch "B",
Single Pole, 1-Gang 3-Device,
Pillar Terminal 10AX 250V~

WMF517MYH-1VN ★
Phosphorescent indicator Switch "B",
Single Pole, 1-Gang 4-Device,
Pillar Terminal 10AX 250V~

Moderva NEW

★ **Pillar Terminal**

Solid, Stranded
1. Switch 10AX:1.0mm²-2×2.5mm²
2. WMF535 □□□ -VN: 1.5mm²-4.0mm²
3. WMF984 □□□ -VN/WMF936 □□□ -VN:0.5mm²-2.5mm²
4. WMF132 □□□ -VN: 2.5mm²-4.0mm²

Solid, Stranded, Flexible
5. WMFV503307 □□□ : 2.5mm²-6.0mm²

SWITCHES & ACCESSORIES

WMF512MYH-1VN ★
Phosphorescent indicator Switch"C"
3 Way, 1-Gang 1-Device
Pillar Terminal
10AX 250V~

WMF514MYH-1VN ★
Phosphorescent indicator Switch"C"
3 Way, 1-Gang 2-DevicesTT
Pillar Terminal
10AX 250V~

WMF516MYH-1VN ★
Phosphorescent indicator Switch"C"
3 Way, 1-Gang 3-Devices
Pillar Terminal
10AX 250V~

WMF518MYH-1VN ★
Phosphorescent indicator Switch"C"
3 Way,1-Gang 4-Devices
Pillar Terminal
10AX 250V~

WMFV503307MYH ★
Glow Switch"D", Double Pole,
1-Gang 1-Device Pillar Terminal
20A 250V~

WMF594MYH-VN ★
Switch"E", 4 Way
1-Gang 1-Device
Pillar Terminal
10AX 250V~

WMF596MYH-VN ★
Switch"E", 4 Way
1-Gang 2-Devices
Pillar Terminal
10AX 250V~

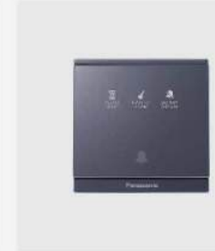
WMF223MYH-VN ★
Bell push button switch
1-Gang 1-Device
Pillar Terminal
10AX 250V~

WMF224MYH-VN ★
Unlock push button switch
1-Gang 1-Device
Pillar Terminal
10AX 250V~

WMF533MYH-VN ★
Curtain Switch
1-Gang 2-Devices
Pillar Terminal
10AX 250V~

WMF535MYH-VN ★
Electronic Key Card Switch
Pillar Terminal
16A 220V~

WMF984MYH-VN ★
Hotel Use Switch for
Indication for "Don't Disturb,
Make UP Room, Please wait"
10AX 250V~



WMF936MYH-VN ★
Hotel Use Bell Switch
with Indication for Don't Disturb,
Make Up Room, Please Wait
3A 250V~

WMF132MYH-VN ★
Shaver Receptacle
Input:220~230V
Output:230V/115V 20VA

WMF301MYH-VN
DIN Type Television Terminal

WMF311MYH-VN
High-Shield Television Terminal (CATV)

WMF403MYH-VN
Telephone Modular Jack

WMF421MYH-VN
CAT5E Data Modular Jack

WMF422MYH-VN
1-Gang 2-Devices CAT5E
Data Modular Jack

PLATES *COMPATIBLE WITH FULL-COLOR WIDE SERIES MODULE

WMFV7811MYH
1-TOUCH PLATE,
1-Gang Center 1-Device

WMFV7812MYH
1-TOUCH PLATE,
1-Gang Center 2-Devices

WMFV7813MYH
1-TOUCH PLATE,
1-Gang 3-Device

WMF6891MYH-VN
1-TOUCH PLATE, 1-Gang Cover

Moderva NEW

★ **Pillar Terminal**

Solid, Stranded
1. Switch 10AX:1.0mm²-2×2.5mm²
2. WMF535 □□□ -VN: 1.5mm²-4.0mm²
3. WMF984 □□□ -VN/WMF936 □□□ -VN:0.5mm²-2.5mm²
4. WMF132 □□□ -VN: 2.5mm²-4.0mm²

Solid, Stranded, Flexible
5. WMFV503307 □□□ : 2.5mm²-6.0mm²

SWITCHES & ACCESSORIES

WMF501MYZ-VN ★
Switch"B", Single Pole
1-Gang 1-Device
Pillar Terminal 10AX 250V~

WMF503MYZ-VN ★
Switch"B", Single Pole
1-Gang 2-Devices
Pillar Terminal 10AX 250V~

WMF505MYZ-VN ★
Switch"B", Single Pole
1-Gang 3-Devices
Pillar Terminal 10AX, 250V~

WMF507MYZ-VN ★
Switch"B", Single Pole
1-Gang 4-Devices
Pillar Terminal 10AX, 250V~

WMF502MYZ-VN ★
Switch"C", 3 Way
1-Gang 1-Device
Pillar Terminal 10AX, 250V~

WMF504MYZ-VN ★
Switch"C", 3 Way
1-Gang 2-Devices
Pillar Terminal 10AX, 250V~

WMF506MYZ-VN ★
Switch"C", 3 Way
1-Gang 3-Devices
Pillar Terminal 10AX, 250V~

WMF508MYZ-VN ★
Switch"C", 3 Way
1-Gang 4-Devices
Pillar Terminal 10AX, 250V~

WMF511MYZ-1VN ★
Phosphorescent indicator Switch "B",
Single Pole, 1-Gang 1-Device,
Pillar Terminal
10AX 250V~

WMF513MYZ -1VN ★
Phosphorescent indicator Switch "B",
Single Pole, 1-Gang 2-Devices,
Pillar Terminal
10AX 250V~

WMF515MYZ-1VN ★
Phosphorescent indicator Switch "B",
Single Pole, 1-Gang 3-Devices,
Pillar Terminal
10AX 250V~

WMF517MYZ-1VN ★
Phosphorescent indicator Switch "B",
Single Pole, 1-Gang 4-Devices,
Pillar Terminal
10AX 250V~

WMF512MYZ-1VN ★
Phosphorescent indicator Switch"C"
3 Way, 1-Gang 1-Device
Pillar Terminal
10AX 250V~

WMF514MYZ-1VN ★
Phosphorescent indicator Switch"C"
3 Way, 1-Gang 2-Devices
Pillar Terminal
10AX 250V~

WMF516MYZ-1VN ★
Phosphorescent indicator Switch"C"
3 Way, 1-Gang 3-Devices
Pillar Terminal
10AX 250V~

WMF518MYZ-1VN ★
Phosphorescent indicator Switch"C"
3 Way,1-Gang 4-Devices
Pillar Terminal
10AX 250V~

WMFV503307MYZ ★
Glow Switch"D", Double Pole,
1-Gang 1-Device
Pillar Terminal
20A 250V~

WMF594MYZ-VN ★
Switch"E", 4 Way
1-Gang 1-Device
Pillar Terminal
10AX 250V~

WMF596MYZ-VN ★
Switch"E", 4 Way
1-Gang 2-Devices
Pillar Terminal
10AX 250V~

WMF223MYZ-VN ★
Bell push button switch
1-Gang 1-Device
Pillar Terminal
10AX 250V~

WMF224MYZ-VN ★
Unlock push button switch
1-Gang 1-Device
Pillar Terminal
10AX 250V~

WMF533MYZ-VN ★
Curtain Switch
10AX 250V~

WMF535MYZ-VN ★
Electronic Key Card Switch
Pillar Terminal
16A 220V~

Moderva NEW

★ Pillar Terminal

Solid, Stranded
1. Switch 10AX:1.0mm²-2×2.5mm²
2. WMF535 □□□ -VN: 1.5mm²-4.0mm²
3. WMF984 □□□ -VN/WMF936 □□□ -VN:0.5mm²-2.5mm²
4. WMF132 □□□ -VN: 2.5mm²-4.0mm²

Solid, Stranded, Flexible
5. WMFV503307 □□□ : 2.5mm²-6.0mm²

SWITCHES & ACCESSORIES

WMF984MYZ-VN ★
Hotel Use Switch for
Indication for "Don't Disturb,
Make UP Room, Please wait"
10AX 250V~

WMF936MYZ-VN ★
Hotel Use Bell Switch
with Indication for Don't Disturb,
Make Up Room, Please Wait
3A 250V~

WMF132MYZ-VN ★
Shaver Receptacle
Input: 220~230V
Output: 230V/115V 20VA

WMF301MYZ-VN
DIN Type Television Terminal

WMF311MYZ-VN
High-Shield Television Terminal (CATV)

WMF403MYZ-VN
Telephone Modular Jack

WMF421MYZ-VN
CAT5E Data Modular Jack

WMF422MYZ-VN
1-Gang 2-Devices CAT5E
Data Modular Jack

PLATES *COMPATIBLE WITH FULL-COLOR WIDE SERIES MODULE

WMFV7811MYZ
1-TOUCH PLATE,
1-Gang Center 1-Device

WMFV7812MYZ
1-TOUCH PLATE,
1-Gang Center 2-Devices

WMFV7813MYZ
1-TOUCH PLATE,
1-Gang Center 3-Devices

WMF6891MYZ-VN
1-TOUCH PLATE, 1-Gang Cover

MINERVA

Snow White | Metallic Pearl Gold | Metallic Pearl Gray

NEW STANDARD OF ELEGANCE

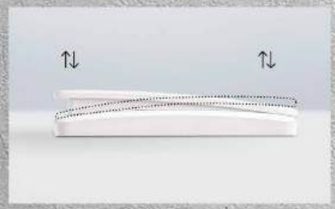
The new Luxury Square Type Wiring Device series from Panasonic

Elegant Design and Colors

Complete the interior design with the elegant finish and perfect shadowing.

Small On/Off revising angle

For the limitless experience in every usage.



Polishing and frameless surface.

Global Terminal
Solid Wire: 1.5-4mm²
Stranded Wire: 1.5-4mm²

★ Pillar Terminal
Solid, Stranded & Flexible Wire
1. 1.0mm²-2.5mm²
2. WMTV503307□□□ 2.5mm²-6.0mm²

Solid and Stranded Wire
3. WEC5781□-VN 1.5mm²~4.0mm²

SWITCHES & ACCESSORIES

WMT501-VN
Switch"B", Single Pole
1-Gang 1-Device
16AX 250V~

WMT503-VN
Switch"B", Single Pole
1-Gang 2-Devices
16AX 250V~

WMT505-VN
Switch"B", Single Pole
1-Gang 3-Devices
16AX 250V~

WMT507-VN ★
Switch"B", Single Pole
1-Gang 4-Devices
16AX 250V~

WMT502-VN
Switch"C", 3 Way
1-Gang 1-Device
16AX 250V~

WMT504-VN
Switch"C", 3 Way
1-Gang 2-Devices
16AX 250V~

WMT506-VN
Switch"C", 3 Way
1-Gang 3-Devices
16AX 250V~

WMT508-VN ★
Switch"C", 3 Way
1-Gang 4-Devices
16AX 250V~

WMT594-VN
Switch"E", 4 Way
1-Gang 1-Device
10AX 250V~

WMT596-VN
Switch"E", 4 Way
1-Gang 2-Devices
10AX 250V~

NEW

WMTV503307
Glow switch"D", Double Pole,
1-Gang 1-device, Pillar Terminal
20A 250V~

WMT707K-VN
Foot Light with Passive Infrared Sensor
and Illuminance Sensor

WEC5781W-VN ★
Electronic Key Card Switch

WSBC7010-VN
Cable Outlet with 20A Terminal Block

WMT540108-VN
Bell Switch

WMT301-VN
DIN Type TV terminal

WMT311-VN
High Shield TV terminal (CATV)

WMT364-VN
DIN TV + CATV socket set

WMT403-VN
TEL Modular Jack (6P4C)

WMT421-VN
CAT5E Data Modular Jack

WMT422-VN
Set 2 CAT5E Data Modular Jack

WMT427-VN
DIN TV + CAT5E Data Modular Jack

WMT428-VN
DIN TV + CAT5E Data Modular Jack

WMT431-VN
CAT6 Data Modular Jack

PLATES *COMPATIBLE WITH FULL-COLOR WIDE SERIES MODULE

WMT432-VN
Set 2 CAT6 Data Modular Jack

WMT7811-VN
1-TOUCH PLATE, 1-Gang 1-Device

WMT7812-VN
1-TOUCH PLATE,
1-Gang Center 2-Devices

WMT7813-VN
1-TOUCH PLATE, 1-Gang 3-Devices

WMT6891-VN
1-TOUCH PLATE, 1-Gang Cover

WBC8981SW-VN
1-TOUCH PLATE, 1-Gang Cover

WBC8991SW-VN
1-TOUCH PLATE, 1-Gang 1-Device

Global Terminal
Solid Wire: 1.5-4mm²
Stranded Wire: 1.5-4mm²

★ Pillar Terminal
Solid, Stranded & Flexible Wire
1. 1.0mm²-2.5mm²
2. WMTV503307□□ 2.5mm²-6.0mm²

Solid and Stranded Wire
3. WEC5781□-VN 1.5mm²-4.0mm²

SWITCHES & ACCESSORIES

WMT501MYZ-VN
Switch"B", Single Pole
1-Gang 1-Device
16AX 250V~

WMT503MYZ-VN
Switch"B", Single Pole
1-Gang 2-Devices
16AX 250V~

WMT505MYZ-VN
Switch"B", Single Pole
1-Gang 3-Devices
16AX 250V~

WMT507MYZ-VN ★
Switch"B", Single Pole
1-Gang 4-Devices
16AX 250V~

WMT502MYZ-VN
Switch"C", 3 Way
1-Gang 1-Device
16AX 250V~

WMT504MYZ-VN
Switch"C", 3 Way
1-Gang 2-Devices
16AX 250V~

WMT506MYZ-VN
Switch"C", 3 Way
1-Gang 3-Devices
16AX 250V~

WMT508MYZ-VN ★
Switch"C", 3 Way
1-Gang 4-Devices
16AX 250V~

WMT594MYZ-VN
Switch"E", 4 Way
1-Gang 1-Device
10AX 250V~

WMT596MYZ-VN
Switch"E", 4 Way
1-Gang 2-Devices
10AX 250V~

NEW

WMTV503307MYZ
Glow witch"D", Double Pole,
1-Gang 1-device, Pillar Terminal
20A 250V~

WMT707MYZ-VN
Foot Light with Passive Infrared Sensor and Illuminance Sensor

WEC5781MYZ-VN ★
Electronic Key Card Switch

WSBC7010MYZ-VN
Cable Outlet with 20A Terminal Block

WMT540108MYZ-VN
Bell Switch

WMT301MYZ-VN
DIN Type TV terminal

WMT311MYZ-VN
High Shield TV terminal (CATV)

WMT364MYZ-VN
DIN TV + CATV socket set

WMT403MYZ-VN
TEL Modular Jack (6P4C)

WMT421MYZ-VN
CAT5E Data Modular Jack

WMT422MYZ-VN
Set 2 CAT5E Data Modular Jack

WMT427MYZ-VN
DIN TV + CAT5E Data Modular Jack

WMT428MYZ-VN
DIN TV + CAT5E Data Modular Jack

WMT431MYZ-VN
CAT6 Data Modular Jack

PLATES *COMPATIBLE WITH FULL-COLOR WIDE SERIES MODULE

WMT432MYZ-VN
Set 2 CAT6 Data Modular Jack

WMT7811MYZ-VN
1-TOUCH PLATE, 1-Gang 1-Device

WMT7812MYZ-VN
1-TOUCH PLATE,
1-Gang Center 2-Devices

WMT7813MYZ-VN
1-TOUCH PLATE, 1-Gang 3-Devices

WMT6891MYZ-VN
1-TOUCH PLATE, 1-Gang Cover

MINERVA

Global Terminal
Solid Wire: 1.5-4mm²
Stranded Wire: 1.5-4mm²

★ Pillar Terminal
Solid, Stranded & Flexible Wire
1. 1.0mm²-2.5mm²
2. WMTV503307□□ 2.5mm²-6.0mm²

Solid and Stranded Wire
3. WEC5781□-VN 1.5mm²-4.0mm²

SWITCHES & ACCESSORIES

WMT501MYH-VN
Switch"B", Single Pole
1-Gang 1-Device
16AX 250V~

WMT503MYH-VN
Switch"B", Single Pole
1-Gang 2-Devices
16AX 250V~

WMT505MYH-VN
Switch"B", Single Pole
1-Gang 3-Devices
16AX 250V~

WMT507MYH-VN ★
Switch"B", Single Pole
1-Gang 4-Devices
16AX 250V~

WMT502MYH-VN
Switch"C", 3 Way
1-Gang 1-Device
16AX 250V~

WMT504MYH-VN
Switch"C", 3 Way
1-Gang 2-Devices
16AX 250V~

WMT506MYH-VN
Switch"C", 3 Way
1-Gang 3-Devices
16AX 250V~

WMT508MYH-VN ★
Switch"C", 3 Way
1-Gang 4-Devices
16AX 250V~

WMT594MYH-VN
Switch"E", 4 Way
1-Gang 1-Device
10AX 250V~

WMT596MYH-VN
Switch"E", 4 Way
1-Gang 2-Devices
10AX 250V~

NEW

WMTV503307MYH
Glow witch"D", Double Pole,
1-Gang 1-device, Pillar Terminal
20A 250V~

WMT707MYH-VN
Foot Light with Passive Infrared Sensor and Illuminance Sensor

WEC5781MYH-VN ★
Electronic Key Card Switch

WSBC7010MYH-VN
Cable Outlet with 20A Terminal Block

WMT540108MYH-VN
Bell Switch

WMT301MYH-VN
DIN Type TV terminal

WMT311MYH-VN
High Shield TV terminal (CATV)

WMT364MYH-VN
DIN TV + CATV socket set

WMT403MYH-VN
TEL Modular Jack (6P4C)

WMT421MYH-VN
CAT5E Data Modular Jack

WMT422MYH-VN
Set 2 CAT5E Data Modular Jack

WMT427MYH-VN
DIN TV + CAT5E Data Modular Jack

WMT428MYH-VN
DIN TV + CAT5E Data Modular Jack

WMT431MYH-VN
CAT6 Data Modular Jack

PLATES *COMPATIBLE WITH FULL-COLOR WIDE SERIES MODULE

WMT432MYH-VN
Set 2 CAT6 Data Modular Jack

WMT7811MYH-VN
1-TOUCH PLATE, 1-Gang 1-Device

WMT7812MYH-VN
1-TOUCH PLATE,
1-Gang Center 2-Devices

WMT7813MYH-VN
1-TOUCH PLATE, 1-Gang 3-Devices

WMT6891MYH-VN
1-TOUCH PLATE, 1-Gang Cover

Halumie

Snow White

Metallic Pearl Gold

Metallic Pearl Gray

HARMONY IN EVERY ANGLES

Slimmer and easier-to-use setting the standard for advanced wiring device designs. Now available in three colors to suit every design.

Designs in harmony with living spaces

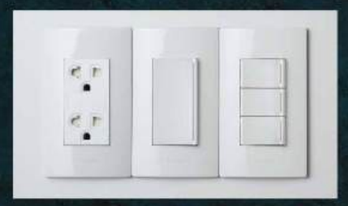
Simple and elegant design matches any room interior.

Always pleasant to the touch

Advanced mechanism allows smoother ON/OFF switching. Designed for easiest possible operation.

Always reliable and beautiful

Made of a material that resists color fading even when constantly bathed in room light or sunlight.



Halumie

Global Terminal
Solid Wire: 1.5-4mm²
Stranded Wire: 1.5-4mm²

Quick Connect Terminal
Solid Wire Only: 1.5-2.5mm²

Quick Connect Terminal
Solid Wire: 1.5-2.5mm²
Stranded Wire: 1.5-2.5mm²

★ Pillar Terminal
Solid,Stranded,Flexible Wire
1. 1.5-4.0mm²
2. WEVH5033-7: 2.5-6.0mm²

Solid,Stranded Wired
3. WEVH5542-7□,WEG57912□:1.0-2.5mm²
4. WEF108107□-VN:1.5-2.5mm²

IP protection of Halumie

Panasonic holds the rights of numerous patents and designs of the Halumie series in the Vietnam.

The Halumie series is protected by the following design rights.

SWITCH
Registration No. 26095
Application No. 3-2015-023932

PLATE
Registration No. 23868

RECEPTACLE/ ASSEMBLY FRAMES
Registration No. 23869

SWITCHES

WEVH5511K
WEVH5511-7K ★
Switch"B", Single Pole
16AX 250V~

WEVH5521K
WEVH5521-7K ★
Switch"B", Single Pole
16AX 250V~

WEVH5531K
WEVH5531-7K ★
Switch"B", Single Pole
16AX 250V~

WEVH5151-51
WEVH5151-7 ★
Illuminated Switch"B", Single Pole
16AX 250V~

WEVH5512
WEVH5512-7 ★
Switch"C", 3 Way
16AX 250V~

WEVH5522
WEVH5522-7 ★
Switch"C", 3 Way
16AX 250V~

WEVH5532
WEVH5532-7 ★
Switch"C", 3 Way
16AX 250V~

WEVH5152-51
WEVH5152-7 ★
Illuminated Switch"C", 3 Way
16AX 250V~

WEVH5542-7 ★
with plate WEVH68030
Applicable for WEVH68030 & WEVH68060
Switch"C", 3 Way 10AX 250V~

WEVH5033-7 ★
Glow Switch"D", Double Pole
20A 250V~

WEVH5004
Switch"E", 4 Way
16A 250V~

SWITCHES

WEVH5401-011
Bell Push Button
10A 250V~

RECEPTACLES AND ACCESSORIES

WEV1081SW
WEV1081-7SW ★
Universal Receptacle with Safety Shutter
16A 250V~

WEV1091SW
Universal Receptacle
16A 250V~

WEV1181SW
WEV1181-7SW ★
Grounding Universal Receptacle with Safety Shutter
16A 250V~

WEV1582SW
WEV1582-7SW ★
Grounding Duplex Universal Receptacle with Safety Shutter
16A 250V~

WEV24886SW
CAT6 Data Modular Jack

WEV2488SW
CAT5 Data Modular Jack

WEV2364SW
Telephone Modular Jack (6P4C)

WEV2501SW
DIN Type Television Terminal Modular Jack

WEG3023SW
Telephone Wire Chip Dia 9mm/16mm

WEG3020SW
Blank Chip

WEF108107-VN ★
1-Port USB Charger 5V 2.4A
Applicable wire is 1.5-2.5mm²

WEF11821W
2 port USB Fast Charger 5V 3A

NEW

WEF14821W-VN
2 port USB Charger type A+C, 5V 3A
USB-A: 5V 3A, 9V 2A
USB-C (USB PD): 5V 3A, 9V 2A, 12V 1.5A

WEI1171SW-VN
Multiple Receptacle with Safety Shutter
16A - 250VAC, 1.5~4.0mm²
Solid, Stranded and Flexible wire

Halumie

Global Terminal
Solid Wire: 1.5-4mm²
Stranded Wire: 1.5-4mm²

Quick Connect Terminal
Solid Wire Only: 1.5-2.5mm²

Quick Connect Terminal
Solid Wire: 1.5-2.5mm²
Stranded Wire: 1.5-2.5mm²

★ Pillar Terminal
Solid,Stranded,Flexible Wire
1.1.5-4.0mm²
2. WEVH5033-7: 2.5-6.0mm²
Solid,Stranded Wired
3. WEVH5542-7□,WEG57912□:1.0-2.5mm²
4. WEF108107□-VN:1.5-2.5mm²

DIMMER SWITCHES

WEG575151SW
Dimmer Switch (Incandescent Light Control) 500W 220V~
※Off Function Type
*Applicable Wire: 1.0~2.5mm²
(Solid Wire Only)

WEG57912SW ★
Dimmer Switch (Incandescent and LED Light Control) 200W (LED50W) 220-240V~
※Push On/Off Function Type
*Applicable Wire: 1.0~2.5mm²
(Solid and Stranded Wire)

WEF5791301SW-VN
Dimmer Switch with Minimum Brightness Adjustment
(Incandescent and LED Light Control)
100W (LED100W) 220V~
※Push On/Off Function Type

WEF5791501SW-VN
Dimmer Switch with Minimum Brightness Adjustment
(Incandescent and LED Light Control)
240W (LED200W) 220V~
※Off Function Type

PLATES

WEVH68010
1-Gang 1-Device Plate

WEVH68020
1-Gang 2-Device Plate

WEVH68030
1-Gang 3-Device Plate

WEVH680290
1-Gang Center 2-Device Plate
for WEV1181SW

WEVH68910
Single Cover Plate

WEVH8061
1-Gang Plate for
HB breaker

WEVH68040
2-Gang 4-Device Plate

WEVH68060
2-Gang 6-Device Plate

WEG8973SW-VN
Weatherproof plate with soft cover window

WEG8973LH-VN
Weatherproof plate with soft cover window

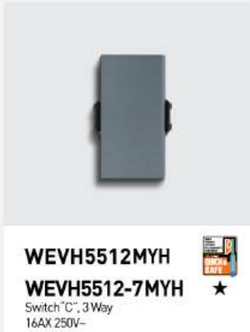
SWITCHES

WEVH5511MYHK
WEVH5511-7MYHK ★
Switch"B", Single Pole
16AX 250V~

WEVH5521MYHK
WEVH5521-7MYHK ★
Switch"B", Single Pole
16AX 250V~

WEVH5531MYHK
WEVH5531-7MYHK ★
Switch"B", Single Pole
16AX 250V~

WEVH5151-51MYH
WEVH5151-7MYH ★
Illuminated Switch"B", Single Pole
16AX 250V~



WEVH5512MYH
WEVH5512-7MYH ★
Switch"C", 3 Way
16AX 250V~

WEVH5522MYH
WEVH5522-7MYH ★
Switch"C", 3 Way
16AX 250V~

WEVH5532MYH
WEVH5532-7MYH ★
Switch"C", 3 Way
16AX 250V~

WEVH5152-51MYH
WEVH5152-7MYH ★
Illuminated Switch"C", 3 Way
16AX 250V~

WEVH5542-7MYH ★
with plate **WEVH68030**
Applicable for WEVH68030 & WEVH68060
Switch"C", 3 Way 10AX 250V~

WEVH5033-7MYH ★
Glow Switch"D", Double Pole
20A 250V~

WEVH5401-011MYH
Bell Push Button
10A 250V~

Global Terminal
Solid Wire: 1.5-4mm²
Stranded Wire: 1.5-4mm²

Quick Connect Terminal
Solid Wire Only: 1.5-2.5mm²

Quick Connect Terminal
Solid Wire: 1.5-2.5mm²
Stranded Wire: 1.5-2.5mm²

★ Pillar Terminal
Solid,Stranded,Flexible Wire
1.1.5-4.0mm²
2. WEVH5033-7: 2.5-6.0mm²

Solid,Stranded Wired
3. WEVH5542-7□,WEG57912□:1.0-2.5mm²
4. WEF108107□-VN:1.5-2.5mm²

RECEPTACLES AND ACCESSORIES

WEV1081MYH
WEV1081-7MYH ★
Universal Receptacle with Safety Shutter 16A 250V~

WEV1181MYH
WEV1181-7MYH ★
Grounding Universal Receptacle with Safety Shutter 16A 250V~

WEV1582MYH
WEV1582-7MYH ★
Grounding Duplex Universal Receptacle with Safety Shutter 16A 250V~

WEV24886MYH
CAT6 Data Modular Jack

WEV2488MYH
CAT5 Data Modular Jack

WEV2364MYH
Telephone Modular Jack (6P4C)

WEV2501MYH
DIN Type Television Terminal Modular Jack

WEF108107MYH-VN ★
1-Port USB Charger 5V 2.4A
Applicable Wire is 1.5~2.5mm²

WEF11821MYH-VN
2 port USB Fast Charger 5V 3A

WEF14821MYH-VN
2 port USB Charger type A+C, 5V 3A
USB-A: 5V 3A, 9V 2A
USB-C (USB PD): 5V 3A, 9V 2A, 12V 1.5A

WEV1171MYH
Multiple Receptacle with Safety Shutter
16A - 250VAC, 1.5~4.0mm²
Solid, Stranded and Flexible wire

PLATES

WEVH68010MYH
1-Gang 1-Device Plate

WEVH68020MYH
1-Gang 2-Device Plate

WEVH68030MYH
1-Gang 3-Device Plate

WEVH680290MYH
1-Gang Center 2-Device Plate
for WEV1181SW

WEVH68910MYH
Single Cover Plate

WEVH8061MYH
1-Gang Plate for
HB breaker

WEVH68040MYH
2-Gang 4-Device Plate

WEVH68060MYH
2-Gang 6-Device Plate

Global Terminal
Solid Wire: 1.5-4mm²
Stranded Wire: 1.5-4mm²

Quick Connect Terminal
Solid Wire Only: 1.5-2.5mm²

Quick Connect Terminal
Solid Wire: 1.5-2.5mm²
Stranded Wire: 1.5-2.5mm²

★ Pillar Terminal
Solid,Stranded,Flexible Wire
1.1.5-4.0mm²
2. WEVH5033-7: 2.5-6.0mm²

Solid,Stranded Wired
3. WEVH5542-7□,WEG57912□:1.0-2.5mm²
4. WEF108107□-VN:1.5-2.5mm²

SWITCHES

WEVH5511MYZK
WEVH5511-7MYZK ★
Switch"B", Single Pole
16AX 250V~

WEVH5521MYZK
WEVH5521-7MYZK ★
Switch"B", Single Pole
16AX 250V~

WEVH5531MYZK
WEVH5531-7MYZK ★
Switch"B", Single Pole
16AX 250V~

WEVH5151-51MYZK
WEVH5151-7MYZK ★
Illuminated Switch"B", Single Pole
16AX 250V~

WEVH5512MYZ
WEVH5512-7 MYZ ★
Switch"C", 3 Way
16AX 250V~

WEVH5522MYZ
WEVH5522-7MYZ ★
Switch"C", 3 Way
16AX 250V~

WEVH5532MYZ
WEVH5532-7MYZ ★
Switch"C", 3 Way
16AX 250V~

WEVH5152-51MYZ
WEVH5152-7MYZ ★
Illuminated Switch"C", 3 Way
16AX 250V~

WEVH5542-7MYZ ★
with plate WEVH68030
Applicable for WEVH68030 & WEVH68060
Switch"C", 3 Way 10AX 250V~

WEVH5033-7MYZ ★
Glow Switch"D", Double Pole
20A 250V~

WEVH5401-011MYZ
Bell Push Button
10A 250V~

RECEPTACLES AND ACCESSORIES

WEV1081MYZ
WEV1081-7MYZ ★
Universal Receptacle with
Safety Shutter 16A 250V~

WEV1181MYZ
WEV1181-7MYZ ★
Grounding Universal
Receptacle with Safety Shutter
16A 250V~

WEV1582MYZ
WEV1582-7MYZ ★
Grounding Duplex
Universal Receptacle
with Safety Shutter 16A 250V~

WEV24886MYZ
CAT6 Data Modular Jack

WEV2488MYZ
CAT5 Data Modular Jack

WEV2364MYZ
Telephone Modular Jack (6P4C)

WEV2501MYZ
DIN Type Television Terminal Modular Jack

WEF108107MYZ-VN ★
1-Port USB Charger 5V 2.4A
Applicable Wire is 1.5~2.5mm²

WEF11821MYZ-VN
2 port USB Fast Charger 5V 3A

WEF14821MYZ-VN
2 port USB Charger type A+C, 5V 3A
USB-A: 5V 3A, 9V 2A
USB-C (USB PD): 5V 3A, 9V 2A, 12V 1.5A

WEV1171MYZ
Multiple Receptacle with Safety Shutter
16A - 250VAC, 1.5~4.0mm²
Solid, Stranded and Flexible wire

PLATES

WEVH68010MYZ
1-Gang 1-Device Plate

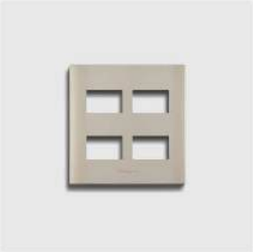
WEVH68020MYZ
1-Gang 2-Device Plate

WEVH68030MYZ
1-Gang 3-Device Plate

WEVH680290MYZ
1-Gang Center 2-Device Plate
for WEV1181SW

WEVH68910MYZ
Single Cover Plate

WEVH8061MYZ
1-Gang Plate for
HB breaker



WEVH68040MYZ
2-Gang 4-Device Plate

WEVH68060MYZ
2-Gang 6-Device Plate

Halumie Acrylic NEW

Clear White

Clear Metallic Pearl Gold

Clear Metallic Pearl Gray

STREAMLINE DESIGN STYLE, TRANSPARENT APPEARANCE

Bring a sense of serenity & luxurious.

Fashionable Design

Seamless, smooth surface and transparency of acrylic creates attractive appearance that suit variety of construction.

Unique material, stable durability

Acrylic material is scratch-resistant, impact-resistant and will not fade over time.

PLATES

WEGH6801CW-VN
1-Gang 1-Device Plate

WEGH6802CW-VN
1-Gang 2-Device Plate

WEGH6803CW-VN
1-Gang 3-Device Plate

WEGH68029CW-VN
1-Gang Center 2-Device Plate

WEGH6801CYH-VN
1-Gang 1-Device Plate

WEGH6802CYH-VN
1-Gang 2-Device Plate

WEGH6803CYH-VN
1-Gang 3-Device Plate

WEGH68029CYH-VN
1-Gang Center 2-Device Plate

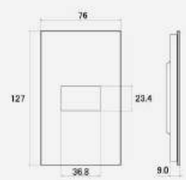
WEGH6801CYZ-VN
1-Gang 1-Device Plate

WEGH6802CYZ-VN
1-Gang 2-Device Plate

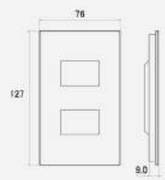
WEGH6803CYZ-VN
1-Gang 3-Device Plate

WEGH68029CYZ-VN
1-Gang Center 2-Device Plate

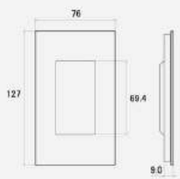
DRAWINGS



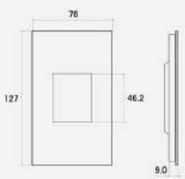
1-Gang 1-Device Plate



1-Gang 2-Device Plate



1-Gang 3-Device Plate



1-Gang Center 2-Device Plate

Gen-X

FLAT PANEL WITH ULTRA-THIN DESIGN

Exclusive switch series with ultrathin panel and refined appearance adding elegance to your interior

Heat-resistant, easy-to-use latest switch mechanism

On/Off with just a soft push of the switch.
Build for trouble-free operation.

Sophisticated surface with a super-slim design

Ideal asymmetric design using 2mm-thick, high-quality aluminum plate.

Gen-X

Global Terminal
Solid Wire: 1.5-4mm²
Stranded Wire: 1.5-4mm²

Quick Connect Terminal Ⅱ
Solid Wire: 1.5-2.5mm²
Stranded Wire: 1.5-2.5mm²

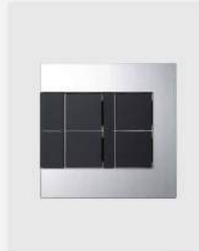
Pillar ★ Terminal Ⅱ
Solid, Stranded and Flexible Wire: 1.5-4mm²

SWITCHES

WTEGP51552S-1-G
Illuminated Switch"C", 3 Way
1-Device with Plate
16AX 250V~
(Neon Lamp: 220V~)

WTEGP52562S-1-G
Illuminated Switch"C", 3 Way
2-Devices with Plate
16AX 250V~
(Neon Lamp: 220V~)

WTEGP53572S-1-G
Illuminated Switch "C", 3 Way
3-Devices with Plate
16AX 250V~
(Neon Lamp: 220V~)



WTEGP54562S-1-G
Illuminated Switch"C", 3 Way
4-Devices with Plate
16AX 250V~
(Neon Lamp: 220V~)

WTEGP55582S-1-G
Illuminated Switch"C", 3 Way
5-Devices with Plate
16AX 250V~
(Neon Lamp: 220V~)

WTEGP56572S-1-G
Illuminated Switch"C", 3 Way
6-Devices with Plate 16AX 250V~
(Neon Lamp: 220V~)

WTFBP51552S-1-G
BS-TYPE Illuminated Switch"C",
3 Way 1-Device with Plate

WTFBP52562S-1-G
BS-TYPE Illuminated Switch"C",
3 Way 2-Devices with Plate

WTFBP53572S-1-G
BS-TYPE Illuminated Switch"C",
3 Way 3-Devices with Plate

DIMMER SWITCHES

WEG57912B-1 ★
Dimmer Switch
(Incandescent and LED Light Control)
200W (LED50W) 220-240V~
※Push On/Off Function Type
Applicable cable is 1.0mm² -2.5mm²
(Solid and Stranded wire)

WEG57813B-1-G ★
Dimmer Switch (Incandescent and Low Voltage Halogen with Transformer 12V Light Control)
300W 220V~
※Off Function Type
Applicable cable is 1.0mm² -2.5mm²
(Solid and Stranded wire)

WEG57816B-1-G ★
Dimmer Switch (Incandescent and Low Voltage Halogen with Transformer 12V Light Control)
500W 220V~
※Off Function Type
Applicable cable is 1.0mm² -2.5mm²
(Solid and Stranded wire)

RECEPTACLES AND ACCESSORIES

WEG15829B-G
Grounding Duplex
Universal Receptacle with
Safety Shutter
16A 250V~

WEG1181BK-G
Grounding Universal
Receptacle with
Safety Shutter
16A 250V~

WEV2364B
Telephone Modular Jack (6P4C)

WEV2488B
CAT5E Data Modular Jack

WEV2501B
DIN Type Television Terminal

WEG3020B-G
Blank Chip

EGG331-P
Weatherproof Push Button for Door Chime
1A 220V~

EGG335-P
Weatherproof Push Button for Door Chime
1A 220V~
(Dark Brown)

EBG888-P
Door chime 220V~
Two tone 9.5W, 50Hz
Easy-to-hear 82 dB Chime

PLATES

WTEG6503S-1-G
1-Gang 3-Device

WTFB6503S-1-G
1-Gang 3-Device

WTEG6506S-1-G
2-Gang 6-Device

WTEG6506S-G
2-Gang 6-Device

Refina

FULL-COLOR WIDE SERIES

COLOR -FUL MULTI STYLE

Wide color range suit modern interiors

Stylish color coordination enhancing your living environments.

Wide color palette to perfectly match lifestyle interiors

Luxurious appearance with wide color variations creating attractive living spaces.

Global Terminal
Solid Wire: 1.5-4mm²
Stranded Wire: 1.5-4mm²

★ Pillar Terminal
Solid, Stranded, Flexible
1. 16AX Switches:1.5mm²-4.0mm²
2. WEVH5033-7: 2.5mm²-6.0mm²
Solid, Stranded
3. WEC5542-7SW:1.0mm²-2.5mm²

Various Combination: 8 Plate Colors × 8 Switch Colors

Snow White	Metallic Pearl White	Metallic White	Metallic Gray	Metallic Black	Metallic Gold	Metallic Brown	Metallic Dark Brown
SW	MWZ	MW	MH	MB	MY	MF	MA

The last 2 or 3 characters in of Refina product numbers show the item color.

SWITCHES

WEG5511 MH
Switch"B", Single Pole
16AX 250V~

WEG5521 MH
Switch"B", Single Pole
16AX 250V~

WEG5531 MH
Switch"B", Single Pole
16AX 250V~

WEG5512 MH
Switch"C", 3Way
16AX 250V~

WEG5522 MH
Switch"C", 3Way
16AX 250V~

WEG5532 MH
Switch"C", 3Way
16AX 250V~

WEG5551 MH
Illuminated Switch"B",
Single Pole, 16AX 250V~
(LED Lamp: 220V~)

WEG5561 MH
Illuminated Switch"B",
Single Pole, 16AX 250V~
(LED Lamp: 220V~)

WEG5571 MH
Illuminated Switch"B",
Single Pole, 16AX 250V~
(LED Lamp: 220V~)

WEG5552 MH
Illuminated Switch"C", 3Way
16AX 250V~
(LED Lamp: 220V~)

WEG5562 MH
Illuminated Switch"C", 3Way
16AX 250V~
(LED Lamp: 220V~)

WEG5572 MH
Illuminated Switch"C", 3Way
16AX 250V~
(LED Lamp: 220V~)

WEV5533-7SW ★
Glow Switch"D", Double Pole
20A 250V~

WEC5542-7SW ★
Twin Switch"C", 3Way
10AX 250V~

RECEPTACLES WITH SWITCHES

WEGP1282
Grounding Duplex Universal Receptacle
with Safety Shutter and Switch

Metallic White
WEGP1282MW

Metallic Gray
WEGP1282MH

Metallic Brown
WEGP1282MF

Metallic Black
WEGP1282MB

Metallic White MW
MetallicPearl White MWZ
Metallic Gray MH
Metallic Dark Brown MA
Metallic Brown MF
Metallic Gold MY
Metallic Black MB

WEV5511 SW
Switch"B", Single Pole
16AX 250V~

WEV5521 SW
Switch"B", Single Pole
16AX 250V~

WEV5531 SW
Switch"B", Single Pole
16AX 250V~

WEV5512 SW
Switch"C", 3Way
16AX 250V~

WEV5522 SW
Switch"C", 3Way
16AX 250V~

WEV5532 SW
Switch"C", 3Way
16AX 250V~

WEV5511-7 SW ★
Switch"B", Single Pole
16AX 250V~

WEV5521-7 SW ★
Switch"B", Single Pole
16AX 250V~

WEV5531-7 SW ★
Switch"B", Single Pole
16AX 250V~

WEV5512-7 SW ★
Switch"C", 3Way
16AX 250V~

WEV5522-7 SW ★
Switch"C", 3Way
16AX 250V~

WEV5532-7 SW ★
Switch"C", 3Way
16AX 250V~

Refina FULL-COLOR WIDE SERIES

A - TYPE

Global Terminal
Solid Wire: 1.5-4mm²
Stranded Wire: 1.5-4mm²

Quick Connect Terminal
Solid Wire Only: 1.5-2.5mm²

Quick Connect Terminal
Solid Wire: 1.5-2.5mm²
Stranded Wire: 1.5-2.5mm²

★ Pillar Terminal
Solid, Stranded and Flexible Wire 1.5-4.0mm²
WEG57912W□: Solid, Stranded 1.0-2.5mm²

RECEPTACLES

WEV1081SW
Universal Receptacle with Safety Shutter 16A 250V ~

WEV1091SW
Universal Receptacle 16A 250V ~

WEG1001SW
Receptacle 16A 250V~

WEG1090SW
Round Pin Receptacle 16A 250V~

WEV1181SW
Grounding Universal Receptacle with Safety Shutter, 16A 250V~

WEV1582SW
Grounding Duplex Universal Receptacle with Safety Shutter, 16A 250V ~

WEV1081-7SW ★
Universal Receptacle with safety Shutter 16A 250V ~

WEV1181-7SW ★
Grounding Universal Receptacle with Safety Shutter 16A 250V~

WEV1582-7SW ★
Grounding Duplex Universal Receptacle with Safety Shutter 16A 250V~

WEI1171SW-VN
Multiple Receptacle with Safety Shutter 16A 250 VAC 1.5-4.0mm² Solid, Stranded and Flexible wire

WEF108107-VN ★
1-Port USB Charger 5V 2.4A
Applicable Wire is 1.5mm²-2.5mm²

WEF11821W
2-port USB Charger 5V 3A

WEF14821W-VN
2-Port USB Charger type A+C 5V 3A

WEV24886SW
CAT6 Data Modular Jack

WEV2488SW
CAT5E Data Modular Jack

WEV2364SW
Telephone Modular jack (6P4C)

WEV2501SW
DIN Type Television Terminal

WEG2021SW
Connector for HDMI Connection

WEG57912SW ★
(Incadescent and LED Light Control) 200W (LED50W) 220-240V~
Applicable cable is 1.0-2.5mm²
(Solid and Stranded wire)
※ Push On/Off Function Type

WEF5791301SW-VN
Dimmer Switch with minimum Brightness Adjustment (Incandescent and LED Light Control) 100W (LED100W) 220V~
※ Push On/Off Function Type

WEF5791501SW -VN
Dimmer Switch with minimum Brightness Adjustment (Incandescent and LED Light Control) 240W (LED200W) 220V~
※ Push On/Off Function Type

WEG575151SW
Dimmer Switch (Incandescent Light Control) 500W 220V~
* Off Function Type

EGG331-P
Weatherproof Push Button for Door Chime 1A 220V~

EGG335-P
Weatherproof Push Button for Door Chime 1A 220V~ (Dark Brown)

EBG888-P
Door Chime 220V~ Two Tone 9.5W,50Hz Easy-to-Hear 82 dB Chime

ACCESSORIES

DIMMER SWITCHES

PLATES

Unit: mm

FULL-COLOR WIDE SERIES	Plastic Plate 1-Gang 1-Device	Plastic Plate 1-Gang 2-Device	Plastic Plate 1-Gang 3-Device	Plastic Plate 1-Gang Center 2-Device	Plastic Plate 1-Gang Cover	Plastic Plate 2-Gang 4-Device Plate	Plastic Plate 2-Gang 6-Device Plate	Plastic Plate 1-Gang for HB Breaker	Plastic Plate 1-Gang for 1P1E MCB	Plastic Plate Double Cover Plate
Standard plate Snow White [S][W]	WEV68010SW	WEV68020SW	WEV68030SW	WEV680290SW	WEV68910SW	WEV68040SW	WEV68060SW	WEV7061SW	WEV7001SW	WEV68920SW
Metal plate Alumunum	WEG6501-1	WEG6502-1	WEG6503-1	WEG65029-1	WEG6591-1					
Metal plate Stainless	WEG6601-1	WEG6602-1	WEG6603-1	WEG66029-1	WEG6691-1					
Metallic Metallic Pearl White [M][W][Z]	WEG68010MWZ	WEG68020MWZ	WEG68030MWZ	WEG680290MWZ						
Metallic Metallic White [M][W]	WEG68010MW	WEG68020MW	WEG68030MW	WEG680290MW	WEG68910MW	WEG68040MW	WEG68060MW	WEV7061MW	WEV7001MW	
Metallic Metallic Pearl White [M][H]	WEV68010MH	WEV68020MH	WEV68030MH	WEV680290MH	WEV68910MH	WEV68040MH	WEV68060MH	WEV7061MH	WEV7001MH	
Metallic Metallic Brown [M][F]	WEV68010MB	WEV68020MB	WEV68030MB	WEV680290MB	WEV68910MB	WEV68040MB	WEV68060MB	WEV7061MB	WEV7001MB	
Metallic Metallic Gold [M][Y]	WEG68010MY	WEG68020MY	WEG68030MY	WEG680290MY						
Metallic Metallic Black [M][B]	WEG68010MF	WEG68020MF	WEG68030MF	WEG680290MF						
Metallic Metallic Dark Brown [M][A]	WEG68010MA	WEG68020MA	WEG68030MA	WEG680290MA						
Weatherproof plates Metal IPX3	Metal WEG7801	Metal WEG7802	Metal WEG7803	Metal WEG78029						
Weatherproof plates Beige / Snow White	WEG7901K-VN	WEG7902K-VN	WEG7903K-VN	WEG79029K-VN						
Weatherproof plates Beige / Snow White	WEG7901SWK-VN	WEG7902SWK-VN	WEG7903SWK-VN	WEG79029SWK-VN						
Weatherproof plates Light Gray NEW	WEG7901HK-VN	WEG7902HK-VN	WEG7903HK-VN	WEG79029HK-VN						
Weatherproof cover plates (Horizontal Type) Metal IP55			Metal WEG8881K-VN							
Weatherproof cover plates (Horizontal Type) Plastic IP55			Plastic WEG8981K-VN							

*IP=Ingress Protection (when flap is closed).

Global Terminal Solid Wire: 1.5-4mm² Stranded Wire: 1.5-4mm²

Quick Connect Terminal Solid Wire Only: 1.5-2.5mm²

★ **Pillar Terminal Ⅱ** Solid, Stranded and Flexible Wire: 1.5-4mm²

RECEPTACLES AND ACCESORIES

WEV1081-7H ★
Universal Receptacle with Safety Shutter 16A 250V~
WEB7811 M W (Plate)
1-Gang 1-Device

WEV1081H
Universal Receptacle with Safety Shutter 16A 250V~
WEB7812 M W (Plate)
1-Gang 2-Devices

WEV1181H
Grounding Universal Receptacle with Safety Shutter 16A 250V~
WEB7812 M W (Plate)
1-Gang 2-Devices

WEV1582-7H ★
Grounding Duplex Universal Receptacle with Safety Shutter 16A 250V~
WEB7813 M W (Plate)
1-Gang 3-Devices

WEV1191H
Grounding Universal Receptacle 16A 250V~
WEG5151-51HK
Illuminated Switch"B", Single Pole 16AX 250V~ (Neon Lamp 220V~)
WEB7813 M W (Plate)
1-Gang 3-Devices

WEV2501H
DIN Type Television Terminal 16A 250V~
WEV2364H
Telephone Modular Jack (6P4C)
WEB7812 M W (Plate)
1-Gang 2-Devices

WEV2501H
DIN Type Television Terminal
WEB7811 M W (Plate)
1-Gang 1-Device

WEV2364H
Telephone Modular Jack (6P4C)
WEB7811 M W (Plate)
1-Gang 1-Device

WEV2488H
CAT5E Data Modular Jack
WEB7811 M W (Plate)
1-Gang 1-Device

WEV24886H
CAT6 Data Modular Jack
WEB7811 M W (Plate)
1-Gang 1-Device

WEG575181H
Dimmer Switch (Incandescent Light Control) 800W 220V~
WEB7812 M W (Plate)
1-Gang 2-Devices

WEV1081-7SW ★
Universal Receptacle with Safety Shutter 16A 250V~
WEV1181-7SW
Grounding Universal Receptacle with Safety Shutter 16A 250V~
WEB7813SW (Plate)
1-Gang 3-Devices

WEV1081-7SW ★
Universal Receptacle with Safety Shutter 16A 250V~
WEB7811SW (Plate)
1-Gang 1-Device

WEV1081-7SW ★
Universal Receptacle with Safety Shutter 16A 250V~
WEB7812SW (Plate)
1-Gang 2-Devices

WEV1582-7SW ★
Grounding Duplex Universal Receptacle with Safety Shutter 16A 250V~
WEB7813SW (Plate)
1-Gang 3-Devices

WEV1081-7SW ★
Universal Receptacle with Safety Shutter 16A 250V~
WEV5531-7SW
1 Way SP Switch"B" 16AX 250V~
WEB7812SW (Plate)
1-Gang 2-Devices

WEV2501SW
DIN Type Television Terminal
WEV2364SW
Telephone Modular Jack (6P4C)
WEB7812SW (Plate)
1-Gang 2-Devices

WEV2501SW
DIN Type Television Terminal
WEB7811SW (Plate)
1-Gang 1-Device

WEV2488SW
CAT5E Data Modular Jack
WEB7811SW (Plate)
1-Gang 1-Device

WEV24886SW
CAT6 Data Modular Jack
WEB7811SW (Plate)
1-Gang 1-Device

WEV2364SW
Telephone Modular Jack (6P4C)
WEV2488SW
CAT5E Data Modular Jack
WEB7812SW (Plate)
1-Gang 2-Devices

WEG575181
Dimmer Switch (Incandescent Light Control) 800W 220V~
WEB7812SW (Plate)
1-Gang 2-Devices

WEG5151-51SWK
Illuminated Switch"B" Single Pole
WEB7811SW (Plate)
1-Gang 1-Device

WEV5001-7SW ★
Switch"B" Single Pole 16AX 250V~
WEB7813SW (Plate)
1-Gang 3-Devices

WEG5401-7SW
Push Bottom"B" Single Pole 10A 250V~
WEB7811SW (Plate)
1-Gang 1-Device

WEI1171SW-VN
Multiple Receptacle with Safety Shutter 16A - 250VAC
WEB7812SW (Plate)
1-Gang 1-Device

WBC8981SW-VN
Weatherproof Cover for BS-TYPE Switch Plastic IP43 (White)

WBC8991W-VN
Weatherproof Cover for BS-TYPE Receptacle Plastic IP43 (White)

WSBC7010SW-VN
Cable Outlet with 20A Terminal Block
*Applicable Wire
Input: 2.5~6.0mm² (Rigid Copper Wire)
Output: 1.5~2.5mm² (Flexible Wire)

SWITCHES WITH PLATE [PILLAR TERMINAL]

COLOR	1-Device 1Way SP Switch"B" 16AX 250V~ ★	2-Devices 1Way SP Switch"B" 16AX 250V~ ★	3-Devices 1Way SP Switch"B" 16AX 250V~ ★	1-Device 2Way SP Switch"C" 16AX 250V~ ★	2-Devices 2Way SP Switch"C" 16AX 250V~ ★	3-Devices 2Way SP Switch"C" 16AX 250V~ ★
Snow White SW	WEBP515117SW	WEBP525217SW	WEBP535317SW	WEBP515127SW	WEBP525227SW	WEBP535327SW
Metallic Pearl White MWZ	WEBP515117MWZ	WEBP525217MWZ	WEBP535317MWZ	WEBP515127MWZ	WEBP525227MWZ	WEBP535327MWZ
Metallic White MW	WEBP515117MW	WEBP525217MW	WEBP535317MW	WEBP515127MW	WEBP525227MW	WEBP535327MW
Metallic Gray MH	WEBP515117MH	WEBP525217MH	WEBP535317MH	WEBP515127MH	WEBP525227MH	WEBP535327MH
Metallic Black MB	WEBP515117MB	WEBP525217MB	WEBP535317MB	WEBP515127MB	WEBP525227MB	WEBP535327MB
Metallic Gold MY	WEBP515117MY	WEBP525217MY	WEBP535317MY	WEBP515127MY	WEBP525227MY	WEBP535327MY
Metallic Brown MF	WEBP515117MF	WEBP525217MF	WEBP535317MF	WEBP515127MF	WEBP525227MF	WEBP535327MF
Metallic Dark Brown MA	WEBP515117MA	WEBP525217MA	WEBP535317MA	WEBP515127MA	WEBP525227MA	WEBP535327MA

The last 2 or 3 characters in of Refina product numbers show the item color.

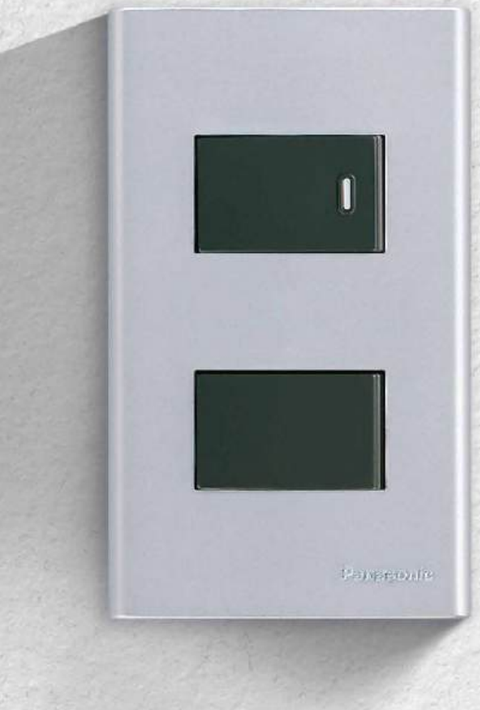
PLATES

Unit: mm

FULL-COLOR WIDE SERIES Refina BS-TYPE (9)	1-Gang 1-Device (36.5, 86, 23.2, 86)	1-Gang 2-Device (36.5, 86, 46.2, 86)	1-Gang 3-Device (36.5, 86, 69.2, 86)
Snow White SW	WEB7811SW	WEB7812SW	WEB7813SW
Metallic Pearl White MWZ	WEB7811MWZ	WEB7812MWZ	WEB7813MWZ
Metallic White MW	WEB7811MW	WEB7812MW	WEB7813MW
Metallic Gray MH	WEB7811MH	WEB7812MH	WEB7813MH
Metallic Black MB	WEB7811MB	WEB7812MB	WEB7813MB
Metallic Gold MY	WEB7811MY	WEB7812MY	WEB7813MY
Metallic Brown MF	WEB7811MF	WEB7812MF	WEB7813MF
Metallic Dark Brown MA	WEB7811MA	WEB7812MA	WEB7813MA
Weatherproof cover plates (Horizontal Type) (103, 113) Plastic IP55			WBG8981-P

The last 2 or 3 characters in of Refina product numbers show the item color.

FULL-COLOR WIDE SERIES

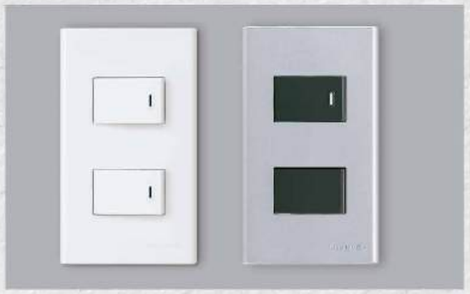


THE STANDARD OF YOUR COMFORTABLE LIFE

THE BEAUTY OF SIMPLICITY

Sharp looking design brings a polished touch to your living room and office

Elegantly simple squarish design
Add a refreshing accent to any room.
Bold, modern plates with square shapes availabe in various configurations to suit residential and commercial requirements.



Heat-resistant, easy-to-use Latest switch mechanism
Panasonic's standard design wiring device with simple, trouble-free switch mechanism

FULL-COLOR WIDE SERIES

Global Terminal
Solid Wire: 1.5-4mm²
Stranded Wire: 1.5-4mm²

Quick Connect Terminal
Solid Wire Only: 1.5-2.5mm²

Quick Connect Terminal
Solid Wire: 1.5-2.5mm²
Stranded Wire: 1.5-2.5mm²

★ Pillar Terminal
Solid, Stranded and Flexible Wire 1.5-4.0mm²
WEG57912□: Solid, Stranded 1.0-2.5mm²

SWITCHES

WEV5001SW
Switch"B", Single Pole
16AX 250V~

WEG5151-51SWK
Illuminated Switch"B",
Single Pole , 16AX 250V~
(LED Lamp: 220v~)

WEG5141SW
Glow Switch"B", Single Pole
2 Wire 6AX 250V~

WEV5001-7SW ★
Switch"B", Single Pole
16AX 250V~

WEG51517SW ★
Illuminated Switch"B", Single Pole
16AX 250V~ (LED Lamp: 220v~)

WEV5002SW
Switch"C", 3Way
16AX 250V~

WEG5152-51SWK
Illuminated Switch"C", 3Way
16AX 250V~ (LED Lamp: 220v~)

WEV5002-7SW ★
Switch"C", 3Way
16AX 250V~

WEG51527SW ★
Illuminated Switch"C", 3Way
16AX 250V~ (LED Lamp: 220v~)

WEG5004KSW
Switch"E", 4Way
16AX 250V~

WEG5341SW
Glow Switch"B",
Single Pole 3 Wire,16A 250V~

RECEPTACLES AND ACCESORIES

WEV5033-7SW ★
Glow Switch (2 Poles)
20A 250V~

WEG3032GSW(Green)
Pilot Lamp
220V~

WEG3032SW(White)
Pilot Lamp
220V~

WEG3032RSW(Red)
Pilot Lamp
220V~

WEG5400-7 ★
Push Button NC Contact Type
10A 250V~

WEG3023SW
Telephone Wire Chip
for 9mm Diameter 16 Diameter

WEG3020SW
Blank Chip

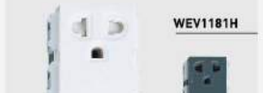
WEV1081SW
Universal Receptacle
with safety Shutter
16A 250V ~

WEV1081-7SW ★
Universal Receptacle with Safety Shutter
16A 250V~

WEV1091SW
Universal Receptacle
16A 250V~

WEG1001SW
Receptacle
16A 250V~

WEG1090SW
Round Pin Receptacle
16A 250V~



WEV1181SW
Grounding Universal Receptacle
with Safety Shutter
16A 250V~

WEV1181-7SW ★
Grounding Universal Receptacle
with Safety Shutter
16A 250V~

WEV1582SW
Grounding Duplex Universal
Receptacle with Safety Shutter
16A 250V~

WEV1582-7SW ★
Grounding Duplex Universal
Receptacle with Safety Shutter
16A 250V~

WEV24886SW
CAT6 Data Modular Jack

WEV2488SW
CAT5E Data Modular Jack

WEV2364SW
Telephone Modular Jack (6P4C)

WEV2501SW
DIN Type Television Terminal

WEG5401-7SW
Push Button"B", Single Pole
10A 250V~

WEI1171SW-VN
Multiple Receptacle with Safety Shutter
16A - 250VAC, 1.5mm²-4.0mm²
Solid, Stranded and Flexible wire

WEG2021SW
Connector for HDMI Connection

WEF108107-VN ★
1-Port USB Charger 5V 2.4A
Applicable Wire is 1.5-2.5mm²

WEF14821W-VN
2-port USB Charger
Type A+C, 5V 3A
USB-A: 5V 3A, 9V 2A
USB-C (USB PD): 5V 3A, 9V 2A,
12V 1.5A

WEF11821W
2 Port USB
Fast Charger 5V 3A

EGG331
Weatherproof Push Button
for Door Chime
1A 220V~

EGG335
Weatherproof Push Button
for Door Chime
1A 220V~ (Dark Brown)

EBG888
Door Chime
220V~ Two Tone 9.5W, 50Hz
Easy-to-Hear 82 dB Chime

FULL-COLOR WIDE SERIES

Global Terminal
Solid Wire: 1.5-4mm²
Stranded Wire: 1.5-4mm²

Quick Connect Terminal
Solid Wire Only: 1.5-2.5mm²

Quick Connect Terminal
Solid Wire: 1.5-2.5mm²
Stranded Wire: 1.5-2.5mm²

★ **Pillar Terminal Ⅱ**
Solid, Stranded and Flexible Wire: 1.5-4mm²

DIMMER SWITCHES

WEF5791301SW-VN
Dimmer Switch with Minimum Brightness Adjustment
(Incandescent and LED Light Control)
100W (LED100W) 220V~
※ Push On/Off Function Type

WEF5791501SW-VN
Dimmer Switch with Minimum Brightness Adjustment
(Incandescent and LED Light Control)
240W (LED200W) 220V~
※ Push On/Off Function Type

WEG575151SW
Dimmer Switch
(Incandescent Light Control) 500W 220V~
※Off Funtion Type
Applicable wire: 1.0 ~2.5mm²
(Solid wire only)

WEG575181
Dimmer Switch
(Incandescent Light Control) 800W 220V~
※Off Funtion Type
Applicable wire: 1.0 ~2.5mm²
(Solid wire only)

FOR HOTEL

WEG57912SW ★
Incandescent and LED Light Control
200W (LED50W) 220-240V~
※ Push On/Off Function Type
Applicable wire: 1.0 ~2.5mm²
(Solid and stranded wire)

WSBC9120SW-VN
Shaver Receptacle
Input 220V-240V~
Output 230V/115V~

WEC5781W-VN
Electronic Key Card Switch

WEG5001SWK-031
Hotel Use Switch"B" for Indication "Make up Room"
16AX 250V~

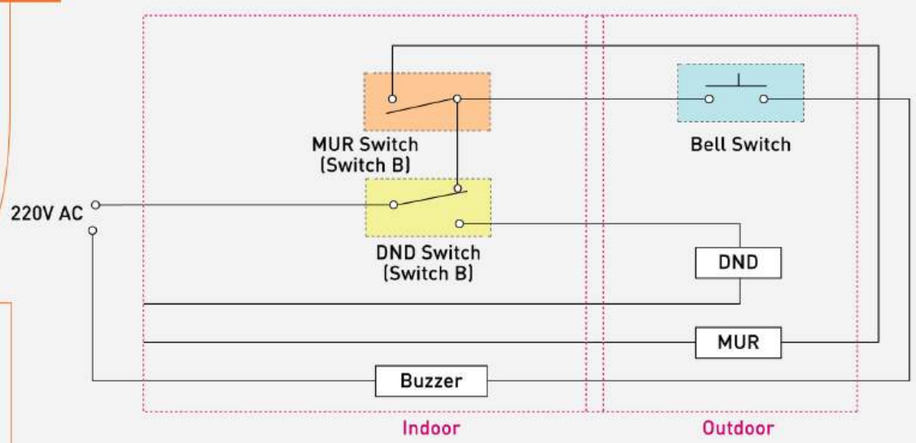
WEG5401-011SW
Entrance Bell
10A 250V~

WEG5002SWK-021
Hotel Use Switch"C" for Indication "Don't Disturb"
16AX 250V~

WEG3032G-031
Pilot Lamp for Indication "Make up Room"
Green 220V~

WEG3032R-021
Pilot Lamp for Indication "Don't Disturb"
Red 220V~

WIRING DIAGRAM – "Don't Disturb" - "Make Up Room" - "Bell Switch"



PLATES

Unit: mm

FULL-COLOR WIDE SERIES	Plastic Plate 1-Gang 1-Device	Plastic Plate 1-Gang 2-Device	Plastic Plate 1-Gang 3-Device	Plastic Plate 1-Gang Center 2-Device	Plastic Plate 1-Gang Cover	Plastic Plate 2-Gang 4-Device Plate	Plastic Plate 2-Gang 6-Device Plate	Plastic Plate 1-Gang for HB Breaker	Plastic Plate 1-Gang for 1P1E MCB	Plastic Plate Double Cover Plate
Standard plate Snow White SW	WEV68010SW	WEV68020SW	WEV68030SW	WEV680290SW	WEV68910SW	WEV68040SW	WEV68060SW	WEV7061SW	WEV7001SW	WEV68920SW
Metal plate Alumunum	WEG6501-1	WEG6502-1	WEG6503-1	WEG65029-1	WEG6591-1					
Metal plate Stainless	WEG6601-1	WEG6602-1	WEG6603-1	WEG66029-1	WEG6691-1					
Metallic Metallic Pearl White MWZ	WEG68010MWZ	WEG68020MWZ	WEG68030MWZ	WEG680290MWZ						
Metallic Metallic White MW	WEV68010MW	WEV68020MW	WEV68030MW	WEV680290MW	WEV68910MW	WEV68040MW	WEV68060MW	WEV7061MW	WEV7001MW	
Metallic Metallic Pearl White MWZ	WEV68010MH	WEV68020MH	WEV68030MH	WEV680290MH	WEV68910MH	WEV68040MH	WEV68060MH	WEV7061MH	WEV7001MH	
Metallic Metallic Brown MF	WEV68010MB	WEV68020MB	WEV68030MB	WEV680290MB	WEV68910MB	WEV68040MB	WEV68060MB	WEV7061MB	WEV7001MB	
Metallic Metallic Gold MY	WEG68010MY	WEG68020MY	WEG68030MY	WEG680290MY						
Metallic Metallic Gray MH	WEG68010MF	WEG68020MF	WEG68030MF	WEG680290MF						
Metallic Metallic Black MB	WEG68010MA	WEG68020MA	WEG68030MA	WEG680290MA						
Metallic Metallic Dark Brown MA										
Weatherproof plates Metal IPX3	Metal WEG7801	Metal WEG7802	Metal WEG7803	Metal WEG78029						
Weatherproof plates Beige	WEG7901K-VN	WEG7902K-VN	WEG7903K-VN	WEG79029K-VN						
Weatherproof plates Snow White	WEG7901SWK-VN	WEG7902SWK-VN	WEG7903SWK-VN	WEG79029SWK-VN						
Weatherproof plates Light Gray NEW	WEG7901HK-VN	WEG7902HK-VN	WEG7903HK-VN	WEG79029HK-VN						
Weatherproof cover plates (Horizontal Type) Metal IP55			Metal WEG8881K-VN							
Weatherproof cover plates (Horizontal Type) Plastic IP55			Plastic WEG8981K-VN							

*IP=Ingress Protection (when flap is closed).

FULL-COLOR
SERIES

THE STANDARD OF EXCELLENCE

FOR ANY INSTALLATION

SIMPLE DESIGN COMPATIBLE WITH ANY INTERIOR PLAN

Heat-resistant, easy-to-use latest switch mechanism

A basic Panasonic wiring device with simple, trouble-free switch mechanism

FULL-COLOR SERIES

A - TYPE

Quick Connect Terminal
Solid Wire Only: 1.5-2.5mm²

SWITCHES

WNV5001-7W
Switch"B", Single Pole
16AX 250V~

WNG5061W-701
Appellation Switch"B", Single Pole
16AX 250V~

WNG5021W-7
Twin Switch"B", Single Pole
10AX 250V~

WN5241W-801
Appellation Glow
Switch"B", Single Pole
4A 300V~

WNG5051W-751
Illuminated Appellation
Switch"B", Single Pole
16AX 250V~ (Neon Lamp: 220V~)

WNG5401W-7K
Push Button"B", Single Pole
10A 300V~

WSG3001
Surface Mounting
Switch"B", Single Pole
10A 300V~

WNV5002-7W
Switch"C", 3Way
16AX-250V~

WNG5052W-751
Illuminated Appellation
Switch"C", 3Way
16AX 250V~ (Neon Lamp: 220V~)

WNG5003W-7
Switch"D", Double Pole
10AX 250V~

WNG5343W-761
Glow Switch"D", Double Pole
for Water Heater
20AX 250V~

WBG5414699W-SP
Glow Switch"D", Double Pole
20AX 250V~

WBG5414699W
Glow Switch"D", Double Pole
for A/C
20AX 250V~

WNG5004W-7
Switch"E", 4Way
10AX 250V~

WNH5611-VN
Tablet Switch
10A 250V~

RECEPTACLES AND ACCESORIES

WNV1081-7W
Universal Receptacle with
Safety Shutter
16A 250V~

WNV1091-7W
Universal Receptacle
10A 250V~

WN1090-7K-W
Round Pin Receptacle
10A 250V~

WN1001-7K-W
Receptacle
10A 250V~

WN1101-7W
3 Wire Grounding Receptacle
10A 250V~

WNG15923-7W
Grounding Duplex
Universal Receptacle, 16A 250V~

NR3170W-8
CAT6 Data Modular Jack

NRV3160W
Enhanced CAT5E Data Modular Jack

WNTG15649W
Telephone Modular Jack (6P4C)

WZV1201W
Television Terminal
(Current Passing Type)

WN3020W
Blank Chip

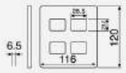
WN3023W
Telephone Wire Chip

WKG1092-250
Sureface Mounting Universal
Duplex Receptacle, 10A 250V~

WKG1091-250
Sureface Mounting
Universal Receptacle,10A 250V~

PLATES

Unit: mm

FULL-COLOR SERIES A-TYPE	Modern Plate	Aluminum Plate		Stainless Plate
		Screw Visible	Screw Invisible	Screw Visible
	Without Mounting Strap	With Mounting Strap	With Mounting Strap	With Mounting Strap
1-Gang 1-Device	WZV7841W	WN7501-VN	-	WN7601-VN
1-Gang 2-Device	WZV7842W	WN7502-VN	WN65029-VN	WN7602-VN
1-Gang 3-Device	WZV7843W	WN7503-VN	WN65039-VN	WN7603-VN
 2-Gang 4-Device	WZV7844W	-	-	-
2-Gang 6-Device	WZV7846W	-	WN6506K-VN	-
1-Gang for HB	WZV7061W	-	-	-

LOCKING RECEPTACLES AND WEATHER PROOF LOCKING RECEPTACLES

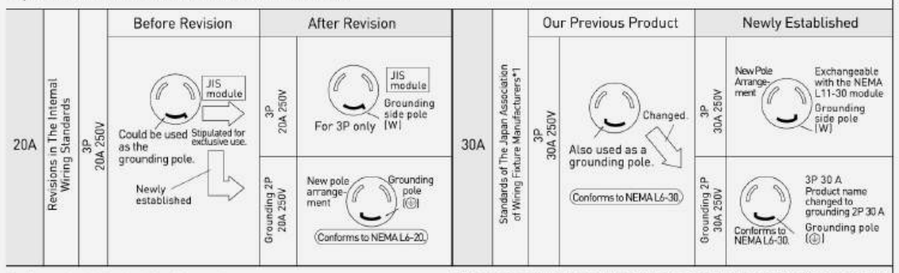
Note For locking flush mounting receptacles (20A and 30A) indicated by a ※1 mark, because no more than one plug can be plugged in at the same time if the receptacles are installed in a multi-receptacle plate, use single plates and install the number needed.				Locking Flush Mounting Receptacles		Locking Surface Mounting Receptacles	Applicable Electrical Wire
Form		Rating		Black	Milky White	Black	
3P		20A	250V	–	WF2320K-VN ※1	WK2320K-VN	Ø2, Ø2.6 3.5mm², 5.5mm²
Grounding 2P (Previously 3P)		15A	125V	–	WF2315K-VN	WK2315K-VN	Ø1.6, Ø2 2mm², 3.5mm²
		30A (L6-30)	250V	WF2330B-VN ※1	–	WF2330-VN	Ø2.6, Ø3.2 5.5mm², 8mm²
Grounding 3P (Previously 4P)		20A	250V	WF2420BK-VN ※1	WF2420K-VN ※1	WK2420K-VN	Ø2, Ø2.6 3.5mm², 5.5mm²
		30A ★(L15-30)	250V	WF2430B-VN ※1	–	WK2430-VN	Ø2.6, Ø3.2 5.5mm², 8mm²

★ The 3P 30A and the grounding 3P 30A receptacles conform to NEMA standards and are not exchangeable with some of the receptacles used domestically in Japan.

Features

The Japan Electric Association Code has been revised (8001-1990), with the distinction between grounding poles and grounded-side pins clearly identified. In addition, although not stipulated in the Japan Electric Association Code, these receptacles have been established by the standards of the Japan Wiring Devices Association.

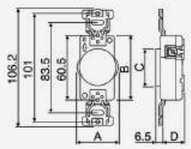
Explanation of The Revisions (Related Sections)



The diagram above is indicating the face of receptacles.

Pole arrangements which are not stipulated in the Japan Electric Association Code are selected according to the standards of the Japan Wiring Devices Association.

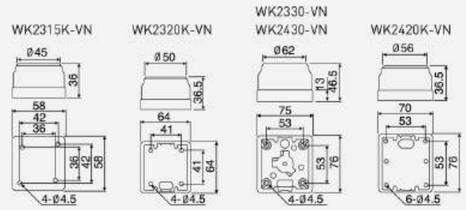
Dimensions (Unit: mm)



• Locking Flush Mounting Receptacles

	Model No.	Dimension A	Dimension B	Dimension C (※)	Dimension D
3P	WF2320K-VN	38.8	59.5	34.5	25.5
Grounding 2P (Previously 3P)	WF2315K-VN	37.7	59	34.5	24
	WF2330B-VN	42	69.1	40.5	30
Grounding 3P (Previously 4P)	WF2420BK/K-VN	43	61	40.5	25.5
	WF2430B-VN	42	67	40.5	30

• Locking Surface Mounting Receptacle



All products have entirely the same specifications as those sold in Japan.

LOCKING PLUGS

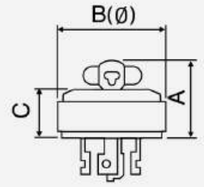
Applicable Wire Types: Rubber Cabtire Cable (Type 2 or less), Round Rubber Cabtire Cord, Vinyl Cabtire Cable, and Round Vinyl Cabtire Cord

Form		Rating		Locking Plugs WF6320-VN Black	Applicable Electrical Wire
3P		20A	250V	WF6320-VN	2mm², 3.5mm²
Grounding 2P (Previously 3P)		15A	125V	WF6315-VN	1.25mm², 2.0mm²
		30A (L6-30)	250V	WF6330-VN	3.5mm², 5.5mm²
Grounding 3P (Previously 4P)		20A	250V	WF6420-VN	2mm², 3.5mm²
		30A ★(L15-30)	250V	WF6430-VN	3.5mm², 5mm²

Note:
- For outdoor wiring exposed to rain, use either rubber cabtire cable or vinyl cabtire cable.
- For indoor locations exposed to moisture or high humidity, use rubber cabtire cable.
- If you use stranded wire on screw terminal, please don't solder up the copper wires at the terminal. There is a possibility that heating will occur since long time use may bring about oxidizing on surface of solder and make the contact between terminal and solder defective.

Unit: mm

• Locking Plugs



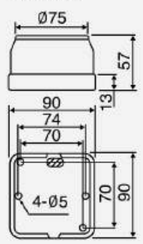
	Model No.	Dimension A	Dimension B (Ø)	Dimension C
3P	WF6320-VN	38	46	23
Grounding 2P (Previously 3P)	WF6315-VN	36	38.5	21
	WF6330-VN	57.5	62.5	44
Grounding 3P (Previously 4P)	WF6420-VN	40	56	25
	WF6430-VN	57.5	62.5	44

HIGH-CAPACITY SURFACE MOUNTING RECEPTACLES, RUBBER PLUGS

WK1330-VN

Surface Moutning Receptacle,
30A 250V AC
Applicable Electrical Wire
Φ2.6 [Φ3.2], 5.5mm², [8mm²]

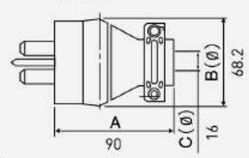
WK1330



WF4330

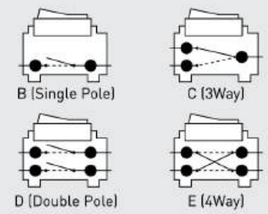
Rubber Plug (Non-Weather proof type)
30A 250V AC
Applicable Electrical Wire
3.5mm², 5.5mm²

WF4330

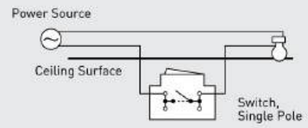


SWITCHES

Contact Structure



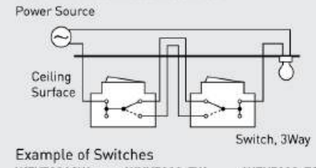
Switch, Single Pole



Example of Switches
WEV5001SW WNV5001-7W WEVH5511
WNG5051W-751 WEV5001-7SW WEVH5511-7
WEG5151-7SW WMT501-VN

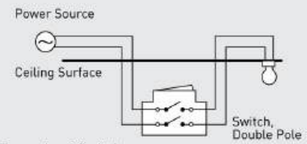
Switch, 3Way

Operation of one fixture 2 locations.



Example of Switches
WEV5001SW WNV5002-7W WEV5002-7SW
WNG5052W-751 WEG5152-51KSW WEG51527SW
WEVH5512 WEVH5512-7 WMT502-VN

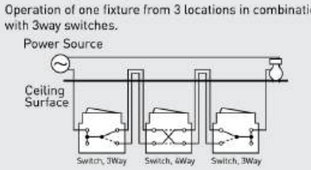
Switch, Double Pole



Example of Switches
WEG5003KSW WEVH5003
WNG5003W-7

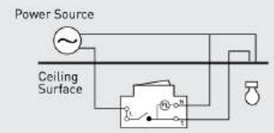
Switch, 4Way

Operation of one fixture from 3 locations in combination with 3way switches.



Example of Switches
WEG5004KSW WEVH5004
WNG5004W-7 WMT594-VN

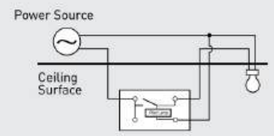
Glow Switch, 3Way



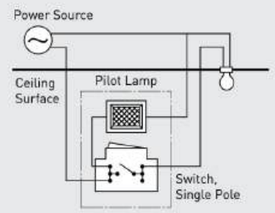
Example of Switches
WEG5341

WIRING INSTRUCTIONS [Combination with Pilot Lamp]

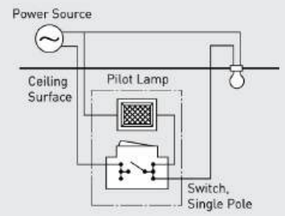
Glow Switch, 3 Wires



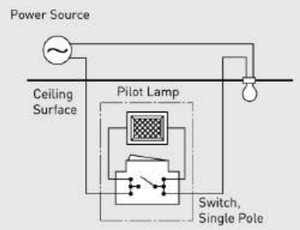
Pilot Lamp Location Indicator



Switch On/Pilot Lamp On

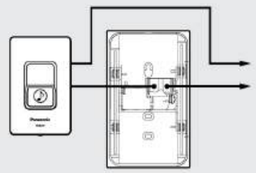


Switch Off/Pilot Lamp On



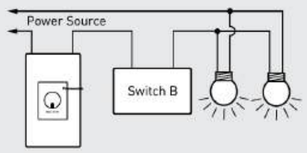
Door Chime

EGG331/EGG335/EBG888



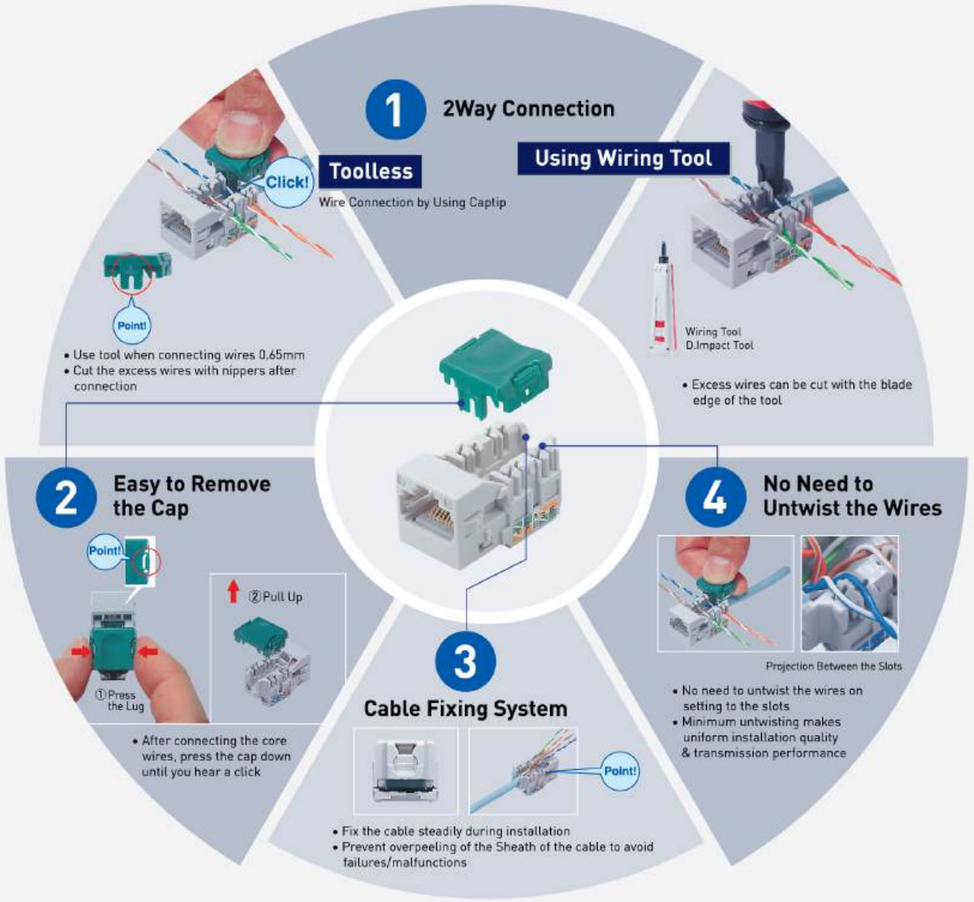
Dimmer Unit WK2420K-VN

WEG575151SW WNGP575253
WEG575181 WNGP575283

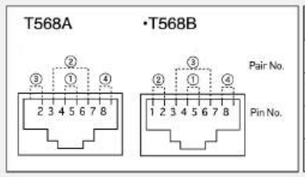


METHODS OF WIRING

Easy Installation (WEV2488SW/WEV2488H/WEV24886SW/WEV24886H WEV2488MYH,WEV2488MYZ,WEV24886MYH,WEV24886MYZ)

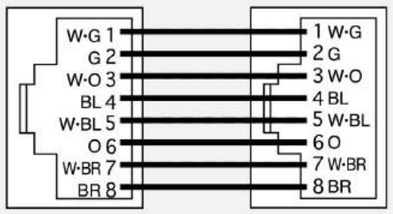


Pin/Pair Assignment

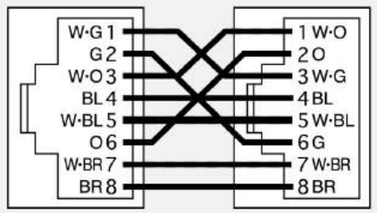


		T568A	T568B
①	W・BL	5	5
	BL	4	4
②	W・O	3	1
	O	6	2
③	W・G	1	3
	G	2	6
④	W・BR	7	7
	BR	8	8

Straight Connection with T568A



Cross Connection for 10BASE-T/100BASE-TX

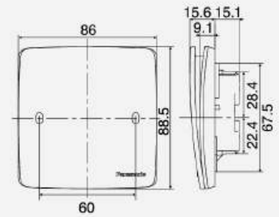


DIMENSION OF WIRING DEVICES

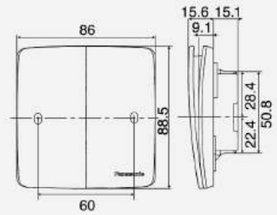
MINERVA

Unit: mm

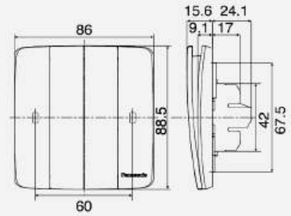
WMT501-VN | WMT502-VN
WMT505-VN | WMT506-VN
WMT503-VN



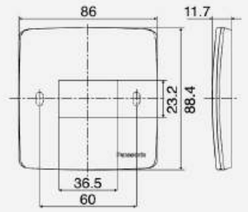
WMT504-VN



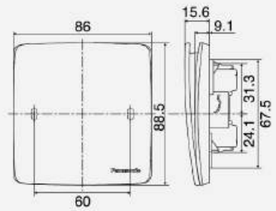
WMT507-VN
WMT508-VN



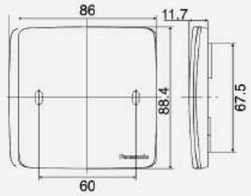
WMT7811-VN
WMT7812-VN
WMT7813-VN



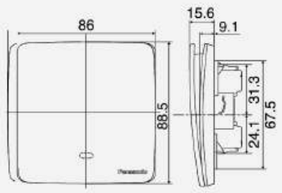
WMT594-VN
WMT596-VN



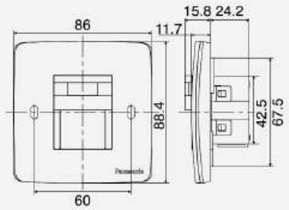
WMT6891-VN



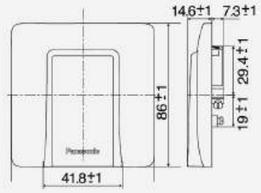
WMTV503307



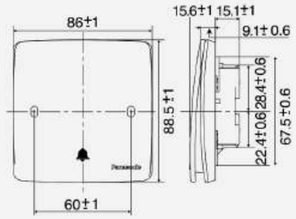
WMT707-VN



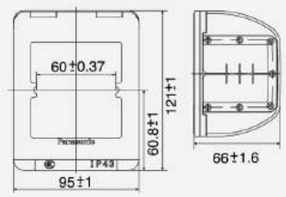
WSBC7010W-VN



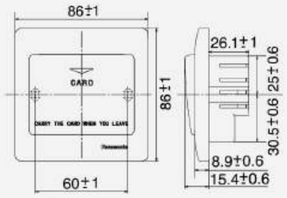
WMT540108-VN



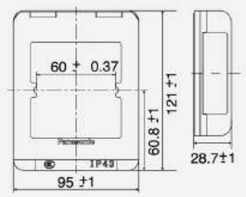
WBC8991W-VN



WEC5781W-VN



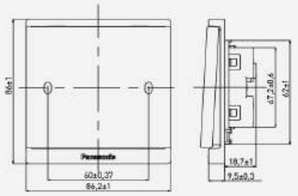
WBC8981SW-VN



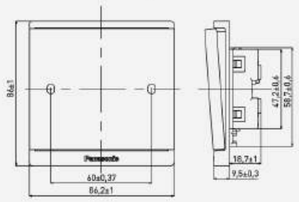
Moderva

Unit: mm

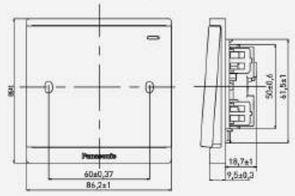
WMF501-VN



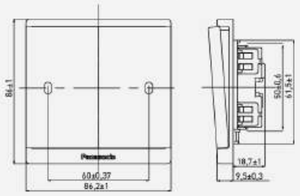
WMF502-VN, WMF594-VN



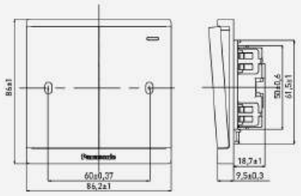
WMF511-VN, WMF512-1VN



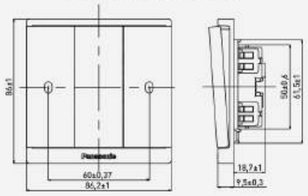
WMF503-VN, WMF504-VN, WMF596-VN



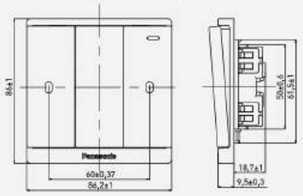
WMF513-VN, WMF514-VN



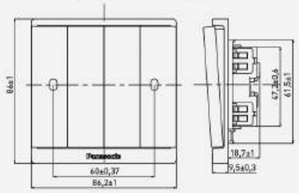
WMF505-VN, WMF506-VN



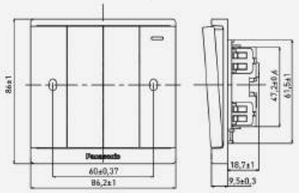
WMF515-VN, WMF516-VN



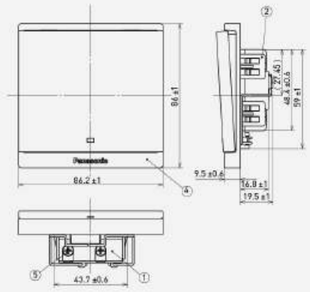
WMF507-VN, WMF508-VN



WMF517-VN, WMF518-VN



WMF503307-VN



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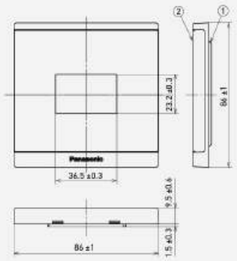

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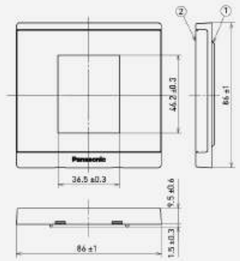

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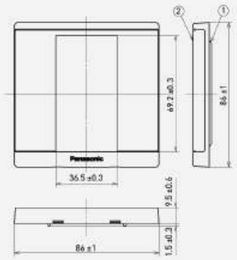
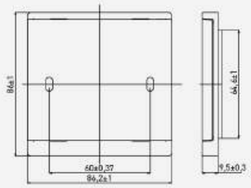
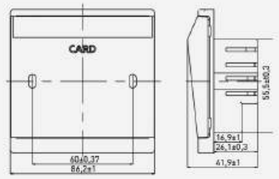


Unit: mm

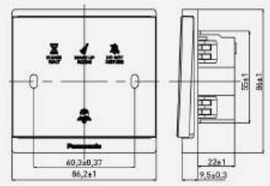
WMF6891-VN



WMF535-VN



WMF936-VN



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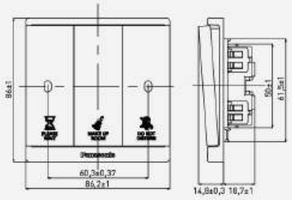

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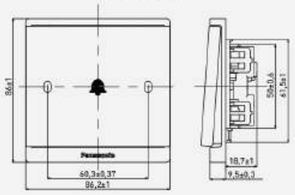

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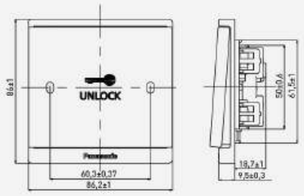

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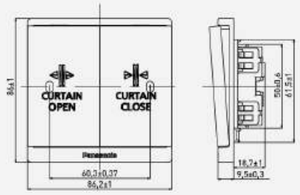

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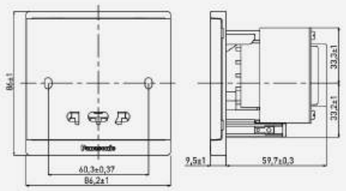

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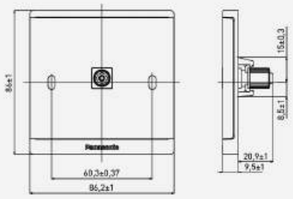

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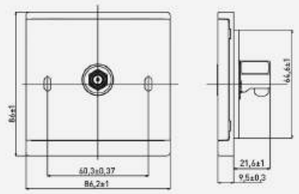

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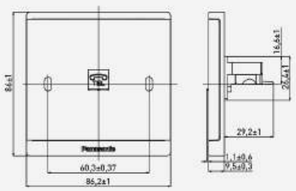

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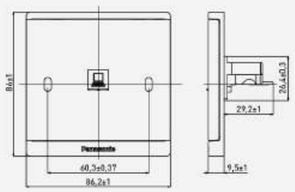

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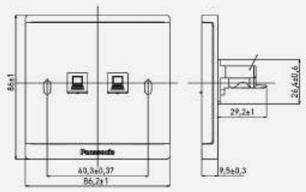
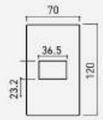
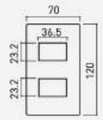
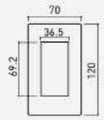
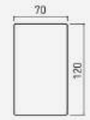


PLATES

Unit: mm

Halumie	 Plastic Plate 1-Gang 1-Device	 Plastic Plate 1-Gang 2-Device	 Plastic Plate 1-Gang 3-Device	 Plastic Plate 1-Gang Cover
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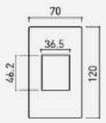
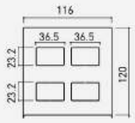
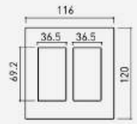
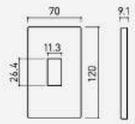
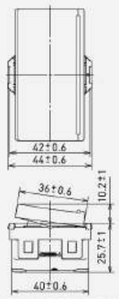
	 Plastic Plate 1-Gang Center 2-Device	 Plastic Plate 2-Gang 4-Device	 Plastic Plate 2-Gang 6-Device	 Plastic Plate 1-Gang for HB Breaker
	WEVH680290	WEVH68040	WEVH68060	WEVH8061

WEVH5511K



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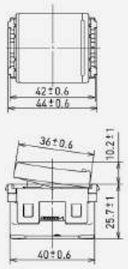

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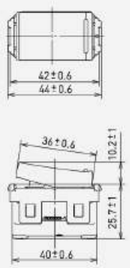

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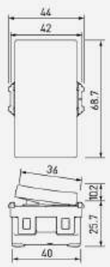

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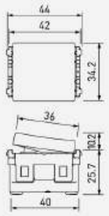

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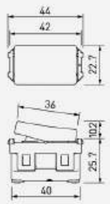

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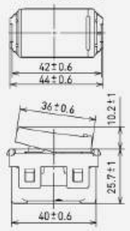

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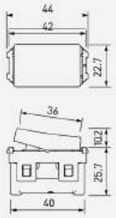

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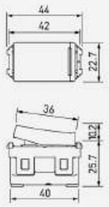

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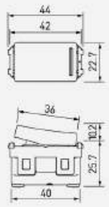

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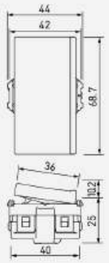

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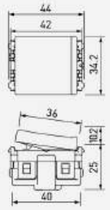

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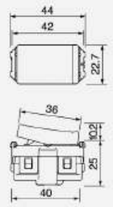
Unit: mm

WEVH5531-7K



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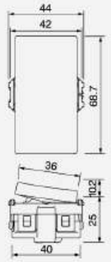

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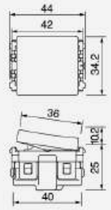

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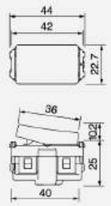

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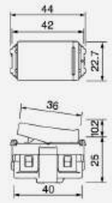

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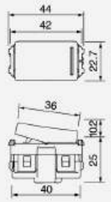

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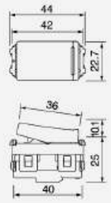

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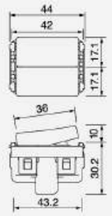

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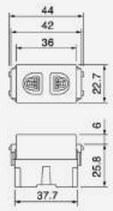
WEV1081-7SW



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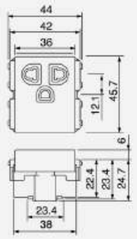

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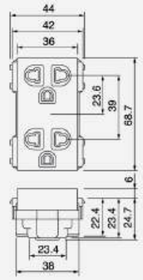

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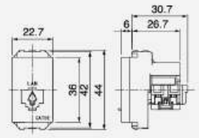

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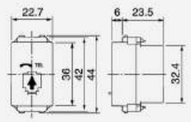

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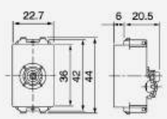

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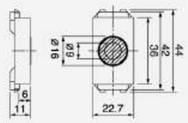

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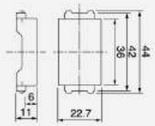
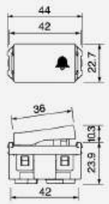


WEVH5401-011



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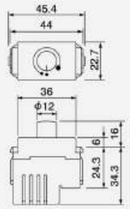
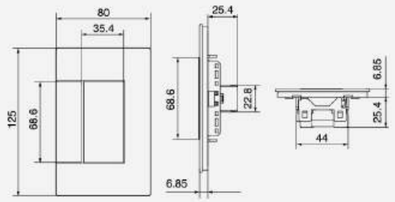


DIMENSION OF WIRING DEVICES

Gen-X

Unit: mm

WTEGP51552S-1-G



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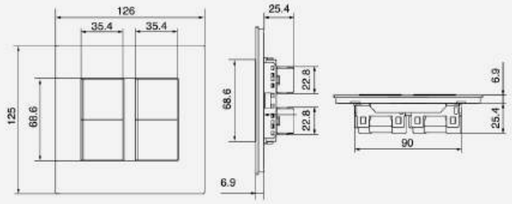

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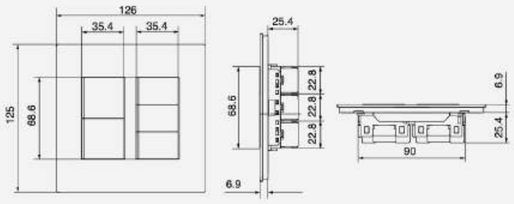

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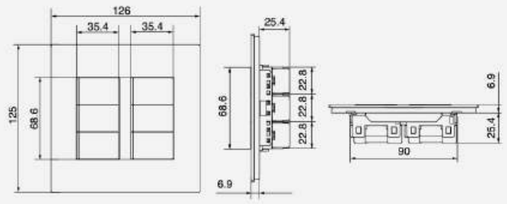
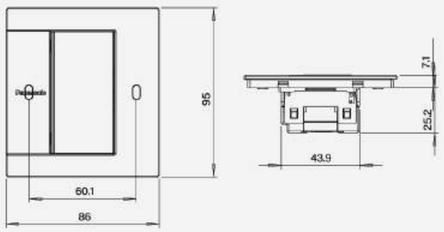
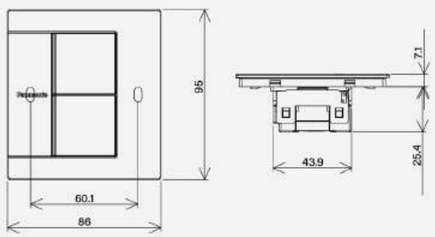


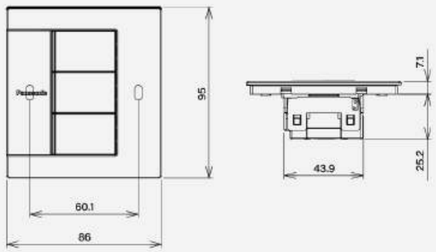
WTFBP51552S-1



WTFBP52562S-1



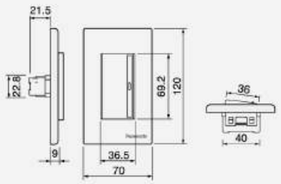
WTFBP53572S-1



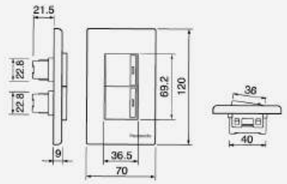
FULL-COLOR WIDE SERIES Refina

Unit: mm

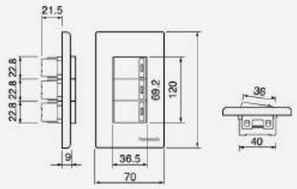
WEV5511SW



WEV5521SW



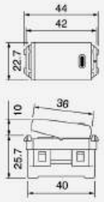
WEV5531SW



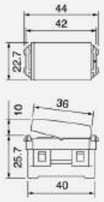
FULL COLOR WIDE SERIES

Unit: mm

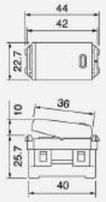
WEV5001SW
WEG5003KSW
WEV5001-7SW



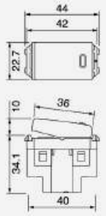
WEV5002SW
WEG5004KSW
WEV5002-7SW



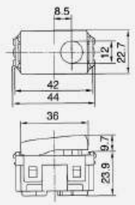
WEG5151-51SWK | WEG51517SW
WEG5152-51SWK | WEG51527SW
WEG5341SW



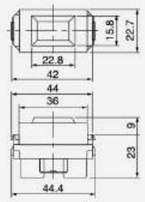
WEG5141SW



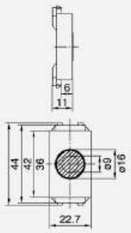
WEG5400-7SW
WEG5401-7SW



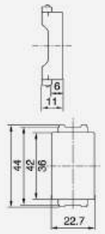
WEG3032SW (White)
WEG3032RSW (Red)
WEG3032GSW (Green)



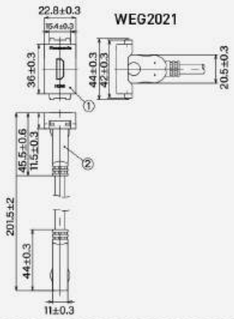
WEG3023SW



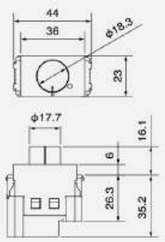
WEG3020SW



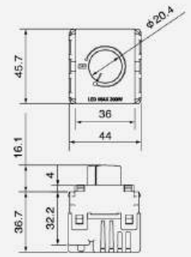
WEG2021



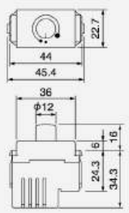
WEF5791301SW-VN



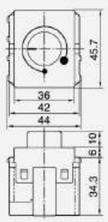
WEF5791501SW-VN



WEG575151SW



WEG575181

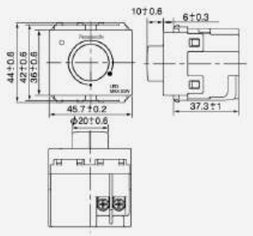


DIMENSION OF WIRING DEVICES

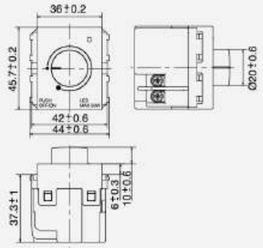
FULL-COLOR WIDE SERIES Refina

Unit: mm

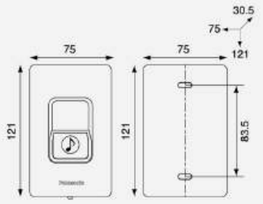
WEG57912SW



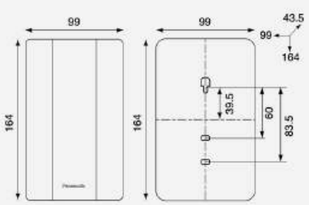
WEG57912B-1



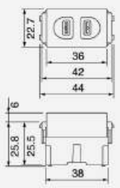
EGG331/EGG335



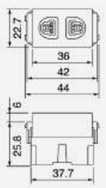
EBG888



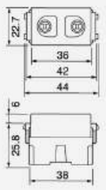
WEG1001SW



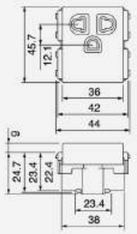
WEV1081SW | WEV1081-7SW
WEV1091SW



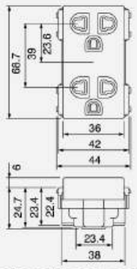
WEG1090SW



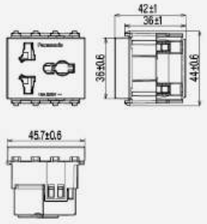
WEV1181SW | WEV1181-7SW
WEV1191SW



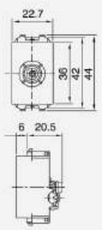
WEV1582SW | WEV1582-7SW
WEV1592SW



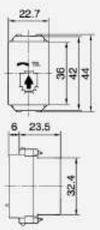
WEI1171SW—VN



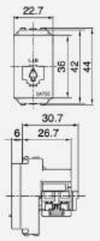
WEV2501SW



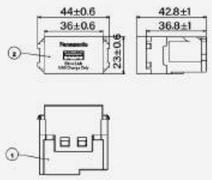
WEV2364SW



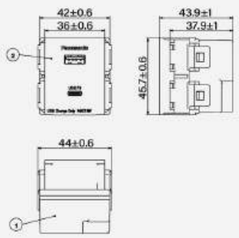
WEV24886SW
WEV2488SW



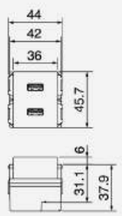
WEF108107



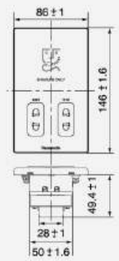
WEF14821



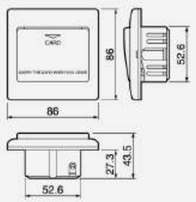
WEF11821W



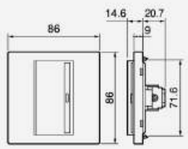
WEB1051WK



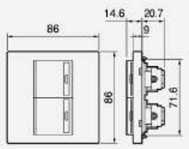
WEC5781W-VN



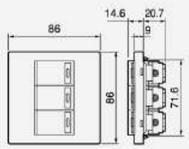
WEBP515117SW



WEBP525217SW



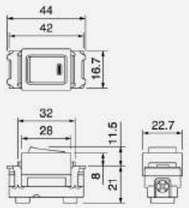
WEBP535317SW



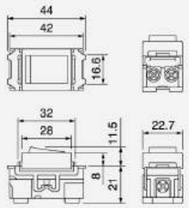
FULL-COLOR SERIES

Unit: mm

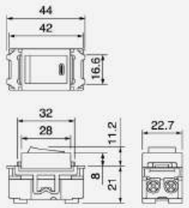
WNV5001-7W



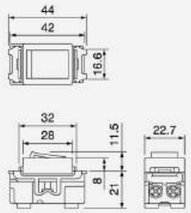
WNV5002-7W



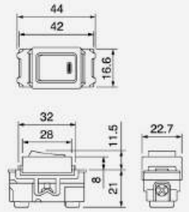
WNG5003-7W



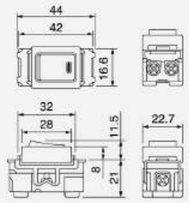
WNG5004-7W



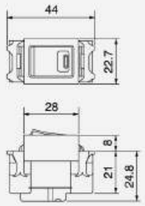
WNG5051W-751



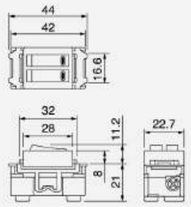
WNG5052W-751



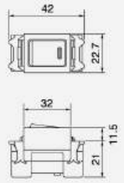
WN5241W-801



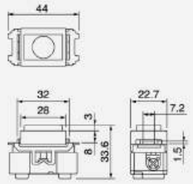
WNG5021W-7



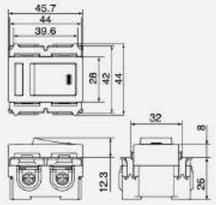
WNG5061-701W



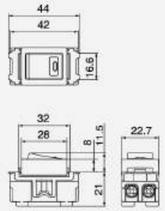
WNG5401W-7K



WBG5408699W



WBG5414699W-SP
WBG5414699W



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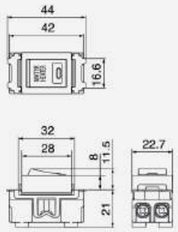

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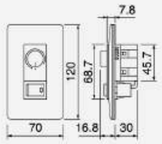

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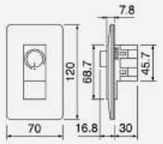

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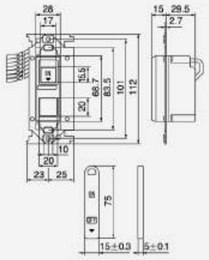
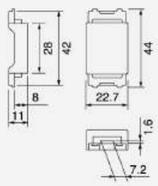


FULL-COLOR SERIES

Unit: mm

WN3020W



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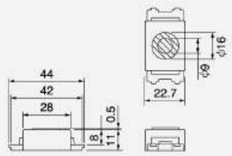
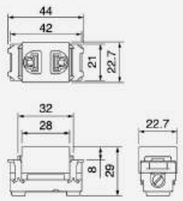


WNV1081-7W
WNV1091-7W



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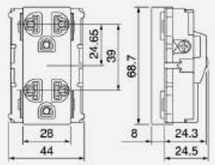

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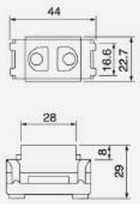
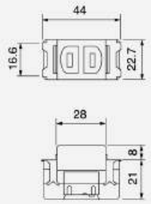


WN1001-7K-W



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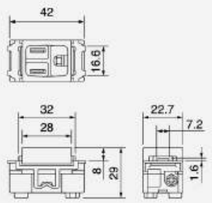

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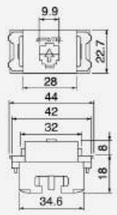

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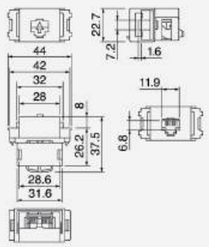

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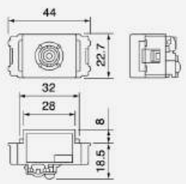

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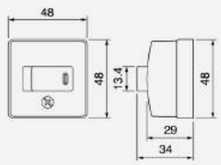
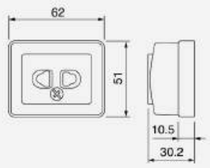


WK1091-250



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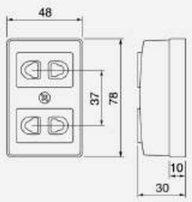


HIGH SAFETY AND DURABILITY

High safety that complies with Thai industrial standard (TIS) and civilized design in Japan

Durability:

- Extension cord equipped with highly reliable and safe Panasonic receptacles
- Compatible for both home and office use

Features:

- Maximum capacity 16A, 3,500W
- Line-up available from 3, 5 and 6 modules
- Glow switched receptacles for precise ON/OFF function are also available
- Safety shutter with rigid body
- Build in breaker for overload protection

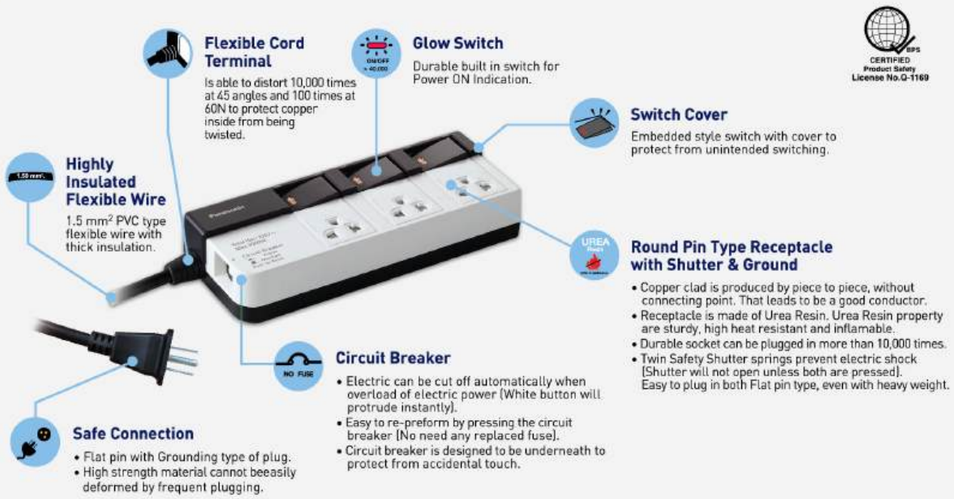
16A, 250V ~

WCHG28334
Extension Cord (3 Sockets)

WCHG28352
Extension Cord (5 Sockets)

WCHG2836
Extension Cord (6 Sockets)

FEATURES



PERFECT FIT FOR YOUR INTERIOR

Extension Cord With Safety Shutters & Breaker,
3 Sockets With Main Switch & 3-Meter Cord

Durability:

- Suitable to every type of residence space with Simple and Casual design
- Compact and Round shape

Features:

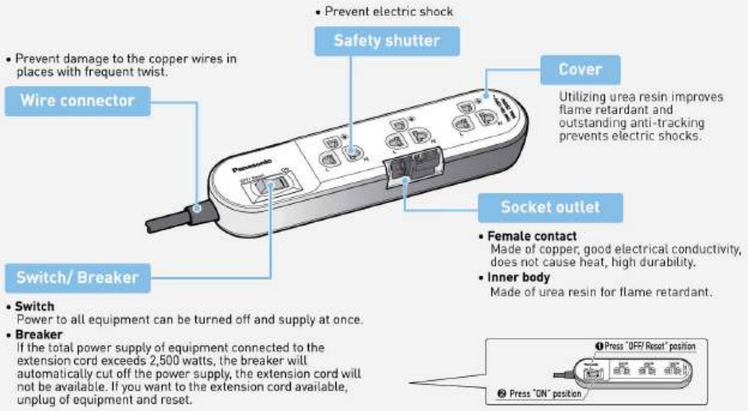
- Maximum capacity 10A, 2,500W
- Equipped with safety shutter
- Build in breaker for overload protection

10A, 250V ~

WCHG24332W-G
Extension Cord (3 Sockets)

WCHG243322W-VN
Extension Cord (3 Sockets) with 2-Port USD Charger

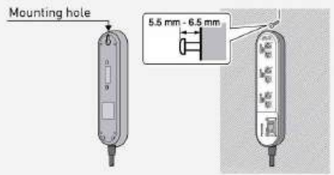
FEATURES



INSTALLATION

Can be fixed to a wall using the mounting hole
Hang using wooden screws
Diameter 4.5mm, length 16mm above

Remark: Wooden screws
(Not include in the extension cord, available on the market)



Product Type	Feature	Specification	Recommended Location
Pop-up type	• Users are familiar with this type • Durability to withstand heavy use • Easy to plug	• Plate 7.6mm • 3 Modules • IP44	• Temporary use such as vacuum cleaner • Heavy-duty use
Shallow type	• Hard to stumble with thin type • Auto-close door prevent dust and water from entering • Small Square design • 46mm box depth (Shallow)	• Plate 3.5mm • 3 Modules • IP44	• Dusty place • Places where design is important, such as shop or cafe
Double Duplex type	• Large module capacity (6 modules) • Luxury finish	• Plate 6.6mm • 6 Modules • IP44	• Where large module capacity is required such as office
Plug stored type	• The plug can be stored inside, making it difficult to trip	• Plate 4.0mm • 3 Modules • IP44	• Places that always use Power, TEL or LAN such as office
Resin type	• 2 types: Single or Duplex • Small and low cost	• Plate 3.7mm~4.1mm • 2 or 3 Modules • IP24	• Two types available, ideal for residential use

Panasonic Quality

We have passed severe tests based on our own standards. The following is an example:

1. Cover open-close durability

Open the cover by hand and let the cover close down test 10,000 times

2. Load performance test

Rolling 1,000N load on the Floor outlet 10,000 times

FLOOR OUTLET

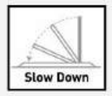
Panasonic has a wide range of series depending on the application and building

Blank types are available, and modules can be freely selected

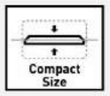
DU5900VTK

Blank with Outlet Box and Box Protector

Shallow Type



Comfortable with automatic lid mechanism



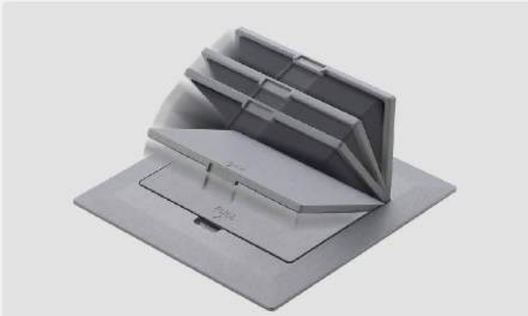
Flat and Fit the Floor surface

Dust and Water proof at safety level IP44

Adapted Module	3 modules (Full-color wide)
IP performance	IP44
Height of upper plate (mm)	3.5
Material	Aluminum Diecast
Dimension (mm)	130 x 130
Depth of BOX (mm)	69

DUFS1200LTH-1

Floor Outlet Shadow Aluminum diecast without inside Wiring Devices for Full-Color WIDE series IP44



Double Duplex Type

6 modules mountable

Multiple combination of Power and Data

Adapted Module	3 modules (Full-color wide)
IP performance	IP44
Height of upper plate (mm)	6.6
Material	Aluminum Diecast
Dimension (mm)	130 x 130
Depth of BOX (mm)	58

DUMF3200LT-1

Without Inside Wiring Devices for Full-Color WIDE series

Pop-up Type

Temporary use such as vacuum cleaner

Adapted Module	3 modules (Full-color wide)
IP performance	IP44
Height of upper plate (mm)	7.6
Material	Aluminum Diecast
Dimension (mm)	130 x 130
Depth of BOX (mm)	69

POP-UP FLOOR OUTLET IP-44

DU5900VTK
Blank with Outlet Box and Box Protector

DU5990LT9-1
Grounding Duplex Parallel with Outlet Box and Box Protector 16A 250V~

DU5993LT9-1
Grounding Duplex Parallel with Outlet Box and Box Protector 16A 250V~

DU5983LT9-1
Grounding Duplex Universal with Safety Shutter with Outlet Box and Box Protector 16A 250V~

DU59833LT9-1
Grounding Universal with Safety Shutter 16A 250V~ and Telephone Modular Jack (6P4C) with Outlet Box and Box Protector

DU59835LT9-1
Grounding Universal with Safety Shutter 16A 250V~ and CAT5E Modular Jack with Outlet Box and Box Protector

DU6933LT9-1
Duplex Telephone Modular Jack (6P4C) with Outlet Box and Box Protector

DU6935LT9-1
Telephone Modular Jack (6P4C) and CAT5E Modular Jack with Outlet Box and Box Protector

DU6955LT9-1
Duplex CAT5E Modular Jack with Outlet Box and Box Protector

Plug Stored Type

Places that always use Power, TEL or LAN such as office

Adapted Module	3 modules (Full-color wide)
IP performance	IP44
Height of upper plate (mm)	4.0
Material	Aluminum Diecast
Dimension (mm)	130 x 130
Depth of BOX (mm)	69

FLOOR OUTLET [ALUMINUM DIECAST] IP-44

DUF1200LTK-1
Blank with Outlet Box and Box Protector for FULL-COLOR WIDE SERIES Wiring Devices

DUF1260LTK-1
Grounding Duplex Universal with Safety Shutter with Outlet Box and Box Protector 16A 250V~

DUF1270LTK-1
Grounding Duplex Universal with Outlet Box and Box Protector 16A 250V~

DUF2214LTK-1
Telephone Modular Jack (6P4C) and CAT5E Modular Jack with Outlet Box and Box Protector

DUF2229LTK-1
Duplex Telephone Modular Jack (6P4C) with Outlet Box and Box Protector

DUF2259LTK-1
Duplex CAT5E Modular Jack with Outlet Box and Box Protector

DUF3221LTK-1
Grounding Universal with Safety Shutter 16A 250V~ and Telephone Modular Jack (6P4C) with Outlet Box and Box Protector

DUF3234LTK-1
Grounding Universal with Safety Shutter 16A 250V~ And CAT5E Modular Jack with box Protector and Outlet Box

DUF5200LT-1
Blank with Outlet Box and Box Protector for BS Type Wiring Devices

Resin Type

Two types available, ideal for residential use

Adapted Module	Single : 2 modules (Full-color wide) Duplex : 3 modules (Full-color wide)
IP performance	IP24
Height of upper plate (mm)	Single: 3.7 Duplex: 4.1
Material	Plastic
Dimension (mm)	Single: φ114 Duplex: φ134
Depth of BOX (mm)	64

Single

Duplex

FLOOR OUTLET SINGLE IP-24

DU8102HTC-1
Grounding Universal with Safety Shutter with Cover Unit 16A 250V~

DU5102HTC-1
Grounding Single Parallel with Cover Unit 16A 250V~

DU5199HTC-1
Floor Outlet Blank for Single Device with Cover Unit

DU61233HTC-1
Duplex Telephone Modular Jack (6P4C) Cover Unit

DU61223HTC-1
Telephone Modular Jack (6P4C) and TV Terminal Cover Unit

DU7199HTC-1
Floor Outlet Blank for Double Device with Cover Unit

FLOOR OUTLET DUPLEX IP-24

DU51031HTK-1
Grounding Duplex Parallel with Outlex Box and Box Protector 16A 250V~

DU81931HTK-1
Grounding Duplex Universal with Outlex Box and Box Protector 16A 250V~

DU81831HTK-1
Grounding Duplex Universal with Safety Shutter with Outlex Box and Box Protector 16A 250V~

DU81835HTK-1
Grounding Universal with Safety Shutter and CAT5E Modular Jack with Outlex Box and Box Protector 16A 250V~

FLOOR OUTLET

FLOOR OUTLET DUPLEX IP-24

DU612331HTK-1
Duplex Telephone Modular Jack (6P4C) with Outlex Box and Box Protector
16A 250V~

DU612351HTK-1
Telephone Modular Jack (6P4C) and CAT5E Modular Jack with Outlex Box and Box Protector

DU61355HTK-1
Duplex CAT5E Modular Jack with Outlex Box and Box Protector

DU61466HTK-1
Duplex CAT6 Modular Jack with Outlex Box and Box Protector

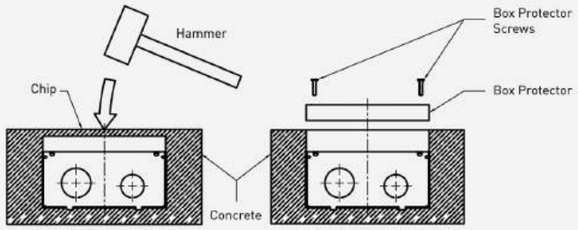
DU8199HTK-1
Floor Outlex, Blank for Triple Device with Cover Unit

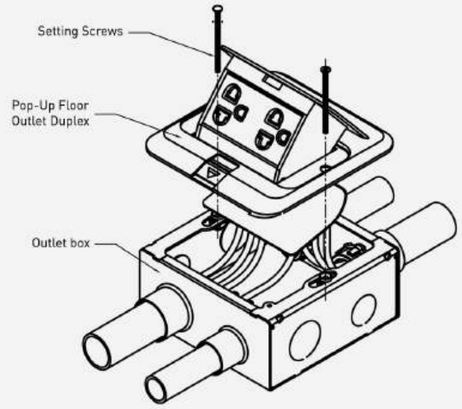
HOW TO MOUNT

Floor Outlet
After putting the concrete on, make the hole to install the product.

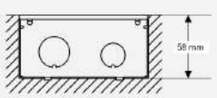
(1) Hammer the center part of where the box is installed and make the hole for installation.

(2) After chipping the concrete away, loosen cover unit screws and take the box protector off.

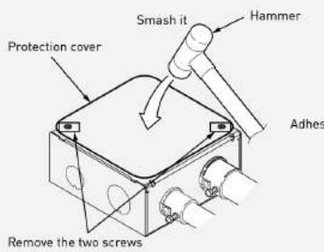


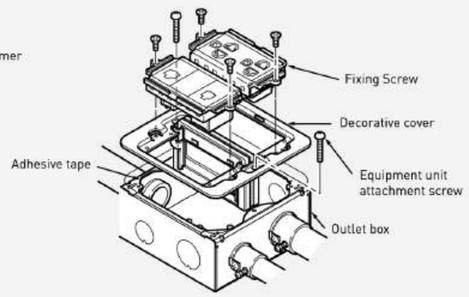


Floor Outlet Double
The upper surface of the protection cover must be the finished surface of the concrete.



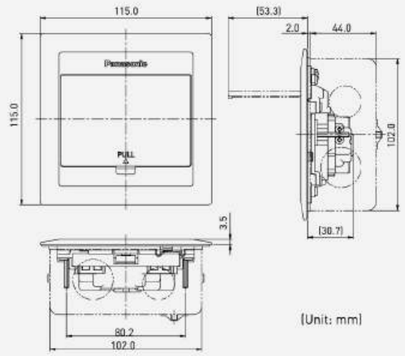
Smash the protection cover and remove the screws.



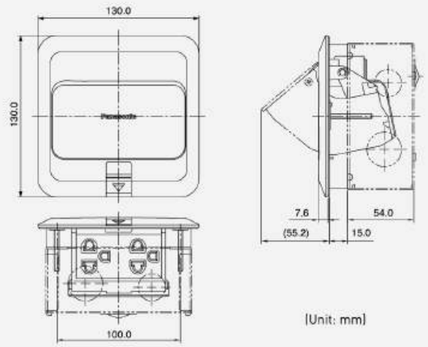


DRAWINGS

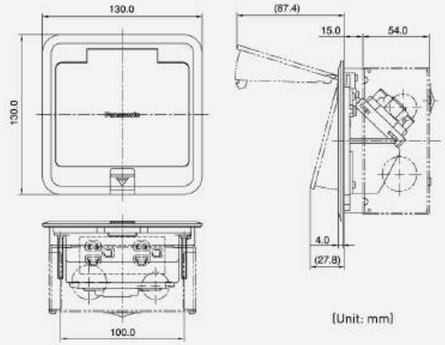
Floor Outlet Shallow Type



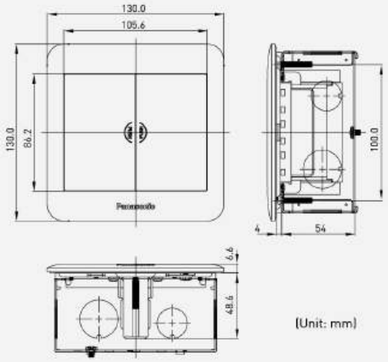
Pop-up Floor Outlet



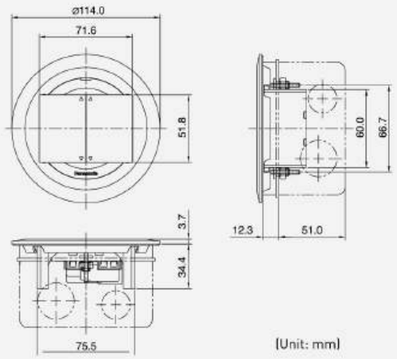
Floor Outlet (Aluminum Diecast)



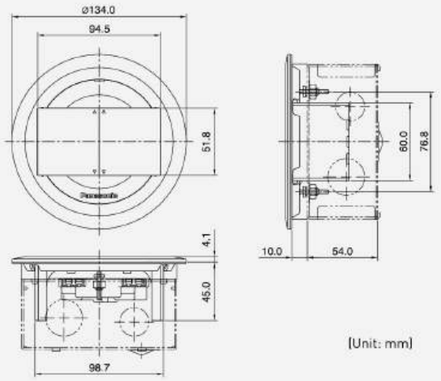
Floor Outlet Double



Floor Outlet Single



Floor Outlet



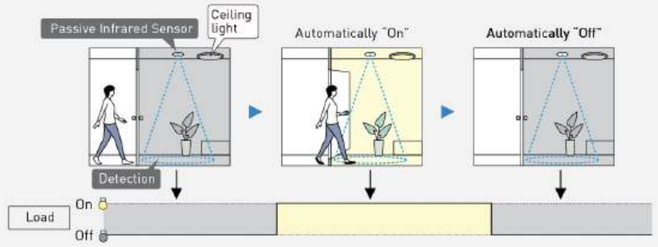
PASSIVE INFRARED SENSOR

New innovation with
New energy-saving lighting control

SAVES ENERGY PREVENTING FORGOTTEN ON LIGHTS

Best for Energy saving and Touchless demand.
Sensing human motion and automatically turn On/Off the lights.

Demonstration



Features

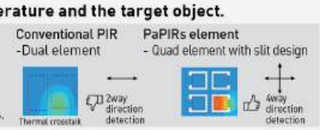
Non Contact — PIR Sensor reduces the risk of contact infection because it automatically turns ON/OFF the light **without touching the switch** at toilet and meeting room etc.

Safety — PIR Sensor automatically turns ON/OFF the light without exploring switch in a dark area. Rest assured that the elderly and children **will not stumble.**

Energy Saving — PIR Sensor automatically turns ON/OFF the light in case of no people in the warehouse and it leads to power saving.

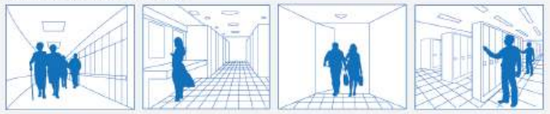
PaPIRs provides higher "Sensitivity" and "Reliability"!
Reliable detection when small temperature difference between the ambient temperature and the target object.

- **2 Times better Sensitivity**
  - -Slid design elements prevent thermal crosstalk between the single sensing elements.
- **4 Directions detection**
  - -Improve detection performance with Quad elements.



- **4 Times better signal-to-noise ratio**
  - -Original designed ASIC decrease the probability of false alarms
  - -Fine tuned detection setting in ASIC with our knowhow

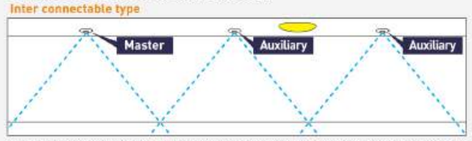
Recommended Location



Corridor | Restroom | Entrance hall | Locker

Multiple detection as Saving cost.
Suitable for hall way and parking.

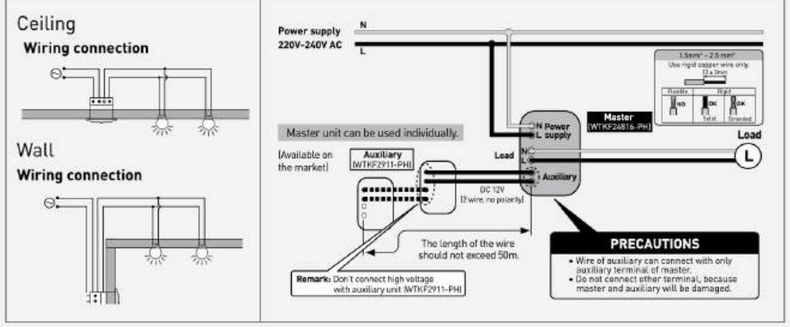
Inter connectable type



Number of Auxiliary units connected; WTKG2411(3A) → 4 units, WTKF24816-PH(8A) → 6 units

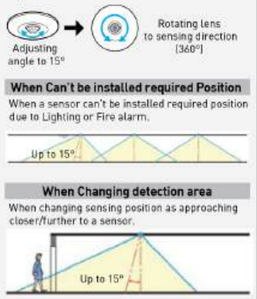
Wiring Method

Stand-alone type	Interconnectable type



Adjustable Lens

Adjusting detection area up to 15°C in any direction. Possible to change required detection area after installation.



Time Delay Out

Continuous" ON" and "Off" can be switched. The time when it is "ON" can be changed.

Set the knob to the position where it "clicks" to stop. Set a longer setting time for places where there are many people coming and going and where the ON/OFF function of the lighting fixture is frequently performed.

Brightness sensor

The ambient brightness where PIR sensor switch works can be changed "When "OFF" button is, PIR sensor switch operates regardless of the brightness.

It can be adjusted by turning the knob toward "light" when you want the light to turn on in bright ambient light conditions and toward "Dark" when you want the light to turn on in dark conditions.

Quick Connect Terminal II
Solid Wire: 1.5-2.5mm²
Stranded Wire: 1.5-2.5mm²

Screw-less Terminal
Suitable for Stranded Wire

CEILING FLUSH MOUNT TYPE

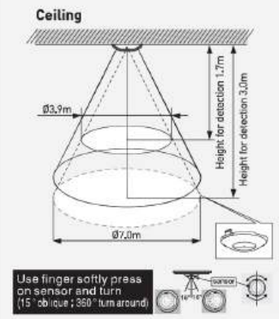
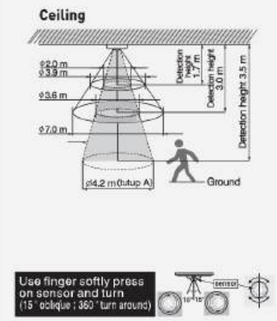
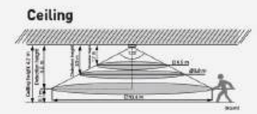
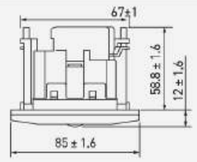
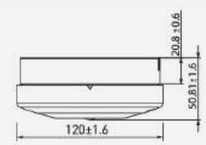
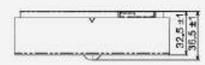
WTKG2310
Passive Infrared Sensor
(Ceiling Flush Mount Type)
3A 220V-240V~, 1 min Time Delay

CEILING SURFACE MOUNT TYPE

WTKF23113-VN
Passive Infrared Sensor
(Ceiling Surface Mount Type)
3A 220V-240V~, 10sec-30min, Time Delay

WTKF337107-VN
Passive Infrared Sensor Wide detection type
(Ceiling Surface Mount Type)
8A 220V-240V~, 10sec -10min, Time Delay

SPECIFICATIONS

Model no.		WTKG2310	WTKF23113-VN	WTKF337107-VN
Detectable Scope				
Dimension				
Rating		3A 220V-240V~		8A 220V-240V
Rated Power Consumption		Less than 2W		Less than 1W (Standby)
Load Capacity		Incandescent Lamp 660W		Incandescent Lamp 1760W
		Fluorescent Lamp 330W LED Lamp 330W		Fluorescent Lamp 880W LED Lamp 880W
Applicable Standard		IEC60669-1	–	
Ambient Temperature		-10°C to +40°C		
Wiring Connection		Quick Connect Terminal		Screw Terminal
Size of Installation Hole (cm)		Ø7.0 (+0.5)	Ø7.2 (+0.5)	
Applicable Wire		1.5mm² - 2.5mm² Rigid Copper Wire Only		
Applicable Boxes	Square Box	1.5 inches or more	1.5 inches or more	-
	Octagon Box	1.5 inches or more	1.5 inches or more	-
Illuminance Sensor		o	o	o
Time-Out Delay		Fixed 1min.	Adjustable 10sec. - 30min	(7steps) (OFF/10s/1m /3m/5m/10m/Continuous)
Detectable Movement Speed		0.3m/s ~ 1.0m/s		

Quick Connect Terminal Ⅱ
Solid Wire: 1.5-2.5mm²
Stranded Wire: 1.5-2.5mm²

Set the detection range to hand's motion range about 70cm

INTERCONNECTABLE TYPE CEILING FLUSH MOUNT TYPE (MASTER)

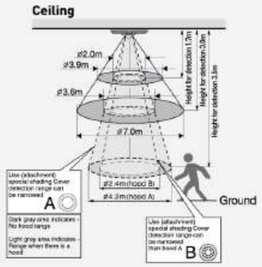
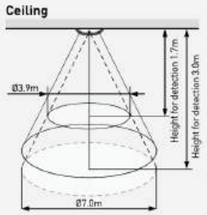
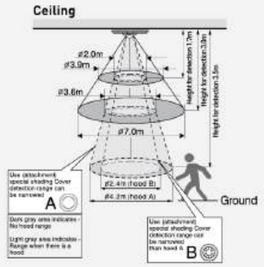
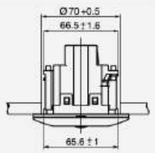
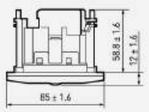
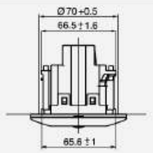
WTKF24816-VN
Passive Infrared Sensor
(Master Unit)
8A 220-240V

WTKG2411
Passive Infrared Sensor
(Master Unit)
3A 220-240V

CEILING FLUSH MOUNT TYPE (AUXILIARY)

WTKF2911-VN
Passive Infrared Sensor
(Auxiliary Unit)
DC12V

SPECIFICATIONS

Model no.		WTKF24816-VN	WTKG2411	WTKF2911-VN
Detectable Scope				
Adjustable Lens		Use finger softly press on sensor and turn (15° oblique ; 360° turn around)	Use finger softly press on sensor and turn (15° oblique ; 360° turn around)	Use finger softly press on sensor and turn (15° oblique ; 360° turn around)
Dimension			 Ø85 x 12 + 58.8 (L=70.8mm)	
Rating		8A 220-240V ~	3A 220-240V~	DC 12V
Rated Power Consumption		Less than 1W	Less than 2W	Less than 1W
Load Capacity		Incandescent Lamp 1760W	Incandescent Lamp 660W	-
		Fluorescent Lamp 880W/ LED Lamp 8800W	Fluorescent Lamp 330W/ LED Lamp 330W	-
Applicable Standard		-	IEC60669 – 2 – 1	-
Ambient Temperature		-10°C to +40°C	-10°C to +40°C	-10°C to +40°C
Wiring Connection		Quick Connect Terminal	Quick Connect Terminal	Quick Connect Terminal
Size of Installation Hole (cm)		Ø7.0 (+0.5)	Ø7.0 (+0.5)	Ø7.0 (+0.5)
Applicable Wire		1.5mm² - 2.5mm² Rigid Copper Wire Only	1.5mm² - 2.5mm² Rigid Copper Wire Only	1.5mm² - 2.5mm² Rigid Copper Wire Only
Applicable Boxes	Square Box	-	2 inches or more	-
	Octagon Box	-	2 inches or more	-
Illuminance Sensor		o	o	o
Time-Out Delay		Adjustable 10sec. – 30min.	Adjustable 10sec. – 30min.	-
Detectable Movement Speed		0.3m/s ~ 1.0m/s	0.3m/s ~ 1.0m/s	0.3m/s ~ 1.0m/s
Connectable auxiliary unit		6 units (WTKF2911-VN)	4 units (WTKF2911-VN)	

SIMPLE CHART OF DETECTION RANGE

Type	Model No.	Detection range by each height (Unit:m)						
Stand Alone Type	WTKG2310 WTKF23113-VN	Ceiling height		2.4	2.7	3.0	3.7	4.2
		Guideline height for detection scope setting		1.7	2.0	2.3	3.0	3.5
		Diameter of detection scope	No hood	Φ3.9	Φ4.6	Φ5.3	Φ7.0	-
			Hood	Φ2.0	Φ2.4	Φ2.7	Φ3.6	Φ4.2
Wide Detection Type	WTKF337107-VN	Ceiling height		2.4	2.7	3.0	3.7	4.2
		Guideline height for detection scope setting		1.7	2.0	2.3	3.0	3.5
		Diameter of detection scope		Φ6.5	Φ7.7	Φ8.8	Φ11.5	Φ13.4
MasterUnit	WTKG2411	Ceiling height		2.4	2.7	3.0	3.7	
		Guideline height for detection scope setting		1.7	2.0	2.3	3.0	
		Diameter of detection scope		Φ3.9	Φ4.6	Φ5.3	Φ7.0	
	WTKF24816-VN	Ceiling height		2.4	2.7	3.0	3.7	4.2
		Guideline height for detection scope setting		1.7	2.0	2.3	3.0	3.5
		Diameter of detection scope	No hood	Φ3.9	Φ4.6	Φ5.3	Φ7.0	-
			Hood A	Φ2.0	Φ2.4	Φ2.7	Φ3.6	Φ4.2
			Hood B	Φ1.2	Φ1.4	Φ1.6	Φ2.1	Φ2.4
Auxiliary Unit	WTKF2911-VN	Ceiling height		2.4	2.7	3.0	3.7	4.2
		Guideline height for detection scope setting		1.7	2.0	2.3	3.0	3.5
		Diameter of detection scope		Φ3.9	Φ4.6	Φ5.3	Φ7.0	-

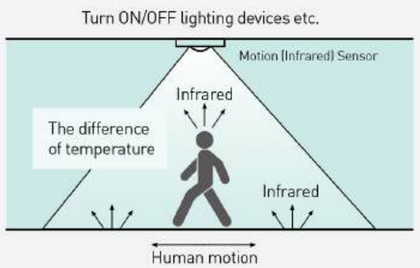
PASSIVE INFRARED SENSOR

New innovation with
New energy-saving lighting control

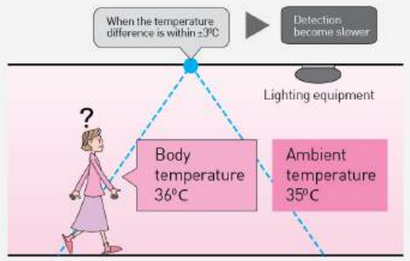
INSTRUCTIONS AND DIRECTIONS FOR USE

Passive Infrared Sensor switch controls the devices by detecting human motion utilizing the difference.

PIR is an abbreviation for Passive Infrared Ray.
Detects human motion in response to temperature Turbulence between human body and surroundings such as floors or walls.



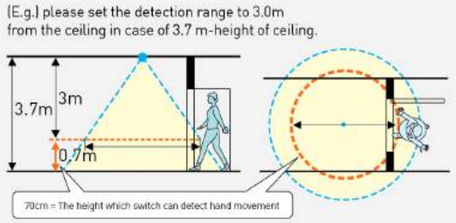
If the difference between ambient temperature and body temperature is small, the detection accuracy may be down and it may be difficult to turn on.



DETECTION RANGE

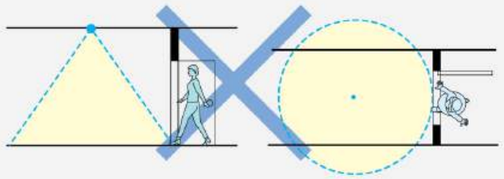
Set the detection range to hand's motion range about 70cm from the floor, which as the detection target for adjustment.

(E.g.) please set the detection range to 3.0m from the ceiling in case of 3.7 m-height of ceiling.



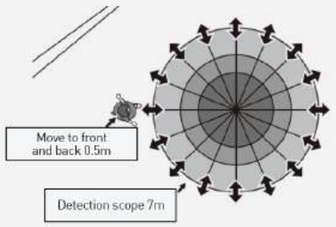
PRECAUTION

If the detection range is set on the floor, it may not be able to detect the temperatur changes immediately after entering a room.



NOTE

The detection performance varies Depending on the detect angle.
Be sure to check the operation after finishing the installation.
The Closer to the center of sensor, he more sensitive It is increased.



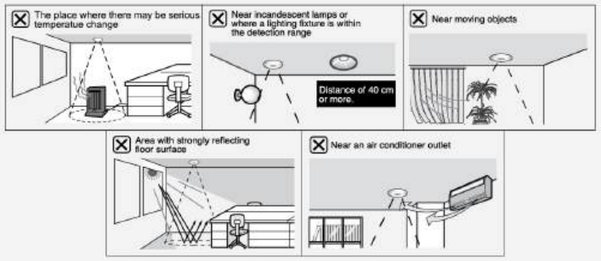
The following occurrences are not malfunctions. It may turn [OFF].

A person does not move.
(Detect speed 0.3m/s to 1m/s)

The ambient area is bright.

INSTALLATION PLACE

Please do not install in locations shown as examples.
The switch can be detect temperature changes (of 4 or more) by human motion, etc.
The switch may detect temperature changes in the surrounding area caused by hot air, etc.
This is not malfunction.



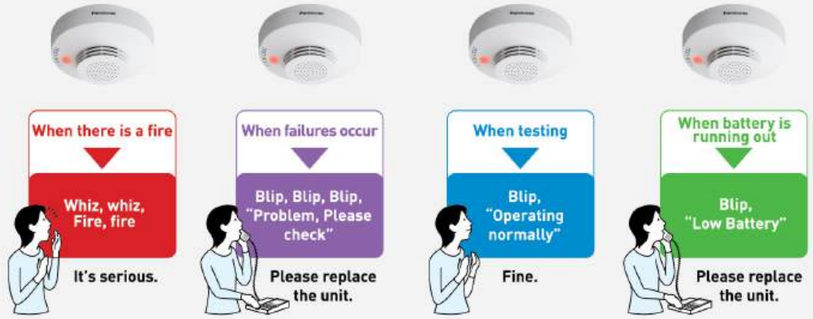
Provides prompt notification
in the event of a fire

SLIM SMOKE & VOICE ALARM WITH LONG-LIFE-BATTERY

Rapid indication with a clear "alarm sound" and a "voice" easy to understand

Approx. 87dB at 1m distance from equipment (at peak value) (measured by our company based on corporate judgment standard)
For alarm sound "Whiz, whiz", a wide frequency band from 0.3kHz to 4.0kHz is adopted for easy catching even by old people and children.

IMMEDIATELY UNDERSTANDS WHAT HAPPENED



SH28455911VN
Smoke alarm for residential use

Model No.		SH28455911
Power Supply		Dedicated Lithium Battery (3V) x 1
Battery Life		Approximately 10 years (*)
Detecting Method		Smoke Type (Photoelectric Method)
Class		Type 2
Alarm Sound/ Voice Alarm	Fire	Whiz, whiz, fire, fire!
	Low Battery	"Blip, Low Battery!" x 3 times "Blip, approx., every 40 seconds after that
	Trouble	"Blip, blip, blip, Problem, Please check" x 3 times "Blip, blip, blip," approx., every 40 seconds after that
Alarm Volume		84 dB or more at 1m distance from equipment
Dimension		Approx. Ø100mm x 44mm (Including attachment base)
Weight (Including Dedicated Lithium Battery)		Approx. 140g
Operating Temperature		0 ∞ C to + 50 ∞ C
Installation Location		Ceiling/ Wall Surface

Signal Transmission Contact (No-Voltage)	-

*It may be shorter depending on usage environment.

	Mode	Voice Alarm	Indication
Function	Normal		OFF
	Alarm	Whiz Whiz Fire Fire	Blink
	Silent	-	OFF
	Trouble #1	Blip, Blip, Blip, Problem please check	Blink
	Trouble (Silent)	-	Blink
	Low Battery #2	Blip, Low Battery	Blink every 8 seconds
	Low Battery (Silent)	-	Blink every 8 seconds

FIRE ALARM SYSTEM

The smartest way to fire proof your business.

INTELLIGENT MONITORING FOR SAFER BUSINESS AND YOU'RE CHOOSING WORLD-CLASS PROTECTION

With more than 50 years' experience in the development of fire alarm solutions, and installations in over 15,000 buildings, Panasonic provides technology that's designed not just to alert you to the outbreak of fire, but also to pre-warn you of conditions that could lead to a fire.

PRODUCT FEATURES

Reliability

Smart flexible detector algorithms

Focused on reliability by using a fine mesh net and AI-based learning function.

Tested not once but twice

Tested with "actual fire conditions" in order to accurately detect smoke during fire.

Convenience

Multi master configuration

Control panels can be connected up to 30 panels.

WEB server integration

Possible to install a WEB server inside the control panel, allowing full access over TCP/IP.

Efficiency

Auto-addressing

EBLWin's function can register the addresses to all the devices at once.

EBL App

Allows scheduled system tests and generate reports quickly by using smart phones.

CONTROL PANEL

EBLOne

NEW

- One COM loop
- 253 COM loop addresses
- Discrete elegance and small size, to fit into all environments
- 7" color touch screen as the single UI
- Remote access via any internet connected terminal
- Wide Enclosures for Batteries
- Integration with conventional systems

EBL 512 G3

- 4 COM loops
- 1020 COM loop addresses max 1020 alarm points
- Up to 30 panels in a TLON network => 30k alarm points
- Redundant network communication for highest security
- Remote access via any internet connected terminal
- Wide Enclosures for Batteries
- Integration with conventional systems

PRODUCT LINEUP

SYSTEM MONITORING

Display unit

Gateway

Software Products

Remote Monitoring

DETECTORS

Smoke/Heat detector

Multi Detector

Intrinsically Safe Detector

SPECIAL DETECTORS

Aspirating Detector

ALARM DEVICE AND MANUAL CALL POINT

VAD with Siren

WALL VAD

External Indicator

Manual Call Point

I/O UNITS

COM-loop Repeater

2 Voltage Output Board

Addressable
2 Monitored Output Unit

Addressable Multi
Purpose I/O Unit

TOOLS

Address Setting Tool

EBL Win Key

CE EN54 VdS

AUTOMATIC TIME SWITCH

Available in a wide variety of models to suit a multitude of environmental and weather conditions

WHAT'S AN AUTOMATIC TIME SWITCH?

An automatic time switch automatically controls the use of electricity according to time.
It's a device that lowers both electrical and labour costs.

BASIC FUNCTION

Automatically Turns the Power On and Off

The Time Switch combines a clock with a switch to automatically turn power on or off at preset times. It is generally built into a lightboard or distribution panel, and controls electricity on a 24-hour. It makes it possible to replace conventional manual control with automated, reliable ON/OFF time management.

Eliminating Waste of Power Is Also Ecological

Because the power is reliably turned on and off according to a preset time schedule, the amount that was wasted by extended use is saved, and electric bills are effectively lowered.

Cutting Labour Costs Is Also Efficient

Since the job of turning the power on and off is done automatically instead of manually, you can assign your valuable human resources to more important jobs. Human error is also eliminated, so power management is more reliable.

BASIC SETTING

Simply Set the Time for ON/OFF Control

Time management consists of simply setting the times to turn the power on and off. A wide range of uses are possible across various operations, such as lighting, air conditioning, water supply, and livestock feeding.

Example: Managing electricity in the office

From 1:00 PM to 6:00 PM

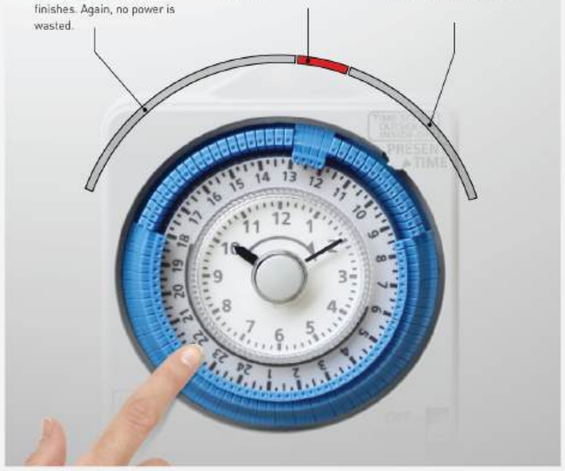
Lighting and air conditioning are turned on precisely when lunchtime ends. Then the power is automatically turned off when the workday finishes. Again, no power is wasted.

From 0:00 PM to 1:00 PM

Lunchtime. Lighting and air conditioning are turned off while people leave the office for lunch. No power is wasted.

From 8:30 AM to 12:00 AM

Turn the power on at the start of the workday. Lighting and air conditioning are turned on to provide a smooth start to office work.



FEATURES

Panasonic, with over 100 years of expertise forged in the Electrical Construction Material field with its Wiring Devices series, has also established a name for itself in the Time Control Devices market during the past 50 years with its Automatic Time Switch.

Thorough Quality Control

In addition to advanced functions, Panasonic focuses its manufacturing efforts on providing high durability and performance for many years of reliable use, and selects materials with full consideration of the global environment. Certification by third-party institutions and compliance with a wide range of international standards attest to these efforts. This approach is also used with Panasonic's Automatic Time Switches, to allow our customers worldwide to experience a new level of comfort and safety for the control of electric equipment.

Meeting IEC Standards

Panasonic's product design has been recognised and certified by many international organisations worldwide, such as the IEC (International Electrotechnical Commission), the top reference for electrical and electronic safety standards. Our Automatic Time Switch has successfully passed and complies with the IEC60730-2-7 directives to provide safer and more comfortable use of our line-up to our customers.

Products Compliant with the RoHS Directive

Panasonic's manufacturing processes are based on management standards for chemical substances by complying with the EU RoHS directive in order to provide all of our customers safer products with less impact on the environment.

Detailed consideration is given to users in the form of functions that are helpful in ordinary usage, and designs that simplify maintenance.

Easy Operation Check

A power lamp is located on the front panel, so the user can see at a glance whether the unit is operating or not, thus helping to provide safe use.

Easy Battery Replacement

With conventional time switches, the unit must be removed from its installation location, such as in a distribution panel, to replace the batteries. Panasonic's Time Switch lets you easily replace the batteries from the front panel. This makes maintenance considerably easier.

Preventing Entry of Ants and Other Small Insects

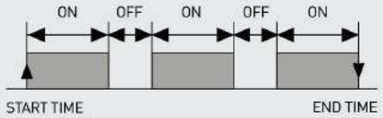
Time Switches are sometimes subject to the entry of ants and other small insects, which can cause malfunctions. Panasonic Time Switches have an airtight construction that prevents this problem for long, trouble-free use.

AUTOMATIC TIME SWITCH

Available in a wide variety of models to suit a multitude of environmental and usage

APPLICATION

Interval Function

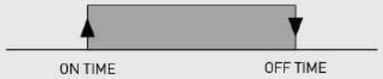


Repeat ON/OFF actions continuously within the setting time (from start time to end time)

Control dry mist at Mall, Park etc

- In summer, dry mist will work regularly to cool down the air.
- On weekend when customers increase, dry mist works more often than weekdays.

Timer Function



TURN ON as set program (ON TIME) and TURN OFF as set program (OFF TIME)

Control sign at shops, convenience store etc

Control lighting at office

Pulse Function

TURN ON as set program (ON TIME) and TURN OFF after finish the pulse length.

Ring a Chime or Bell at office

Signal of Production Machine

LINE-UP

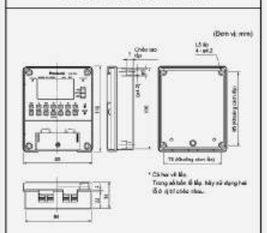
TB47K

Interval, Timer, Pulse Function

Features

- Digital type
- Weekly program (TB4728KE7V)
- 24 hours program (TB4718KE7V)
- 5 years reserve battery

Dimensions (unit: mm)



Applicable Installation	Indoor Use		
Type	Daily		Weekly
Series	TB47K Series		
Item No.	TB4718KE7V		TB4728KE7V
Drive Method	Electronic		
Power Failure Backup Time	5 years(Lithium)		
Rated Voltage(Frequency)	220-240V AC (50-60Hz)		
Rated Voltage for power source	187-264VAC		
Rated Power consumption	220V AC 2W		
Time Precision	±15 sec./month (at 25°C)		
Circuit Configuration	Same circuit (voltage contact output)		
Switch Constraction	Single Pole, Single Through (1a Contact)		
Load Capacity: Resistive Load (cos φ=1)	250V AC 15A		
Load Capacity: Incandescent Lamp Load	250V AC 3A		
Load Capacity: Inductive Load (cos φ 0.6)	250V AC 9A		
Load Capacity: Motor Load (cos φ 0.6)	220V AC 750W		
Minimum Setting Time	Timer: 1 Minute, Interval: 1 Minute, Pulse: 1 second (Pulse: 1~99 second)		
No. of On/Off Operation	Timer: 15 Programs (on/off set), Interval: 8 Programs, Pulse: 30 Pulse		

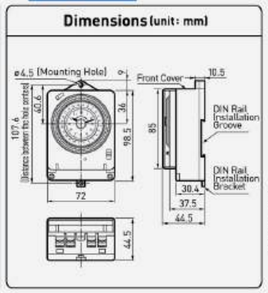
TB35N, TB36N, TB38N, TB39N

Timer function

Features

- 24 hours program
- Surface and DIN rail mount
- 300 hours reserve battery (TB38N, 39N) *Battery exchange from the front side
- 96 operations per day
- Minimum setting time is 15 minutes

Dimensions (unit: mm)



Applicable Installation	Indoor Use			
Type	Daily			
Series	TB35N series	TB36N series	TB38N series	TB39N series
Item No.	TB35809NE5V (220-240V AC 50Hz)	TB36809NE5V (220-240V AC 50Hz)	TB38809NE7V (220-240V AC 50Hz)	TB39809NE7V (220-240V AC 50Hz)
Drive Method	AC Motor		Quartz Motor	
Power Failure Backup Time	———		300 hours	
Time Precision	Same as AC frequency		±15 sec./month (at 25°C)	
Circuit Configuration	Voltage contact output	No voltage contact output	Voltage contact output	No voltage contact output
Switch Constraction	Single Pole, Single Through (1a Contact)	Single Pole, Double Through (1c Contact)	Single Pole, Single Through (1a Contact)	Single Pole, Double Through (1c Contact)
Load Capacity: Resistive Load	250V AC 20A			
Load Capacity: Incandescent Lamp Load	250V AC 10A			
Load Capacity: Inductive Load (cos φ ≥0.6)	250V AC 12A			
Load Capacity: Motor Load (cos φ ≥0.6)	220V AC 1500W			
Minimum Setting Time	15 minutes			
No. of On/Off Operation	96 operations			

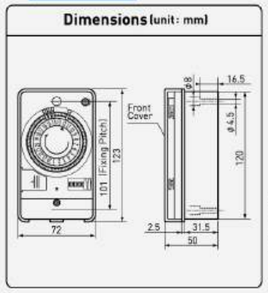
TB17N, TB11N

Timer function

Features

- 24 hours program
- On/Off operations are set with separated pins
- With a manual On/Off switch
- 300 hours reserve battery (TB11N) *Battery exchange from the front side

Dimensions (unit: mm)



Applicable Installation	Indoor Use	
Type	Daily	
Series	TB17N series	TB11N series
Item No.	TB178NE5V (220-240V AC 50Hz)	TB118NE7V (220-240V AC 50Hz)
Drive Method	AC Motor	Quartz Motor
Power Failure Backup Time	———	300 hours
Time Precision	Same as AC frequency	±15 sec./month (at 25°C)
Circuit Configuration	Voltage contact output	
Switch Constraction	Single Pole, Single Through (1a Contact)	
Load Capacity: Resistive Load	250V AC 15A	
Load Capacity: Incandescent Lamp Load	250V AC 15A	
Load Capacity: Inductive Load (cos φ ≥0.6)	250V AC 12A	
Load Capacity: Motor Load (cos φ ≥0.6)	220V AC 1500W	
Minimum Setting Time	30 minutes	
No. of On/Off Operation	Standard 6 operations (Max 48 operations)	

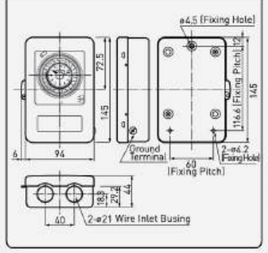
TB35N, TB38N [Steel Box Type]

Timer function

Features

- With robust steel box
- 24 hours program
- Surface mount
- 300 hours reserve battery (TB38N) *Battery exchange from the front side
- 96 operations per day
- Minimum setting time is 15 minutes

Dimensions (unit: mm)



Applicable Installation	Indoor Use	
Type	Daily	
Series	TB35N series	TB38N series
Item No.	TB358NE5V (220-240V AC 50Hz)	TB388NE7V (220-240V AC 50Hz)
Drive Method	AC Motor	Quartz Motor
Power Failure Backup Time	———	300 hours
Time Precision	Same as AC frequency	±15 sec./month (at 25°C)
Circuit Configuration	Voltage contact output	
Switch Constraction	Single Pole, Single Through (1a Contact)	
Load Capacity: Resistive Load	250V AC 20A	
Load Capacity: Incandescent Lamp Load	250V AC 10A	
Load Capacity: Inductive Load (cos φ ≥0.6)	250V AC 12A	
Load Capacity: Motor Load (cos φ ≥0.6)	220V AC 1500W	
Minimum Setting Time	15 minutes	
No. of On/Off Operation	96 operations	

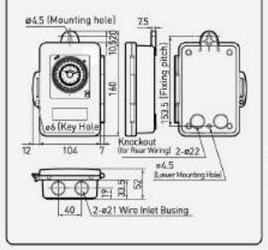
TB43N [Plastic Box Type]

Timer function

Features

- 24 hours program
- Surface mount
- Weatherproof type (IP53)
- 300 hours reserve battery (TB43N) *Battery exchange from the front side

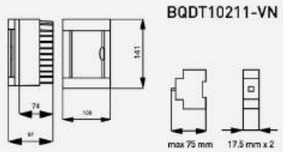
Dimensions (unit: mm)

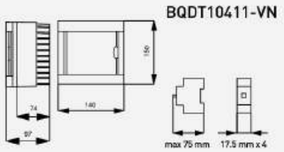


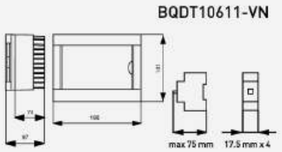
Applicable Installation	Outdoor & Indoor Use
Type	Daily
Series	TB43N Series
Item No.	TB438NE7V (220-240V AC 50Hz)
Drive Method	Quartz Motor
Power Failure Backup Time	300 hours
Time Precision	±15 sec./month (at 25°C)
Circuit Configuration	No voltage contact output
Switch Constraction	Single Pole, Single Through (1a Contact)
Load Capacity: Resistive Load	250V AC 20A
Load Capacity: Incandescent Lamp Load	250V AC 10A
Load Capacity: Inductive Load (cos φ ≥0.6)	250V AC 12A
Load Capacity: Motor Load (cos φ ≥0.6)	220V AC 1500W
Minimum Setting Time	15 minutes
No. of On/Off Operation	96 operations

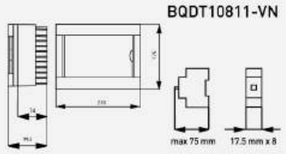
DISTRIBUTION BOX (PLASTIC)

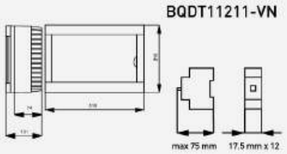
FLUSH MOUNTED

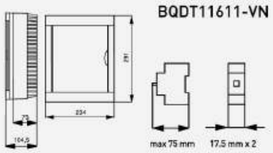


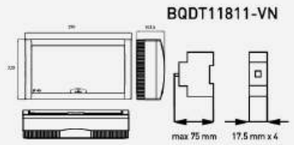


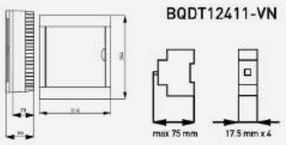


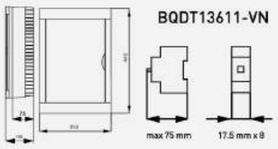




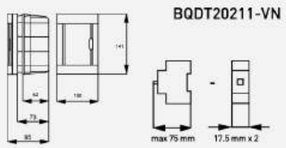


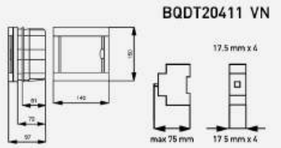


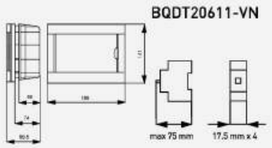


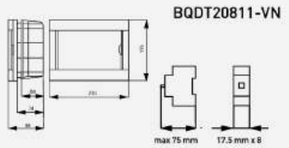


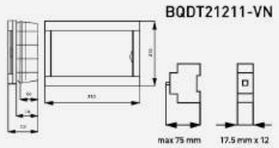
DIMENSIONS OF SURFACE MOUNTED

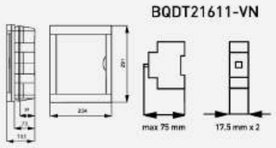


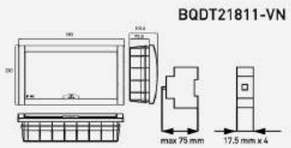


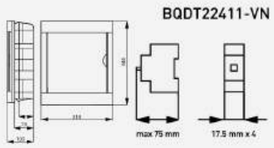


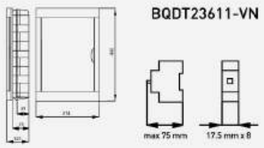












DISTRIBUTION BOX (METAL)

Type	Item code	Description	Color	Cover Material & Box Material	Thickness (box)	Row
WS type (White, transparent cover)	BQDX08T11AV	8 Flush Mounted	White & Black	Cover: Plastic Box: Steel	1.0mm	1
	BQDX12T11AV	12 Flush Mounted	White & Black	Cover: Plastic Box: Steel	1.0mm	1
	BQDX16T11AV	16 Flush Mounted	White & Black	Cover: Plastic Box: Steel	1.0mm	1
	BQDX24T11AV	24 Flush Mounted	White & Black	Cover: Plastic Box: Steel	1.0mm	2
	BQDX32T11AV	32 Flush Mounted	White & Black	Cover: Plastic Box: Steel	1.0mm	2
	BQDX40T11AV	40 Flush Mounted	White & Black	Cover: Plastic Box: Steel	1.5mm	2
G type (Gold, transparent cover)	BQDX08G11AV	8 Flush Mounted	Gold	Cover: Plastic Box: Steel	1.0mm	1
	BQDX12G11AV	12 Flush Mounted	Gold	Cover: Plastic Box: Steel	1.0mm	1
	BQDX16G11AV	16 Flush Mounted	Gold	Cover: Plastic Box: Steel	1.0mm	1
	BQDX24G11AV	24 Flush Mounted	Gold	Cover: Plastic Box: Steel	1.0mm	2
	BQDX32G11AV	32 Flush Mounted	Gold	Cover: Plastic Box: Steel	1.0mm	2
	BQDX40G11AV	40 Flush Mounted	Gold	Cover: Plastic Box: Steel	1.5mm	2

DISTRIBUTION BOX (METAL) NEW

FEATURES:

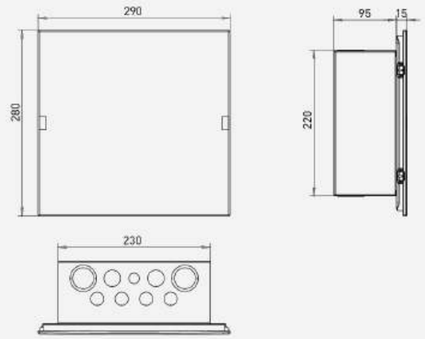
-Frameless cover fits luxurious room
-Cover color matches with Minerva series leads to harmonize your space
-Box thickness is 0.8mm and very light

Type	Item code	Description	Color	Cover Material & Box Material	Thickness (box)	Row
White cover	BQDF08W31AV	8 Flush Mounted	White	Cover: Plastic Box: Steel	0.8mm	1
	BQDF12W31AV	12 Flush Mounted	White	Cover: Plastic Box: Steel	0.8mm	1
	BQDF16W31AV	16 Flush Mounted	White	Cover: Plastic Box: Steel	0.8mm	1
	BQDF24W31AV	24 Flush Mounted	White	Cover: Plastic Box: Steel	1.0mm	2
Metallic Gold cover	BQDF08MG31AV	8 Flush Mounted	Metallic Gold	Cover: Plastic Box: Steel	0.8mm	1
	BQDF12MG31AV	12 Flush Mounted	Metallic Gold	Cover: Plastic Box: Steel	0.8mm	1
	BQDF16MG31AV	16 Flush Mounted	Metallic Gold	Cover: Plastic Box: Steel	0.8mm	1
	BQDF24MG31AV	24 Flush Mounted	Metallic Gold	Cover: Plastic Box: Steel	1.0mm	2
Metallic Gray cover	BQDF08MH31AV	8 Flush Mounted	Metallic Gray	Cover: Plastic Box: Steel	0.8mm	1
	BQDF12MH31AV	12 Flush Mounted	Metallic Gray	Cover: Plastic Box: Steel	0.8mm	1
	BQDF16MH31AV	16 Flush Mounted	Metallic Gray	Cover: Plastic Box: Steel	0.8mm	1
	BQDF24MH31AV	24 Flush Mounted	Metallic Gray	Cover: Plastic Box: Steel	1.5mm	2

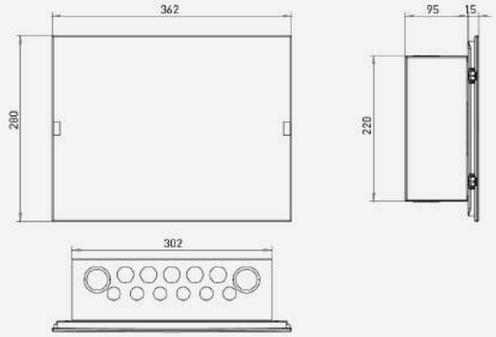
*Upcoming series, detail information will be disclosed soon.

DIMENSION:

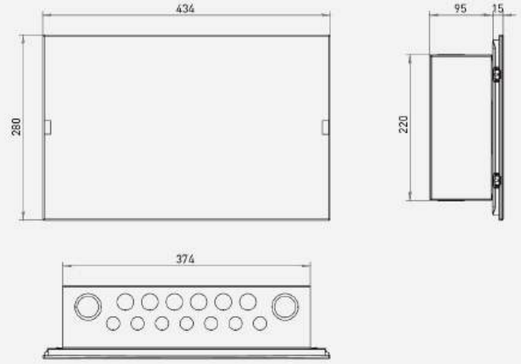
8 Module



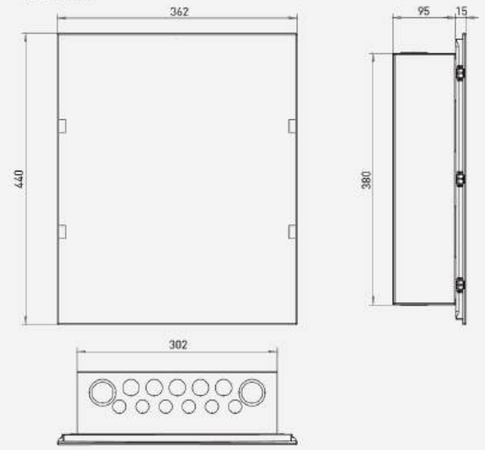
12 Module



16 Module



24 Module

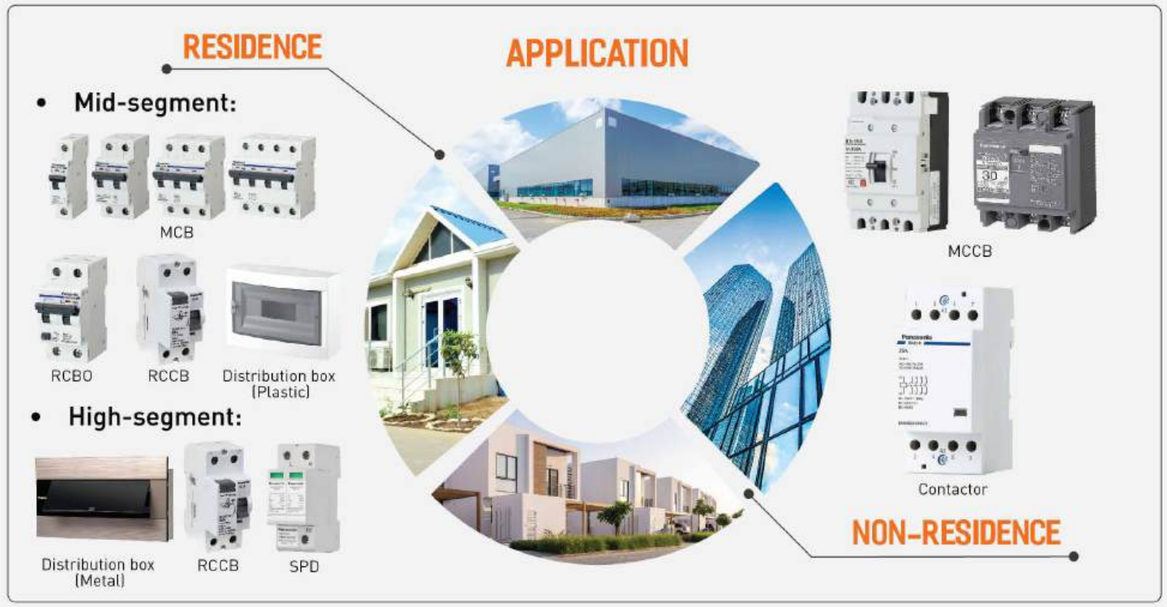


MCB, RCCB, RCBO

Miniature Circuit Breaker (MCB)		Residual Current Circuit Breaker (RCCB)			Residual Current Circuit Breaker with Overcurrent Protection (RCBO)		
Over current and Short circuit Protection		Residual current Protection			Overcurrent, Short circuit and Residual curent Protection		
DIN Type	HB Type	DIN Type	BJS Type	J Type	DIN Type	BJS Type	J Type

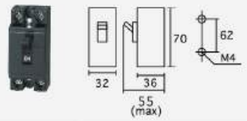
MCCB

Molded Case Circuit Breaker (MCCB)				Earth Leakage Circuit Breaker (ELCB)
Overcurrent and Short circuit Protection				Overcurrent, short circuit and Residual current Protection
SF Type	YH Type	MH Type	BBW Type GD Breaker	BKW Type GD Breaker
160/250AF	100/250/400/630/800AF	400/630/800AF	30/50/60/100/400AF	30/50/60/100/400AF



SAFETY BREAKER HB TYPE

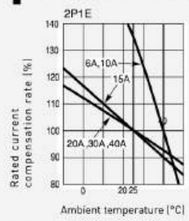
Unit:mm

Dimension Appearance Mounting Pitch		
Number of Poles & Elements	2P1E	
Type	6A	BS11106TV
	10A	BS1110TV
	15A	BS1111TV
	20A	BS1112TV
	30A	BS1113TV
	40A	BS1114TV
Rated Voltage	AC 240V 1.0kA (6A) AC 240V 1.5kA (10·15·20·30·40A)	
Terminal Specifications	Solderless terminals (with strap) φ1.6-φ2.6 5.5 - 8mm² / Note: When using electrical appliance wire or other stranded wire (1.25 - 3.5mm²) use bar lug terminals	
Weight	0.07kg	
Structure – Tripping Mechanism	Thermal operation	
Structure – Arc Quenching Method	Natureal Quenching	
Capacity – Interrupting Time	10ms (100%)	
Capacity – Passage of Short	23 X 10³ A² sec (100%)	

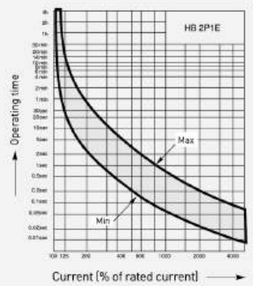
Note: 1. Use 20A for normal branch circuits, and 30A for high capacity dedicated circuits.
2. Use 15A or less for machine protection, after consideration of its characteristic: inrush current and usual current.
3. The data in capacity mentioned above are just for your reference, which are PEW´s experimental ones.

HB Type

Temperature compensation curves

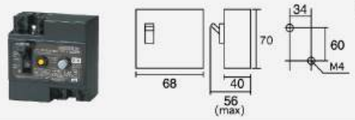


Operating characteristics curves (with O.C.)



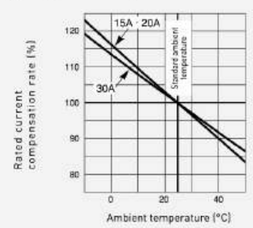
EARTH LEAKAGE BREAKER J TYPE

Unit:mm

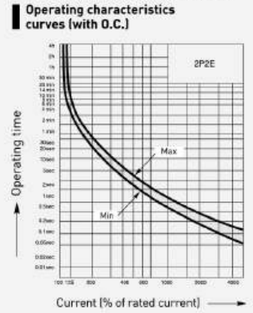
Dimension Appearance Mounting Pitch							
Number of Poles & Elements	2P0E	2P2E					
Type	BJJ230308	BJJ215228	BJJ215328	BJJ220228	BJJ220328	BJJ230228	BJJ230328
Rated Current	30A	15A		20A		30A	
Rated Voltage	AC120-240V						
Residual Operating Current	30mA	15mA	30mA	15mA	30mA	15mA	30mA
Residual Non-operation Current	15mA	7.5mA	15mA	7.5mA	15mA	7.5mA	15mA
Rated Interrupting Capacity (Rated Short-time Current)	(2.5kA)	1.5kA					
Phase and Wiring Configuration	1φ2W	1φ2W, 1φ3W					
Operating Time	Within 0.1 sec.						
Leakage Indication Method	-	Mechanic button					
Terminal Specifications	Solderless terminals (with strap) φ1.6-φ2.6 5.5 - 8mm² / Note: When using electrical appliance wire or other stranded wire (1.25 - 3.5mm²) use bar lug terminals WV2500 1.25 - 2mm² (WV2501 2.0 - 3.5mm²) / Tightening torque: 1.6-2.0N·m 16.3-20.4kgf·cm						
Connecting Method	For direct installation of electrical wiring						
Weight	0.2kg						
Overload Current Tripping Mechanism	-	Thermal operation					

J Type

Temperature compensation curves



Operating characteristics curves (with O.C.)



Note: 1. "Rated short-time current" means that although short-circuit protection is not possible, the internal circuitry and conductors can withstand 1.5kA for 0.02 seconds.
2. Ambient temperature rage for usage: -10°C to +50°C.
3. Disconnect electrical wiring before measuring insulation resistance between wires.

Complete range of products with a compact design

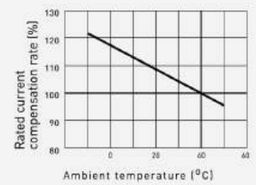
EARTH LEAKAGE BREAKER SMALL TYPE

Unit: mm

Dimension Appearance Mounting Pitch		
Type	BJS3020NA2	BJS3030NA2
Rated Current	30A	
Number of Poles & Elements	2P0E	
Rated Voltage	AC120-240V	
Residual Operating Current	15mA	30mA
Residual Non-operation Current	7.5mA	15mA
Rated Short-time Current	1.5kA	
Phase and Wiring Configuration	1φ2W	
Operating Time	Within 0.1 sec.	
Handle Type	Long	
Standard Terminal Specifications	Solderless terminals (with strap) φ1.6-φ2.6 5.5 - 8mm² / Note: When using electrical appliance wire or other stranded wire (1.25 - 3.5mm²) use bar lug terminals WV2500 1.25 - 2mm² (WV2501 2.0 - 3.5mm²) / Tightening torque: 1.6-2.0N·m 16.3-20.4kgf·cm	
Connecting Method	For direct installation of electrical wiring	
Weight	0.09kg	
Overload Current Tripping Mechanism	None	
Approval Standard	-	

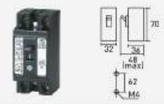
Small Type

Temperature compensation curves

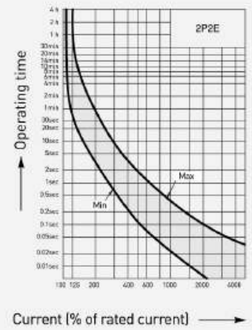


Note: 1. "Rated short-time current" means that although short-circuit protection is not possible, the internal circuitry and conductors can withstand 1.5kA for 0.02 seconds.
2. Ambient temperature rage for usage: -10°C to +50°C.
3. Disconnect electrical wiring before measuring insulation resistance between wires.

Unit: mm

Dimension Appearance Mounting Pitch	 BJS1532SV								
Type	BJS1512SV	BJS1522SV	BJS1532SV	BJS2012SV	BJS2022SV	BJS2032SV	BJS3012SV	BJS3022SV	BJS3032SV
Rated Current	15A			20A			30A		
Number of Poles & Elements	2P2E								
Rated Voltage	AC100-240V								
Residual Operating Current	10mA	15mA	30mA	10mA	15mA	30mA	10mA	15mA	30mA
Residual Non-operation Current	6mA	7.5mA	15mA	6mA	7.5mA	15mA	6mA	7.5mA	15mA
Rated Interrupting Capacity (Rated Short-time Current)	1.5kA								
Phase and Wiring Configuration	1φ2W, 1φ3W								
Operating Time	Within 0.1 sec.								
Handle Type	Short								
Terminal Specifications	Solderless terminals (with strap) φ1.6-φ2.6 5.5 - 8mm² / Note: When using electrical appliance wire or other stranded wire (1.25 - 3.5mm²) use bar lug terminals WV2500 1.25 - 2mm² (WV2501 2.0 - 3.5mm²) / Tightening torque: 1.6-2.0N·m 16.3-20.4kgf·cm								
Connecting Method	For direct installation of electrical wiring								
Weight	0.09kg								
Overload Current Tripping Mechanism	Thermal operation								

Operating characteristics curves (with O.C.)



Note: 1. Ambient temperature rage for usage: -10°C to +50°C.
2. Disconnect electrical wiring before measuring insulation resistance between wires.

MCB BD-63R (6kA)

Type		BD-63R							
Poles & Elements		1P1E		2P2E		3P3E		4P4E	
Instantaneous		C	D	C	D	C	D	C	D
Type	6A	BBD1061CNV	BBD1061DNV	BBD2062CNV	BBD2062DNV	BBD3063CNV	BBD3063DNV	BBD4064CNV	BBD4064DNV
	10A	BBD1101CNV	BBD1101DNV	BBD2102CNV	BBD2102DNV	BBD3103CNV	BBD3103DNV	BBD4104CNV	BBD4104DNV
	16A	BBD1161CNV	BBD1161DNV	BBD2162CNV	BBD2162DNV	BBD3163CNV	BBD3163DNV	BBD4164CNV	BBD4164DNV
	20A	BBD1201CNV	BBD1201DNV	BBD2202CNV	BBD2202DNV	BBD3203CNV	BBD3203DNV	BBD4204CNV	BBD4204DNV
	25A	BBD1251CNV	BBD1251DNV	BBD2252CNV	BBD2252DNV	BBD3253CNV	BBD3253DNV	BBD4254CNV	BBD4254DNV
	32A	BBD1321CNV	BBD1321DNV	BBD2322CNV	BBD2322DNV	BBD3323CNV	BBD3323DNV	BBD4324CNV	BBD4324DNV
	40A	BBD1401CNV	BBD1401DNV	BBD2402CNV	BBD2402DNV	BBD3403CNV	BBD3403DNV	BBD4404CNV	BBD4404DNV
	50A	BBD1501CNV	BBD1501DNV	BBD2502CNV	BBD2502DNV	BBD3503CNV	BBD3503DNV	BBD4504CNV	BBD4504DNV
	63A	BBD1631CNV	BBD1631DNV	BBD2632CNV	BBD2632DNV	BBD3633CNV	BBD3633DNV	BBD4634CNV	BBD4634DNV
Rated Voltage Interrupting Current		AC240/415V 6kA		AC240V 10kA AC415V 6kA		AC415V 6kA		AC415V 6kA	
Weight		6A-32A 0.1kg 40A-63A 0.13kg		6A-32A 0.2kg 40A-63A 0.26kg		6A-32A 0.3kg 40A-63A 0.39kg		6A-32A 0.4kg 40A-63A 0.52kg	

MCB BD-63R Conform to the IEC 60898-1 standards.

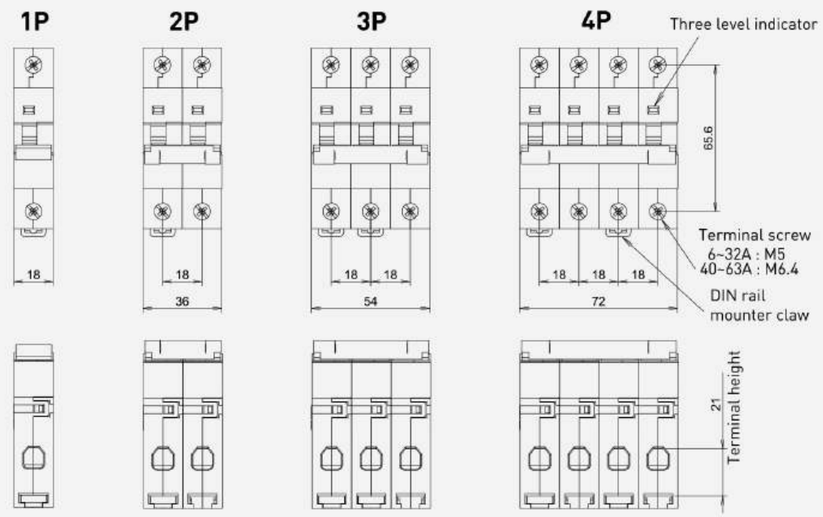
MCB BD-125R (10kA)

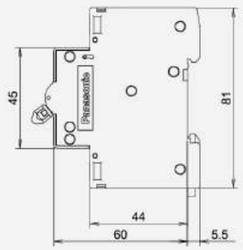
Frame size		BD-125R			
Poles & Elements		1P1E	2P2E	3P3E	4P4E
Instantaneous		C	C	C	C
Type	80A	BBD10801CHV	BBD20802CHV	BBD30803CHV	BBD40804CHV
	100A	BBD11001CHV	BBD21002CHV	BBD31003CHV	BBD41004CHV
Rated Voltage Interrupting Current		AC240V 10kA	AC415V 10kA		
Weight		0.16kg	0.33kg	0.50kg	0.66kg

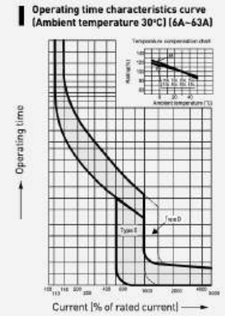
MCB BD-125R Conform to the IEC 60947-2 standards.

MCB-DIN TYPE 63AF (6kA) & 125AF (10kA)

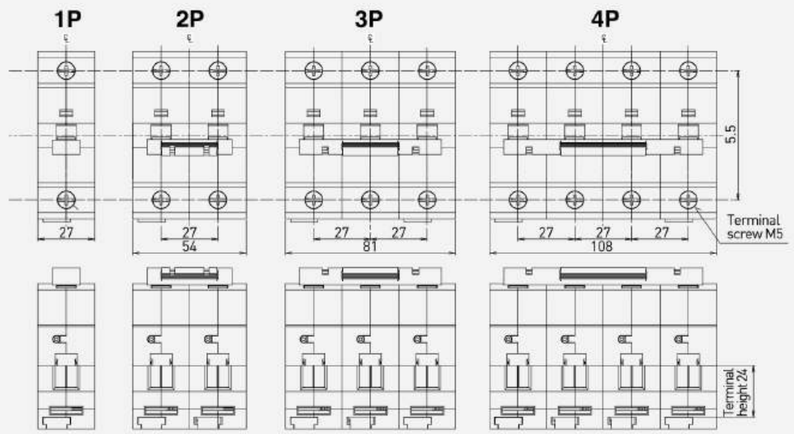
MCB BD-63R (6kA)

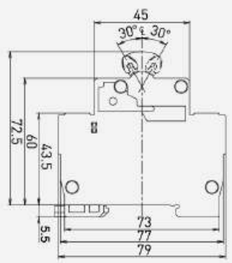


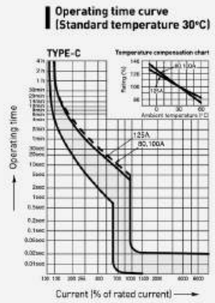


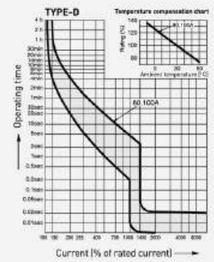


MCB BD-125R (10kA)



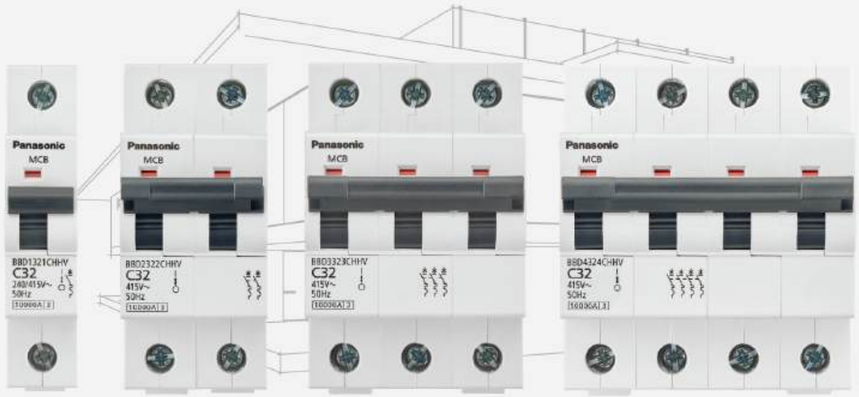






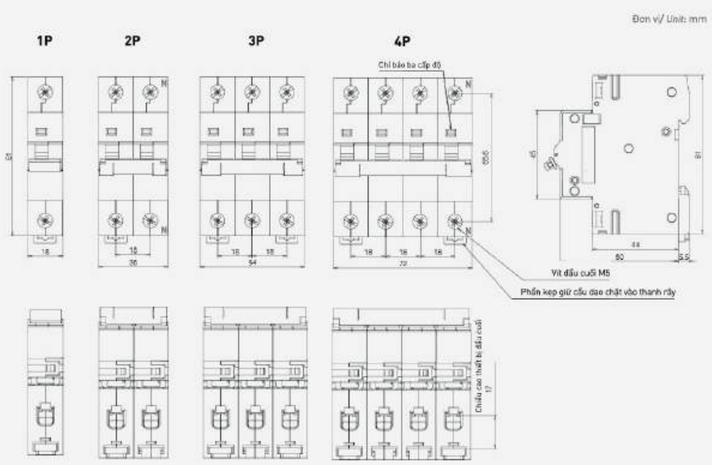
MCB-DIN TYPE 63AF(10kA)

NEW Overcurrent and short circuit protection

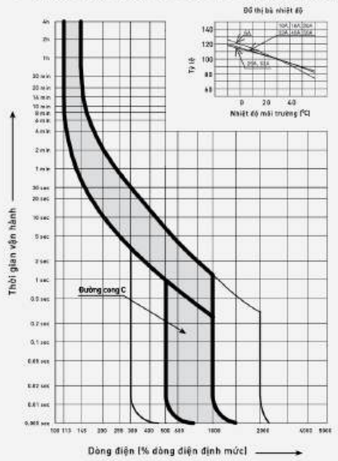


Type		MCB 63AF (10kA)			
Poles & Elements		1P1E	2P2E	**3P3E**	4P4E
Instantaneous		C	C	C	C
Type	6A	BBD1061CHHV	BBD2062CHHV	BBD3063CHHV	BBD4064CHHV
	10A	BBD1101CHHV	BBD2102CHHV	BBD3103CHHV	BBD4104CHHV
	16A	BBD1161CHHV	BBD2162CHHV	BBD3163CHHV	BBD4164CHHV
	20A	BBD1201CHHV	BBD2202CHHV	BBD3203CHHV	BBD4204CHHV
	25A	BBD1251CHHV	BBD2252CHHV	BBD3253CHHV	BBD4254CHHV
	32A	BBD1321CHHV	BBD2322CHHV	BBD3323CHHV	BBD4324CHHV
	40A	BBD1401CHHV	BBD2402CHHV	BBD3403CHHV	BBD4404CHHV
	50A	BBD1501CHHV	BBD2502CHHV	BBD3503CHHV	BBD4504CHHV
	63A	BBD1631CHHV	BBD2632CHHV	BBD3633CHHV	BBD4634CHHV
Rated voltage interrupting current		AC240V/415V 10kA	AC415V 10kA	AC415V 10kA	AC415V 10kA
Rated frequency		50Hz			
Ambient temperature		-10°C to +60°C			

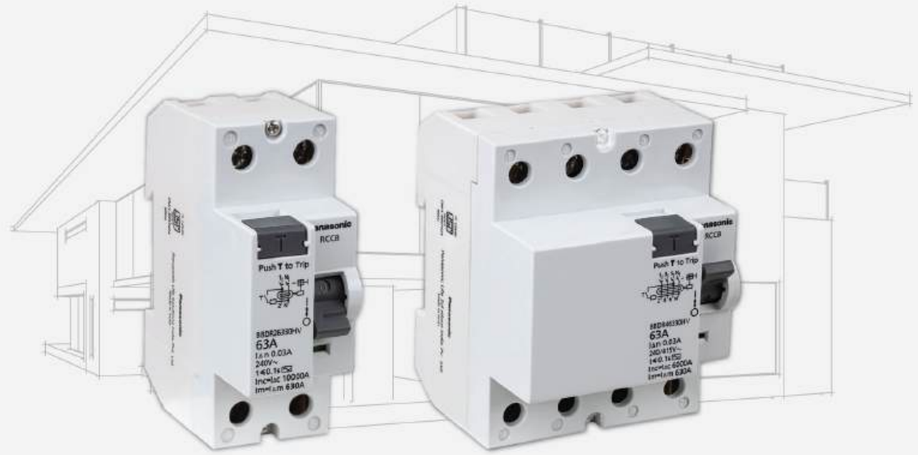
MCB 10kA conform to the IEC 60898-1 standard



Operating time characteristics curve (Ambient temperature 30°C) (6A~63A)

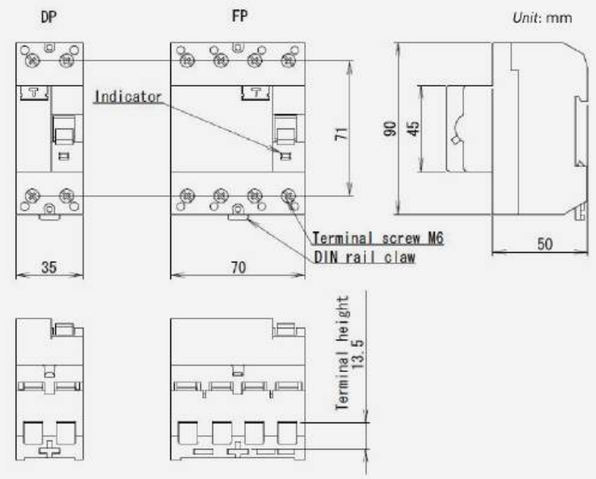


RCCB-DIN TYPE



Number of Poles	2P			4P		
Rated Voltage (AC)	AC240V			AC240/415V		
Rated current (A)						
25A	BBDR22530HV	BBDR22540HV	-	BBDR42530HV	BBDR42540HV	-
32A	BBDR23230HV	BBDR23240HV	-	BBDR43230HV	BBDR43240HV	-
40A	BBDR24030HV	BBDR24040HV	BBDR24050HV	BBDR44030HV	BBDR44040HV	BBDR44050HV
63A	BBDR26330HV	BBDR26340HV	BBDR26350HV	BBDR46330HV	BBDR46340HV	BBDR46350HV
Residual operating current (mA)	30mA	100mA	300mA	30mA	100mA	300mA
Residual non-operating current (mA)	15mA	50mA	150mA	15mA	50mA	150mA
Ambient temperature	-10°C to +60°C					

RCCB conform to the IEC61008-1 standards



RCBO BDE-63R [DIN TYPE]

Type		BDE-63R					
Poles & Elements		2P1E					
Instantaneous		C	D	C	D	C	D
Type	6A	BBDE20631CNV	BBDE20631DNV	BBDE20641CNV	BBDE20641DNV	BBDE20651CNV	BBDE20651DNV
	10A	BBDE21031CNV	BBDE21031DNV	BBDE21041CNV	BBDE21041DNV	BBDE21051CNV	BBDE21051DNV
	16A	BBDE21631CNV	BBDE21631DNV	BBDE21641CNV	BBDE21641DNV	BBDE21651CNV	BBDE21651DNV
	20A	BBDE22031CNV	BBDE22031DNV	BBDE22041CNV	BBDE22041DNV	BBDE22051CNV	BBDE22051DNV
	25A	BBDE22531CNV	BBDE22531DNV	BBDE22541CNV	BBDE22541DNV	BBDE22551CNV	BBDE22551DNV
	32A	BBDE23231CNV	BBDE23231DNV	BBDE23241CNV	BBDE23241DNV	BBDE23251CNV	BBDE23251DNV
	40A	BBDE24031CNV	BBDE24031DNV	BBDE24041CNV	BBDE24041DNV	BBDE24051CNV	BBDE24051DNV
	50A	BBDE25031CNV	BBDE25031DNV	BBDE25041CNV	BBDE25041DNV	BBDE25051CNV	BBDE25051DNV
	63A	BBDE26331CNV	BBDE26331DNV	BBDE26341CNV	BBDE26341DNV	BBDE26351CNV	BBDE26351DNV
Rated Voltage		AC240V 6kA					
Application Voltage Range		187V-264V					
Rated Residual Operating Current		30mA		100mA		300mA	
Rated Residual Non-operating Current		15mA		50mA		150mA	
Weight		6A-32A 0.2kg 40A-63A 0.23kg					

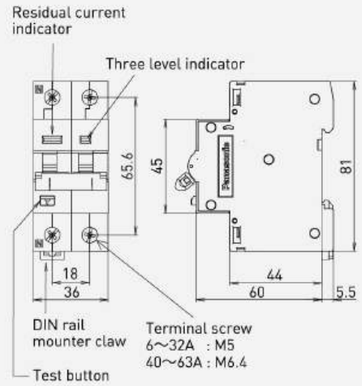
RCBO BDE-63R Conform to the IEC 61009-1 standards.

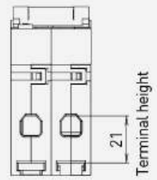
RCBO BDE-63R [4P4E] [DIN TYPE]

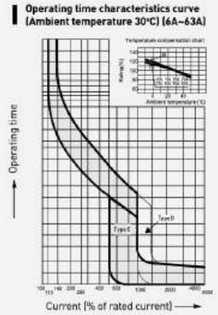
Type		BDE-63R		
Poles & Elements		4P4E		
Type	6A	BBDE40634CNV	BBDE40644CNV	BBDE40654CNV
	10A	BBDE41034CNV	BBDE41044CNV	BBDE41054CNV
	16A	BBDE41634CNV	BBDE41644CNV	BBDE41654CNV
	20A	BBDE42034CNV	BBDE42044CNV	BBDE42054CNV
	25A	BBDE42534CNV	BBDE42544CNV	BBDE42554CNV
	32A	BBDE43234CNV	BBDE43244CNV	BBDE43254CNV
	40A	BBDE44034CNV	BBDE44044CNV	BBDE44054CNV
	50A	BBDE45034CNV	BBDE45044CNV	BBDE45054CNV
	63A	BBDE46334CNV	BBDE46344CNV	BBDE46354CNV
Instantaneous		C		
Rated Voltage		AC415V 6kA		
Application Voltage Range		332V-456V		
Rated Residual Operating Current		30mA	100mA	300mA
Rated Residual Non-Operating Current		15mA	50mA	150mA
Weight		6A-32A 0.63kg 40A-63A 0.75kg		

RCBO BDE-63R Conform to the IEC 61009-1 standards.

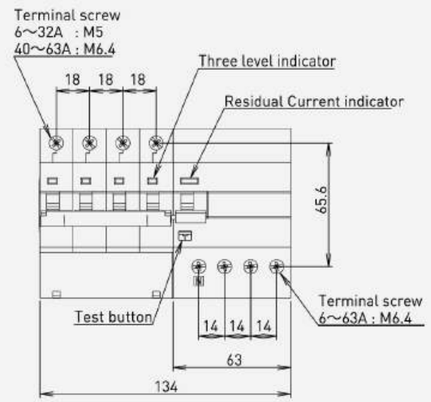
RCBO (BDE - 63R, 2P1E)

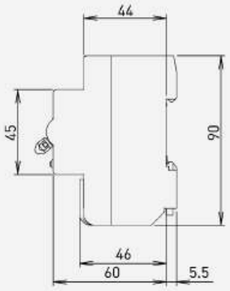


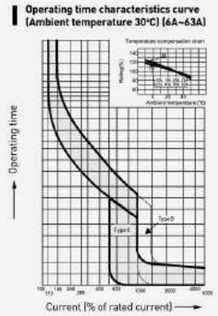


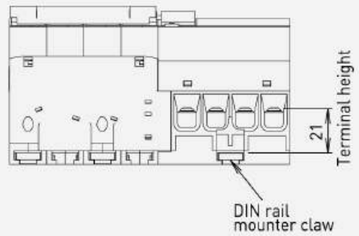


RCBO (BDE - 63R, 4P4E)









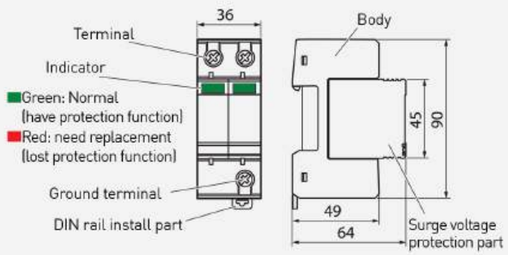
SPD-DIN TYPE

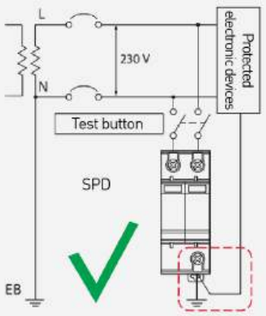
Characteristic:

SPD protects electronic devices from breaking down due to surge voltage. The product is conformed to Class II (IEC 61643-11)

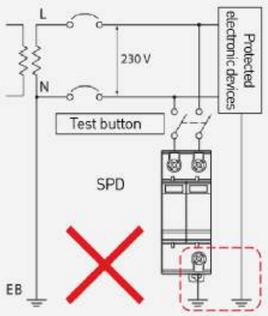
DIMENSION

Item code	BBDT2321BV
IEC 61643-11	Type 2
Nominal A.C. voltage (Un)	230V
Max. continuous operating A.C. voltage (Uc)	320V (50Hz)
Nominal discharge current (8/20μs) (In)	20kA
Max. discharge current (8/20μs) (Imax)	40kA
Voltage protection level (Up)	≤1.5kV
Operating temperature range	-10°C ~ +60°C
Relative operating humidity	85% RH, or less (no condensation)
Application wire	Single wire: Ø1.5 ~ 5.5mm Stranded wire: 1.5 to 35mm²
Protection class	IP20
Weight	200g





Correct installation: Protected electronics devices and SPD have same ground terminal



Wrong installation: Protected electronics devices and SPD have different ground terminal

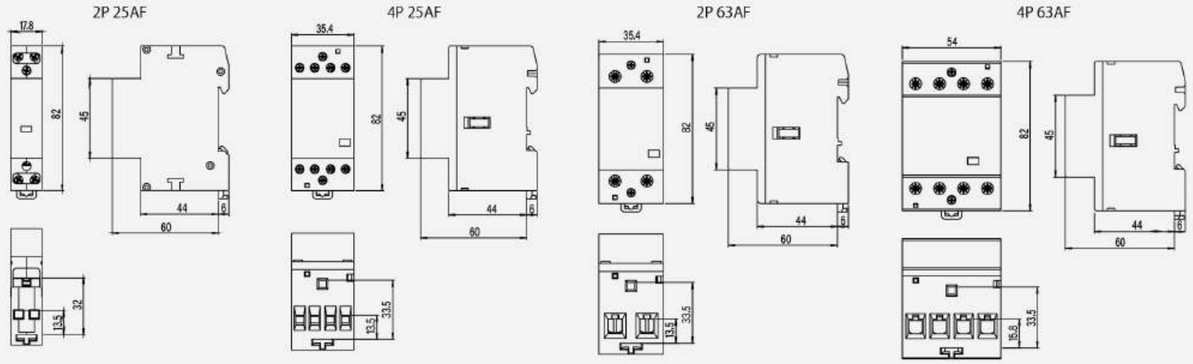
The SPD and connected devices must have same grounding terminal. Using a main MCB from 50A or more as protecting circuit for the SPD is recommended

CONTACTOR-DIN TYPE

No. of poles		2P			4P			
Contact / Operational Current (AC-1/AC-3)		2NO	1NO1NC	2NC	4NO	2NO2NC	3NO1NC	2NC
16A/6A		BMD2016204ACV	BMD2016114ACV	BMD2016024ACV	BMD4016404ACV	BMD4016224ACV	BMD4016314ACV	BMD4016044ACV
20A/6A		BMD2020204ACV	BMD2020114ACV	BMD2020024ACV	BMD4020404ACV	BMD4020224ACV	BMD4020314ACV	BMD4020044ACV
25A/.5A		BMD2025204ACV	BMD2025114ACV	BMD2025024ACV	BMD4025404ACV	BMD4025224ACV	BMD4025314ACV	BMD4025044ACV
40A/16A		BMD2040204ACV	BMD2040114ACV	BMD2040024ACV	BMD4040404ACV	BMD4040224ACV	BMD4040314ACV	BMD4040044ACV
63A/20A		BMD2063204ACV	BMD2063114ACV	BMD2063024ACV	BMD4063404ACV	BMD4063224ACV	BMD4063314ACV	BMD4063044ACV
Rated Voltage		240VAC(50/60Hz)			415VAC(50/60Hz)			
Rated Insulation Voltage	IEC61095	400V(16A,20A,25A),440V(40A,63A)			440V			
	IEC60947-4-1	500V						
Rated Impulse Voltage		4kV						
Width (mm)		17.8(16A,20A,25A), 35.4(40A,63A)			35.4(16A,20A,25A), 54(40A,63A)			
Ambient temperature		-10 to 60°C						
Protection class		IP20						
Standard		IEC61095/IEC60947-4-1						

DIMENSION

unit: mm



MCCB SF

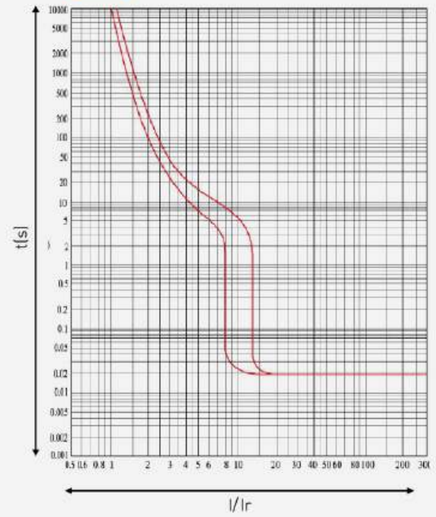
-It is conformed to IEC60947-2.
-160AF of Icu (415V) is 35kA.
- Rated current is 63～160A (160AF) and 160～250A (250AF)
- High durability;
Mechanical operations is 25,000 cycles.
Electrical operation is 10,000 cycles (@415V).

Frame	SF-160			SF-250		
No. of Poles	3P			3P		
Rater current (A)	63A	100A	160A	160A	200A	250A
Item No.	BBSF3363CFCV	BBSF33100CFCV	BBSF33160CFCV	BBSF34160CFCV	BBSF34200CFCV	BBSF34250CFCV
Current Specifications						
Max. Rated operational voltage	AC 415V					
Rated insulation voltage	AC 800V			AC 1000V		
Rated impulse withstand voltage	8kV					
Rated ultimate S.C. breaking capacity @415 (Icu)	35kA					
Service short circuit breaking capacity @415 (Ics)	35kA					
Protection						
Protect method	Thermal (fixed)-Magnetic (fixed)					
Dimension						
Width x High x Depth	77 x 130 x 61.5			105 x 165 x 73		
Special feature						
Line road reversibility	Yes					
Calibration temperature	40 °C					

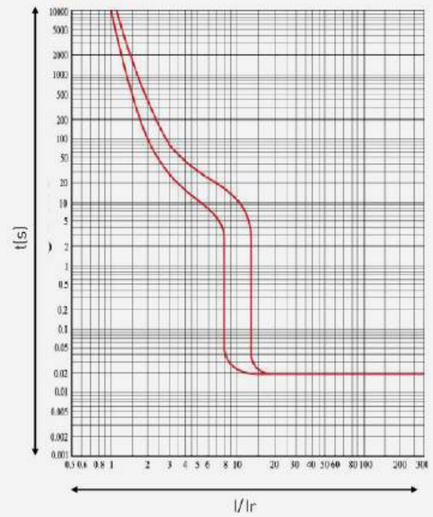
TEMPERATURE DERATING

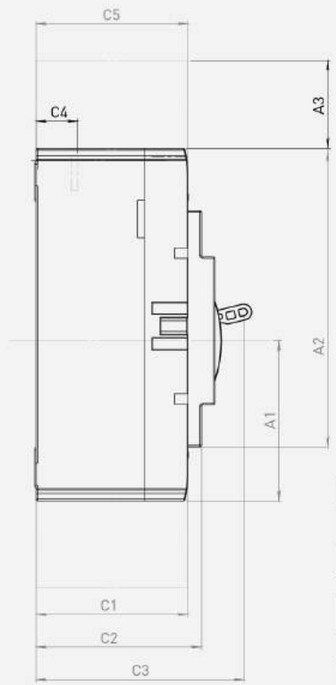
Model	0°C	5°C	10°C	15°C	20°C	25°C	30°C	35°C	40°C	45°C	50°C	55°C	60°C	65°C	70°C
SF-160	1.18	1.16	1.14	1.12	1.09	1.07	1.05	1.03	1.00	1.00	1.00	1.00	0.98	0.95	0.92
SF-250	1.16	1.14	1.12	1.10	1.08	1.06	1.04	1.02	1.00	1.00	1.00	1.00	0.98	0.95	0.92

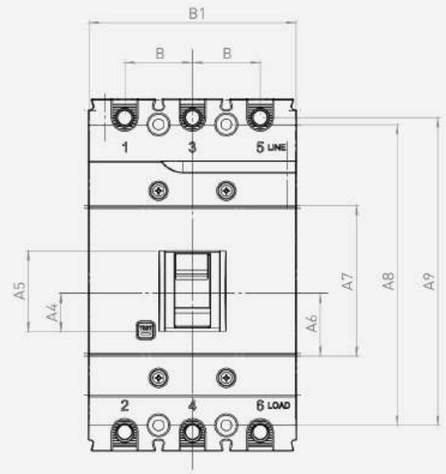
SF-160



SF-250







Model	A1	A2	A3	A4	A5	A6	A7	A8	A9
SF-160	65	130	50	21	30	29.5	54.5	111	116
SF-250	82.5	165	80	21	47.5	28.5	62	143	144

Model	B	B1	B2	B3	C1	C2	C3	C4	C5
SF-160	25	77	24.5	102	56	61	81.5	18	55
SF-250	35	105	33	140	66	73	99.5	25.5	65

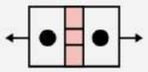
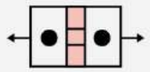
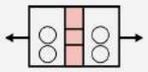
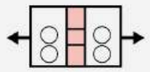
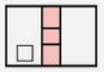
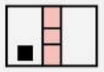
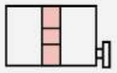
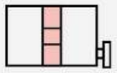
INTERNAL OPTIONS

ITEM NO

BBS (Initial code)	+	Frame	+	Accessories	+	Mount Position	+	Rate Voltage
		160F: 160AF (35kA) 250Q: 250AF (75kA)		08: AL 20: AX 10: SHT 20: UVT		L: Left R: Right		A7: AC110V/50Hz A8: AC240V/50Hz A9: AC415V/50Hz D2: DC24V D7: DC110V D8: DC220V

HOW TO MOUNT

PLUG-IN LOCATION

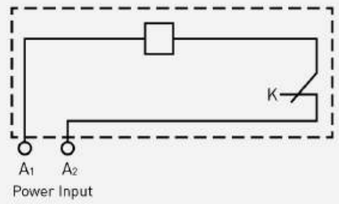
Frame	SF-160	SF-250
AL		
AX		
SHT		
UVT		

SPECIFICATION

AX, AL

	OP	Type	AC-14		DC-13
			AC 240V	AC 415V	DC 220V
Ie	AX	SF-160	-	0.3A	0.15A
		SF-250	-	0.3A	0.15A
	AL	SF-160	1A	-	0.15A
		SF-250	1A	-	0.15A

SHT

SF-160/SF-250		Connection diagrams and Terminal NOs
Exciting current (A) peak value		
Rated Voltage	AC 110, 240, 415V	
	DC 24, 110, 220V	

UVT

Type	Power supply capacity (VA)	
	AC 240V	AC 415V
SF-160	1.2	1.2
SF-250	1.64	1.06

EXTERNAL OPTIONS

Frame	SF-160	SF-250
Extension Rotary Handle (Panel Mount type)	BBS160FB1V	BBS250QB1V
Terminal cover	BBS160FA1V	BBS250MA1V

MCCB YH TYPE

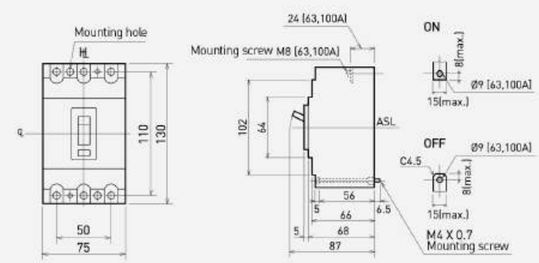
CHARACTERISTICS

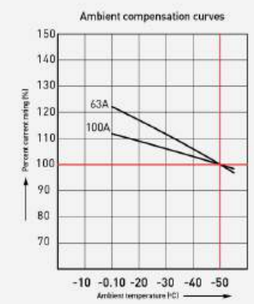
-It is conformed to IEC60947-2.
-Country of origin is Malaysia

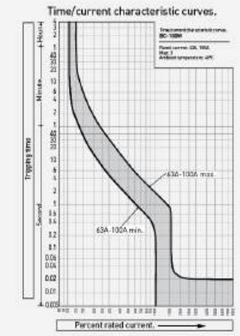
Type	BC-100W		BC-250W		
No. of poles	3P		3P		
Rated current (A)	63A	100A	100A	150A	250A
	BBC3601YHV	BBC3100YHV	BBC31502YHV	BBC32001YHV	BBC3250YHV
Type	A type				
Current specifications					
Max. Rated operational voltage	AC 690V				
Rated insulation voltage	AC 690V				
Rated impulse withstand voltage	6kV		8kV		
Rated ultimate S.C. breaking capacity @ AC 415 (Icu)	10kV		25kV		
Service short circuit breaking capacity @ AC 415 (Icu)	5kV		19kV		
Protection					
Protection method	FIXED thermal magnetic				
Dimension					
Width x High x Depth (mm)	75 x 130 x 68		105 x 165 x 68		
Special feature					
Line load reversibility	Yes				
Calibration temperature	40ºC				

BC-100W

Unit: mm



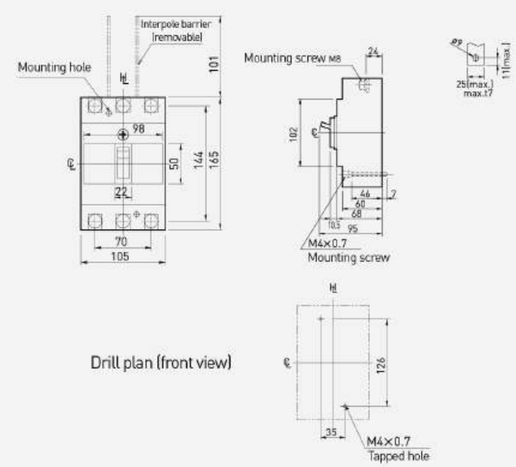




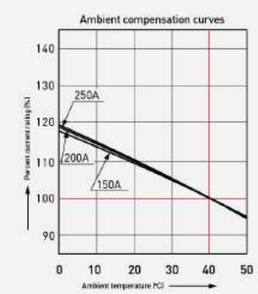
Drill plan (front view)

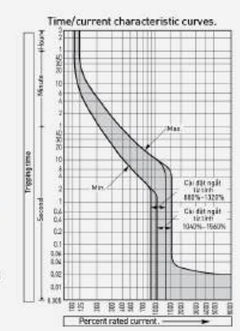
BC-250W

Unit: mm



Drill plan (front view)





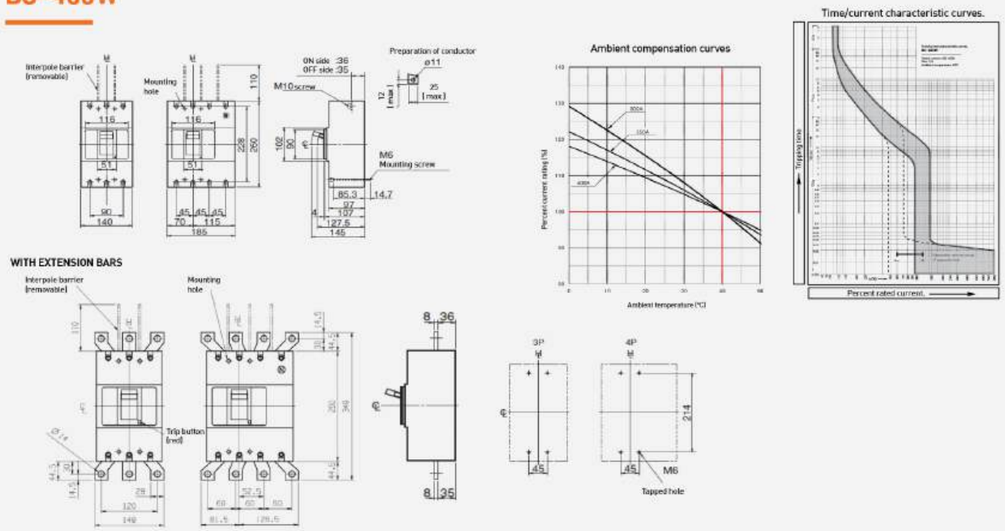
CHARACTERISTICS

-It is conformed to IEC60947-2.
-Country of origin is Japan
-High durability:

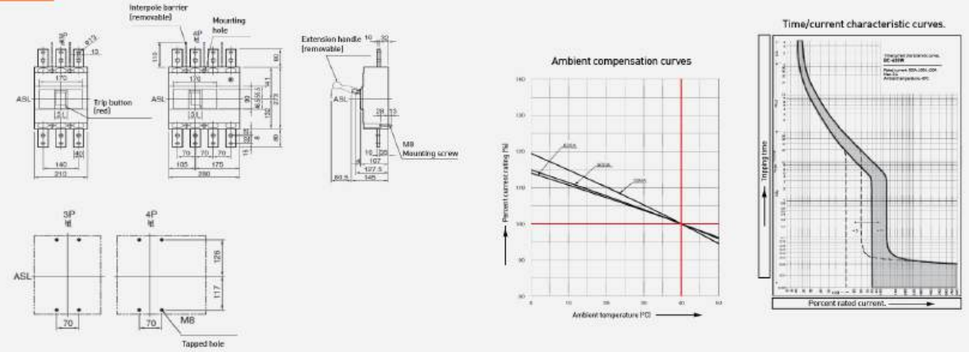
- Mechanical operations is 15,000 times:400AF and 630AF.
  10,000 times:800AF.
- Electrical operation is 4,500 times:400AF and 630AF.
  4,000 times:800AF.

Type	BC-400W			BC-630W			BC-800W	
No. of poles	3P/4P			3P/4P			3P/4P	
Rated current (A)	300A	350A	400A	500A	600A	630A	700A	800A
3P	BBC3300YHV	BBC3350YHV	BBC3400YHV	BBC3500YHV	BBC3600YHV	BBC3630YHV	BBC3700YHV	BBC3800YHV
4P	BBC4300YHV	BBC4350YHV	BBC4400YHV	BBC4500YHV	BBC4600YHV	BBC4630YHV	BBC4700YHV	BBC4800YHV
Utilization category				A Type				
Current specifications								
Max. Rated operational voltage	AC 690V							
Rated insulation voltage	690V							
Rated impulse withstand voltage	8kV							
Rated ultimate S.C. breaking capacity @ AC 415 (Icu)	36kA							
Service short circuit breaking capacity @ AC 415 (Icu)	36kA							
Protection								
Protection method	Thermal (fixed) Magnetic (adjustable)							
Dimension								
Width x High x Depth (mm)	3P 140 x 260 x 103 4P 185 x 260 x 103			3P 210 x 273 x 103 4P 280 x 273 x 103				
Special feature								
Line load reversibility	Yes							
Calibration temperature	40ºC							

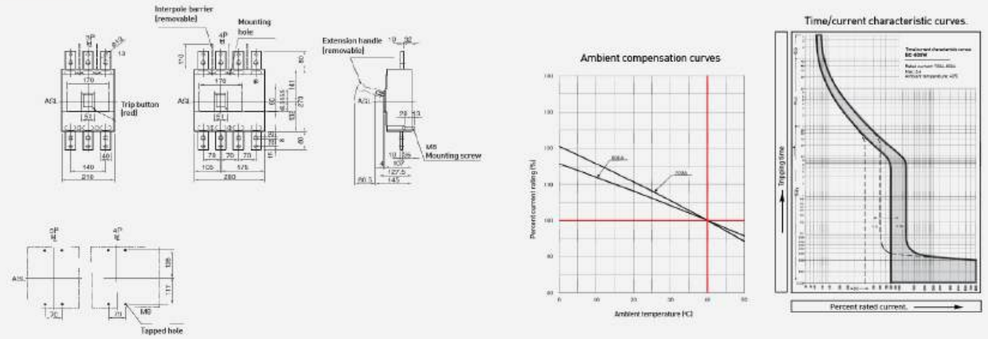
BC-400W



BC-630W



BC-800W



INTERNAL ACCESSORIES

AL (Alarm switch)	AX (Auxiliary switch)	SHT (Shunt Trip)	UVT (Undervoltage Trip)
A switch generates a signal that indicates trip states of the breaker	A switch generates a signal that indicates ON/OF Trip states of the breaker	A device tripping circuit breaker remotely	A device which trips the breaker mechanically when voltage to the terminals drops below a threshold level

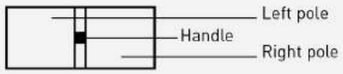
Interpole Barrier	Terminal Cover	Handle Lock	Rotary Handle	
			Breaker Mounted type	Panel Mounted type
It is clipped between the phases of the breaker terminals to secure the insulation distance.	To cover the terminal charging part so that it is not exposed.	Lock the breaker in ON and OFF state	To operate the breaker which is installed inside of DB from the outside without opening the DB's door	

COMBINATION TABLE

	100AF	250AF	400AF - 630AF - 800AF
	3P	3P	3P - 4P
AL			
AX			
AL + AX			
SHT			
AL + SHT			
AX + SHT			
AL + AX + SHT			
UVT			

Symbol

AL AX SHT(Without anti-bum switch) SHT(With anti-bum switch) UVT



INTERNAL ACCESSORIES

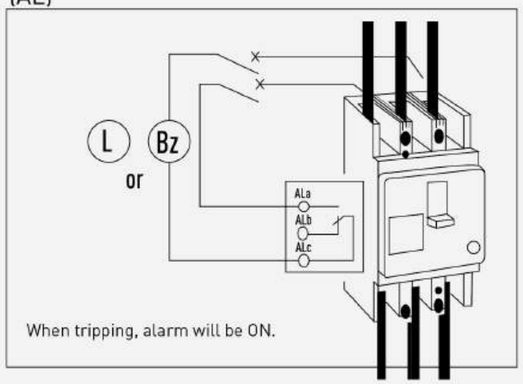
MCCB item no	+	Accessories	L: AL X: AX LX: AL+ AX S: SHT	U: UVT LS: AL+ SHT LXS: AL + AX + SHT	+	Voltage (400V system)	No suffix 4: SHT (380~450V) : UVT (380~415V) (380~450V)

*Please confirm the detail of specification in specification sheet before connecting devices.

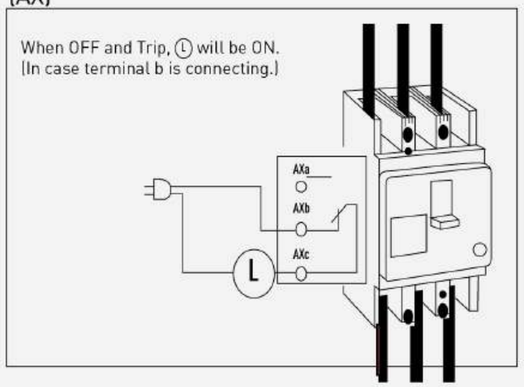
AL, AX

Connection example

(AL)



(AX)



Contact state of Switch

(AL)

Contact state of Switch		
MCCB states	ALb ALc	ALa ALc
ON	ON	OFF
OFF	ON	OFF
TRIP	OFF	ON

(AX)

Contact state of Switch		
MCCB states	AXb AXc	AXa AXc
ON	OFF	ON
OFF	ON	OFF
TRIP	ON	OFF

INTERNAL ACCESSORIES

AL, AX

Specification

	100AF~800AF						
	AC (V)			DC (V)			Minimum Load
	Rated Voltage	Electric Current (A)		Rated Voltage	Electric Current (A)		
		Resistive load	Inductive load		Resistive load	Inductive load	
100AF	480V	—	—	250V	0.2	0.03	DC6V 100mA DC24V 25mA
	250V	3	2	150V	0.4	0.05	
	125V	3	2	30V	3	2	
250- 800AF	480V	—	—	250V	—	—	DC15V 100mA
	250V	3	2	125V	0.4	0.05	
	125V	3	2	30V	3	2	

Referring load by applications
· Resistive load: Load without inrush current
· Inductive load: Buzzer, Relay, Lamp, Motor etc. When connecting LED, please refer inductive load above table.

*Please use it with over the minimum load.
*For example, when connecting to a buzzer, please choose not to exceed the inductive load. In case it exceeds, the contact's lifetime can be shorter or the contacts can be damaged. when the load capacity is larger than rating of the contact capacity, please use electromagnetic contractor etc.

SHT

Specification

100AF		Connection diagrams and Terminal NOs
Exciting current (A) peak value		
Rated Voltage	AC (V)	
	200-480	
	0.83A	

250AF			Connection diagrams and Terminal NOs
Exciting current (A) peak value			
Rated Voltage	AC (V)		
	200-240	380-450	
	0.016A	0.0068A	

400-800AF			Sơ đồ nối dây và số lượng đầu nối
Exciting current (A) peak value			
Rated Voltage	AC (V)		
	200-240	380-450	
	0.015A	0.0065A	

*Please set the voltage will not be below the allowable voltage range due to the voltage drop during SHT operation.
(Allowable voltage range: 85%~110% of rated voltage)
*After SHT operation, please turn on the breaker again before setting control circuit which the power of SHT is OFF. If the breaker is turned on while voltage is applied to shunt,the breaker will be tripped again and the lifetime of the breaker will be shorten. Also, if electricity is constantly applied to the shunt coil, there is a risk of burning.

UVT

Specification

400AF		
Power supply capacity (VA)		
Rated Voltage	AC (V)	
	200-240	380-450
	1.3VA	2.6VA

630-800AF		
Power supply capacity (VA)		
Rated Voltage	AC (V)	
	230-240	380-415
	1.3VA	2.2VA

*Please choose after checking circuit's rated voltage.
*When recovering from a blackout, please turn on the power again after the rated voltage reaches 85-110% or more. If the power is turned on again before recovery, the breaker may trip again.

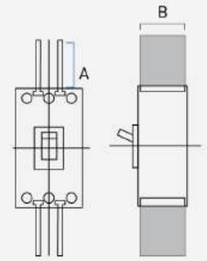
EXTERNAL ACCESSORIES

ITEM CODE

BBC31008051YV	Interpole barrier BC-100W	BB60201YV	Rotary handle (breaker mounted) MCCB 100AF
BBC32508051YV	Interpole barrier BC-250W	BB60202YV	Rotary handle (breaker mounted) MCCB 250AF
BBC38008051YV	Interpole barrier BC-400W, 630W, 800W	BB60203YV	Rotary handle (breaker mounted) MCCB 400AF
BBC34008034YV	Terminal cover MCCB 400AF 3P	BB60204YV	Rotary handle (breaker mounted) MCCB 630-800AF
BBC44008034YV	Terminal cover MCCB 400AF 4P	BB60301YV	Rotary handle (panel mounted) MCCB 100AF
BBC38008034YV	Terminal cover MCCB 630-800AF 3P	BB60302YV	Rotary handle (panel mounted) MCCB 250AF
BBC48008034YV	Terminal cover MCCB 630-800AF 4P	BB60303YV	Rotary handle (panel mounted) MCCB 400AF
BBC38008042YV	Handle lock MCCB 400-800AF	BB60304YV	Rotary handle (panel mounted) MCCB 630-800AF

INTERPOLE BARRIER

It is clipped between the phases of the breaker terminals to secure the insulation distance.



(Unit:mm)	A	B
100AF	36	50
250AF	101	53
400,630,800AF	110	95

<Enclosed qty purchasing MCCB>
100AF : 0set (0pcs)
250AF : 1set (2pcs)
400-800AF : 3P 2set (4pcs)
4P 2set (6pcs)

*When purchasing MCCB, 1 set of interpole Barrier is included.

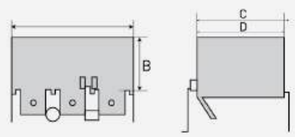
<Enclosed qty purchasing barriers>
100AF-800AF (3P•4P): 2pcs

TERMINAL COVER

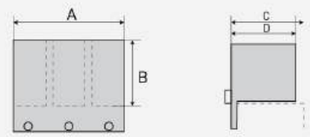
To cover the terminal charging part so that it is not exposed.

	Number of Poles	Dimension(Unit:mm)			
		A	B	C	D
400AF	3P	180	110	97	94.5
	4P	240	114	98	98
630AF/800AF	3P	215	130	99.5	99
	4P	285			

Plug-in mounted version (400AF)



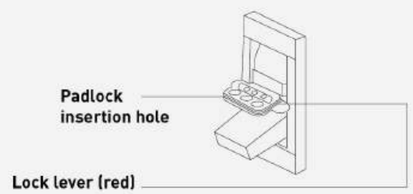
Screw mounted version (630AF/800AF)



HANDLE LOCK

Locking the breaker in ON and OFF state and it prevents from accidents by unintended operation.

*The breaker is a trip-free mechanism that automatically shuts off current when an accident occurs even with the handle lock is mounted.

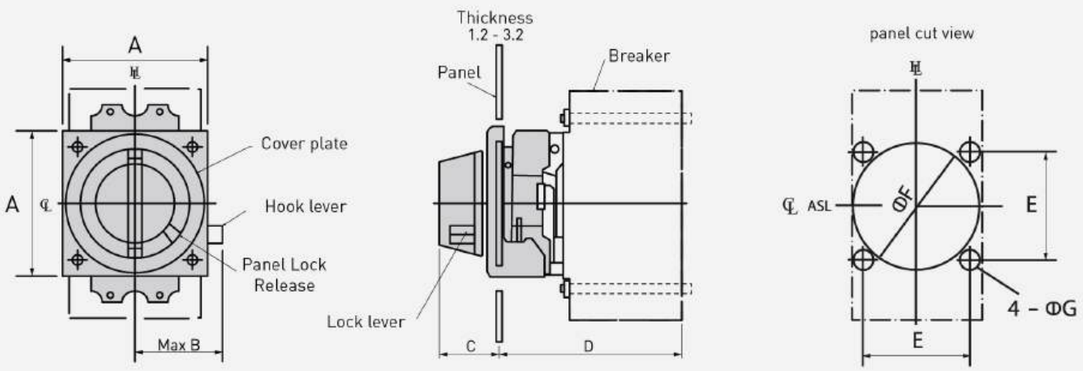


ROTARY HANDLE (BREAKER MOUNTED)

A device to operate the breaker which is installed inside of DB from the outside without opeing the DB's door. When in danger during breaker operation or in difficulty to operate handle easily, it assists.
It is mounted on surface of the breaker.

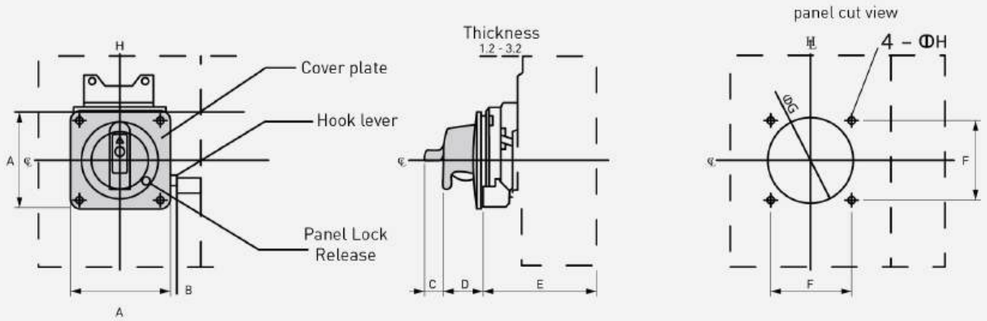
	Dimension(Unit:mm)						
	A	B	C	D	E	F	G
100AF	105	61	43	106±2	78	90	15
250AF	75	-	41.5	109±2	60	65	10

*Terminal cover cannot be mounted with rotary handle.



℄ Center line Handle Frame Centre Line ASL: Arrangement Standard Line

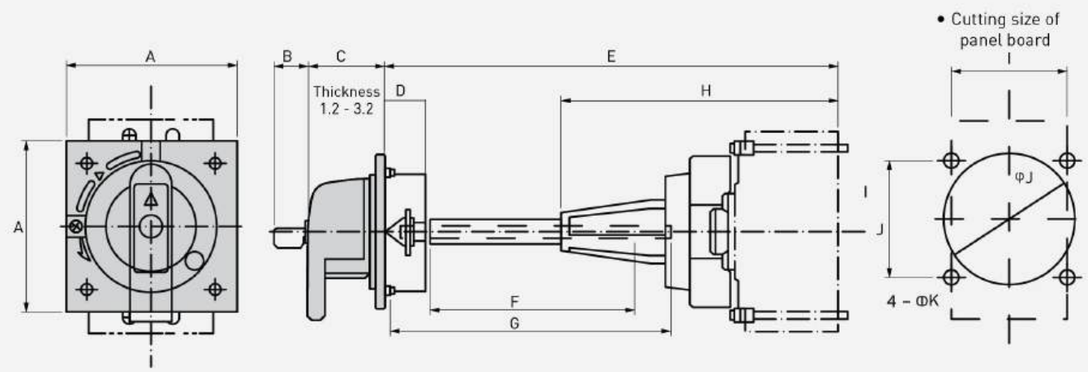
	Dimension(Unit:mm)							
	A	B	C	D	E	F	G	H
400AF	130	-	24	50	150±2	105	110	10
630AF/800AF	130	10	24	50	150±2	105	110	10



ROTARY HANDLE (PANEL MOUNTED)

A device to operate the breaker which is installed inside of DB from the outside without opeing the DB's door.
Handle and breaker are connected by a shaft.

	Dimension(Unit:mm)										
	A	B	C	D	E (Max)	F	G	H	I	J	K
100AF	105	24	51	31	550	370	421	194	78	85	10
250AF					543			186			
400AF	130			34	610	280	447.5	261	105	110	
630AF/800AF	130										



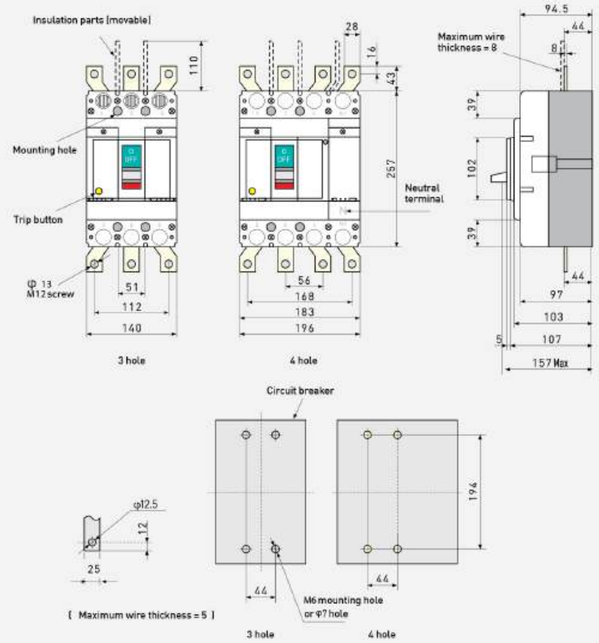
MCCB MH TYPE NEW

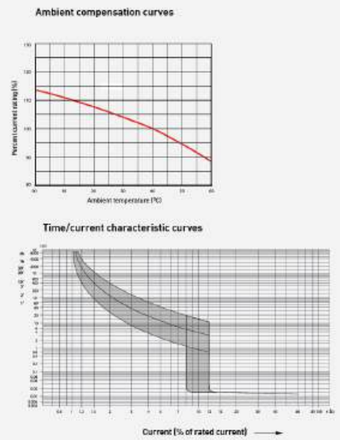
CHARACTERISTICS

- Complied to IEC 60947-2.
- With longevity and high safety standards:
  + Load durability up to 7,500 times.
  + Mechanical durability up to 12,000 times.
- Current adjustable from 630AF to 800AF.

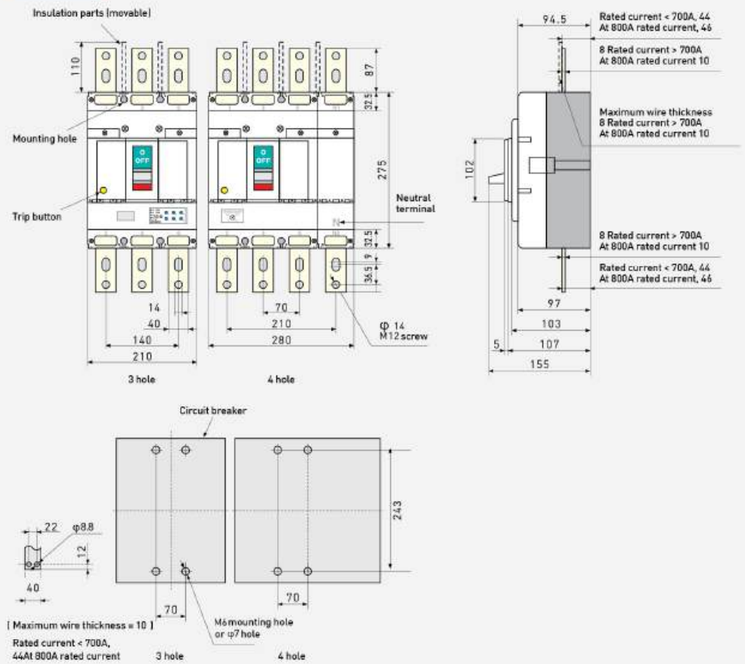
Type	BC-400			BC-630		BC-800	
No. of poles	3P/4P			3P/4P		3P/4P	
Rated current (A)	300A	350A	400A	500A	630A	700A	800A
3P	BBC35300CMHV	BBC35350CMHV	BBC35400CMHV	BBC36500GMHV	BBC36630GMHV	BBC37700GMHV	BBC37800GMHV
4P	BBC45300CMHV	BBC45350CMHV	BBC45400CMHV	BBC46500GMHV	BBC46630GMHV	BBC47700GMHV	BBC47800GMHV
Current specifications							
Max. Rated operational voltage	AC 690V						
Rated insulation voltage	AC 800V						
Rated impulse withstand voltage	8kV						
Rated ultimate S.C. breaking capacity @ AC 415 (Icu)	50kA						
Service short circuit breaking capacity @ AC 415 (Icu)	35kA						
Protection							
Protection method	Thermal (fixed) - Magnetic (fixed)			Thermal (fixed) - Magnetic (adjustable)			
Dimension							
Width x High x Depth (mm)	(3P) 140 x 257 x 103 (4P) 183 x 257 x 103			(3P) 210 x 275 x 103 (4P) 280 x 275 x 103			
Special feature							
Line load reversibility	Yes						
Calibration temperature	40ºC						

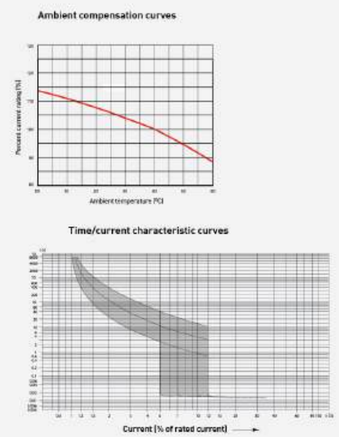
BC-400





BC- 630, BC-800

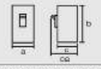


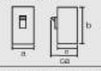


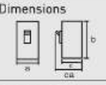
GD BREAKER

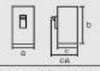
HGC electric interrupting technique is power connection safety design Small dimension , high rated interrupting capacity

MCCB [BBW TYPE]

Frame Size		30AF			
Type		BBW-30		BBW-30C	
Appearance				DIN rail mountable	
Number of Poles		2P	3P	2P	3P
Cat. No. & Rated Current (Nominal Ambient Temperature 40°C)	3A	BBW23Y	BBW33Y	BBW23CKY	BBW33CKY
	5A	BBW25Y	BBW35Y	BBW25CKY	BBW35CKY
	10A	BBW210Y	BBW310Y	BBW210CKY	BBW310CKY
	15A	BBW215Y	BBW315Y	BBW215CKY	BBW315CKY
	20A	BBW220Y	BBW320Y	BBW220CKY	BBW320CKY
	30A	BBW230Y	BBW330Y	BBW230CKY	BBW330CKY
Rated Insulation Voltage	AC	500V		500V	
JIS Rated Interrupting Capacity (sym)	AC 415V	1.5kA		1.5kA	
	AC 200V	2.5kA		2.5kA	
	AC 100V	2.5kA		2.5kA	
Dimensions 	a	47	70	50	75
	b	96		96	
	c	52		60	
	ca	67.6		75.6	
Weight of Standard Type		0.3kg	0.4kg	0.3kg	0.4kg

Frame Size		50AF			
Type		BBW-50		BBW-50S	
Appearance				DIN rail mountable	
Number of Poles		2P	3P	2P	3P
Cat. No. & Rated Current (Nominal Ambient Temperature 40°C)	20A	BBW2201Y	BBW3201Y	5A	BBW251SKY	BBW351SKY
	30A	BBW2301Y	BBW3301Y	10A	BBW2101SKY	BBW3101SKY
	40A	BBW240Y	BBW340Y	15A	BBW2151SKY	BBW3151SKY
	50A	BBW250Y	BBW350Y	20A	BBW2201SKY	BBW3201SKY
				30A	BBW2301SKY	BBW3301SKY
				40A	BBW240SKY	BBW340SKY
				50A	BBW250SKY	BBW350SKY
Rated Insulation Voltage	AC	500V		500V	
JIS Rated Interrupting Capacity (sym)	AC 415V	1.5kA		2.5kA	
	AC 200V	2.5kA		10kA	
	AC 100V	2.5kA		10kA	
Dimensions 	a	47	70	50	75
	b	96		96	
	c	52		60	
	ca	67.6		75.6	
Weight of Standard Type		0.3kg	0.4kg	0.3kg	0.4kg

Frame Size		60AF			
Type		BBW-60		BBW-60S	
Appearance				DIN rail mountable	
Number of Poles		2P	3P	2P	3P
Cat. No. & Rated Current (Nominal Ambient Temperature 40°C)	3A	BBW232Y	BBW332Y	60A	BBW260SKY	BBW360SKY
	5A	BBW252Y	BBW352Y			
	10A	BBW2102Y	BBW3102Y			
	15A	BBW2152Y	BBW3152Y			
	20A	BBW2202Y	BBW3202Y			
	30A	BBW2302Y	BBW3302Y			
	40A	BBW2401Y	BBW3401Y			
	50A	BBW2501Y	BBW3501Y			
	60A	BBW260Y	BBW360Y			
Rated Insulation Voltage	AC	500V		500V	
JIS Rated Interrupting Capacity (sym)	AC 415V	2.5kA		2.5kA	
	AC 200V	5kA		10kA	
	AC 100V	5kA		10kA	
Dimensions 	a	47	70	50	75
	b	96		96	
	c	52		60	
	ca	67.6		75.6	
Weight of Standard Type		0.3kg	0.4kg	0.3kg	0.4kg

Frame Size		100AF		400AF		
Type		BBW-100		BBW-400		
Appearance		DIN rail mountable				
Number of Poles		2P	3P	2P		3P
Cat. No. & Rated Current (Nominal Ambient Temperature 40°C)	20A	BBW2203KY	BBW3203KY	250A	BBW22501KY	BBW32501KY
	30A	BBW2303KY	BBW3303KY	300A	BBW23001KY	BBW33001KY
	40A	BBW2402KY	BBW3402KY	350A	BBW2350KY	BBW3350KY
	50A	BBW2502KY	BBW3502KY	400A	BBW2400KY	BBW3400KY
	60A	BBW2601KY	BBW3601 KY			
	75A	BBW275KY	BBW375KY			
	100A	BBW2100KY	BBW3100KY			
Rated Insulation Voltage	AC	500V		600V		
JIS Rated Interrupting Capacity (sym)	AC 415V	5kA		25kA		
	AC 200V	25kA		50kA		
	AC 100V	25kA		50kA		
Dimensions 	a	75		140 (148)		
	b	96		260 (349)		
	c	60		103		
	ca	75.6		135		
Weight of Standard Type		0.5kg	0.5kg	4.0kg		4.6kg

Note 1) Install breakers with BBW-30, BBW-30C, BBW-50, BBW-50S, BBW-60, BBW-60S, BBW-100 within ±10° of perpendicular.
Note 2) When using 3-poles breaker for 1Ø 3W, neutral conductor cannot have open-phase protection.
Note 3) Please select conformed wire which suit to rated current.
Note 4) Dimensions with [ ] is the measurement including bar terminal.

EARTH LEAKAGE BREAKER [BKW TYPE]

Frame Size	30AF					
Type	BKW-30			BKW-30C		
Appearance				DIN rail mountable		
Phase and Wiring Configuration	1φ2W		3φ3W 1φ3W	1φ2W		3φ3W 1φ3W
Number of Poles	2P		3P	2P		3P
Cat. No. & Rated Current (Nominal Ambient Temperature 40°C)	3A	BKW23□Y	BKW33□Y	5A	BKW25□CKY	BKW35□CKY
	5A	BKW25□Y	BKW35□Y	10A	BKW210□CKY	BKW310□CKY
	10A	BKW210□Y	BKW310□Y	15A	BKW215□CKY	BKW315□CKY
	15A	BKW215□Y	BKW315□Y	20A	BKW220□CKY	BKW320□CKY
	20A	BKW220□Y	BKW320□Y	30A	BKW230□CKY	BKW330□CKY
	30A	BKW230□Y	BKW330□Y			
Rated Voltage (AC V)	100-200V Dual use			100-200V Dual use		
High Speed Type: Rated Sensitivity Current (mA)	15, 30			15, 30		15, 30, 100
High Speed Type: Operating Time (sec.)	0.1			0.1		
Leakage Indication Method	Mechanical button			Mechanical button		
JIS Rated Interrupting Capacity (sym) AC 415V	-			-		
JIS Rated Interrupting Capacity (sym) AC 200V	2.5kA			2.5kA		
JIS Rated Interrupting Capacity (sym) AC 100V	2.5kA			2.5kA		
Dimensions a	70			50		75
Dimensions b	96			96		
Dimensions c	52			60		
Dimensions ca	67.6			75.6		
Weight of Standard Type	0.4kg		0.5kg	0.4kg		0.5kg

Frame Size	50AF					
Type	BKW-50			BKW-50C		
Appearance				DIN rail mountable		
Phase and Wiring Configuration	1φ2W		3φ3W 1φ3W	1φ2W		3φ3W 1φ3W
Number of Poles	2P		3P	2P		3P
Cat. No. & Rated Current (Nominal Ambient Temperature 40°C)	20A	BKW220□1Y	BKW320□1Y	15A	BKW215□1CKY	BKW315□1CKY
	30A	BKW230□1Y	BKW330□1Y	20A	BKW220□1CKY	BKW320□1CKY
	40A	BKW240□Y	BKW340□Y	30A	BKW230□1CKY	BKW330□1CKY
	50A	BKW250□Y	BKW350□Y	40A	BKW240□CKY	BKW340□CKY
				50A	BKW250□CKY	BKW350□CKY
Rated Voltage (AC V)	100-200V Dual use			100-200V Dual use		
High Speed Type: Rated Sensitivity Current (mA)	15 (below 30A), 30,100 (above 40A)			15, 30		
High Speed Type: Operating Time (sec.)	0.1			0.1		
Leakage Indication Method	Mechanical button			Mechanical button		
JIS Rated Interrupting Capacity (sym) AC 415V	-			-		
JIS Rated Interrupting Capacity (sym) AC 200V	2.5kA			25kA		
JIS Rated Interrupting Capacity (sym) AC 100V	2.5kA			25kA		
Dimensions a	70			50		75
Dimensions b	96			96		
Dimensions c	52			60		
Dimensions ca	67.6			75.6		
Weight of Standard Type	0.4kg		0.5kg	0.4kg		0.5kg

■ Rated Voltage Applicable Range

Rated voltage	Applicable Voltage Range
100–200V dual use	80-242V

■ Cat. No. □ Depends on the sensitivity current
2:15mA 3:30mA 4:100mA 9:100-200-500mA Switchover

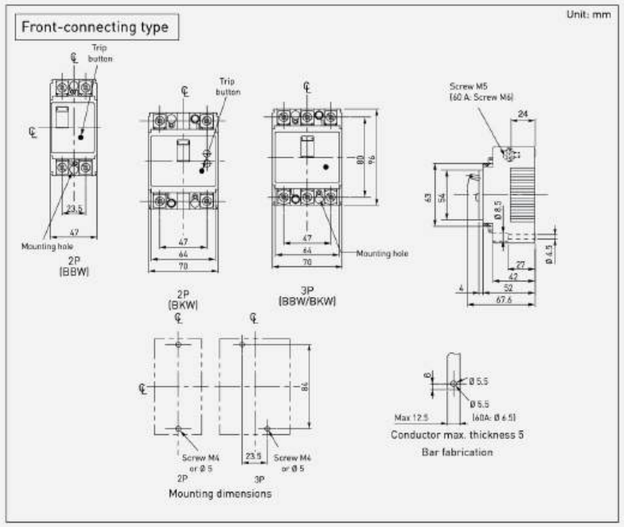
Frame Size	50AF			60AF					
Type	BKW-50S			BKW-60			BKW-60S		
Appearance	DIN rail mountable						DIN rail mountable		
Phase and Wiring Configuration	1φ2W		3φ3W 1φ3W	1φ2W		3φ3W 1φ3W	1φ2W		3φ3W 1φ3W
Number of Poles	2P		3P	2P		3P	2P		3P
Cat. No. & Rated Current (Nominal Ambient Temperature 40°C)	15A	BKW215□1SKY	BKW315□1SKY	15A	BKW215□Y	BKW315□Y	60A	BKW260□SKY	BKW360□SKY
	20A	BKW220□1SKY	BKW320□1SKY	20A	BKW220□Y	BKW320□Y			
	30A	BKW230□1SKY	BKW330□1SKY	30A	BKW230□Y	BKW330□Y			
	40A	BKW240□SKY	BKW340□SKY	40A	BKW240□Y	BKW340□Y			
	50A	BKW250□SKY	BKW350□SKY	50A	BKW250□Y	BKW350□Y			
				60A	BKW260□Y	BKW360□Y			
Rated Voltage (AC V)	100-200V Dual use			100-200V Dual use			100-200V Dual use		
High Speed Type: Rated Sensitivity Current (mA)	15, 30, 100 (2P)			15 (below 30A) 30, 100 (above 40A)			30, 100 (2P)		
High Speed Type: Operating Time (sec.)	0.1			0.1			0.1		
Leakage Indication Method	Mechanical button			Mechanical button			Mechanical button		
JIS Rated Interrupting Capacity (sym) AC 415V	-			-			-		
JIS Rated Interrupting Capacity (sym) AC 200V	10kA			5kA			10kA		
JIS Rated Interrupting Capacity (sym) AC 100V	10kA			5kA			10kA		
Dimensions a	50		75	70			50		75
Dimensions b	96			96			96		
Dimensions c	60			52			60		
Dimensions ca	75.6			67.6			75.6		
Weight of Standard Type	0.4kg		0.5kg	0.4kg		0.5kg	0.4kg		0.5kg

Frame Size	100AF			400AF	
Type	BKW-100			BKW-400	
Appearance	DIN rail mountable				
Phase and Wiring Configuration	1φ2W		3φ3W 1φ3W	3φ3W 1φ3W	
Number of Poles	2P		3P	3P	
Cat. No. & Rated Current (Nominal Ambient Temperature 40°C)	60A	BKW260□1KY	BKW360□1KY	250A	BKW3250□1KY
	75A	BKW275□KY	BKW375□KY	300A	BKW3300□1KY
	100A	BKW2100□KY	BKW3100□KY	350A	BKW3350□KY
				400A	BKW3400□KY
Rated Voltage (AC V)	100-200V Dual use			100-200-415V Dual use	
High Speed Type: Rated Sensitivity Current (mA)	30			30,100-200-500	
High Speed Type: Operating Time (sec.)	0.1			0.1	
Leakage Indication Method	Mechanical button			Mechanical button	
JIS Rated Interrupting Capacity (sym) AC 415V	-			25kA	
JIS Rated Interrupting Capacity (sym) AC 200V	25kA			50kA	
JIS Rated Interrupting Capacity (sym) AC 100V	25kA			50kA	
Dimensions a	75			140 (148)	
Dimensions b	96			260 (349)	
Dimensions c	60			103	
Dimensions ca	75.6			135	
Weight of Standard Type	0.6kg		0.6kg	4.8kg	

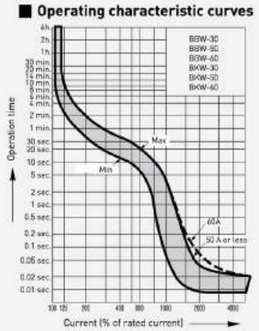
Note 1) When using 3-poles breaker for 1φ3W configuration apply voltage to two end terminal. In this case neutral conductor cannot have open-phase protection.
Note 2) When using on frequency control circuit (inverter) be sure to install breaker on primary side of inverter.
Note 3) Breaker can be connected in reverse. However do not reverse connect 400 when used on a 415V circuit.
Note 4) Install BKW-30, BKW-30C, BKW-50, BKW-50C, BKW-50S, BKW-60, BKW-60S, BKW-100 within ±10° of perpendicular.
Note 5) Please select conformed wire which suit to related current.
Note 6) Dimensions with ( ) is the measurement including bar terminal.

DIMENSIONAL DIAGRAME

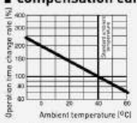
1 BBW-30, BBW-50, BBW-60, BKW-30, BKW-50, BKW-60



Operating characteristic curves



Temperature compensation curve

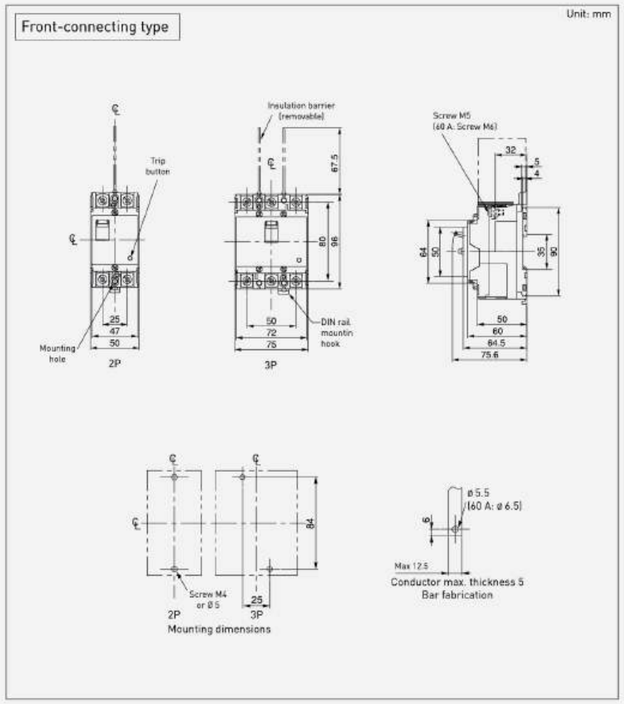


Note: The method used to detect overcurrent is electromagnetic, so temperature compensation takes the form of an increase or decrease relative to the lead-out time and there is no change in the rated current.

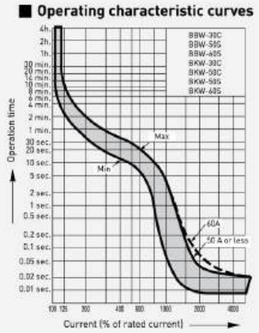
Standard included accessories (frontconnecting type)

Mounting screws	Small round-head screws M4 x 0.7 x 35

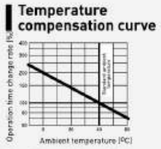
2 BBW-30C, BBW-50S, BBW-60S, BKW-30C, BKW-50C, BKW-60S



Operating characteristic curves



Temperature compensation curve

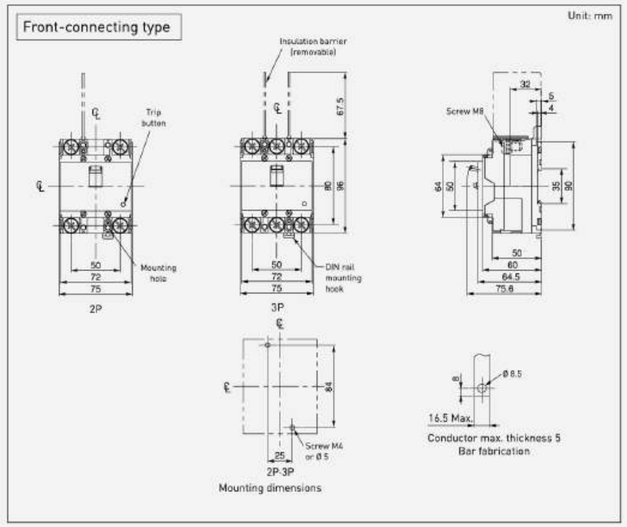


Note: The method used to detect overcurrent is electromagnetic, so temperature compensation takes the form of an increase or decrease relative to the lead-out time and there is no change in the rated current.

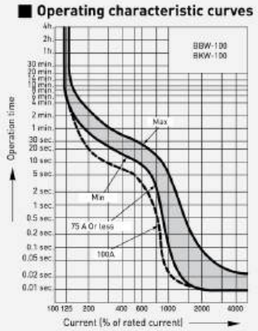
Standard included accessories (frontconnecting type)

Mounting screws	Small round-head screws M4 x 0.7 x 54
Insulation barrier	2 pole: 1, 3 pole: 2

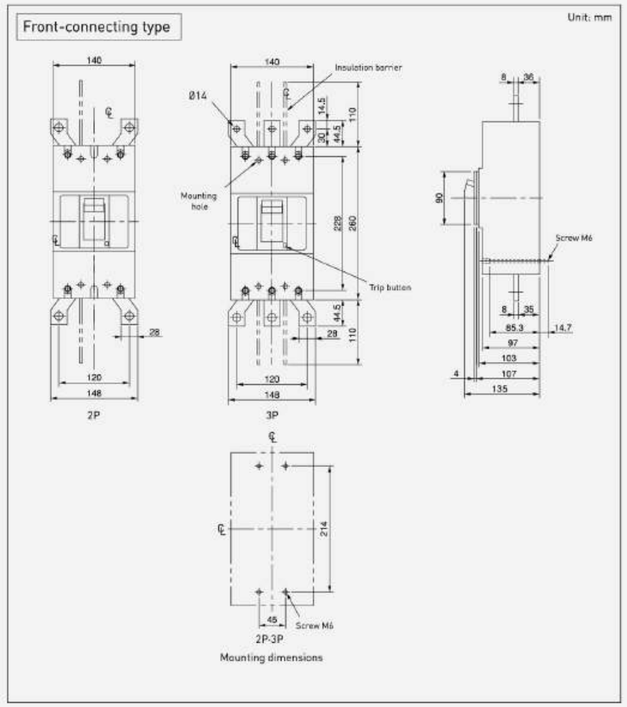
3 BBW-100, BKW-100



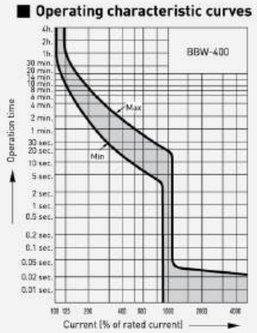
Operating characteristic curves



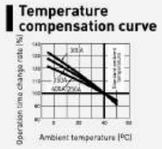
4 BBW-400, BKW-400



Operating characteristic curves



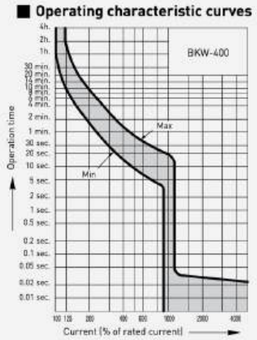
Temperature compensation curve



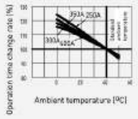
Standard included accessories (front-connecting type)

Mounting screws	Small round-head screws M6 x 1.0 x 100
Insulation barrier	2 pole: 2, 3 pole: 4

Operating characteristic curves

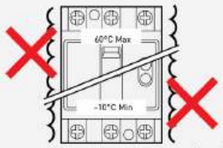


Temperature compensation curve



CAUTIONS FOR THE USE OF BREAKERS

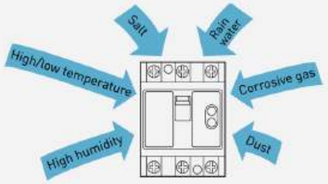
■ Cautions concerning the operating environment



Keep humidity at or below 85%RH

Ambient temperature: -10°C to +60°C
Note: Range is -10°C to +50°C for residential panel breakers
Relative humidity: 45% to 85%
Maximum elevation: 2000m above sea level

- If temperature exceeds 40°C, refer to the current rating table when specifying current rating of the breaker.
- If installed outdoors or in a location exposed to moisture, the breaker must be housed in a suitable enclosure. (Do not use in locations where dew or other condensation will form).
- It is recommended that the breaker be installed in a location not exposed to direct sunlight, as this can result in incorrect operation.



- The breaker must be installed in a suitable enclosure for use in a location exposed to dirt or dust, etc.
- Avoid installation in locations with acidic or alkaline atmospheres, such as chemical plants or breweries, etc.
- Avoid installation in locations exposed to rainwater or water spray, etc.

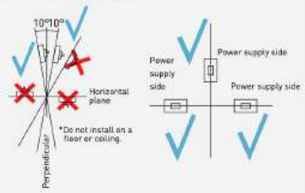
- Avoid installation in locations exposed to vibration, shock, or impact, etc.

■ Cautions concerning installation

Although perpendicular installation of breakers is recommended, installation is also possible as indicated below.

Overload current tripping method	Magnetic	~60AF *Include BBW-100, BKW-100	Within 10° of perpendicular
	Thermal, Thermal and magnetic	100AF~ *Exclude BBW-100, BKW-100	No restrictions on installation direction

Installation orientation for breakers with magnetic trip.



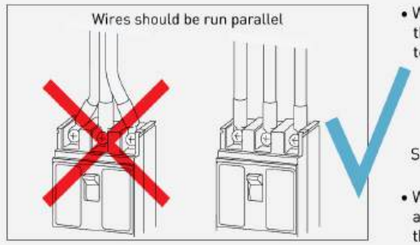
Side view Front view

When drilling holes or stripping insulation, cover the breaker with masking tape or paper to prevent sawdust and other foreign matter from entering the breaker mechanism.

■ Cautions concerning connections

1. Connection of electrical wires

- When connecting stranded wire, do not solder or bind the ends of the wire.
- Tighten the electrical wires securely. If the wires are not connected securely, overheating of terminals could cause a fire. If the neutral pole of a single-phase, three-wire breaker is not connected securely, an incorrect voltage could cause damage to the load.
- Do not lubricate the screws. Lubrication will reduce the friction of the screws and make it easier for them to come loose, which can result in overheating.
- Lubricating oil can also cause excessive stress on the screws, even when tightened to the specified torque, thus resulting in damage to the screws.
- Connect wires so that they run parallel.
- Select a wire size suitable to carry the rated current of the load.



2. Connection of MCCB terminals under 50AF

- When connecting directly to a terminal, insert the single wire or stranded wire straight into the terminal and then tighten to the specified torque. It is also possible to use commercially available lug or bar terminals.

- When connecting stranded wire, separate the strands before inserting them into the terminal.

Single wire Lug terminal Stranded wire

- When connecting two or more wires directly, avoid connecting in any combination other than those listed below. No more than three wires. For stranded wire in particular, use a lug terminal wherever possible. Please use solderless terminal in case of M6.
- Possible wire combinations when connecting two wires.

	Single wire	Stranded wire
M5	ø1.6 & ø1.6mm	3.5mm² & 3.5mm²
	ø1.6 & ø2.0mm	3.5mm² & 5.5mm²
	ø1.6 & ø2.6mm	3.5mm² & 8mm²
	ø2.0 & ø2.0mm	5.5mm² & 5.5mm²
	ø2.0 & ø2.6mm	3.5mm² & 8mm²
	ø2.6 & ø2.6mm	8mm² & 8mm²
		8mm² & 14mm²

MAINTENANCE AND INSPECTION

After usage of breakers begins, perform regular inspections to maintain rated performance and prevent failures

Recommended replacement frequency
Circuit breakers: 15 years
Leakage breakers: 15 years
Source: "Investigation related to recommended replacement frequency for low-voltage equipment" Japan Electrical Manufacturers' Association

Regular inspection guidelines

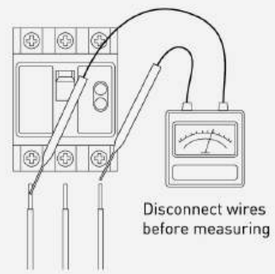
Environment	Regular inspection guideline (10-year period following installation)
Location where air is always clean and dry	Once every 2 to 3 years
Indoor location with little dust and no corrosive gases	Once each year
Location with little dust where air contains impurities (0.1 ppm or greater) such as sulfurous acid, hydrogen sulfide, salt, or high humidity	Once every 6 months

Type	Inspection location	Inspection item	Notes
Common	Top of breaker, power supply side	Check for problems such as dust accumulation and oil buildup.	After confirming that no power supply voltage is being applied, use cleaner to wipe away any dust and then wipe away any remaining grime with a clean, dry rag.
	Exhaust opening	Check for evidence indicating that the breaker has been tripped by overcurrent in the past.	If there is clear evidence of overvoltage, such as black soot or melted metal, replace the breaker with a new one.
	Terminals	• Tighten terminal screws to ensure they are not loose. • Check for evidence indicating abnormally high temperatures or damage due to humidity or corrosive gas.	• Apply appropriate torque when tightening. • Sight discoloration of the terminal area is not a problem. If the discoloration is extreme or if the insulation is damaged. However, replace the breaker with a new one.
	Handle	Confirm that the breaker closes and opens smoothly.	If the breaker is normally closed, open and close it a few times to ensure stable contact resistance and prevent overheating.
	Body	Check to make sure that the temperature of the breaker body does not exceed 70°C and no smoke or odor is produced when electrical current is flowing.	If there is anything amiss, replace the breaker with a new one.
ELB	Test button	Use the test button to confirm that the breaker operates properly. (When not testing the breaker, avoid using the test button to switch the handle to the off position).	• Test the breaker about once each month. • When performing operation inspections, also measure using a leak checker to ensure that the current sensitivity and operation time are normal.

■ Cautions when measuring insulation resistance

- For the places marked with a triangle (Δ) in the table at right, measuring the insulation resistance will not cause damage, but the insulation resistance meter reading will be approximately zero due to the internal circuit. To measure the insulation resistance between wires, first remove the wires from the terminals.
- For leakage breakers or breakers with leakage alarms equipped with the meg measurement switch as an internal function, measurement is possible if the handle is the off position.
- After reconnecting wires, switch the handle to the on position and press the test button to confirm the breaker is operating properly.

		Insulation resistance measurement (500 V or less)	
Handle position		On	Off
Between charger and groud		○	○
Between left and middle poles and between middle and right poles		○	○
Between left and right poles	Power supply side	Δ	○
	Load side	Δ	Δ
Between power supply and load terminals		–	○



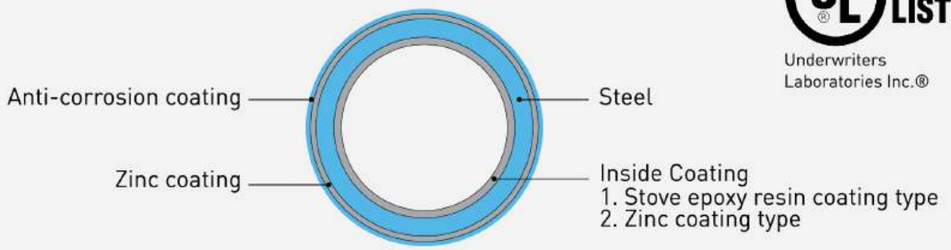
Disconnect wires before measuring

WHITE CONDUIT

Great protection against corrosion and high durableness
Labor-saving in installing pipe

Superior galvanizing by in - line hot - dip process for greater protection against corrosion . Finished with durable and clear anti - corrosion coating for higher protection outside and higher grade epoxy coating inside .

CROSS-SECTIONAL VIEW OF Panasonic WHITE CONDUIT



UL LISTED
Underwriters Laboratories Inc.®

Features

1. Easy and accurate bending
Panasonic WHITE CONDUIT is made of high quality steel and processed by high frequency induction welding to prevent cracking when bend.

2. Easy wire pushing and pulling
The high-grade stove epoxy resin coating on the inside wall makes wire-pulling easy, and protects against corrosion.

3. Easy coupling and fast installation
Precise, sharp threads cut by automated machinery mean fast and easy installation. Precise thread also makes our conduit virtually moisture-tight.

4. High corrosion resistance
Pure zinc coating on the exterior wall and stove epoxy resin finish on the inside protects WHITE CONDUIT from corrosion, even by harsh chemicals and sea air.

5. Uniform quality
Flat steel is rolled, zinc-coated and threaded in one continuous automated process for uniform high quality.

ANSI/UL

EMT (Electrical Metallic Tubing)

Listed by "UL" File No. E-44051

UL 797

Item No.	Size (inch)	Outside Diameter (mm)	Nominal Wall Thickness (mm)	Length (mm)	Nominal Weight (kg/pc)	Primary Bundle (pcs)	Master Bundle (pcs)
DWE012Y	1/2	17.93	1.07	3,048	1.46	10	500
DWE034Y	3/4	23.42	1.24	3,048	2.21	10	300
DWE100Y	1	29.54	1.45	3,048	3.08	5	200
DWE114Y	1-1/4	38.35	1.65	3,048	4.74	5	125
DWE112Y	1-1/2	44.20	1.65	3,048	5.49	5	100
DWE200Y	2	55.80	1.65	3,048	6.99	3	75
DWE212Y	2-1/2	73.03	1.83	3,048	9.80	-	40
DWE300Y	3	88.90	1.83	3,048	11.99	-	30
DWE312Y	3-1/2	101.60	2.11	3,048	15.80	-	20
DWE400Y	4	114.30	2.11	3,048	17.81	-	20

IMC (Intermediate Metal Conduit)

Listed by "UL" File No. E-62193

UL 1242

Item No.	Size (inch)	Outside Diameter (mm)	Nominal Wall Thickness (mm)	Length (mm)	Nominal Weight (kg/pc)	Primary Bundle (pcs)	Master Bundle (pcs)
DWM012Y	1/2	20.70	1.97	3,030	2.81	10	300
DWM034Y	3/4	26.14	2.10	3,030	3.81	5	250
DWM100Y	1	32.77	2.35	3,025	5.40	5	125
DWM114Y	1-1/4	41.59	2.41	3,025	7.17	3	75
DWM112Y	1-1/2	47.81	2.54	3,025	8.80	3	75
DWM200Y	2	59.93	2.67	3,025	11.61	-	50
DWM212Y	2-1/2	72.56	3.81	3,010	20.00	-	40
DWM300Y	3	88.29	3.81	3,010	24.63	-	30
DWM312Y	3-1/2	100.86	3.81	3,005	28.53	-	20
DWM400Y	4	113.40	3.81	3,005	31.75	-	15

ANSI/UL

RSC (Rigid Steel Conduit/ Hot-Dip Galvanized Outside and Epoxy Resin Inside)

Listed by "UL" File No. E-157617

UL 6

Item No.	Size (inch)	Outside Diameter (mm)	Nominal Wall Thickness (mm)	Length (mm)	Nominal Weight (kg/pc)	Primary Bundle (pcs)	Master Bundle (pcs)
DWR012Y	1/2	21.34	2.64	3,030	3.72	10	300
DWR034Y	3/4	26.67	2.72	3,030	4.94	5	250
DWR100Y	1	33.40	3.20	3,025	7.30	5	125
DWR114Y	1-1/4	42.16	3.38	3,025	9.89	3	75
DWR112Y	1-1/2	48.26	3.51	3,025	11.93	3	75
DWR200Y	2	60.33	3.71	3,025	15.88	-	50

RSC (Rigid Steel Conduit/ Hot-Dip Galvanized both Inside and Outside)

Listed by "UL" File No. E-157617

UL 6

Item No.	Size (inch)	Outside Diameter (mm)	Nominal Wall Thickness (mm)	Length (mm)	Nominal Weight (kg/pc)	Primary Bundle (pcs)	Master Bundle (pcs)
DWR012ZY	1/2	21.34	2.64	3,030	3.72	10	300
DWR034ZY	3/4	26.67	2.72	3,030	4.94	5	250
DWR100ZY	1	33.40	3.20	3,025	7.30	5	125
DWR114ZY	1-1/4	42.16	3.38	3,025	9.89	3	75
DWR112ZY	1-1/2	48.26	3.51	3,025	11.93	3	75
DWR200ZY	2	60.33	3.71	3,025	15.88	-	50
DWR212ZY	2-1/2	73.03	4.90	3,010	25.36	-	40
DWR300ZY	3	88.90	5.21	3,010	32.98	-	30
DWR312ZY	3-1/2	101.60	5.46	3,005	39.92	-	20
DWR400ZY	4	114.30	5.72	3,005	46.72	-	15
DWR500ZY	5	141.30	6.22	2,995	63.50	-	10
DWR600ZY	6	168.28	6.76	2,995	83.46	-	5

Flexible Conduit

Item No.	Size (inch)	Outside Diameter (mm)	Standard pack (m/Roll)	Weight (kg/pc)
DME012	1/2	21.84 ~ 23.37	30	7.80
DME034	3/4	26.54 ~ 28.07	30	9.70
DME100	1	33.02 ~ 35.05	15	5.80

BS31

Threaded Conduit – Medium/ Heavy protection (Class 3)

BS31: 1940

Item No.	Size (inch)	Outside Diameter (mm)	Nominal Wall Thickness (mm)	Length (mm)	Nominal Weight (kg/pc)	Primary Bundle (pcs)	Master Bundle (pcs)
DWB0343S	3/4	18.92	1.60	3,048	2.11	10	350
DWB0343L				3,810	2.63	10	350
DWB1003S	1	25.27	1.60	3,048	2.90	10	250
DWB1003L				3,810	3.61	10	250
DWB1143S	1-1/4	31.62	1.60	3,048	3.69	7	210
DWB1143L				3,810	4.59	7	210
DWB1123S	1-1/2	37.96	1.80	3,048	5.00	5	150
DWB1123L				3,810	6.23	5	150
DWB2003S	2	50.66	2.00	3,048	7.49	3	90
DWB2003L				3,810	9.32	3	90

BS4568

Threaded Conduit – Medium/ Heavy protection (Class 3)

BS4568: Part 1: 1970

Item No.	Size (inch)	Outside Diameter (mm)	Nominal Wall Thickness (mm)	Length (mm)	Nominal Weight (kg/pc)	Primary Bundle (pcs)	Master Bundle (pcs)
DWB0203	20	19.85	1.60	3,750	2.72	10	350
DWB0253	25	24.80	1.60	3,750	3.48	10	250
DWB0323	32	31.80	1.60	3,750	4.54	7	210

Heavy Protection (Class 4)

BS4568: Part 1: 1970

Item No.	Size (inch)	Outside Diameter (mm)	Nominal Wall Thickness (mm)	Length (mm)	Nominal Weight (kg/pc)	Primary Bundle (pcs)	Master Bundle (pcs)
DWB0204	20	19.85	1.60	3,750	2.92	10	350
DWB0254	25	24.80	1.60	3,750	3.71	10	250
DWB0324	32	31.80	1.60	3,750	4.84	7	210

JIS

Plain Conduit (Threadless)

JIS C 8305

Item No.	Size (inch)	Outside Diameter (mm)	Nominal Wall Thickness (mm)	Length (mm)	Nominal Weight (kg/pc)	Primary Bundle (pcs)	Master Bundle (pcs)
DW819T	E19	19.1	1.20	3,660	1.94	10	400
DW825T	E25	25.4	1.20	3,660	2.62	10	250
DW831T	E31	31.8	1.40	3,660	3.84	7	175
DW839T	E39	38.1	1.40	3,660	4.64	5	125
DW851T	E51	50.8	1.40	3,660	6.24	3	75
DW863T	E63	63.5	1.60	3,660	8.94	-	50
DW875T	E75	76.2	1.80	3,660	12.09	-	40

Thin Wall Conduit (Threaded)

JIS C 8305

Item No.	Size (inch)	Outside Diameter (mm)	Nominal Wall Thickness (mm)	Length (mm)	Nominal Weight (kg/pc)	Primary Bundle (pcs)	Master Bundle (pcs)
DW119T	C19	19.1	1.60	3,660	2.53	10	400
DW125T	C25	25.4	1.60	3,660	3.44	10	250
DW131T	C31	31.8	1.60	3,660	4.36	7	175
DW139T	C39	38.1	1.60	3,660	5.27	5	125
DW151T	C51	50.8	1.60	3,660	7.11	3	75
DW163T	C63	63.5	2.00	3,660	11.10	-	50
DW175T	C75	76.2	2.00	3,660	13.40	-	40

Thick Wall Conduit (Threaded)/ Hot-Dip Galvanized Outside and Epoxy Resin Inside

JIS C 8305

Item No.	Size (inch)	Outside Diameter (mm)	Nominal Wall Thickness (mm)	Length (mm)	Nominal Weight (kg/pc)	Primary Bundle (pcs)	Master Bundle (pcs)
DW216T	G16	21.0	2.30	3,660	3.88	10	250
DW222T	G22	26.5	2.30	3,660	5.02	10	175
DW228T	G28	33.3	2.50	3,660	6.95	7	125
DW236T	G36	41.9	2.50	3,660	8.89	5	75
DW242T	G42	47.8	2.50	3,660	10.22	3	75
DW254T	G54	59.6	2.80	3,660	14.35	-	50
DW270T	G70	75.2	2.80	3,660	18.30	-	40
DW282T	G82	87.9	2.80	3,660	21.51	-	30
DW392T	G92	100.7	3.50	3,660	30.71	-	20
DW394T	G104	113.4	3.50	3,660	34.72	-	20

Thick Wall Conduit (Threaded)/ Hot-Dip Galvanized both Inside and Outside

JIS C 8305

Item No.	Size (inch)	Outside Diameter (mm)	Nominal Wall Thickness (mm)	Length (mm)	Nominal Weight (kg/pc)	Primary Bundle (pcs)	Master Bundle (pcs)
DWZ216T	G16	21.0	2.30	3,660	3.88	10	250
DWZ222T	G22	26.5	2.30	3,660	5.02	10	175
DWZ228T	G28	33.3	2.50	3,660	6.95	7	125
DWZ236T	G36	41.9	2.50	3,660	8.89	5	75
DWZ242T	G42	47.8	2.50	3,660	10.22	3	75
DWZ254T	G54	59.6	2.80	3,660	14.35	-	50
DWZ270T	G70	75.2	2.80	3,660	18.30	-	40
DWZ282T	G82	87.9	2.80	3,660	21.51	-	30
DWZ392T	G92	100.7	3.50	3,660	30.71	-	20
DWZ394T	G104	113.4	3.50	3,660	34.72	-	20

FULL-2WAY REMOTE LIGHTING CONTROL SYSTEM

For your amenity and energy saving

Simple, Efficient Lighting Control That Matches Your Needs

ECOLOGY
Energy-saving while Creating an Efficient Lighting Environment

AMENITY
User-friendly

SIMPLE
Simple Design and Labor-saving Installation

CONVENIENCE
Minimal Design, Minimum Maintenance

FLEXIBILITY
Reduced Total Cost

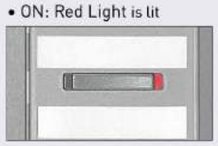
Centralized Monitoring and Control

Control and Monitor All Lighting from a Central Location

Functional Display of Lightning Status

LED Displays Lightning Status

- ON: Red Light is lit



- OFF: Green Light is lit

Timer and Sensor Control

Connectable with Timer or Sensor Control Equipments for Further Energy Saving

- Program Timer Unit

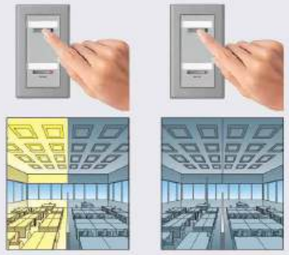
- Passive Infrared Ceiling Unit

- Daylight Sensor Unit

Group Control

Turn ON All Lights in The Sales Department

Turn OFF All Lights in The Sales Department

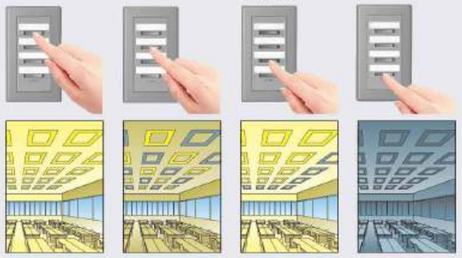


All Lights ON

All Lights OFF

Pattern Control

9:00 AM	Noon to 1:00 PM	2:00 to 3:00 PM	6:00 PM
Work Starts	Lunch Break	Natural Light Come from Outside	Work Finish

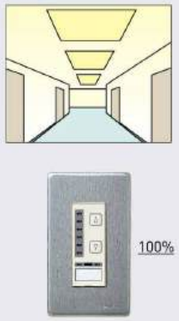


All Lights ON

Some Lights ON

All Lights OFF

Dimmer Control



The bigger the building, the more labor-saving the installation

Direct Control

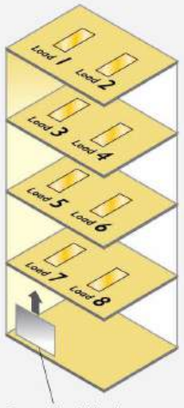
Common Wiring

The Switch located between the load and the power source directly turn the power ON/OFF

Remote Control

Multiplex Transmission Full-2Way Control

The Switch acts as a signal transmitter, sending commands to the Relay to turn ON/OFF



Centralized Monitor and Control Switch (Selector Switch)

Common Wiring Method

Total: 8+1 = 9 lines

Thicker Conduit Pipes Required

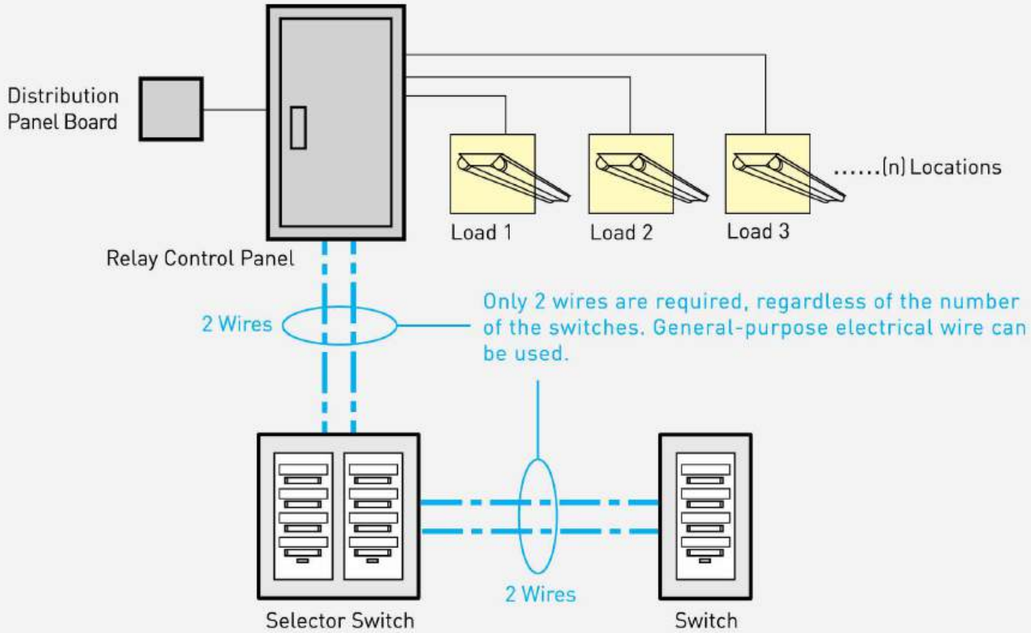
Small Scale Projects

Full-2way Remote Control Method Two Signal Wire

Can be Housed in a Thinner Conduit

Large Scale Projects

Wiring diagram for Full-2Way remote control system



HOME AND BUILDING AUTOMATION SYSTEMS (KNX)

Increase comfort and save energy

Panasonic provides excellent KNX devices for Home and Building Automation Systems developer.

Panasonic KNX system comes with equipment that meets the needs of people to make life easier. It can manage and control lighting, blinds and shutters, HVAC, remote control, etc. from via touch panel, smart phone and switch.

PRODUCT FEATURES

Comfort & Convenience

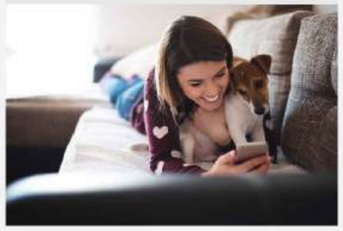
Step into a much smarter life...

Panasonic combines technology to elevate people's lives to be more convenient and comfortable.

Security & Safety

Safety is firts...

Panasonic will also provide safe and secure environment.



Remote Access & Monitoring

Beyond Luxury... It's Panasonic.

Smartphone can be used as a remote controller.

EXCLUSIVE DESIGNS & LUXURIOUS SWITCHES

Touch Panel

Easier setting management & monitoring

- 10inch Slim monitor can create a sense of luxury
- Remote Access from the outside is possible with smartphone

Multi Functional Switch

Touch switch can control with 12 customizable switches

- "Good design" awarded in Turkey 2021
- With or without LCD display

Switch

More than 300 types of combinations (Frame×switch handle)

- Many colors & material frames can be selected depends on project.

CREATE YOUR OWN WORLD WITH PANASONIC

Security
- Connection with CCTV
- Connection with sensor

HVAC
- Room temperature control
- Pleasant ventilation
- Sensor and timer control

Blind
- Scene control
- Sensor and timer control

Connection with mobile
- Smartphone
- Tablet

Automations Remote Access
- Logical functions
- Timed functions
- System supervision
- Remote control

Lighting Control
- All on /off
- Dimming control
- Scene lighting
- Sensor and timer control

Illumination | Roller Blind-Curtain | Security Systems | Heating, Ventilation, Air Conditioning Control | Monitoring Systems | Remote Access

Lighting Control

All ON/OFF
Allows to be able to turn all lights on or off all at once.

DIMMING CONTROL
Several different controlling options can be used to dim the lighting including 1-10V and DALI

SCENE LIGHTING
Can simplify your routine by allowing you to activate multiple settings with one-button.

SENSOR & TIMER CONTROL
Provides energy saving features and automatic control options for lighting control system.

HVAC Control

AIR CONDITIONING CONTROL
Can control the heating system and ventilation system effectively by setting the suitable temperature into your thermostat.

PLEASANT VENTILATION
Improves the air quality of the room by activating ventilation using the presence detectors information.

SENSOR & TIME CONTROL
Helps to regulate the temperature more efficiently by using the information of the presence detector and timer control.

Blind Control

CONTROL NATURAL LIGHTING
Roller shutters, blinds and curtains can be controlled to prevent the room temperature to rise caused by the sunlight.

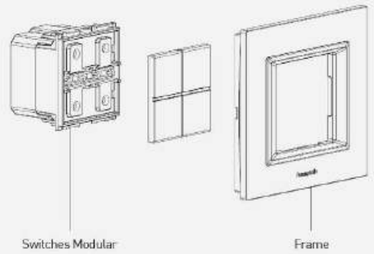
SCENE CONTROL
Provides comfort with simultaneous control of several engines as well as security and efficient lighting control.

SENSOR & TIMER CONTROL
Prevents the sunlight from entering inside with automated activation of the curtains or sun blinds through the data received from outdoor sensors and ensures that air-conditioners run more efficiently, consume less energy.

HOME AND BUILDING AUTOMATION SYSTEMS (KNX)

Increase comfort
and save energy

BUTTON & SWITCHES MODULAR



1,2,4 Switches(2M)

3 Switches (3M)

4 Switches (4M)

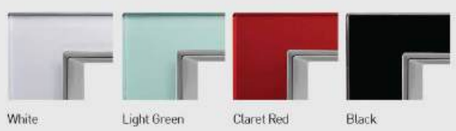
FRAME

OPAQUE

METALLIC

METAL

ULTIMA - METAL



ULTIMA - GLASS

INTELLIGENCE INTERFACE

KNX 10.1" Touch Panel V2.0

- Smart Home Functions
  - •Lighting control
  - •Dimming control
  - •RGB control
  - •Shutter / Blind control
  - •Thermostat control
- Scene Functions
  - •Individual scene create
  - •Time dependent scene management
  - •KNX scene control
- Intercom Integration
- Alarm and Security
- Remote Control Apps(iOS®/Android™)

KNX Multifunctional Switch

-Metallic transparent front surface
-High contrast 2.5 inch LCD screen
-12 functional capacitive touch buttons with sound feedback
-Customizable button icons
-LED feedback indicator
-External analog sensor input (underfloor heating vs.) and dry contact input
-Below functions can be configured:
-Advanced thermostat features (Underfloor Heating, Heating / Cooling Functions, VRV / VRF Control with suitable interface product, Split Climate Control with suitable IR interface product), Switching Control, Dimming Control, Shutter / Blind Control, Scene Actuator

KNX Multifunctional Switch

-Metallic transparent front surface
-12 functional capacitive touch buttons with sound feedback
-Customizable button icons
-LED feedback indicator
-External analog sensor input (underfloor heating vs.) and dry contact input
-Below functions can be configured:
-Thermostat Features, Switching Control, Dimming Control, Shutter / Blind Control, Scene Actuator

SYSTEM DEVICES

MIX ACTUATOR
KNX Mix Actuator 16A
(4/8/12/16/20/24 Channels)

SWITCH/BLIND ACTUATOR
KNX Switching/Blind Actuator 16A
4/2 Gang, 8/4 Gang, 12/6 Gang

DIMMING ACTUATOR
KNX Dimming Actuator 16A
2 Gang 300W, 4 Gang 250W

DIMMING ACTUATOR
KNX 1-10V
Control Unit 4 Gang

INTERFACE DEVICES

KNX POWER SUPPLY
TP-320mA/640mA

KNX IP INTERFACE TP

KNX AREA/LINE COUPLER TP

HOME AND BUILDING AUTOMATION SYSTEMS (KNX)

Increase comfort
and save energy

INTERFACE DEVICES

KNX IP ROUTER TP

KNX USBGATEWAY

KNX INPUT MODULE DRY CONTACT
IO100:20 Gang
IO101:20/8 Gang

MIX DALI GATEWAY
DL101/DL102

KNX IR INTERFACE

KNX CEILING TYPE PRESENCE DETECTOR

Ceiling-type
Persence Detector

Ceiling-type
Persence Detector
(with temperature
& humidity sensor)

Ceiling-type
Persence Detectort
(with temperature,
humidity & air quality
sensor)

KNX High Bay Mount
Presence Detector

KNX Corridor
Type Detector
(Surface Mounted)

KNX Corridor
Type Detector
(Flush Mounted)

KNX MODULAR THERMOSTAT

Opaque White | Beige | Metalic White | Dore | Anthracite | Dark Gray | Black

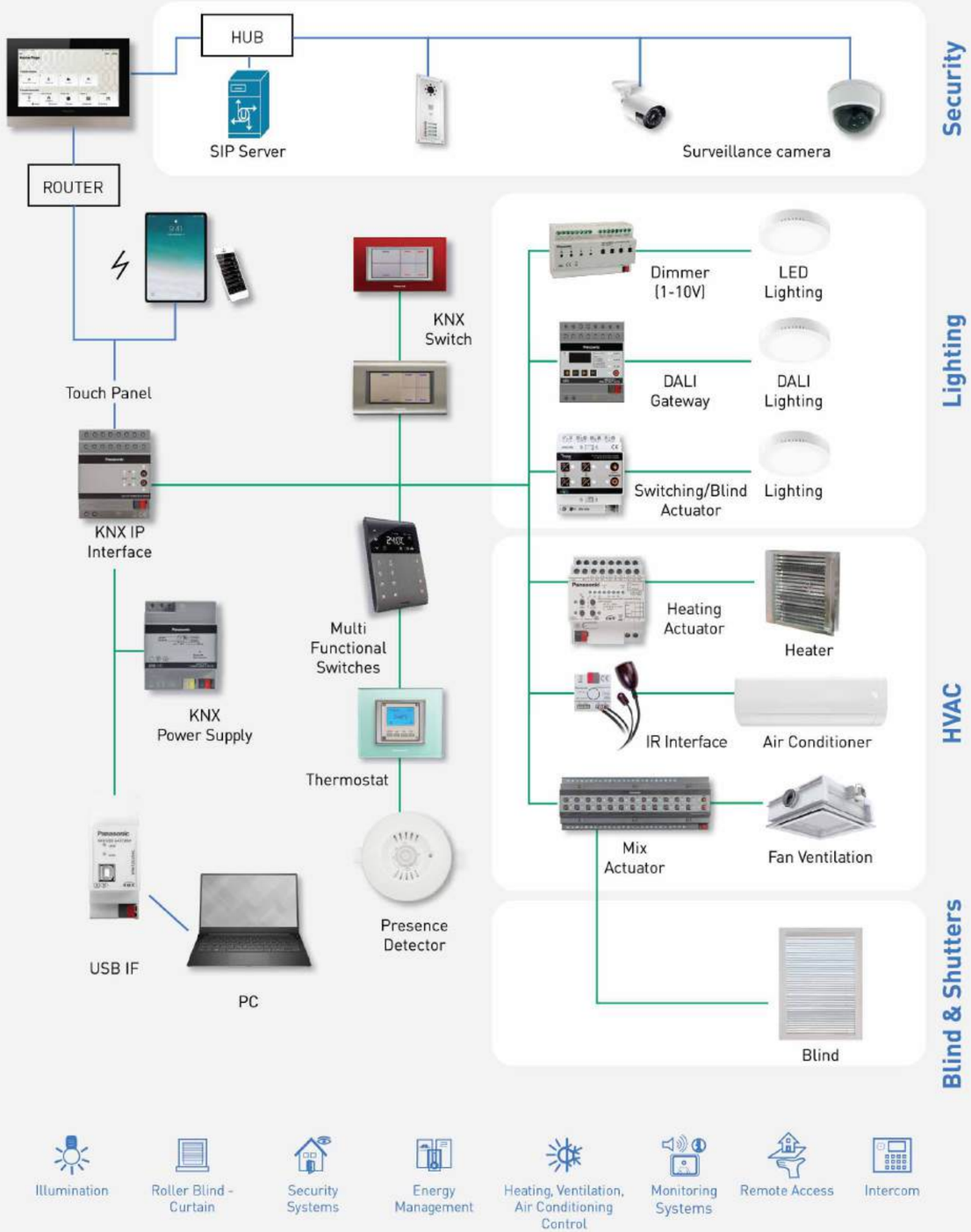
KNX BINARY INPUT

Binary Input 2-Way

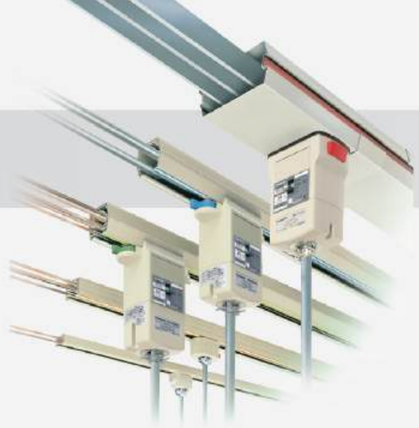
Binary Input 4-Way

Binary Input 6-Way

SYSTEM DIAGRAM



FactoryLine



Flexible wiring systems for stationary loads . Select from four types according to the capacity you desire , from single - phase 20A to three - phase 100A

Flexible power supply from the ceiling

Ceiling wiring systems capable of providing power for lighting & driving.
You can change layout simply by reconnecting plugs to the ducts installed at the ceiling - it allows you to reduce time, labor, and cost significantly without major rewiring.

FLEXIBLE
Easy to add or move plugs; suitable for environments where layouts are changed frequently.

SAFETY
No more wire across the floor - it prevents tripping & falling.

NICE VIEW
It not only simplifies the wiring & ceiling, but also provides "three-phase and single-phase", or "single-phase two circuits".

FLEXIBLE — No More Wiring-work After Layout Change.

Basic advantages
Simple layout change - just re-connect plugs at different positions. You can reduce labor, time & cost.

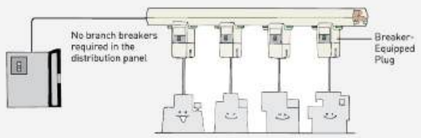
Additional advantages
You can add, reduce & relocate power supply easily. Just pull down lever, and turn the plugs to remove or connect.

Factory Line 100/60 Factory Line 30

SAFETY — No more tripping over & damaging a cable on the floor.

Basic advantages
Wiring from the ceiling keeps the floor tidy. Plugs with breakers provide safety.

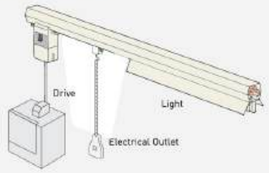
Additional advantages
No need to install breakers with distribution panels - it saves space.



NICE VIEW — It simplifies wiring & appearance. Effective for productivity improvement.

Basic advantages
You can keep ceiling & floor tidy, and appeal to visitors during factory tours.

Additional advantages
One single duct provides three-phase power supply & single-phase power supply - it allows one duct to supply power for machine-driving, conventional sockets and lighting. Factory Line 100/60 simplifies the entire wiring plan.



WIDE LINEUP

Four types of main duct are available – 100A, 60A, 30A and 20A.
You can combine them to create your own flexible wiring systems for factories.

For Main and Branch Lines

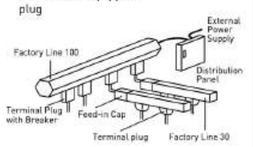
Multi-purpose Factory Flexible wiring System -
It provides three-phase & single-phase power supplies at a time.

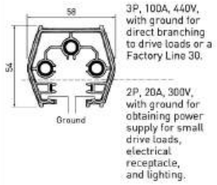
Factory Line **100**

- Three-phase power supply (100A max.)
- Single-phase power supply (20A max.)

Can be used simultaneously

with breaker-equipped plug





3P, 100A, 440V, with ground for direct branching to drive loads or a Factory Line 30.

2P, 20A, 300V, with ground for obtaining power supply for small drive loads, electrical receptacle, and lighting.

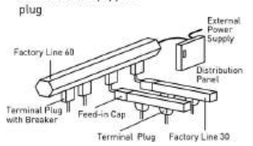
Multi-purpose Factory Flexible wiring System -
It provides three-phase & single-phase power supplies at a time.

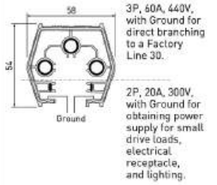
Factory Line **60**

- Three-phase power supply (60A max.)
- Single-phase power supply (20A max.)

Can be used simultaneously

with breaker-equipped plug

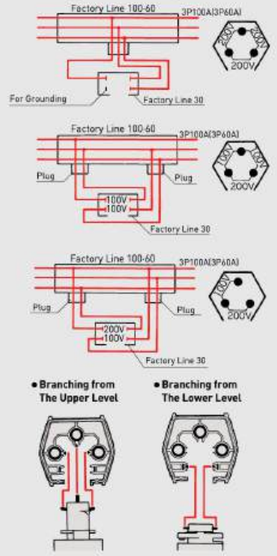




3P, 60A, 440V, with Ground for direct branching to a Factory Line 30.

2P, 20A, 300V, with Ground for obtaining power supply for small drive loads, electrical receptacle, and lighting.

■ **Branching from the 3 wires of the upper level to Factory Line 30.**
[The rating in ( ) is of Factory Line 60]



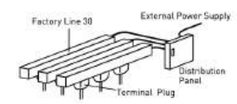
The plugs of Factory Line 30, 60 & 100 are NOT exchangeable - they have different ground connection.

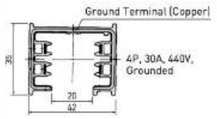
For Branch Lines

Four wire Factory Flexible wiring System -
It provides one or the other: three-phase circuit or two single-phase circuits.

Factory Line **30**

- Three-phase power supply, one circuit (30A max.)
- Single-phase power supply, two circuits (30A max.)





4P, 30A, 440V, Grounded

■ **Standard Power Supply Take-Off**

• **Plug Socket (for 100V)**

• **Terminal Plug (for 440V)**

(Adapter for fluorecent lights are the same).

• **Terminal Plug (for Three-Phase 440V)**

*3PL Type

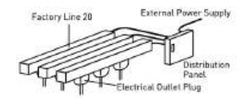
You need a dedicated ground wire.
Use 4P type plug, and one conductor in the duct for the ground circuit.

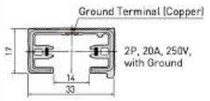
For Small-Scale Branch Lines

Factory Flexible wiring System for small-scale branching -
It provides one single-phase power supply circuit.

Factory Line **20**

- Single-phase power supply (20A max.)





2P, 20A, 250V, with Ground

FACTORY LINE SYSTEM

FACTORY LINE 100/60

Factory Line 100/60 Main Unit (Cream-Gray Finish: Munsell 5Y7.2/1.4)		Cat. No.	Length ℓ (mm)	Weight (kg)	Rating
	Factory Line 100	DGHU2411	1,000	3.3	3P 100A 440V + 2P 20A 300V with Ground
		DGHU2412	2,000	6.6	
		DGHU2413	3,000	9.9	
	Factory Line 60	DGHU2311	1,000	3.1	3P 60A 440V + 2P 20A 300V with Ground
		DGHU2312	2,000	6.1	
		DGHU2313	3,000	9.1	

	Cat. No.	Weight (kg)	Rating
Feed-in Cap (Cream-Gray Finish)	DGHU2421	1.1	3P 100A 440V + 2P 20A 300V with Ground
Center Feed-in Joiner (Cream-Gray Finish)	DGHU2422	2.4	
Joiner (Cream-Gray Finish)	DH2431	0.1	2P 20A 300V with Ground
End Cap (Cream-Gray Finish)	DH2423K	0.06	-
Terminal plug A (Cream-Gray Finish)	DGHU2481	0.35	3P 30A 440V with Ground
Terminal plug B (Cream-Gray Finish)	DH2463	0.08	2P 15A 300V with Ground
Locking plug socket (Cream-Gray Finish)	DH2477	0.07	Ground 2P 15A 125V Locking
Plug socket (Cream-Gray Finish)	DH2461	0.07	Ground 2P 15A 125V
Reel-Type plug socket (White Finish)	DH24621W	0.7	for Twin Ground 2P 15A 125V
	DH24641W		for Twin Ground 2P 15A 125V Locking
Hanger (with earthquake resistant reinforcement fixtur)	DH2452K1	0.03	-

FACTORY LINE 30

Factory Line 30 Main Unit (Cream-Gray Finish: Munsell 5Y7.2/1.4)	Cat. No.	Length ℓ (mm)	Weight (kg)	Rating
	DGHU2711	1,000	1.6	4P 30A 440V with Ground
	DGHU2712	2,000	3.2	
	DGHU2713	3,000	4.8	

	Cat. No.	Name/ Type	Weight (kg)	Rating
Feed-in Cap (Cream-Gray Finish)	DGHU2721	-	0.16	4P 30A 440V with Ground
Center Feed-in Joiner (Cream-Gray Finish)	DGHU2722	-	0.24	
End Cap (Cream-Gray Finish)	DH2723	-	0.01	-
Joiner (Cream-Gray Finish)	DGHU2731	-	0.08	4P 30A 440V with Ground
Terminal Plug (Cream-Gray Finish) ※1	DGHU2781	2PS	0.08	2P 15A 440V with Ground
	DGHU2782	2PL		
	DGHU2783	3P		3P 15A 440V with Ground
	DGHU2784	4P		4P 15A 440V with Ground
Plug socket (Cream-Gray Finish) ※2	DH2773	S	0.05	Ground 2P 15A 125V
	DH2774	L		
Locking plug socket (Cream-Gray Finish) ※2	DH2791	S	0.05	Ground 2P 15A 125V Locking
	DH2792	L		
Reel-Type plug socket (White Finish) ※2	DH27751W	S	0.73	for Twin Ground 2P 15A 125V
	DH27761W	L		
	DH27781W	S		for Twin Ground 2P 15A 125V Locking
	DH27791W	L		
Hanger (with earthquake resistant reinforcement fixture)	DH2752K1	-	0.03	-

FACTORY LINE 20

Factory Line 20 Main Unit (Cream-Gray Finish: Munsell 5Y7.2/1.4)	Cat. No.	Length ℓ (mm)	Weight (kg)	Rating
	DGHU2611	1,000	0.79	2P 20A 250V with Ground
	DGHU2612	2,000	1.58	
	DGHU2613	3,000	2.37	

	Cat. No.	Weight (kg)	Rating
Feed-in Cap (Cream-Gray Finish)	DGHU2621K1	0.11	2P 20A 250V with Ground
Center Feed-in Joiner (Cream-Gray Finish)	DGHU2622K1	0.19	
End Cap (Cream-Gray Finish)	DH2623	0.006	-
Joiner (Cream-Gray Finish)	DGHU2631K1	0.1	2P 20A 250V with Ground
Terminal Plug (Cream-Gray Finish)	DGHU2683	0.05	2P 15A 250V with Ground
Plug Sockets (with Ground) (Cream-Gray Finish)	DH2670	0.04	Ground 2P 15A 125V
Locking Plug Socket (Cream-Gray Finish)	DH2671	0.04	2P 15A 125V
Locking Plug Socket (with Ground) (Cream-Gray Finish)	DH2684	0.04	Ground 2P 15A 125V Locking
Reel-Type Plug Socket (with Ground) (White Finish)	DH26751W	0.7	for Twin Ground 2P 15A 125V
	DH26771W		for Twin Ground 2P 15A 125V Locking
Hanger (without Bolt)	DH2652	0.03	-

※1: 2P/3P/4P 15A 300V with Ground, Power Outlet for The Main Unit.
"L" (for the upper 2P conductors) and "S" (for the lower 2P conductors) plug are available in 2P type.
※2: "L" (for the upper conductors) and "S" (for the lower conductors) plug are available.

FACTORIES

You can get power from optimal location quickly even after layout change.

Factory Line 100

SCHOOLS

Two circuits can be supplied simultaneously from a single duct, making it possible to connect more devices and keeping floor clearer.

Factory Line 30

RETAIL STORES

Supplying power for lighting & sockets at a time. Highly functional Factory Line 30, which offers two single phase circuits at a time, allows the store to have power for lighting and extra sockets. It also fits into modern, lightly equipped ceilings - the simple wiring produces spacious environment in the store.

Factory Line 30

OTHERS

Research Institutes & Laboratories

One single duct (Factory Line 30) can provide many small capacity power supplies with different voltages & frequencies - it allows many applications.

Data Centers

Factory Line 100, 60 and 30 can supply power to both 200V & 100V devices at a time on server racks.
NO NEED FOR WIRING SPACE ON/UNDER FLOOR due to power supply from the ceiling.

Information about Panasonic Factory Line Systems

is available at: **https://panasonic.net/electricworks/ecm/ffs/**

- Specification drawings, operation and installation manuals can also be downloaded.