

General Catalog

Electrical Construction Materials

2024 - 2026

General Catalog Electrical Construction Materials 2024 - 2026



Please contact...
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Panasonic Manufacturing Philippines Corporation

■ 14 Floor, 6788 Ayala Avenue, 1223 Makati City

Manufactured by
Panasonic Manufacturing Ayuthaya Co., Ltd.
Panasonic SPT (Thailand) Co.,Ltd.
Panasonic Eco Solutions Electrical Construction Materials Co., Ltd.
Panasonic Manufacturing Beijing Co., Ltd
Panasonic Electric Works Turkey Co.,Ltd.
Panasonic Corporation Electric Works Company

Panasonic®



Empower Your Moments

We believe that subtle moments add up to make a real difference to your life.

Thus we sincerely focus on human behavior and pursue the details to create beauty and harmony in your daily lives.

We are always on your side,
The Moments, The Day, The Life.

Attending to your comfort and brightening your days and nights,
switching on your world and energizing your life.



Company Profile

Product Concept

Since Panasonic Corporation was founded in 1918, it has based its 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 continuing to focus 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, distribution switchboards, breakers, factory line systems, security and disaster prevention equipment and environment energy systems. The Solution Engineering business is committed to creating long-term solutions that realize well-being, environmental friendliness, and resilience by connecting hardware systems, service consulting, and engineering with the aim of providing comprehensive business solutions tailored to the needs of each customer. 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 the Panasonic Group's extensive product lines. As we address issues that our customers around the world face through Panasonic solutions, we contribute to realizing a sustainable society.

Panasonic — dedicated to Life-conscious manufacturing.

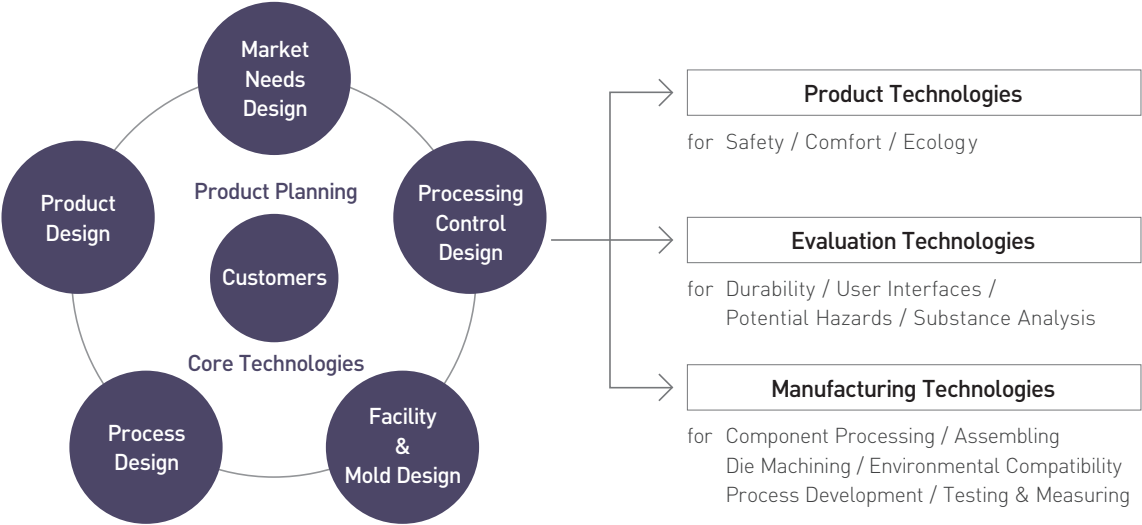
Manufacturing Life-conscious products that do not harm humans and the environment has always been a priority for Panasonic. Conforming to the RoHS directive originating from the EU, Panasonic restricts the usage of hazardous substances that might adversely affect the environment and humans such as lead, cadmium, chromium, 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 consistently produce 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.



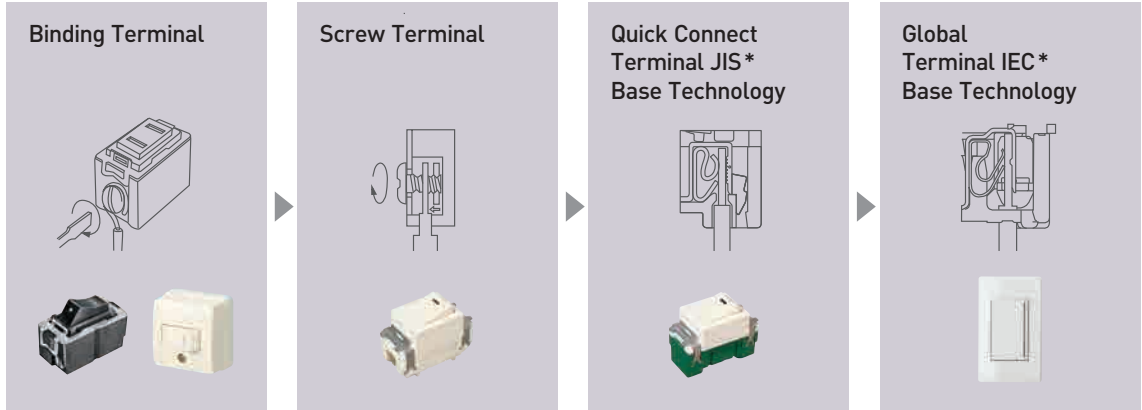
Panasonic — firmly committed to assuring Security, Safety and Comfort for customers using our products.

Introduction of Panasonic's original products and the wiring devices classified by terminal structure.

Panasonic's "Original Products" and the Evolution of Wiring Devices

In 1918 Attachment Plug	
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Evolution of Panasonic's Wiring Devices Series



*JIS = Japanese Industrial Standards *IEC = International Electrotechnical Commission

To the next stage.

Panasonic has been present in the Philippines market over many years. During all this time, our customers have come to appreciate Panasonic and our extensive range of products, including one of our key product groups, Wiring Devices, an integral component of Panasonic Electrical Construction Materials.

Playing a key role in Panasonic company history since 1918, Panasonic Wiring Devices have 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 Philippines customers a higher level of satisfaction with any of our diverse product categories.



Panasonic Original Product
1918
Attachment plug

WIRING DEVICES	P18		SLIM ART	PASSIVE INFRARED SENSOR SWITCHES	P66	
	P26		FLATIMA SERIES	AUTOMATIC TIME SWITCHES	P70	
	P28		FULL-COLOR WIDE SERIES REFINA	MCBs, RCBos, RCCBs	P74	
	P34		FULL-COLOR WIDE SERIES	MCB BOXes	P86	
	P38		FULL-COLOR WIDE SERIES FOR HOTEL	FACTORY LINE SYSTEMS	P88	
	P42		FULL-COLOR SERIES	FIRE ALARM SYSTEMS	P92	
	P46		USB CHARGERS	SLIM SMOKE & VOICE ALARM WITH LONG-LIFE-BATTERY	P94	
	P48		TWISTLOCKS	LIGHTING SOLUTIONS	P96	
	P58		EXTENSION CORDS with Safety Shutter & Breaker			
	P59		EXTENSION CORDS "PERFECT FIT"			
	P60		FLOOR OUTLET SERIES			

Panasonic ECM offers a wide range of high quality products suitable for various scenarios

Home/Condominium



Perfect for needs in every space at home

Living Room

- EXTENSION CORD
- LIGHT SWITCH
- LED DIMMER
- USB CHARGER
- TANDEM RECEPTACLE

Kitchen

- EL GUARD

Porch

- PUSH BUTTON
- DOOR BELL

Bedroom

- LIGHT SWITCH
- LED DIMMER
- USB CHARGER

Toilet

- PASSIVE INFRARED SENSOR

Recommended Products

- SLIM ART
- FLATIMA SERIES
- SMOKE ALARM
- LAMP
- PERFECT FIT
- CIRCUIT BREAKER with MCB BOX

Hotel



Functionality and design combined

Guest Room

- MULTI SOCKET
- USB CHARGER
- HDMI SOCKET
- MULTI PLATE (8 MODULE)

Other Items for Hotel

- DND-MMR CONTROL UNIT
- BELL PUSH SWITCH
- KEY CARD SWITCH
- SHAVER RECEPTACLE

Recommended Products

- SLIM ART
- EL GUARD
- FIRE ALARM SYSTEM
- LAMP
- PERFECT FIT
- CIRCUIT BREAKER with MCB BOX

Office



Recommended Products

- SLIM ART
- FLOOR OUTLET SERIES
- FULL-COLOR WIDE SERIES
- FIRE ALARM SYSTEM
- PASSIVE INFRARED SENSOR SWITCH
- CIRCUIT BREAKER with MCB BOX
- PERFECT FIT
- LAMP

Factory



Recommended Products

- FULL-COLOR WIDE SERIES
- FLOOR OUTLET SERIES
- TWISTLOCK
- FIRE ALARM SYSTEM
- PASSIVE INFRARED SENSOR SWITCH
- AUTOMATIC TIME SWITCH
- FACTORY LINE SYSTEM
- LAMP
- CIRCUIT BREAKER with MCB BOX

Shopping Center



Recommended Products

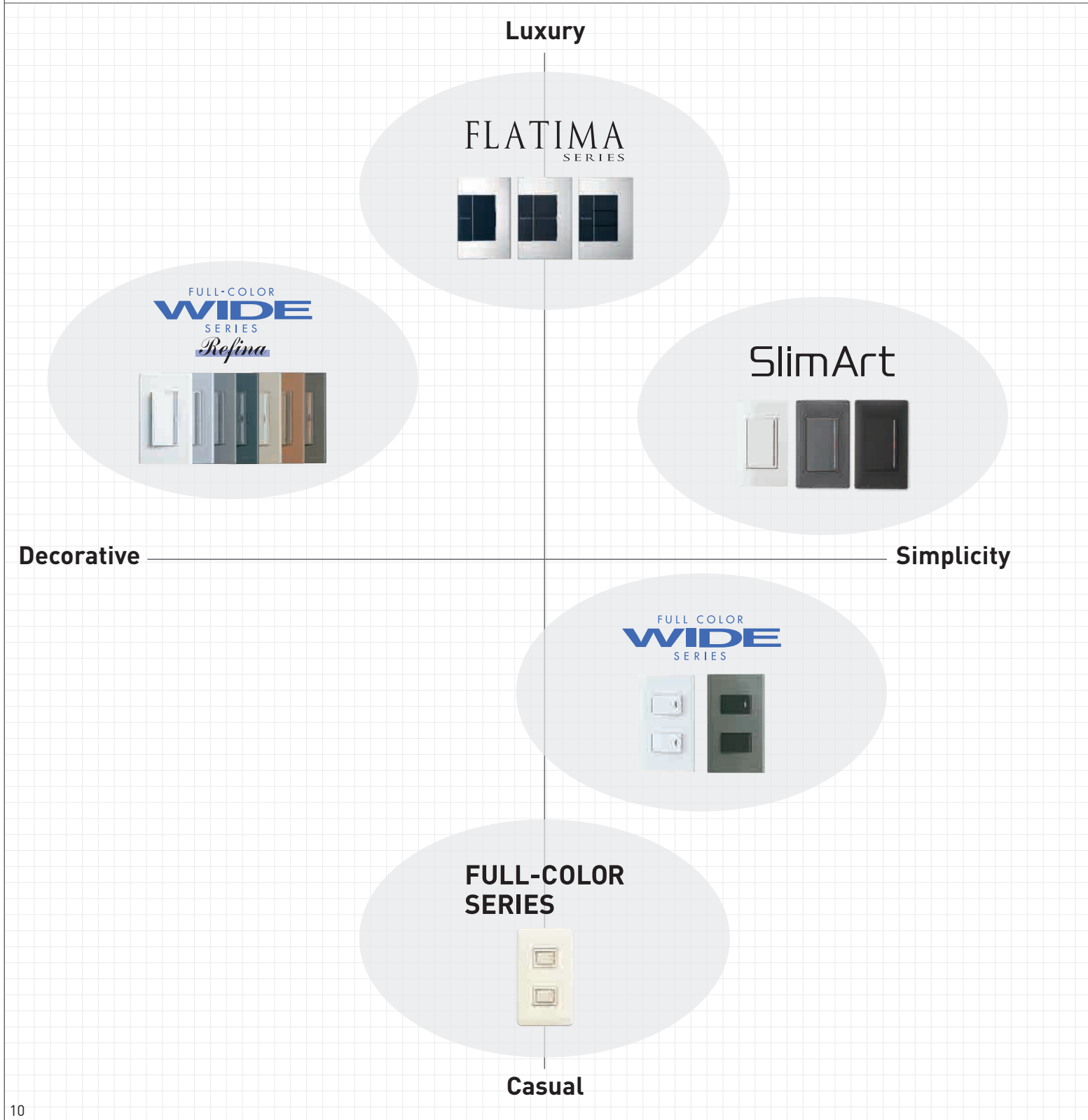
- FULL-COLOR WIDE SERIES
- FIRE ALARM SYSTEM
- TWISTLOCK
- CIRCUIT BREAKER with MCB BOX
- AUTOMATIC TIME SWITCH
- USB CHARGER
- FLOOR OUTLET SERIES

Product Positioning

(Series of Wiring Devices)

DIFFERENT TASTES

Panasonic has different styles that are suitable for different tastes in interior design.
 From luxury to casual, and from decorative to simple.
 Panasonic products have different styles to fit whatever your taste in interiors.



FLATIMA SERIES

P. 26

High-end series featuring special panel for strength and a refined appearance that adds a touch of elegance to everyday life



Full-COLOR WIDE SERIES Refina

P. 28

Subtle and stylish color coordination enhances living environments



SlimArt

P. 18

Offering slim designs that effortlessly blend into living space décor



Full-COLOR WIDE SERIES

P. 34

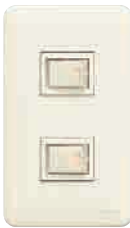
Clean lines for sharp-looking designs that add to the attractiveness of living rooms as well as offices



Full-COLOR SERIES

P. 42

Simple designs compatible with any interior plan



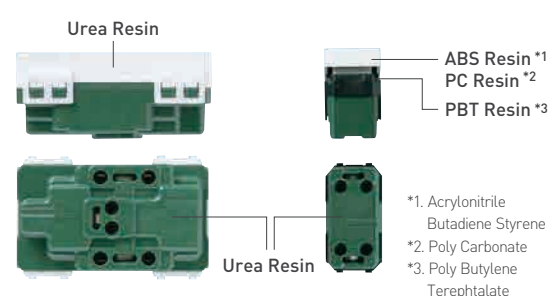


SAFETY AND RELIABILITY

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

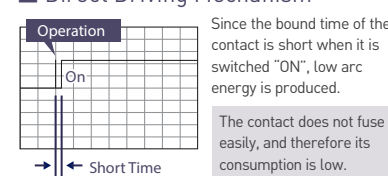
Enclosure Material Characteristics (Reference)

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

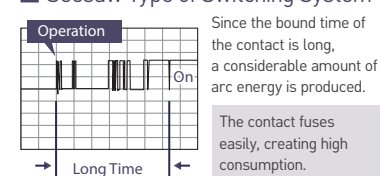
2 Durable & Smooth Operations Direct Driving Mechanism

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

Direct Driving Mechanism



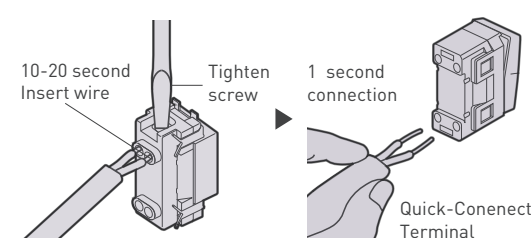
Seesaw Type of Switching System



3 Quick & Secure Connection Quick-Connect Terminal

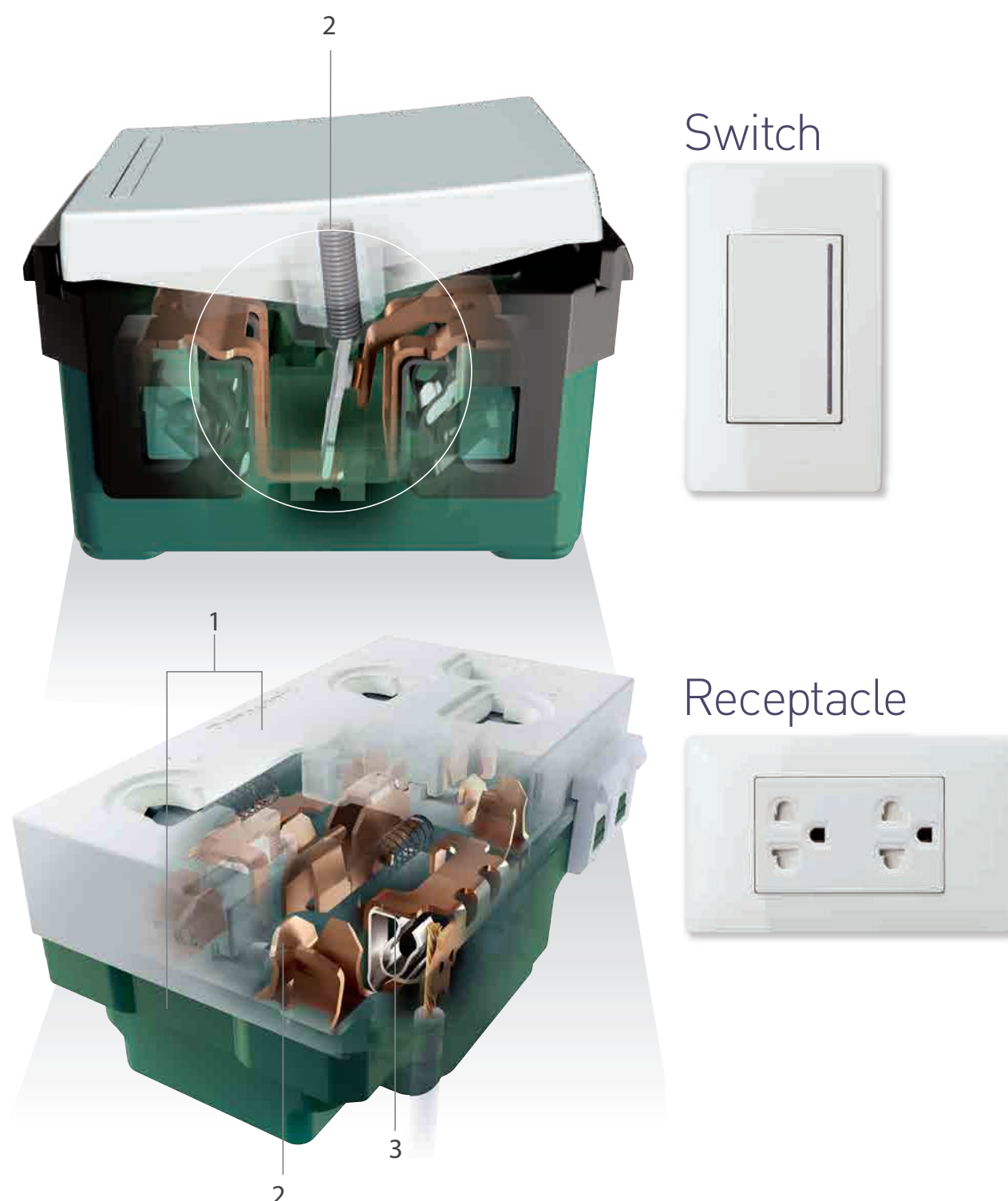
These terminals improve site construction quality since fewer tightening screws are required, simplifying connections.

Reduces the execution time considerably



Tensile strength after connection

IEC60669-1 IEC60884-1 Standard Value	WIRE / SlimArt	Strength
IEC Standard	Wire	
30N min.	1.5 mm ² 4.0 mm ²	30N min. or more



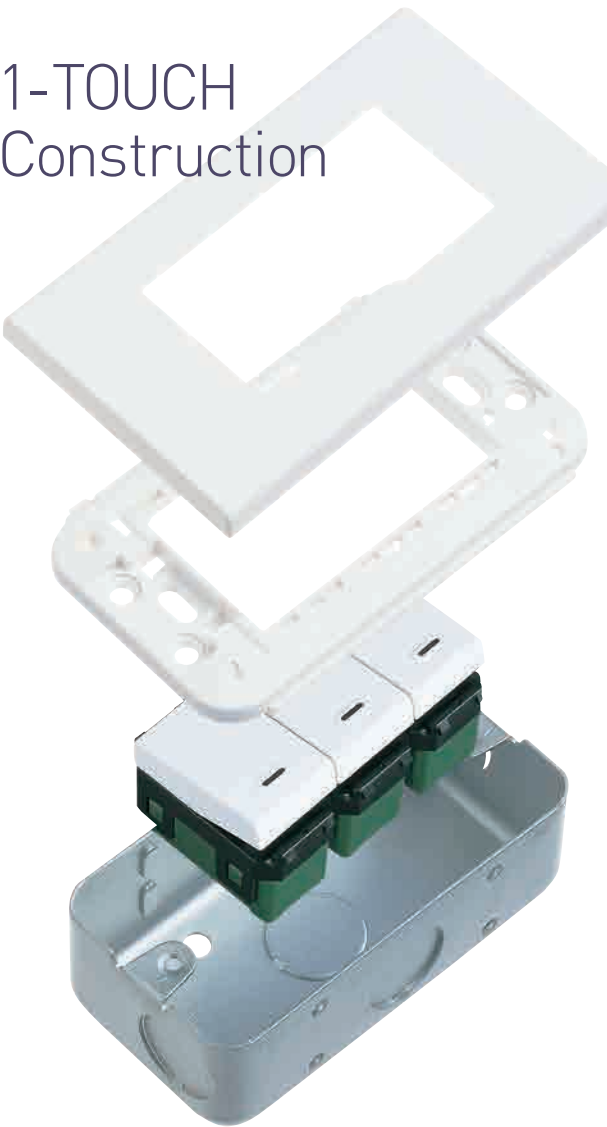


EASY TO INSTALL

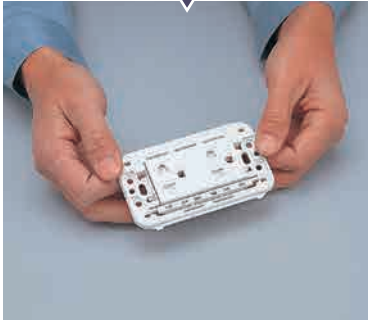
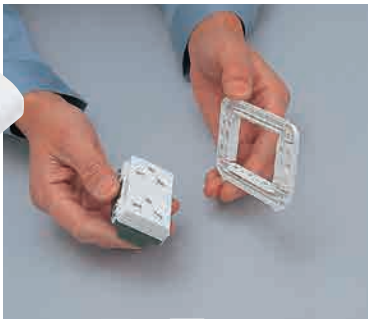
Panasonic-designing one-touch action products that are easy to install.

The All One-Touch Action design concept that attaches devices to body plates and body plates to the cover plates makes the installation process easier than ever, Saving both time and labor.

1-TOUCH Construction



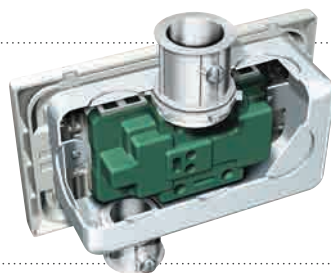
■ Device & Body Plate



■ Body Plate & Cover Plate



Highly efficient, 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 1.5-2.5mm ²	 Solid OK
	 Screw-less Terminal Solid Wire:1.5-2.5mm ² Stranded Wire:1.5-2.5mm ² Solid Wire:1.5-2.5mm ² Stranded Wire:1.5-2.5mm ²	 Solid Stranded OK
Global Terminal	 Solid Wire:1.5-4mm ² Stranded Wire:1.5-4mm ²	 Solid Stranded OK
Screw Terminal	 1.5-4.0mm ² Solid, Stranded and Flexible wire	 Solid Stranded Flexible OK



WORLDWIDE STANDARDS

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.

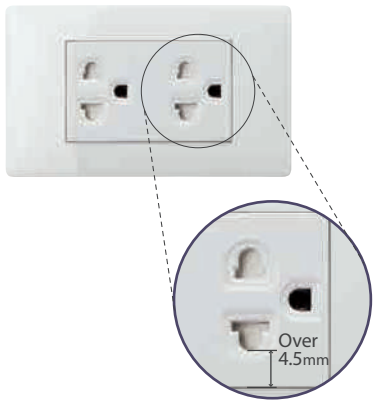


■ Terminal Section Temperature rise

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 sockets 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

IEC60884-1 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.

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/TIS standards.

■ Examination and registration card.



Laboratory Accreditation of Product Testing



Panasonic Manufacturing Ayuthaya Co.,Ltd. got TIS approval 17025-2548 (ISO/IEC 17025) on Y2013 that is certified laboratory accreditation of product testing. The certificate included requirement items of quality management and academic. Testing result from this laboratory is a trustworthy in term of academic. Moreover, it comply with requirement from Thai industrial standard institute.

■ Thai Industrial Standard Institution



Panasonic comes with Philippine Standard (PS) mark

In compliance with Philippine National Standard (PNS) issued by the Department of Trade and Industry's Bureau of Product Standards (DTI-BPS)



■ IEC / TIS Standard Test Equipment

In our Ayuthaya factory in Thailand, we have equipment to conduct stringent tests for the manufacture of products which meets international safety standards. We promise reliable quality from a safe manufacturing environment.



1. Glow Wire Test Apparatus
2. Insert & Withdraw Test Apparatus
3. Impact Test Apparatus
4. On/Off Switch Apparatus
5. Temperature & Humidity Chamber
6. Temperature Chamber
7. Terminal Test Apparatus

SlimArt

Offering slim designs that effortlessly blend into living space décor



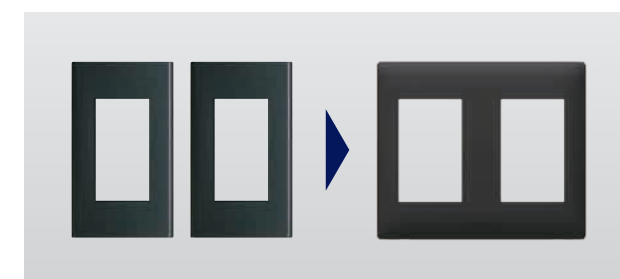
BEAUTIFUL COLORS AND SPECIAL MATERIALS THAT BLEND IN WITH YOUR SPACE.

Stylish space can be created from a switch and receptacle



LED INDICATOR WITH SLIM DESIGN

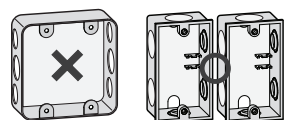
Provides a softly lit LED indicator for easy visibility in the dark.



2-GANG 6-DEVICE PLATE GIVE NEAT IN APPEARANCE

Can be installed 2pcs 1-Gang box.
No need special 2-Gang box.

*Refer to installation method P25



SECURING ORIGINAL COLOR BEAUTIFULLY

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



*Yellowing of conventional products

SLIM ART A-TYPE

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

Switch (Metallic Black)

WSAG5511MB-5

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



WSAG5521MB-5

Switch "B", Single Pole,
2-Device, 16AX 250V~



WSAG5531MB-5

Switch "B", Single Pole,
3-Device, 16AX 250V~



WSAG5512MB-5

Switch "C",
3-way, 1-Device,
16AX 250V~



WSAG5522MB-5

Switch "C", 3-way,
2-Device, 16AX 250V~



WSAG5532MB-5

Switch "C", 3-way,
3-Device, 16AX 250V~



WSAG5551MB-5

Illuminated Switch "B",
Single Pole,
1-Device,
16AX 250V~



WSAG5561MB-5

Illuminated Switch "B", Single Pole,
2-Device, 16AX 250V~



WSAG5571MB-5

Illuminated Switch "B", Single Pole,
3-Device, 16AX 250V~



WSAG5552MB-5

Illuminated Switch "C",
3-way, 1-Device,
16AX 250V~



WSAG5562MB-5

Illuminated Switch "C", 3-way,
2-Device, 16AX 250V~



WSAG5572MB-5

Illuminated Switch "C", 3-way,
3-Device, 16AX 250V~



WSAG5514MB-5

Switch "E",
4-way, 1-Device,
16AX 250V~



WSAG5004MB-5

Switch "E", 4-way,
3-Device, 16AX 250V~



WSAG5411MB-011

Entrance Bell,
1-Device
10A 250V~



WSAG5431MB-011

Entrance Bell,
3-Device, 10A 250V~



 These products conform to
Philippine Standards with PS mark.

The product without PS mark is
exempted model or with ICC sticker.

Switch (Metallic Gray)

WSAG5511MH-5

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



WSAG5521MH-5

Switch "B", Single Pole,
2-Device, 16AX 250V~



WSAG5531MH-5

Switch "B", Single Pole,
3-Device, 16AX 250V~



WSAG5512MH-5

Switch "C",
3-way, 1-Device,
16AX 250V~



WSAG5522MH-5

Switch "C", 3-way,
2-Device, 16AX 250V~



WSAG5532MH-5

Switch "C", 3-way,
3-Device, 16AX 250V~



WSAG5551MH-5

Illuminated Switch "B",
Single Pole,
1-Device,
16AX 250V~



WSAG5561MH-5

Illuminated Switch "B", Single Pole,
2-Device, 16AX 250V~



WSAG5571MH-5

Illuminated Switch "B", Single Pole,
3-Device, 16AX 250V~



WSAG5552MH-5

Illuminated Switch "C",
3-way, 1-Device,
16AX 250V~



WSAG5562MH-5

Illuminated Switch "C", 3-way,
2-Device, 16AX 250V~



WSAG5572MH-5

Illuminated Switch "C", 3-way,
3-Device, 16AX 250V~



WSAG5514MH-5

Switch "E",
4-way, 1-Device
16AX 250V~



WSAG5004MH-5

Switch "E", 4-way,
3-Device, 16AX 250V~



WSAG5411MH-011

Entrance Bell,
1-Device
10A 250V~



 These products conform to
Philippine Standards with PS mark.

The product without PS mark is
exempted model or with ICC sticker.

SLIM ART A-TYPE

WSAG5514-5
Switch "E",
4-way, 1-Device,
16AX 250V~



WSAG5004-5
Switch "E", 4-way, 3-Device,
16AX 250V~



WSAG5411-011
Entrance Bell,
1-Device
10A 250V~



Receptacles and Accessories

WSAG5431-011
Entrance Bell, 3-Device
10A 250V~



WSAG1091-5
Universal Receptacle,
20A 250V~



WSAG1461-5*
20A Tandem Grounding Receptacle
20A 250V~
For Air Conditioner



WSAG1181-5
Grounding Universal Receptacle with Safety Shutter,
16A 250V~



IP20

WSAG1191-5
Grounding Universal Receptacle,
16A 250V~



WSAG1582-5
Grounding Duplex Universal Receptacle
with Safety Shutter,
16A 250V~



IP20

WSAG1592-5
Grounding Duplex Universal Receptacle,
16A 250V~



WEGP1741SW9-PH
EL Guard Grounding Receptacle (Snow White)
10A 220V~
[Solid Cu only]



Applicable Wire: 2.0-3.5mm²
Rigid copper wire or Standard wire

WSAG2164
Telephone Modular Jack
[6P4C]



WSAG2488
CAT5E Data Modular Jack



WSAG24886
CAT6 Data Modular Jack



WSAG2701
Television Terminal
(Current Passing Type)



WSAG2741-PH
F Type Television Terminal
(Current Passing Type)



WSAG3020
Blank Chip



 These products conform to Philippine Standards with PS mark.

 The product without PS mark is exempted model or with ICC sticker.

*Product is suitable for air conditioner with tandem plug.

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

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

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

Dimmer Switches

WSAF108107-PH
1-port USB Type-A Fast Charger 2.4A
Applicable Wire: 1.5-2.5mm²
Rigid copper wire only



WSAF1182-PH
2-port USB Type-A Fast Charger 3A



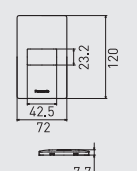
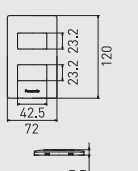
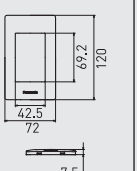
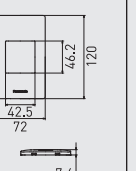
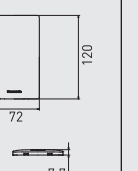
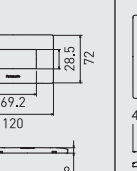
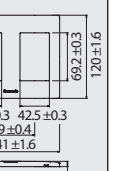
WSAG575151
Dimmer Switch
(Incandescent Light Control)
500W 220V~ (Off Function Type)
Applicable Wire: 1.0-2.5mm²
Rigid copper wire only



WSAF5791301-PH
Dimmer Switch with Minimum
Brightness Adjustment
[Incandescent and LED Light Control]
100W[LED 100W]220V~
*Push On/Off Function Type



Plates

SLIM ART SERIES	Dimension						
	 1-Touch Plate, 1-Gang 1-Device	 1-Touch Plate, 1-Gang 2-Device	 1-Touch Plate, 1-Gang 3-Device	 1-Touch Plate, 1-Gang Center 2-Device	 1-Touch Plate, 1-Gang Cover	 F-Plate (Plate for EL Guard)	 1-Touch Plate, 2-Gang 6-Device
 White	WSAG6801-1	WSAG6802-1	WSAG6803-1	WSAG68029-1	WSAG6891-1	WSAG1813	WSAG6806-1*
 Metallic Black	WSAG6801MB-1	WSAG6802MB-1	WSAG6803MB-1	WSAG68029MB-1	WSAG6891MB-1	WSAG1813MB	WSAG6806MB-1*
 Metallic Gray	WSAG6801MH-1	WSAG6802MH-1	WSAG6803MH-1	WSAG68029MH-1	WSAG6891MH-1	WSAG1813MH	WSAG6806MH-1*

*For the installation method, please refer to the manual attached to the product.

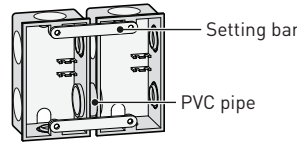
Notice for 2-Gang 6-Device plate

Please read these instructions before installing.

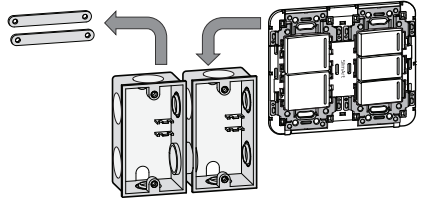
■ Installation method

※This product needs 2 pcs of 1 gang utility boxes for the installation.

- ① When combining the utility boxes, please use the provided setting bar to keep the appropriate distance when installing the plate.
※In case there is necessity to connect 2 utility boxes, please plumb using PVC pipe.



- ② After positioning the utility boxes on the wall, with the appropriate distance, remove the setting bar and install the baseplate with devices.



IP Protection of SlimArt

Panasonic holds the rights of numerous patents and designs of the SlimArt in the Philippines. The SlimArt is protected by the following patents and design rights. (As of November 1, 2018)

Patent

Switch	Application No.1-2017-000262 Spring part is set into the Switch, which is in contact with the Terminal and the Electrode, with elastic force acting thereon.
Mounting Frame	Application No.1-2017-000266 Reinforcing Member(metal) is spread out to the Pair of Vertical Frame Portions.
Assembly Frames	Application No.1-2017-000268 A step is formed according to the shape of the housing. Application No.1-2017-000267 A step is formed according to the shape of the housing, which can engage with mounting frame.

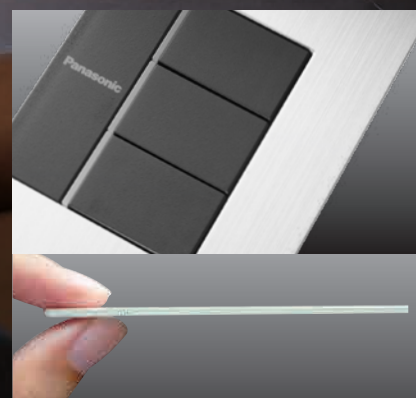
Design

Switch	Registration No.3-2016-000950/ No.3-2016-000951
Plate	Registration No.3-2016-000948/3-2016-001019 /3-2016-001020/3-2016-001021
Assembly Frames	Registration No.3-2016-000949/3-2016-001016 /3-2016-001017/3-2016-001018/3-2016-001022

FLATIMA SERIES

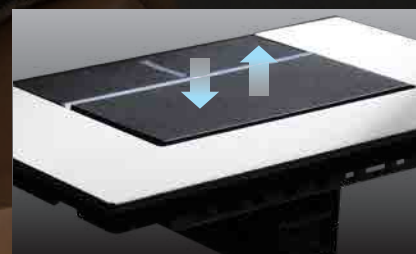
High-end Panasonic switch series featuring special panel for strength and a refined appearance that adds a touch of elegance to everyday life

FLATIMA SERIES



SOPHISTICATED SURFACE WITH A SUPER-SLIM DESIGN

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



HEAT-RESISTANT, EASY-TO-USE LATEST SWITCH MECHANISM

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



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



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

FLATIMA SERIES A-TYPE

Switches

WTEGP51552S-1-5

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



WTEGP52562S-1-5

Illuminated Switch "C" 3-Way
2-Devices with Plate
16AX 250V~
(LED Lamp:220V~)



WTEGP53572S-1-5

Illuminated Switch "C" 3-Way
3-Devices with Plate
16AX 250V~
(LED Lamp:220V~)



WTEGP54562S-1-5

Illuminated Switch "C" 3-Way
4-Devices with Plate
16AX 250V~
(LED Lamp:220V~)



WTEGP55582S-1-5

Illuminated Switch "C" 3-Way
5-Devices with Plate
16AX 250V~
(LED Lamp:220V~)



WTEGP56572S-1-5

Illuminated Switch "C" 3-Way
6-Devices with Plate
16AX 250V~
(LED Lamp:220V~)



Receptacles and Accessories

WEG15829B-5

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



WEG15929B-5

Grounding Duplex Universal
Receptacle 16A 250V~



WEG2488B-F

CAT5E Data Modular Jack



WEG2488B-F

CAT6 Data Modular Jack



WEG2701B-F

DIN type Television Terminal
(Current Passing Type)



WEG3020B-F

Blank Chip



Dimmer Switches

WEG2021B-F

Connector for HDMI Connection



WEG57813B-1-F

Dimmer Switch
(Incandescent and Low Voltage Halogen with Transformer 12V Light Control)
300W 220V~
[Off Function Type]
Applicable Wire: 1.0-2.5mm²
Rigid copper wire only



WEG57816B-1-F

Dimmer Switch
(Incandescent and Low Voltage Halogen with Transformer 12V Light Control) 500W 220V~
[Off Function Type]
Applicable Wire: 1.0-2.5mm²
Rigid copper wire only



WEG57912B-1-F

LED-Dimmer Switch for Dimmable LED
[Max 8 LED bulbs or less than 50W]
[Push On/Off Function Type]
Applicable Wire: 1.0-2.5mm²
Rigid copper wire only



Plates for Receptacles and Accessories

WTEG6503S-F

1-Gang 3-Device



WTEG6506S-F

2-Gang 6-Device



WTEG6503S-1-F

1-Gang 3-Device



These products conform to Philippine Standards with PS mark.

The product without PS mark is exempted model or with ICC sticker.

SLIM ART
A-TYPE

FLATIMA SERIES
A-TYPE

FULL-COLOR SERIES
REFINA A-TYPE

FULL-COLOR WIDE SERIES
A-TYPE

FULL-COLOR WIDE SERIES
FOR HOTEL

FULL-COLOR SERIES
A-TYPE

Various color range suits modern interiors



FULL-COLOR WIDE SERIES

REFINA



FULL-COLOR
WIDE
SERIES
Refina



WIDE COLOR PALETTE TO PERFECTLY MATCH LIFESTYLE INTERIORS

Luxurious appearance with wide color variations range enhances living spaces.



**49 STYLES THAT CAN BE CREATED BY YOU
[7 PLATE COLORS] × [7 SWITCH COLORS]**

The various colors switch and plate can be customized in your own style.



**HEAT-RESISTANT, EASY-TO-USE
LATEST SWITCH MECHANISM**

Panasonic's standard design wiring device with simple, trouble-free switch mechanism.

FULL-COLOR WIDE SERIES REFINA A-TYPE

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

Various Combination : 7 Plate Colors × 7 Switch Colors



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

Receptacle with Switches



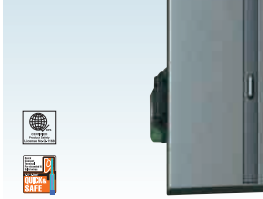
WEGP1282-5
Grounding Duplex Universal Receptacle
with Safety Shutter and Switch



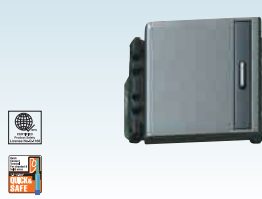
These products conform to Philippine Standards with PS mark. The product without PS mark is exempted model or with ICC sticker.

Switches

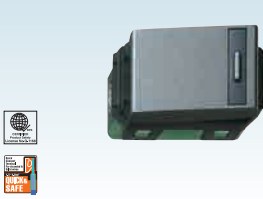
WEG5511 M H -5
Switch "B" Single Pole, 1-Device,
16AX 250V~



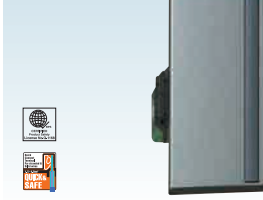
WEG5521 M H -5
Switch "B" Single Pole, 2-Device,
16AX 250V~



WEG5531 M H -5
Switch "B" Single Pole, 3-Device,
16AX 250V~



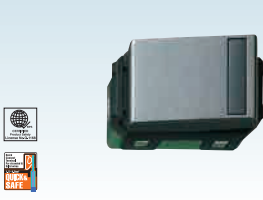
WEG5512 M H -5
Switch "C" 3-Way, 1-Device,
16AX 250V~



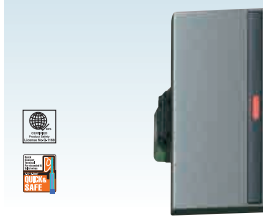
WEG5522 M H -5
Switch "C" 3-Way, 2-Device,
16AX 250V~



WEG5532 M H -5
Switch "C" 3-Way, 3-Device,
16AX 250V~



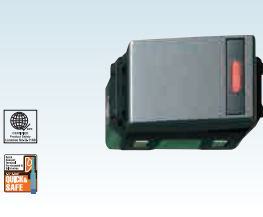
WEG5551 M H -5
Illuminated Switch "B" Single Pole, 1-Device,
16AX 250V~ (LED Lamp: 220V~)



WEG5561 M H -5
Illuminated Switch "B" Single Pole, 2-Device,
16AX 250V~ (LED Lamp: 220V~)



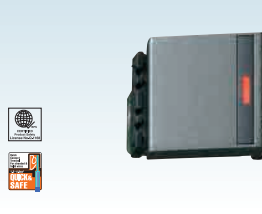
WEG5571 M H -5
Illuminated Switch "B" Single Pole, 3-Device,
16AX 250V~ (LED Lamp: 220V~)



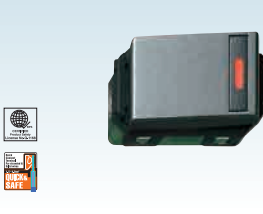
WEG5552 M H -5
Illuminated Switch "C" 3-Way, 1-Device,
16AX 250V~ (LED Lamp: 220V~)



WEG5562 M H -5
Illuminated Switch "C" 3-Way, 2-Device,
16AX 250V~ (LED Lamp: 220V~)



WEG5572 M H -5
Illuminated Switch "C" 3-Way, 3-Device,
16AX 250V~ (LED Lamp: 220V~)

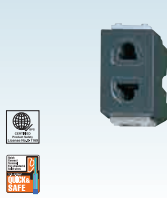


Receptacles and Accessories

WEG1001H-5
Receptacle
16A 250V~



WEG10919H-5
Universal Receptacle
16A 250V~



WEG1151H-5
Grounding Receptacle
with Safety Shutter 16A 250V~



WEG1101H-5
Grounding Receptacle
16A 250V~



These products conform to Philippine Standards with PS mark.

The product without PS mark is exempted model or with ICC sticker.

FULL-COLOR WIDE SERIES REFINA A-TYPE

SLIM ART A-TYPE

FLATINA SERIES A-TYPE

FULL-COLOR WIDE SERIES REFINA A-TYPE

FULL-COLOR WIDE SERIES A-TYPE

FULL-COLOR WIDE SERIES FOR HOTEL

FULL-COLOR SERIES A-TYPE

WEG1181HK-5
Grounding Universal Receptacle
with Safety Shutter 16A 250V~

WEG1461H-5*
20A Tandem Grounding Receptacle
20A 250V~
For Air Conditioner

WEG1302H-5
Duplex Receptacle
20A 250V~

WEG1552H-5
Grounding Duplex Receptacle
with Safety Shutter 16A 250V~

IP20

WEG1512H-5
Grounding Duplex Receptacle
16A 250V~

WEG15929H-5
Grounding Duplex Universal Receptacle
16A 250V~

WEG15829H-5
Grounding Duplex Universal Receptacle
with Safety Shutter 16A 250V~

WEF108107H-PH
1-Port USB Type-A
Fast Charger 2.4A
Applicable Wire: 1.5-2.5mm²
Rigid copper wire only

WEF1182H-PH
2-Port USB Type-A
Fast Charger 3A

WEF411407H-PH **NEW**
1-Port USB type-C
Fast Charger 2.4A
Applicable Wire: 1.5-2.5mm²
Rigid copper wire only

WEG2164H
Telephone Modular Jack (6P 4C)

WEG2166H
Telephone Modular Jack (6P 6C)

WEG2488H
CAT5E Data Modular Jack

WEG24886H
CAT6 Data Modular Jack

WEG2701H
Television Terminal
(Current Passing Type)

WEG2741H-PH
F Type Television Terminal
(Current Passing Type)

WEG2021H
Connector for HDMI
Connection

WEG575151H
Dimmer Switch
(Incandescent Light Control)
800W 220V~
*Off Function Type
Applicable Wire: 1.0-2.5mm²
Rigid copper wire only

WEG575181H
Dimmer Switch
(Incandescent Light Control)
800W 220V~
*Off Function Type
Applicable Wire: 1.0-2.5mm²
Rigid copper wire only

WEG579121H
LED-Dimmer Switch for
Dimmable LED
[Max 8 LED bulbs or less than 50W]
Applicable Wire: 1.0-2.5mm²
Rigid copper wire only

WEF5791301H-PH
Dimmer Switch with Minimum
Brightness Adjustment
(Incandescent and LED Light Control)
100W(LED 100W)220V~
*Push On/Off Function Type

WEF5791501H-PH
Dimmer Switch with Minimum
Brightness Adjustment
(Incandescent and LED Light Control)
240W(LED200W)220V~

These products conform to Philippine Standards with PS mark. The product without PS mark is exempted model or with ICC sticker. *Product is suitable for air conditioner with tandem plug.

32

Quick Connect Terminal
Solid Wire : 1.5-2.5mm²

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

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

Plates

FULL-COLOR WIDE SERIES Refina A-TYPE

		1-Gang 1-Device	1-Gang 2-Device	1-Gang 3-Device	1-Gang Center 2-Device
Plastic Plate					
		WEG6801W-1	WEG6802W-1	WEG6803W-1	WEG68029W-1
		WEG6801MW-1	WEG6802MW-1	WEG6803MW-1	WEG68029MW-1
		WEG6801MH-1	WEG6802MH-1	WEG6803MH-1	WEG68029MH-1
		WEG6801MB-1	WEG6802MB-1	WEG6803MB-1	WEG68029MB-1
		WEG6801MY-1	WEG6802MY-1	WEG6803MY-1	WEG68029MY-1
		WEG6801MF-1	WEG6802MF-1	WEG6803MF-1	WEG68029MF-1
		WEG6801MA-1	WEG6802MA-1	WEG6803MA-1	WEG68029MA-1

33

The beauty of simplicity

FULL-COLOR WIDE SERIES



FULL COLOR
WIDE
SERIES



ELEGANTLY SIMPLE SQUARISH DESIGN

Add a refreshing accent to any room.
Bold, modern plates with square shapes
available 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 A-TYPE

Switches

WEG5001K-5

Switch "B" Single Pole
16AX 250V~

WEG5001HK-5

WEG5002K-5

Switch "C" 3-Way
16AX 250V~

WEG5002HK-5

WEG500307-PH

Switch "D" Double Pole
16AX 250V~

WEG500307H

WEG5004K-5

Switch "E" 4-Way
16AX 250V~

WEG5004HK-5

WEG5151K-5

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

WEG5151HK-5

WEG5152K-5

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

WEG5152HK-5

WEG5141-5

Glow Switch "B" Single Pole
(2-Wire) 6AX 250V~

WEG5141H-5

WEG5341-5

Glow Switch "B" Single Pole
(3-Wire) 16AX 250V~

WEG5341H-5

Receptacles and Accessories

WEG10919-5

Universal Receptacle
16A 250V~

WEG10919H-5

WEG1001-5

Receptacle
16A 250V~

WEG1001H-5

WEG1090-5

Round Pin Receptacle
16A 250V~

WEG1090H-5

WEG1181K-5

Grounding Universal Receptacle
with Safety Shutter
16A 250V~

WEG1181HK-5

WEG1191K-5

Grounding Universal Receptacle
16A 250V~

WEG1191HK-5

WEG1461-5*

20A Tandem Grounding Receptacle
20A 250V~
For Air Conditioner

WEG1461H-5*

WEG1151-5

Grounding Receptacle
with Safety Shutter
16A 250V~

WEG1151H-5

WEG1101-5

Grounding Receptacle
16A 250V~

WEG1101H-5

WEG15829-5

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

WEG15829H-5

WEG15929-5

Grounding Duplex Universal
Receptacle
16A 250V~

WEG15929H-5

WEG1302-5

Duplex Receptacle
16A 250V~

WEG1302H-5

WEG1552-5

Grounding Duplex Receptacle
with Safety Shutter
16A 250V~

WEG1552H-5

WEG1512-5

Grounding Duplex Receptacle
16A 250V~

WEG1512H-5

These products conform to Philippine Standards with PS mark.

The product without PS mark is exempted model or with ICC sticker.

*Product is suitable for air conditioner with tandem plug.



Quick Connect Terminal
Solid Wire : 1.5-2.5mm²



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



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



Screw-less Terminal
Suitable for Stranded Wire

WEF108107-PH

1-Port USB Type-A
Fast Charger 2.4A

WEF108107H-PH

WEF1182-PH

2-Port USB Type-A
Fast Charger 3A

WEF1182H-PH

WEF411407-PH

1-Port USB Type-C
Fast Charger 2.4A

WEF411407H-PH

WEGP1041K-PH

1-Gang Multiple Receptacle
(With Plate)(With Blank Chip)

WEGP1041KH-PH

WEGP1041MHK-PH

1-Gang Multiple Receptacle
(With Plate)(With Blank Chip)

WEGP1041MHHK-PH

WEGP1741W9-PH

EL Guard Grounding Receptacle
[Solid Cu only]

WEGP1741W9H-PH

WEG2164

Telephone Modular Jack
(6P 4C)

WEG2164H

WEG2166

Telephone Modular Jack
(6P 6C)

WEG2166H

WEG2488

CAT5E Data Modular Jack

WEG2488H

WEG24886

CAT6 Data Modular Jack

WEG24886H

WEG2701

Television Terminal
(Current Passing Type)

WEG2701H

WEG2741-PH

F Type Television Terminal
(Current Passing Type)

WEG2741H-PH

WEG3023

Telephone Wire Chip
for 9mm Diameter

WEG3023H

WEG3020

Blank Chip
16mm Diameter

WEG3020H

WEG2021

Connector for HDMI Connection

WEG2021H

EKG331 (White)
EKG335 (Dark Brown)

Weather Proof Push Button for
Door Chime
1A 220V~

Dimmer Switches

WEG575151

Dimmer Switch
(Incandescent Light Control)
500W 220V~
*Off Function Type
Applicable Wire: 1.0-2.5mm²
Rigid copper wire only

WEG575151H

WEG575181

Dimmer Switch
(Incandescent Light Control)
800W 220V~
*Off Function Type
Applicable Wire: 1.0-2.5mm²
Rigid copper wire only

WEG575181H

WEG579121

LED-Dimmer Switch for Dimmable LED
[Max 8 LED bulbs or less than 50W]
*Off Function Type
Applicable Wire: 1.0-2.5mm²
Rigid copper wire only

WEG579121H

WEF5791301-PH

Dimmer Switch with Minimum
Brightness Adjustment
[Incandescent and LED Light Control]
100W(LED 100W)220V~
*Push On/Off Function Type

WEF5791301H-PH

WEF5791501-PH

Dimmer Switch with Minimum
Brightness Adjustment
[Incandescent and LED Light Control]
240W(LED 200W)220V~

WEF5791501H-PH

These products conform to Philippine Standards with PS mark.

The product without PS mark is exempted model or with ICC sticker.

Optimal for use in hotel guest rooms
with a wide range of colors to suit
interior specifications.

FULL-COLOR WIDE SERIES FOR HOTEL



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



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

Switches and Accessories

WEB1051WK-PH

Shaver Receptacle (White)
Input :
220V~
Output :
240V/110V~20VA



WEB5781WK

Electronic Key Card Switch (White)
16A 220V~



WEG5401-011

Entrance Bell
10A 250V~



EBG888

Door Chime
220V~ Two Tone 3.5W 50Hz
Easy-to-Hear 82dB Chime



WEG3032G-031

Pilot Lamp for Indication
"Make Up Room"(Green)
220V~



WEG3032R-021

Pilot Lamp for Indication
"Don't Disturb"(Red)
220V~



WEG5001K-031-5

Hotel Use Switch "B" for
Indication "Make Up Room"
16AX 250V~



WEG5002K-021-5

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



WEG2164

Telephone Modular Jack
(6P 4C)



WEG2488

CAT5E Data Modular Jack



WEG2741-PH

F Type Television Terminal
[Current Passing Type]



WEF108107-PH

1-Port USB Type-A Fast Charger
2.4A



Applicable Wire: 1.5-2.5mm²
Rigid copper wire only

WEF1182-PH

2-Port USB Type-A Fast Charger 3A

WEF1182H-PH



WEGP1041K-PH

1-Gang Multiple Receptacle
(With Plate)[With Blank Chip]



WEGP1741W9-PH

EL Guard Grounding Receptacle
[Solid Cu only]



Applicable Wire: 2.0-3.5mm²
Rigid copper wire or Standard wire

WEG2021

Connector for HDMI Connection

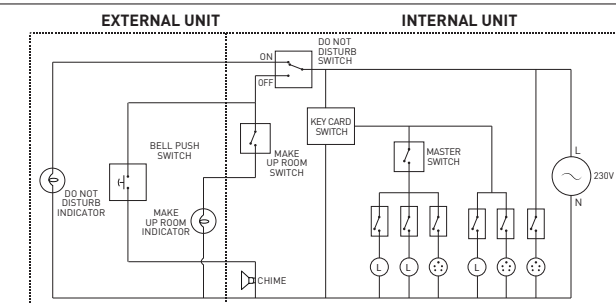
WEG2021H



Hotel Room Wiring Diagram

DND / MUR and Keycard

Note: This is a schematic electrical diagram of hotel room electrical components.
Bell Push and MUR will not work when DND is in on position.
Use of magnetic contactor is required, if the total load connected exceeds rating of
switch.

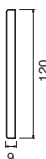
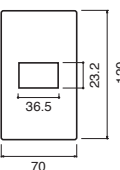
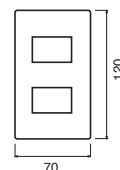
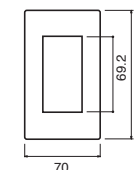
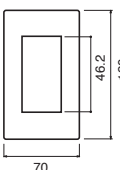
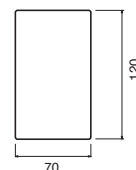
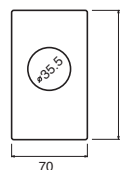
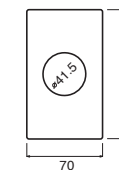
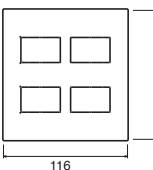
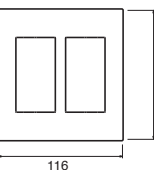


These products conform to
Philippine Standards with PS mark.

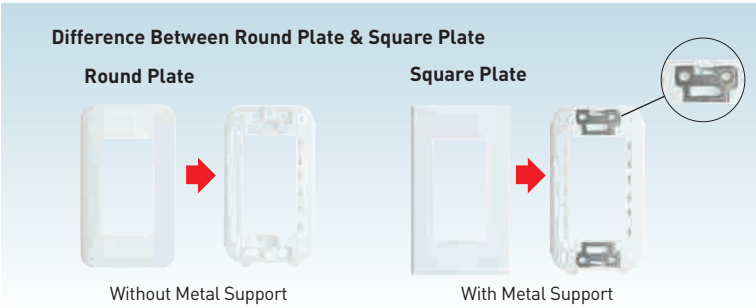
The product without PS mark is
exempted model or with ICC sticker.

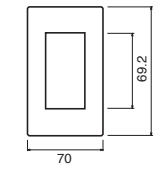
FULL-COLOR WIDE SERIES / FULL-COLOR WIDE SERIES for HOTEL

Plates

FULL-COLOR WIDE SERIES FULL-COLOR WIDE SERIES for HOTEL													Unit: mm	
Round Plate  White		White	WEG64010W	WEG64020W	WEG64030W		WEG640290W	WEG64910W	—	—	—	—		
Square Plate  White		White	WEG6801W-1	WEG6802W-1	WEG6803W-1		WEG68029W-1	WEG6891W-1	WZF1818W-8 Wide Type Plate For Twist Lock Receptacle Without Metal Support	WZF1819W-8 Wide Type Plate For Twist Lock Receptacle Without Metal Support	WEG6804W-1	WEG6806W-1		
Metal Plate  Aluminum  Stainless	Aluminum		WEG6501-1	WEG6502-1	WEG6503-1		WEG65029-1	WEG6591-1						
	Stainless		WEG6601-1	WEG6602-1	WEG6603-1		WEG66029-1	WEG6691-1						
Metallic  Metallic Gray  Metallic White  Metallic Gold	Metallic White		WEG6801MW-1	WEG6802MW-1	WEG6803MW-1		WEG68029MW-1	WEG6891MW-1						
	Metallic Gray		WEG6801MH-1	WEG6802MH-1	WEG6803MH-1		WEG68029MH-1	WEG6891MH-1						
	Metallic Black		WEG6801MB-1	WEG6802MB-1	WEG6803MB-1		WEG68029MB-1	WEG6891MB-1						
	Metallic Gold		WEG6801MY-1	WEG6802MY-1	WEG6803MY-1		WEG68029MY-1	WEG6891MY-1						
	Metallic Brown		WEG6801MF-1	WEG6802MF-1	WEG6803MF-1		WEG68029MF-1	WEG6891MF-1						
	Metallic Dark Brown		WEG6801MA-1	WEG6802MA-1	WEG6803MA-1		WEG68029MA-1	WEG6891MA-1						
Weather Proof Plate  IPX3 Metal  NEW IP55 Beige  NEW IP55 Snow White  NEW IP55 Gray	Metal		WEG7801	WEG7802	WEG7803		WEG78029							
	Beige		WEG7901K-PH	WEG7902K-PH	WEG7903K-PH		WEG79029K-PH							
	Snow White		WEG7901SWK-PH	WEG7902SWK-PH	WEG7903SWK-PH		WEG79029SWK-PH							
	Gray		WEG7901HK-PH	WEG7902HK-PH	WEG7903HK-PH		WEG79029HK-PH							
Weather Proof Cover Plate (Horizontal Type)  IP55 Metal  IP55 Plastic		Metal	WEG8881K-PH											
		Plastic	WEG8981K-PH											
Weather Proof Plate for Receptacle Plug-In Type  NEW IP55 White  NEW IP55 Gray		Plastic White	WEG8991SW-PH											
		Plastic Gray	WEG8991LH-PH											

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



F-plate  White  Aluminum *For WEGP1741W9-PH		
	White	WZ1813W-P
	Aluminum	WZ1823-M

Weather Proof Plate with Soft Cover Window	White	Light gray
IP55 Flush Mounting 	WEG8963SW-PH	WEG8963LH-PH
IP55 Surface Mounting 	WEG8973SW-PH	WEG8973LH-PH

The standard of excellence for any installation

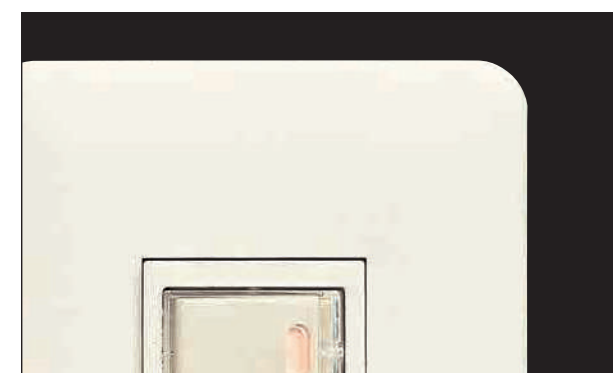


FULL-COLOR SERIES



CREATIVE DESIGN FOR THE WORLD STANDARD

Designed for compatibility with any international wiring standards and installation requirements.



Panasonic STANDARD DESIGNED

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



FULL-COLOR SERIES A-TYPE

QUICK & SAFETY
Quick Connect
Terminal
Solid Wire : 1.5-2.5mm²

Switches

WNG5001-5
Switch "B" Single Pole
16AX 250V~

WNG5002-5
Switch "C" 3-Way
16AX 250V~

WNG5004-5
Switch "E" 4-Way
10AX 250V~

WNG5051-5
Illuminated Appellation
Switch "B" Single Pole
16AX 250V~ (Neon Lamp :220V~)

WNG5052-5
Illuminated Appellation
Switch "C" 3-Way
16AX 250V~ (Neon Lamp :220V~)

WNG5151-5
Illuminated Switch "B" Single Pole
16AX 250V~ (Neon Lamp :220V~)

WNG5152-5
Illuminated Switch "C" 3-Way
16AX 250V~ (Neon Lamp :220V~)

WNG5061-5
Appellation Switch "B" Single Pole
16AX 250V~

WNG5062-5
Appellation Switch "C" 3-Way
16AX 250V~

WNG5021-5
Twin Switch "B" Single Pole
10A 250V~

WNG5401-7K
Push Button "B" Single Pole
10A 300V~

WNG5461-7
Appellation Push Button "B"
Single Pole
10A 300V~

WNG5463-7K
Appellation Push Button "D"
Double Pole
10A 300V~

WNG5460-7K
Appellation Push Button
NC Contact Type
10A 300V~

Receptacles and Accessories

WN1001-5
Receptacle
10A 250V~

WN1502-5
Duplex Receptacle
10A 250V~

WN1512-5
3Wire Grounding Duplex Receptacle
10A 250V~

WNG1091-5
Universal Receptacle
10A 250V~

WN1090-5
Round Pin Receptacle
10A 250V~

WN1592-5
Grounding Duplex Universal Receptacle
10A 250V~

WNTG15649-P
Telephone Modular Jack
(6P 4C)

WNG2741-PH
Television Terminal
[Current Passing Type]

WNG3032W-7 (White)
WNG3032G-7 (Green)
WNG3032R-7 (Red)
Pilot Lamp
220V~

WN4500-PH
Emergency Push Button "D"
Double Pole
6A 300V~

These products conform to Philippine Standards with PS mark. The product without PS mark is exempted model or with ICC sticker.

Dimmer Switches

WN3020-PH
Blank Chip

WV2501-PH
Pin Lug
(for 2-3.5mm² wire)

Refer page 60

WNGP575253
Dimmer Switch with Modern Plate
(Incandescent Light Control)
500W 220-240V~
Applicable Wire:
2.0-3.5mm² Rigid
copper wire only

WNGP575152
Dimmer Switch with Blank
Chip and Modern Plate
(Incandescent Light Control)
500W 220-240V~
Applicable Wire:
2.0-3.5mm² Rigid
copper wire only

WKG1092-5
Surface Mounting Universal
Duplex Receptacle

Plates

FULL-COLOR SERIES A-TYPE	Modern Plate	
	Without Mounting Strap	With Mounting Strap
1-Gang 1-Device	—	WNF6801W-PH
1-Gang 2-Device	WNF6202-89	WNF6802W-PH
1-Gang 3-Device	WNF6203-89	WNF6803W-PH
1-Gang Center 2-Device	WNF6221W-8	—
1-Gang Cover	—	WNF6891W-PH
1-Gang TEL	—	WNF6881W-PH
1-Gang for 35.5mm diameter	WNF6253W-8	—
1-Gang for 41.5mm diameter	WNF6254W-8	—
2-Gang for 58.5mm diameter	WNF6255W-8	—

These products conform to Philippine Standards with PS mark. The product without PS mark is exempted model or with ICC sticker.

Safe & Durable

USB CHARGERS



Resolve shortage of outlets and insufficient charging speed with a USB outlet for charging.

With the growth of the smart devices, the demands of USB outlet is becoming higher than original outlets. At café, office, home or any facilities, these products help to resolve the problem of charging spot.

Contribute your life by USB charger with certified quality and good design.

Charging Speed - Complied with latest standard, high capacity, and improved charging speed.

Improved charging speed for widely used USB Type-A and USB Type-C.

It is recommended not only for house use, but also for public facilities and transportation.

Durability - High durability; Endures 30,000 plug-unplug test.

Examine the quality test strictly by setting our own criteria that is stricter than general test.

Plug-unplug endurance test (30,000 times).

Design - Suits with different design plates and blend with every interior.

Panasonic USB outlet matches with various plate design.

You can choose the plate design that suits the mood of restaurant, public facilities and hotels etc.

Quietness - Passed our own strict quality standard.

Safety - Adopted nonflammable Urea resin.

Using Urea resin (Thermosetting resin) that reduce the risk of failure. (2 Port Type)

Safety; it is hard to dissolve or ignite even when abnormal heating happen.

Recommendation

Residential



Bedroom, Kitchen area etc.

Non-residential



Cafe, Waiting room, Office, etc.



SlimArt

USB Charger 1port

WSAF108107-PH

1-port USB Type-A Fast Charger 2.4A



Applicable Wire: 1.5-2.5mm²
Rigid copper wire only

WSAF108107H-PH

1-port USB Type-A Fast Charger 2.4A



Applicable Wire: 1.5-2.5mm²
Rigid copper wire only

USB Charger 2port

WSAF1182-PH

2-port USB Type-A Fast Charger 3A



WSAF1182H-PH

2-port USB Type-A Fast Charger 3A



FULL-COLOR
SERIES
Refina

FULL-COLOR
SERIES
Refina

USB Charger 1port

WEF108107-PH

1-Port USB Type-A Fast Charger 2.4A



Applicable Wire: 1.5-2.5mm²
Rigid copper wire only

WEF108107H-PH

1-Port USB Type-A Fast Charger 2.4A



Applicable Wire: 1.5-2.5mm²
Rigid copper wire only

WEF411407-PH NEW

1-Port USB Type-C Fast Charger 2.4A



Applicable Wire: 1.5-2.5mm²
Rigid copper wire only

WEF411407H-PH

1-Port USB Type-C Fast Charger 2.4A



Applicable Wire: 1.5-2.5mm²
Rigid copper wire only

USB Charger 2port

WEF1182-PH

2-Port USB Type-A Fast Charger 3A

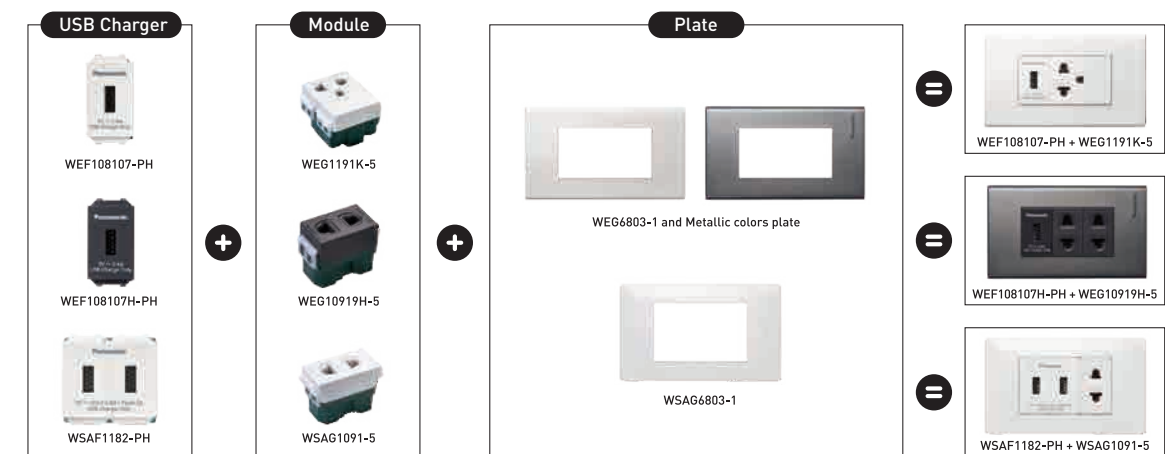


WEF1182H-PH

2-Port USB Type-A Fast Charger 3A



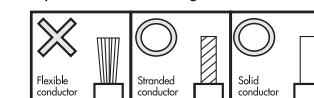
Combination with wiring devices and cover plate



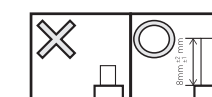
Connection Method

▶ Applicable wire 1.5mm²-2.5mm² Rigid Cu only
Never use any wire other than the applicable wire.
Incorrect use may cause overheating and poor contact.

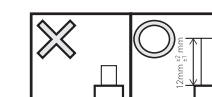
1-port USB Fast Charger
2-port USB Fast Charger



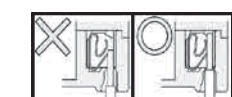
1-port USB Fast Charger
Strip 8 ±1-2mm of the wire coating according to the strip gauge on the back of the device.



2-port USB Fast Charger
Strip 12 ±2mm of the wire coating according to the strip gauge on the back of the device.



Connection Method of screwless terminal for 2 port USB fast charger



TWISTLOCKS

TWISTLOCKS
USB CHARGERS

METHODS OF WIRING

STRUCTURE OF WIRING COMPONENTS

DIMENSIONS

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.

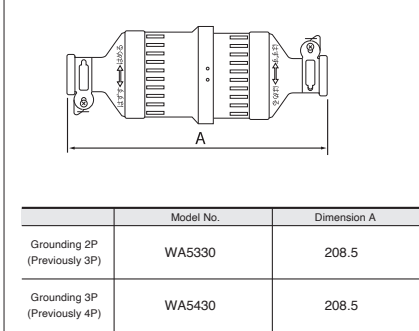
There is a possibility that heating will occur since long time use may bring about oxidizing on surface of solder and make the contact between terminal and solder defective.

30A	Standards of The Japan Association of Wiring Fixture Manufacturers' 1	Our Previous Product		Newly Established	
		3P 30A 250V	Changed. Also used as a grounding pole. Conforms to NEMA L6-30.	3P 30A 250V New pole arrangement Exchangeable with the NEMA L11-30 module	3P 30 A Product name changed to grounding 2P 30 A Grounding pole (⊕)

		Before Revision		After Revision	
20A	Revisions in The Internal Wiring Standards	3P 20A 250V	Could be used as the grounding pole. Stipulated for exclusive use.	3P 20A 250V	For 3P only Grounding side pole (W)
		Grounding 2P 20A 250V	Newly established	Grounding 2P 20A 250V	New pole arrangement Grounding pole (⊕) Conforms to NEMA L6-20.

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

- **Locking Water Proof Rubber Cord Connectors (Complete Set)**

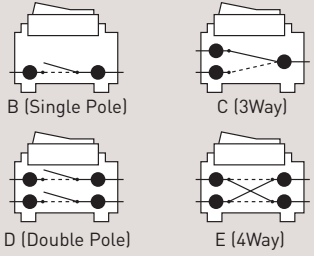


All products have entirely the same specifications as those sold in Japan.

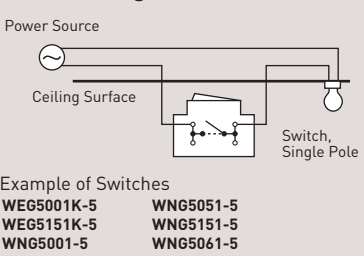
METHODS OF WIRING

Switches

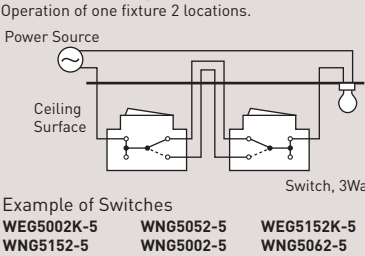
Contact Structure



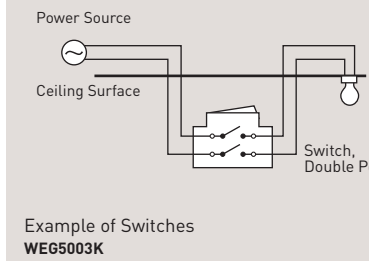
Switch, Single Pole



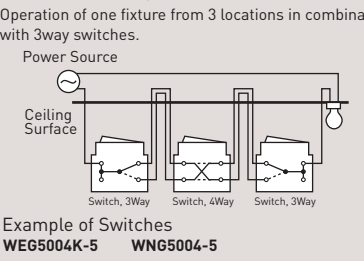
Switch, 3Way



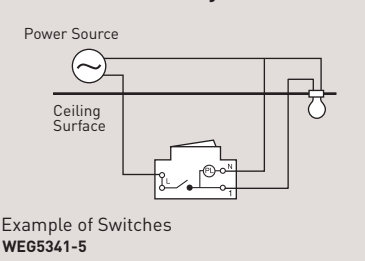
Switch, Double Pole



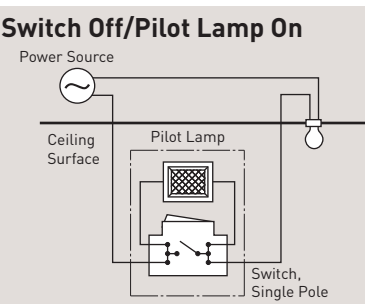
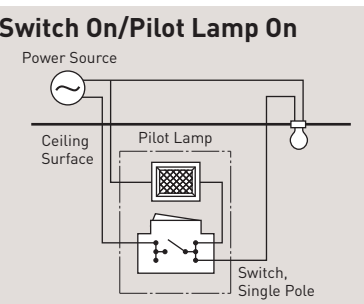
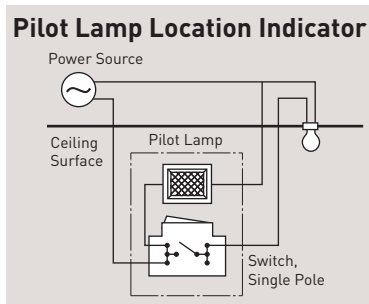
Switch, 4Way



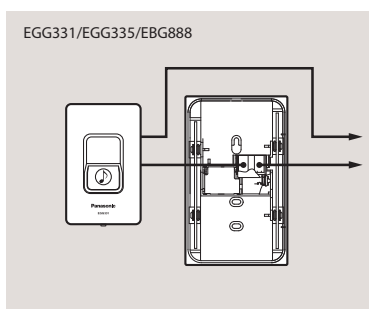
Glow Switch(3Way)



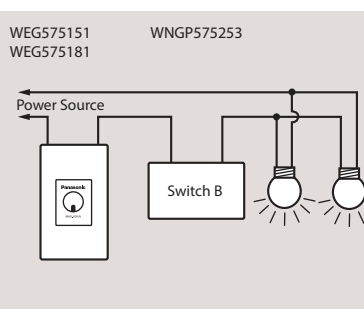
Wiring Instructions(Combination with Pilot Lamp)



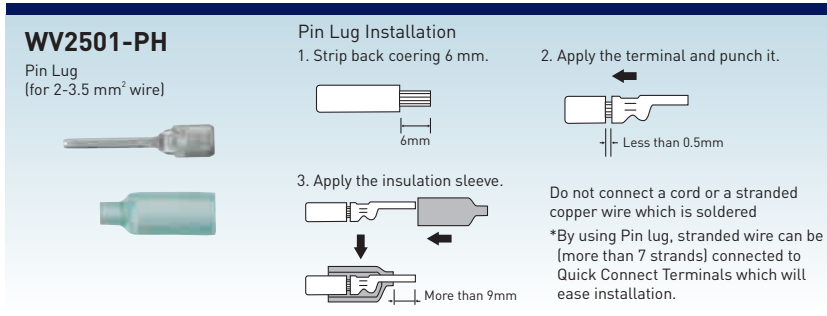
Door Chime



Dimmer Unit



Accessories



STRUCTURE OF WIRING COMPONENTS FOR THE TRANSMISSION OF INFORMATION

Easy Installation(WEG2488/WEG2488H/WEG24886/WEG24886H)

1 2Way Connection

Toolless Wire Connection by Using Captip

Using Wiring Tool

2 Easy to Remove the Cap

3 Cable Fixing System

4 No Need to Untwist the Wires

Projection Between the Slots

• Use tool when connecting wires 0.65mm

• Cut the excess wires with nippers after connection

• After connecting the core wires, press the cap down until you hear a click.

• No need to untwist the wires on setting to the slots.

• Minimum untwisting makes uniform installation quality & transmission performance.

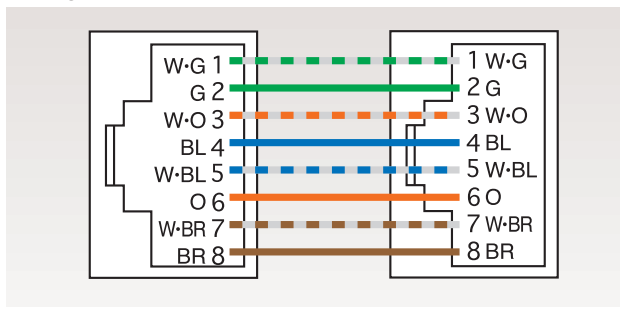
• Fix the cable steadily during installation.

• Prevent overpeeling of the Sheath of the cable to avoid failures/malfunctions

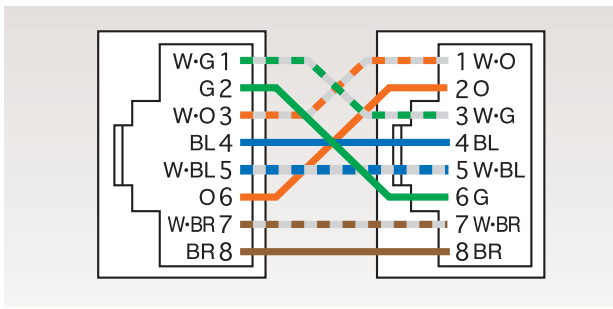
Pin/Pair Assignment

		T568A		T568B	
Pair No.	Pin No.	W	BL	W	BL
1	1	W-BL	5	5	1
1	2	BL	4	4	2
2	3	W-O	3	1	3
2	4	O	6	2	4
3	5	W-G	1	3	5
3	6	G	2	6	6
4	7	W-BR	7	7	7
4	8	BR	8	8	8

Straight Connection with T568A



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



DIMENSIONS

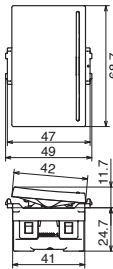
SLIM ART

Unit : mm

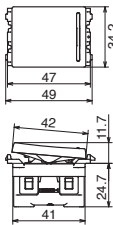
Compare WIDE series with Slim Art series

	Switch	Receptacle
Slim Art		
WIDE series		

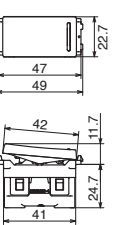
WSAG5511-5
WSAG5551-5
WSAG5552-5
WSAG5511MB-5
WSAG551MB-5
WSAG552MB-5
WSAG551MH-5
WSAG551MH-5
WSAG552MH-5



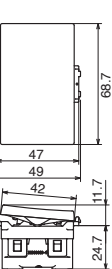
WSAG5521-5
WSAG5561-5
WSAG5562-5
WSAG5521MB-5
WSAG5561MB-5
WSAG5562MB-5
WSAG5521MH-5
WSAG5561MH-5
WSAG5562MH-5



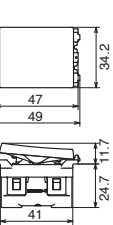
WSAG5531-5
WSAG5571-5
WSAG5572-5
WSAG5531MB-5
WSAG5571MB-5
WSAG5572MB-5
WSAG5531MH-5
WSAG5571MH-5
WSAG5572MH-5



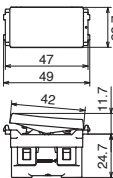
WSAG5512-5
WSAG5514-5
WSAG5512MB-5
WSAG5514MB-5
WSAG5512MH-5
WSAG5514MH-5



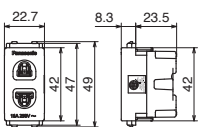
WSAG5522-5
WSAG5522MB-5
WSAG5522MH-5



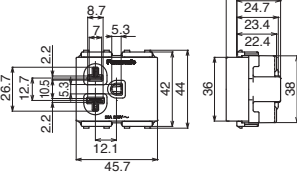
WSAG5532-5
WSAG5004-5
WSAG5532MB-5
WSAG5004MB-5
WSAG5532MH-5
WSAG5004MH-5



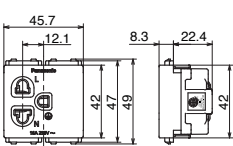
WSAG1091-5
WSAG1091H-5



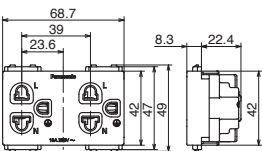
WSAG1461-5
WSAG1461H-5



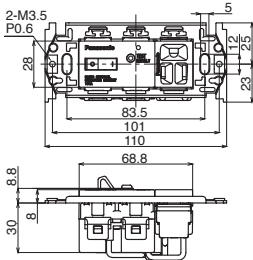
WSAG1181-5
WSAG1191-5
WSAG1181H-5
WSAG1191H-5



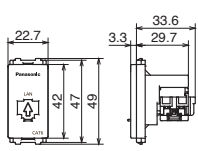
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WSAG1592-5
WSAG1582H-5
WSAG1592H-5



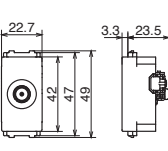
WEGP1741SW9-PH
WEGP1741H9-PH



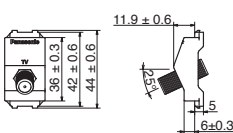
WSAG2488
WSAG24886
WSAG2488H
WSAG24886H



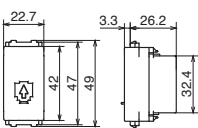
WSAG2701
WSAG2701H



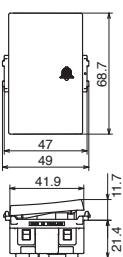
WSAG2741-PH
WSAG2741H-PH



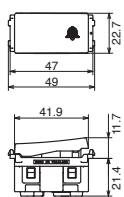
WSAG2164
WSAG2164H



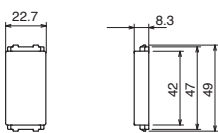
WSAG5411-011
WSAG5411MB-011
WSAG5411MH-011



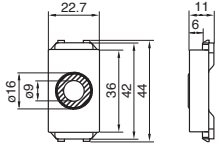
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WSAG5431MB-011
WSAG5431MH-011



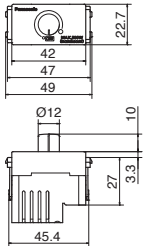
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WSAG3020H



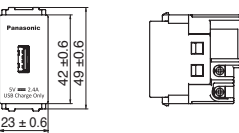
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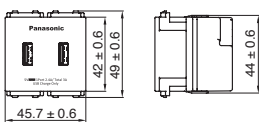
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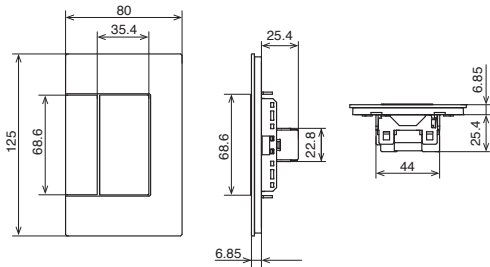
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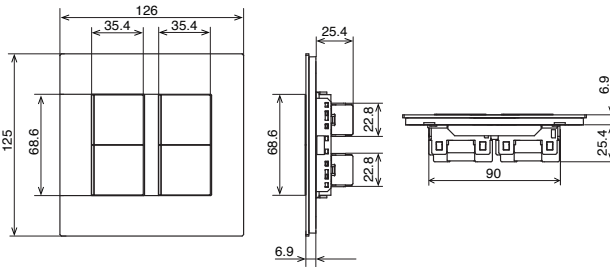
FLATIMA SERIES

Unit : mm

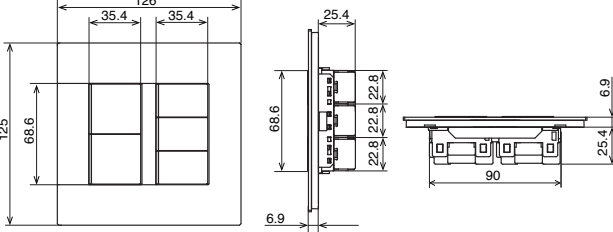
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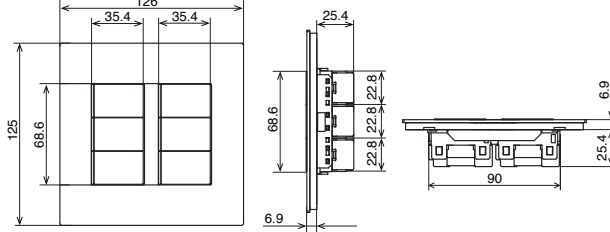
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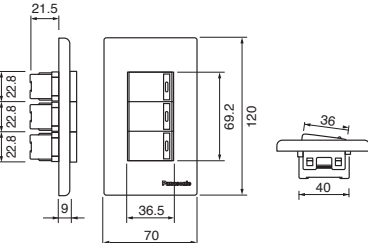
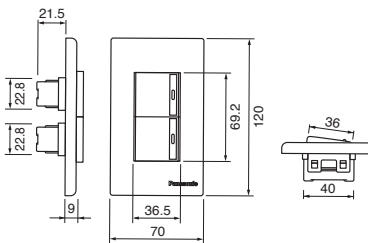
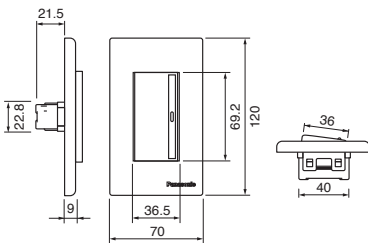
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WTEGP56572S-1-5



FULL-COLOR WIDE SERIES REFINA



USB CHARGERS

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METHODS OF WIRING

STRUCTURE OF WIRING COMPONENTS

DIMENSIONS

USB CHARGERS

TWISTLOCKS

METHODS OF WIRING

STRUCTURE OF WIRING COMPONENTS

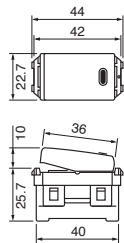
DIMENSIONS

DIMENSIONS

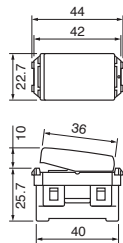
FULL-COLOR WIDE SERIES

Unit: mm

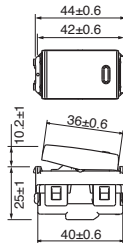
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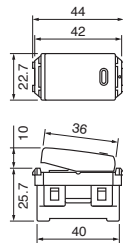
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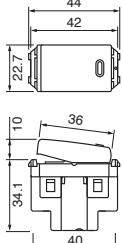
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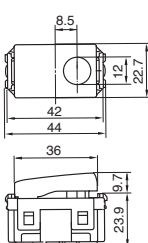
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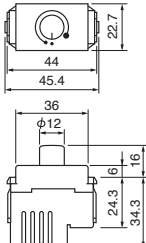
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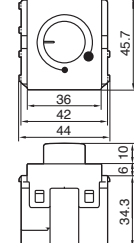
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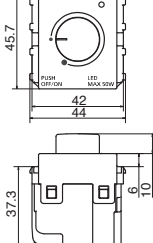
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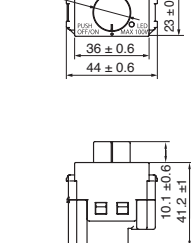
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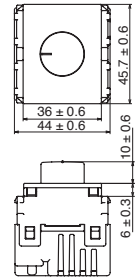
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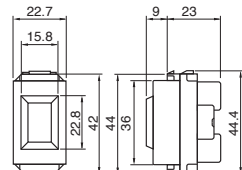
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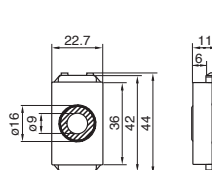
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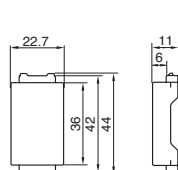
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WEG3032R
WEG3032G



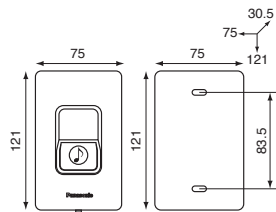
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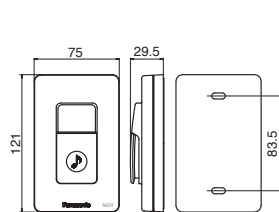
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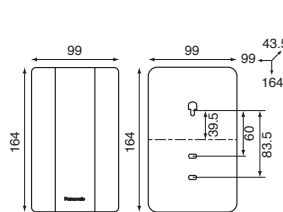
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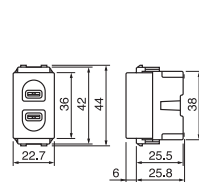
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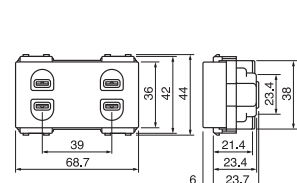
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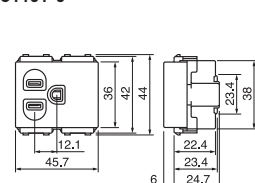
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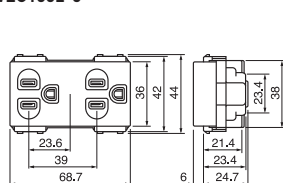
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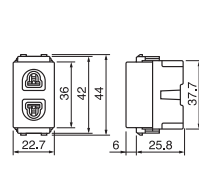
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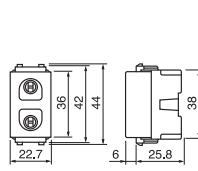
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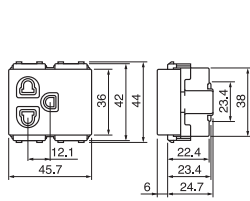
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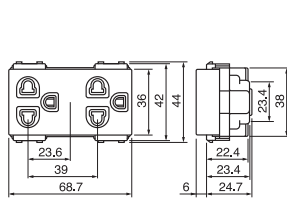
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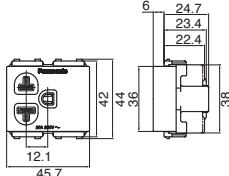
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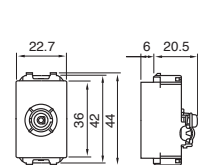
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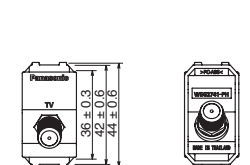
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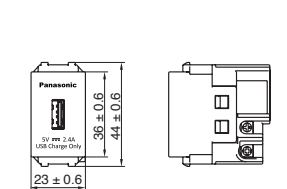
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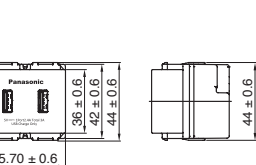
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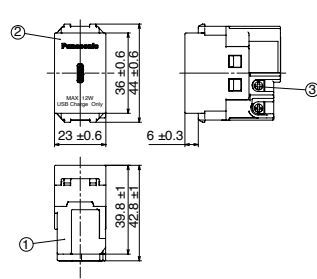
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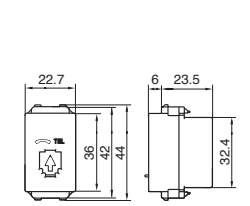
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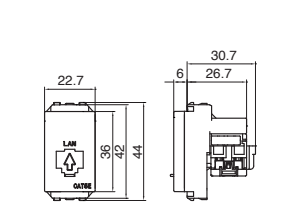
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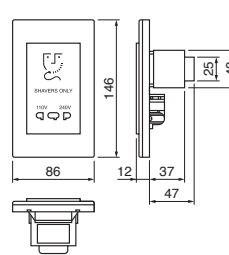
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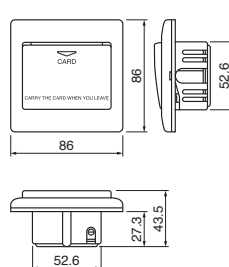
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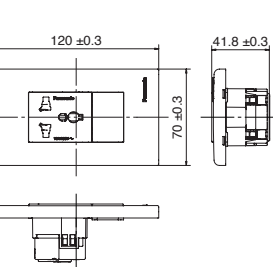
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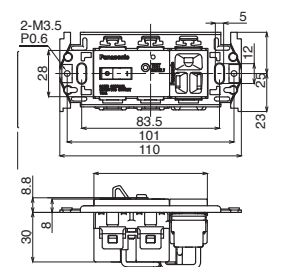
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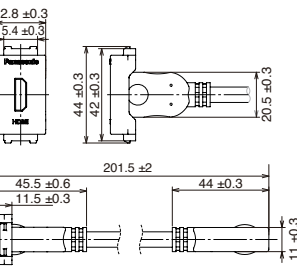
WEGP1041K-PH



WEGP1741W9-PH



WEG20215W



Unit: mm

USB CHARGERS

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STRUCTURE OF WIRING COMPONENTS

DIMENSIONS

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STRUCTURE OF WIRING COMPONENTS

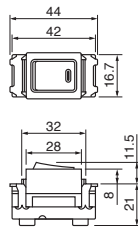
DIMENSIONS

D I M E N S I O N S

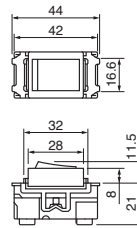
FULL-COLOR SERIES

Unit:mm

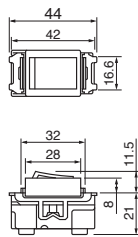
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WNG5151-5



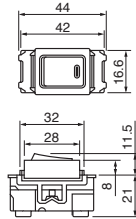
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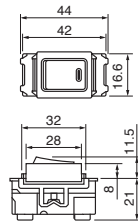
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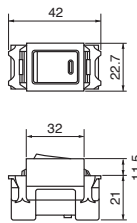
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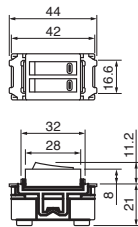
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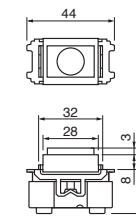
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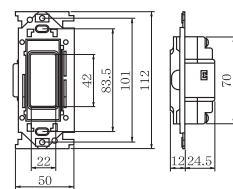
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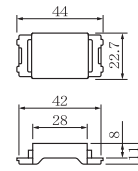
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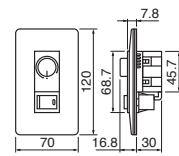
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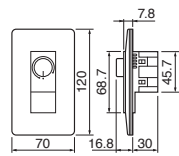
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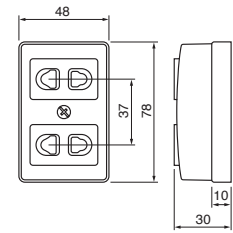


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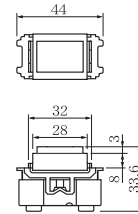


Unit:mm

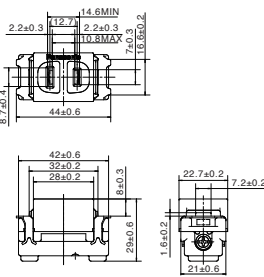
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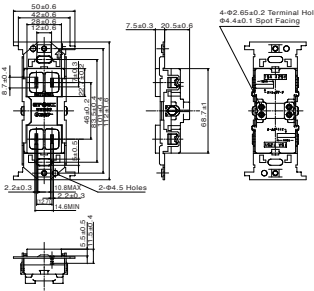
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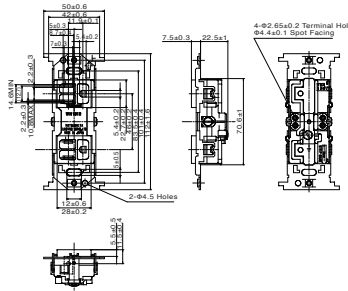
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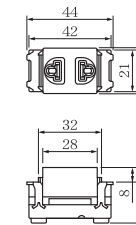
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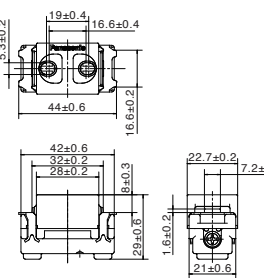
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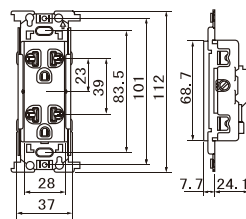
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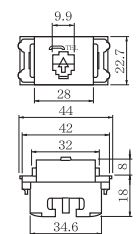
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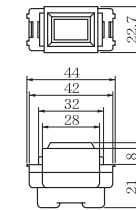
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WNTG15649-P



WNG3032W-7
WNG3032G-7
WNG3032R-7



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D I M E N S I O N S

Safety&Durability

EXTENSION CORDS with Safety Shutter & Breaker



Features:

- Maximum capacity 16A, 3,500W
- Built-in breaker for overload protection
- Safety Shutter on receptacle with rigid body
- Glow switch for indicating the status of ON/OFF

16A, 250V~

WCHG28534-5

Extension Cord (3 Sockets)
- 5m Cord
- Individual Glow Switches



WCHG28552-5

Extension Cord (5 Sockets)
- 3m Cord
- Main Glow Switch



Features

Flexible Cord Terminal
Is able to distort 10,000 times at 45 angles and 100 times at 60N to protect copper inside from being twisted.

Glow Switch
Durable built in switch for Power ON Indication.

Switch Cover
Embedded style switch with cover to protect from unintended switching.

Round Pin Type Receptacle with Shutter & Ground

- Copper clad is produced by piece to piece, without connecting point. That leads to be a good conductor.
- Receptacle is made of Urea Resin. Urea Resin property are sturdy, high heat resistant and inflammable.
- Durable socket can be plugged in more than 10,000 times.
- Twin Safety Shutter springs prevent electric shock (Shutter will not open unless both are pressed).
- Easy to plug in both Flat pin type, even with heavy weight.

Circuit Breaker

- Electric can be cut off automatically when overload of electric power (White button will protrude instantly).
- Easy to re-preform by pressing the circuit breaker (No need any replaced fuse).
- Circuit breaker is designed to be underneath to protect from accidental touch.

Safe Connection

- Flat pin with Grounding type of plug.
- High strength material cannot be easily deformed by frequent plugging.

Highly Insulated Flexible Wire
1.5 mm² PVC type flexible wire with thick insulation.

Wire connector

Switch/ Breaker

- **Switch**
Power to all equipment can be turned off and supply at once.
- **Breaker**
If the total power supply of equipment connected to the extension cord exceeds 2,500 watts, the breaker will automatically cut off the power supply, the extension cord will not be available. If you want to the extension cord available, unplug of equipment and reset.

Safety shutter

- Prevent electric shock.

Cover

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

Socket outlet

- **Female contact**
Made of copper, good electrical conductivity, does not cause heat, high durability.
- **Inner body**
Made of urea resin for flame retardant.

Wall-mounting
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)

Mounting hole
5.5 mm - 6.5 mm

EXTENSION CORDS

EXTENSION CORDS "PERFECT FIT"

FLOOR OUTLET SERIES

PASSIVE INFERRED SENSOR SWITCHES

AUTOMATIC TIME SWITCHES

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Safety & Convenience in Slim body

EXTENSION CORDS "PERFECT FIT" for your interior

Features:

- Maximum capacity 10A, 2,500W
- Built-in breaker for overload protection
- Safety Shutter on receptacle

10A, 250V~

WCHG24332W-5

Extension Cord (3 Sockets)
- 5m Cord
- Main Switches

WCHG24332B-5

Extension Cord (3 Sockets)
- 3m Cord
- Main Switch

Features

Wire connector

Switch/ Breaker

- **Switch**
Power to all equipment can be turned off and supply at once.
- **Breaker**
If the total power supply of equipment connected to the extension cord exceeds 2,500 watts, the breaker will automatically cut off the power supply, the extension cord will not be available. If you want to the extension cord available, unplug of equipment and reset.

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- **Inner body**
Made of urea resin for flame retardant.

Wall-mounting
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)

Mounting hole
5.5 mm - 6.5 mm

Press "OFF/Reset" position
Press "ON" position

EXTENSION CORDS

EXTENSION CORDS "PERFECT FIT"

FLOOR OUTLET SERIES

PASSIVE INFERRED SENSOR SWITCHES

AUTOMATIC TIME SWITCHES

59

Nice Appearance and Safety Design
for Floor Management.

FLOOR OUTLET SERIES

We can offer suitable type of products for each location with our variety line-up

- 1) Safety

Equipped with a cover which doesn't open even if stepped on or hit when not in use. Less protrusion and stays stable in position even if stepped or bumped on while in use.

2) Durability

Internal opening and closing test is conducted for more than 10,000 times to insure the strength and durability.

3) Design

Highly designed products to match with surrounding space.

4) Abundant lineup

Especially Recommended

Recommended

Recommended Location list	Shopping mall	Office/ Meeting room	Training gym	Cafe	Hotel	Class room	Dining room
Key Factor	Safety	Multi-function	Easy to use	Design	Design	Safety	Safety
Pop Up Duplex Type							
Shallow Type							
Plug Stored Type							
Double Duplex Type							
Resin Type							

POP UP DUPLEX TYPE

Easy to plug in and out for temporary power supply

Recommended Location

MALL

Shopping mall

Office/Meeting room

Training gym

Class room

Product Features

- IP:44
- Plate thickness:7.6mm
- Depth under the floor:69.0mm

DU5983LT9-1

Grounding Duplex Universal with Safety Shutter 16A 250V~ with Outlet Box & Box Protector

DU5993LT9-1

Grounding Duplex Universal 16A 250V~ with Outlet Box & Box Protector

DU5990LT9-1

Grounding Duplex Parallel 16A 250V~ with Outlet Box & Box Protector

DU6933LT9-1

Duplex Telephone Modular Jack 6P4C with Outlet Box & Box Protector

DU6935LT9-1

Telephone Modular Jack 6P4C and CAT5E Modular Jack with Outlet Box & Box Protector

DU6955LT9-1

Duplex CAT5E Modular Jack with Outlet Box & Box Protector

DU6966LT9-1

Duplex CAT6 Modular Jack with Outlet Box & Box Protector

SHALLOW TYPE

Thinnest* and excellent design

*Compared to Panasonic lineup

Recommended Location

Cafe

Hotel

Dining room

Shopping mall

Office/Meeting room

Product Features

- IP:44
- Plate thickness:3.5mm
- Depth under the floor:46.0mm

DUFS1260LTH-1

Grounding Duplex Universal with Safety Shutter 16A 250V ~ with Outlet Box & Box Protector

DUFS1270LTH-1

Grounding Duplex Universal 16A 250V ~ with Outlet Box & Box Protector

DUFS2229LTH-1

Duplex Telephone Modular Jack 6P4C with Outlet Box & Box Protector

DUFS2214LTH-1

Telephone Modular Jack 6P4C and CAT5E Modular Jack with Outlet Box & Box Protector

DUFS2259LTH-1

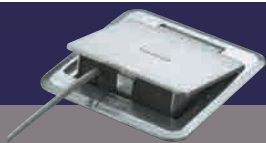
Duplex CAT5E Modular Jack with Outlet Box & Box Protector

DUFS2289LTH-1

Duplex CAT6 Modular Jack with Outlet Box & Box Protector

PLUG STORED TYPE

Protects cable and plug while in use



DOUBLE DUPLEX TYPE

Up to 6 modules can be installed



Recommended Location



Shopping mall



Office/Meeting room



Class room

Product Features

- IP:44
- Plate thickness:4.0mm
- Depth under the floor:69.0mm

Recommended Location



Office/Meeting room



Cafe

Product Features

- IP:44
- Plate thickness:6.6mm
- Depth under the floor:58.0mm

DUF1260LTK-1

Grounding Duplex Universal
with Safety Shutter 16A 250V~
with Outlet Box & Box Protector



DUF1270LTK-1

Grounding Duplex Universal
16A 250V~
with Outlet Box & Box Protector



DUF1250LTK-1

Grounding Duplex Parallel
16A 250V~
with Outlet Box & Box Protector



DUMF83288LT-1

Grounding Duplex Universal with Safety Shutter
16AX 250V ~ (2pcs)
with Outlet Box & Box Protector



DUMF83255LT-1

CAT5E Modular Jack (4pcs)
with Outlet Box & Box Protector



DUMF83266LT-1

CAT6 Modular Jack (4pcs)
with Outlet Box & Box Protector



DUF1230LTK-1

Triplex Parallel 16A 250V~
with Outlet Box & Box Protector



DUF2229LTK-1

Duplex Telephone
Modular Jack 6P4C
with Outlet Box & Box Protector



*Installed Receptacles have PS mark.

DUF2214LTK-1

Telephone Modular Jack 6P4C
and CAT 5E Modular Jack
with Outlet Box & Box Protector



DUMF83235LT-1

Telephone Modular Jack 6P4C (2pcs)
and CAT5E Modular Jack (2pcs)
with Outlet Box & Box Protector



DUMF83236LT-1

Telephone Modular Jack 6P4C (2pcs)
and CAT6 Modular Jack (2pcs)
with Outlet Box & Box Protector



DUMF832836LT-1

Grounding Duplex Universal
with Safety Shutter 16AX 250V ~ (1pc)
and Telephone Modular Jack 6P4C (1pc)
and CAT6 Modular Jack (1pc)
with Outlet Box & Box Protector



DUF2259LTK-1

Duplex CAT5E Modular Jack
with Outlet Box & Box Protector



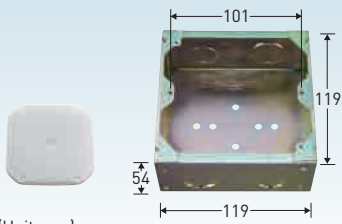
DUF2289LTK-1

Duplex CAT6 Modular Jack
with Outlet Box & Box Protector



DU9FALT-1

Outlet Box and Box Protector
for Floor Outlet
(Aluminum Diecast)



(Unit:mm)

*Box protector and screws included.

DUMF832866LT-1

Grounding Duplex Universal
with Safety Shutter 16AX 250V ~ (1pc)
and CAT6 Modular Jack (2pcs)
with Outlet Box & Box Protector



DUMF832833LT-1

Grounding Duplex Universal
with Safety Shutter 16AX 250V ~ (1pc)
and Telephone Modular Jack 6P4C (2pcs)
with Outlet Box & Box Protector



EXTENSION CORDS

EXTENSION CORDS
"PERFECT FIT"

FLOOR OUTLET SERIES

PASSIVE INFRARED
SENSOR SWITCHES

AUTOMATIC TIME SWITCHES

EXTENSION CORDS

EXTENSION CORDS
"PERFECT FIT"

FLOOR OUTLET SERIES

PASSIVE INFRARED
SENSOR SWITCHES

AUTOMATIC TIME SWITCHES

RESIN TYPE

Easy to plug in and out for temporary power supply



Recommended Location



Dining room



Cafe

Single Product Features

- IP:24
- Plate thickness:3.7mm
- Depth under the floor:63.3mm

Duplex Product Features

- IP:24
- Plate thickness:4.1mm
- Depth under the floor:64.0mm

Floor Outlet Single

DU8102HTC-1

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



DU5100HTC-1

Duplex Parallel 16A 250V~ with Cover Unit



DU61233HTC-1

Duplex Telephone Modular Jack 6P4C with Cover Unit



Floor Outlet Duplex

DU61223HTC-1

Telephone Modular Jack 6P4C and TV Terminal with Cover Unit



DU81831HTK-1

Grounding Duplex Universal with Safety Shutter 16A 250V~ with Outlet Box & Box Protector



DU51031HTK-1

Grounding Duplex Parallel 16A 250V~ with Outlet Box & Box Protector



DU51081HTK-1

Triplex Parallel 16A 250V~ with Outlet Box & Box Protector



DU612331HTK-1

Duplex Telephone Modular Jack 6P4C with Outlet Box & Box Protector



DU612351HTK-1

Telephone Modular Jack 6P4C and CAT5E Modular Jack with Outlet Box & Box Protector



DU61355HTK-1

Duplex CAT5E Modular Jack with Outlet Box & Box Protector



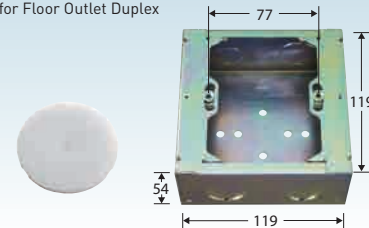
DU61466HTK-1

Duplex CAT6 Modular Jack with Outlet Box & Box Protector



DU9FPLT-1

Outlet Box and Box Protector for Floor Outlet Duplex



(Unit:mm)
*Box protector and screws included.

FLOOR OUTLET SERIES

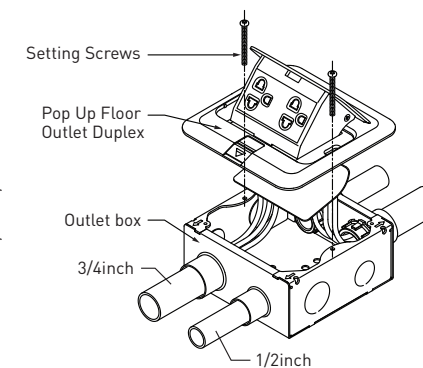
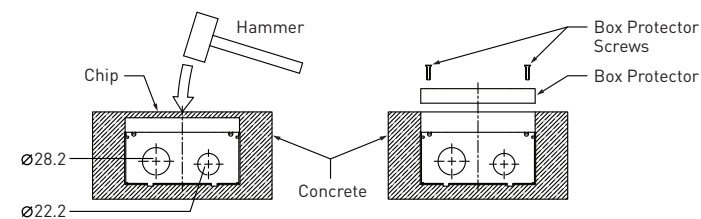
How To Mount

Pop Up Duplex Type

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.

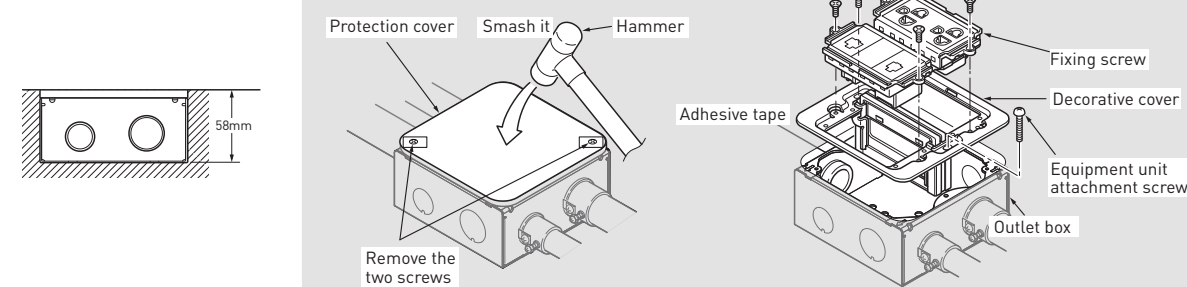
(2) After chipping the concrete away, loosen cover unit screws and take the box protector off.



Double Duplex Type

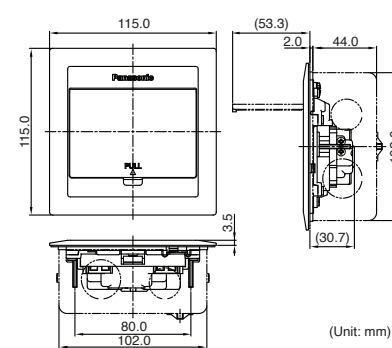
The upper surface of the protection cover must be the finished surface of the concrete.

Smash the protection cover and remove the screws

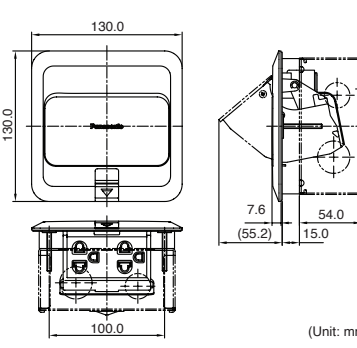


Dimensions

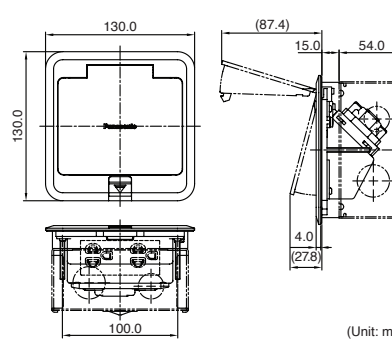
Shallow Type



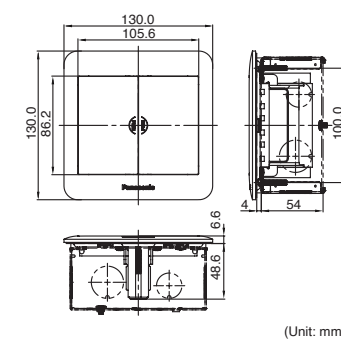
Pop Up Duplex Type



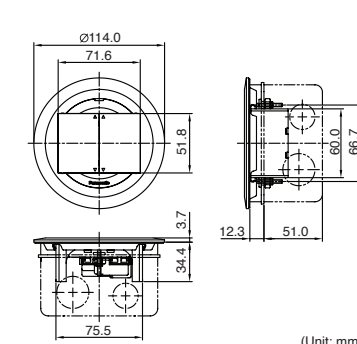
Plug Stored Type



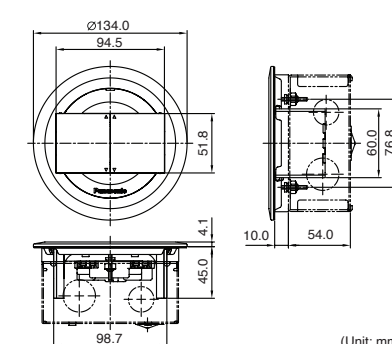
Double Duplex Type



Floor Outlet Single (Resin)



Floor Outlet Duplex (Resin)



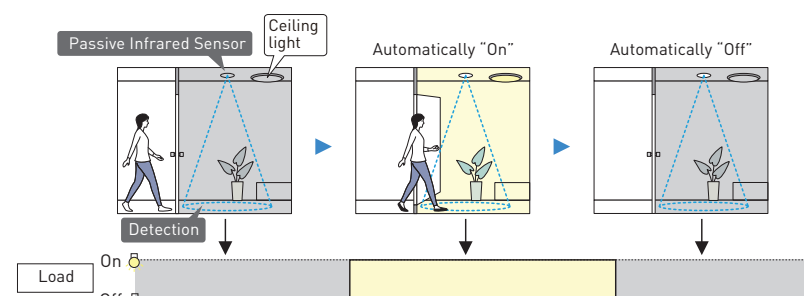
New innovation with
New energy-saving lighting control

PASSIVE INFRARED SENSOR SWITCHES



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

Conventional PIR
- Dual element
- 2way direction detection

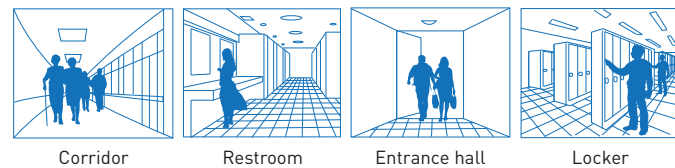
PaPIRs element
- Quad element with slit design
- 4way direction detection

PaPIRs PIR Sensor
High sensitive quad pyroelectric element
Original designed ASIC
High density detection zone

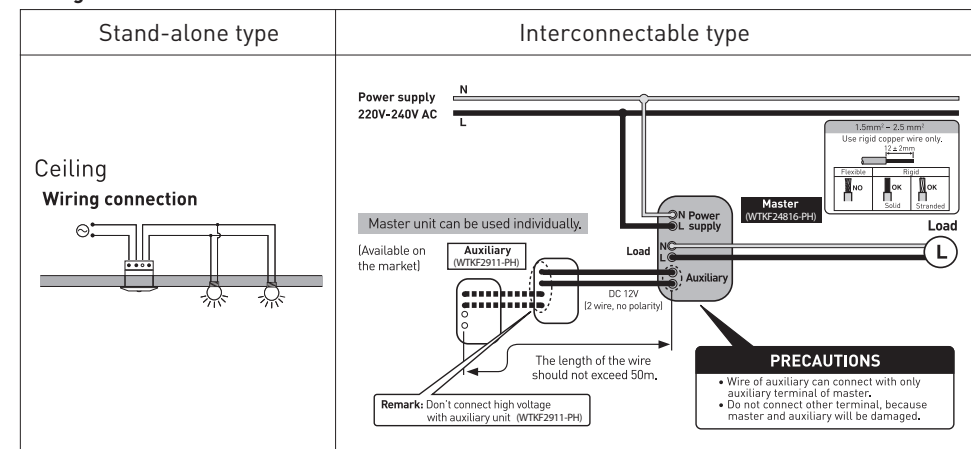
Thermal crosstalk

PaPIRs
Analog output diagram
False alarm

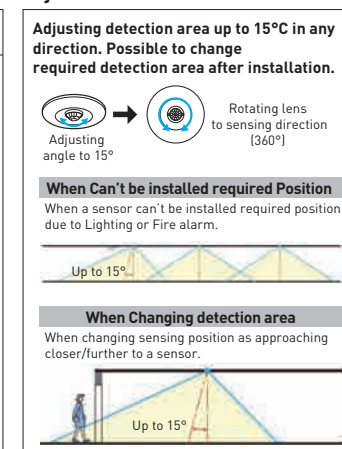
Recommended Location



Wiring Method



Adjustable Lens



■ PaPIRs installed model for Professional Use Stand-alone Type

Ceiling Flush Mount Type Ceiling Surface Mount Type

Model no.	WTKG2310	WTKF23113-PH	WTKF337207-PH	WTKF339207-PH
Passive Infrared Sensor Switch	Passive Infrared Sensor Switch	Passive Infrared Sensor Switch	Passive Infrared Sensor Switch	Passive Infrared Sensor Switch
3A 220-240V~	3A 220-240V~	3A 220-240V~	10A 220-240V	10A 220-240V
1 min Time Delay	10 sec - 30 mins. Time Delay	Wide Detection Type	High Bay Type	
Adjustable Lens	Adjustable Lens	Adjustable Lens		

Specifications

Model no.	WTKG2310	WTKF23113-PH	WTKF337207-PH	WTKF339207-PH
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)		
Dimension				
Rating	3A 220V-240V~		10A 220V-240V	
Rated Power Consumption	Less than 2W		Less than 1W (Standby)	
Load Capacity	Incandescent Lamp 660W Fluorescent Lamp 330W LED Lamp 330W		Incandescent Lamp 2200W Fluorescent Lamp 880W LED Lamp 880W	
Applicable Standard	IEC60669-2-1		IEC60669-1	
Ambient Temperature	-10°C to +40°C		-10°C to +40°C	
Wiring Connection	Quick Connect Terminal		Screw Terminal	
Size of Installation Hole (cm)	- (If digging a hole. The size of installation hole is 7.0(+0.5))		-	
Applicable Wire	1.5mm² - 2.5mm² Rigid Copper Wire Only		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	-
Time-Out Delay	Fixed 1min.		Adjustable 10sec. - 30min	
Detectable Movement Speed	0.3m/s ~ 1.0m/s		0.3m/s ~ 1m/s	

*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, the more sensitive it is increased.



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

■ PaPIRs installed model for Professional Use Interconnectable Type Ceiling Flush Mount Type(Master)

Passive Infrared Sensor
(Auxiliary Unit)
DC12V

Ceiling Flush Mount Type (Auxiliary)

WTKF24816-PH

Passive Infrared Sensor Switch
(Master Unit)
8A 220-240V~



Adjustable Lens
High Capacity



WTKG2411

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



Adjustable Lens



WTKF2911-PH

Passive Infrared Sensor Switch
(Auxiliary Unit)
DC12V



Adjustable Lens



Specifications

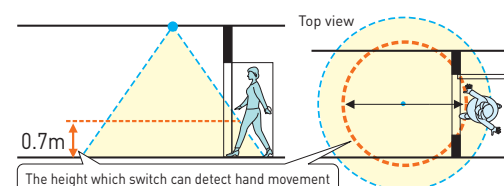
Model no.	WTKF24816-PH	WTKG2411	WTKF2911-PH
Detectable Scope	Ceiling Top view* Use finger softly press on sensor and turn (15° oblique ; 360° turn around)	Ceiling Top view* Use finger softly press on sensor and turn (15° oblique ; 360° turn around)	Ceiling Top view* Use finger softly press on sensor and turn (15° oblique ; 360° turn around)
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	(Ceiling opening size) Ø 70 ± 0.5 66.5 ± 1.6 65.6 ± 1 85 ± 1	Ø 70 ± 0.5 58.8 ± 1.6 12 ± 1.6 85 ± 1.6	(Ceiling opening size) Ø 70 ± 0.5 66.5 ± 1.6 65.6 ± 1 85 ± 1
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 Fluorescent Lamp 880W LED Lamp 880W	Incandescent Lamp 660W 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)	Ø70 (+0.5)	Ø70 (+0.5)	Ø70(+0.5)
Applicable Wire	1.5mm ² - 2.5mm ² Rigid Copper Wire Only	1.5mm ² - 2.5mm ² Rigid Copper Wire Only	1.5mm ² -2.5mm ² Rigid Copper Wire Only
Applicable Boxes	Square Box Octagon Box	2 inches or more 2 inches or more	-
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 units	6 units (WTKF2911-PH)	4 units (WTKF2911-PH)	-

*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, the more sensitive it is increased.

INSTRUCTIONS AND DIRECTIONS FOR USE

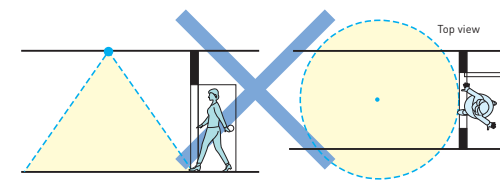
■ Detection range

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.

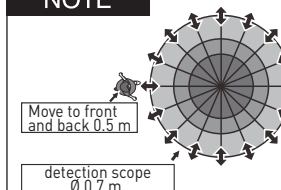


■ Precautions

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

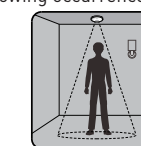


NOTE

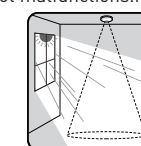


The detection performance varies Depending on the detect angle. Be sure to check the operation after finishing the installation. The Closer to the center of sensor, he more sensitive It is increased.

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



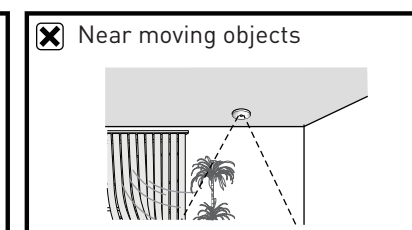
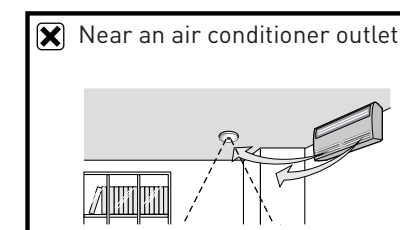
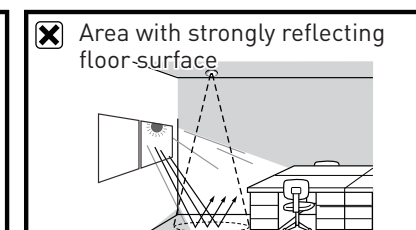
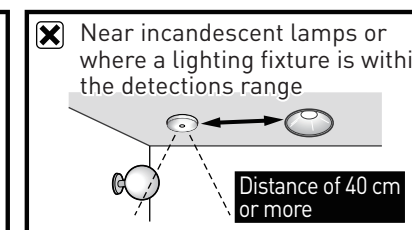
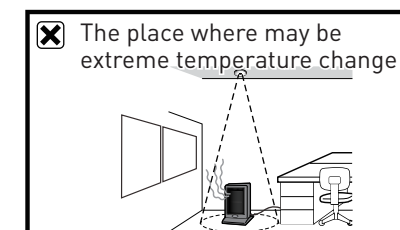
A person does not move.
(detection speed 0.3 m/s to 1 m/s)



The ambient area is bright.

■ Installation Place

Please do not install in locations shown as examples. The switch detects temperature changes (of 4°C 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.



■ Simple Chart of detection range

	Passive Infrared Sensor Switches, Stand-alone Type				Passive Infrared Sensor Switches, Interconnectable Type		
	Ceiling Surface Mounting Type				Ceiling Flush Mounting Type		
					Master Unit	Auxiliary	
Model no	WTKF339207-PH	WTKF337207-PH	WTKF23113-PH	WTKG2310-PH	WTKF24816-PH	WTKG2411	WTKF2911-PH
Rating	10A 220V-240V AC	10A 220V-240V AC	3A 220V-240V AC	3A 220V-240V AC	8A 220V-240V AC	3A 220V-240V AC	12V DC
Load Capacity	Incandescent lamp	2200W	2200W	660W	1760W	660W	-
	Fluorescent lamp	880W	880W	330W	880W	330W	
	LED lamp	880W	880W	330W	880W	330W	
Time-out delay	Approx. 10 sec-10 min.	Approx. 10 sec-10 min.	Approx. 10 sec-30 min.	Fixed 1 min.	Approx. 10 sec-30 min.	Approx. 10 sec-30 min.	Depending on the time-out delay of master type
Light intensity detection	5 lux - 750 lux	5 lux - 750 lux	5 lux - 750 lux	5 lux - 750 lux	5 lux - 1000 lux	5 lux - 1000 lux	5 lux - 1000 lux
Connectable Auxiliary units	-				6 Units (WTKF2911-PH)	4 Units (WTKF2911-PH)	-
Applicable wire	1.5 mm ² -2.5 mm ² Rigid copper wire only						
Recommend place	Lobby, Factory, Warehouse, Wide Corridor, Staircase, Pantry room, Kitchen				Lobby, Long Corridor, Staircase, Restroom, Parking		

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

AUTOMATIC TIME SWITCHES



AUTOMATIC TIME SWITCHES

Uses and Advantage of Panasonic Time Switch

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.



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.

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.

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

Lunchtime. 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.



Eliminating Electrical Waste 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.

Unique Features Designed to Meet Precise Needs

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.

Example of Use

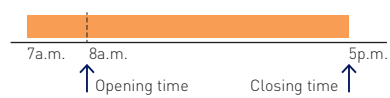
Example 1 Factory



Activation of plant facilities

Equipment such as injection machines are necessary to be warmed up before operations. It's possible to activate forming machine before the operations of factory with a time switch.

An example of time chart



Recommend Model



TB38809NE7P TB438NE7P

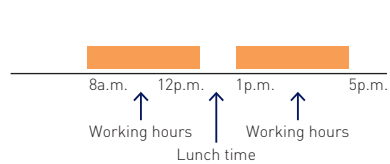
Example 2 Offices, Residences and Commercial Facilities



Control Light and Air Conditioner

Time Switch can be used to turn the light on and off automatically based on the office hours.

An example of time chart



Recommend Model



TB38809NE7P TB118NE7P

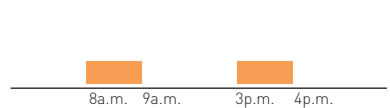
Example 3 Agriculture and Breeding



Control Light, Feeders and water at Poultry

Time Switch can be used to automatically control light in the farm to improve the egg production, also supply food and water at appropriate time each day.

An example of time chart



Recommend Model



TB388NE7P TB118NE7P

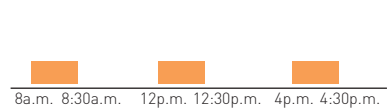
Example 4 Villa and House



Pool Pump (Water Purification)

Time Switch can be used to control the operation of purification pump for residents and for swimming pool.

An example of time chart



Recommend Model



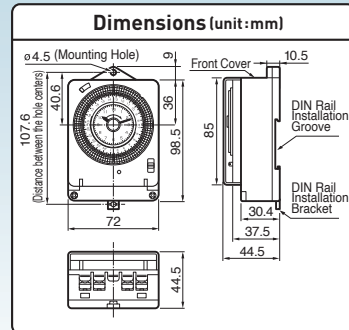
TB38809NE7P TB118NE7P

AUTOMATIC TIME SWITCHES

TB35N, TB36N, TB38N, TB39N



- Features**
- 24-hour 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

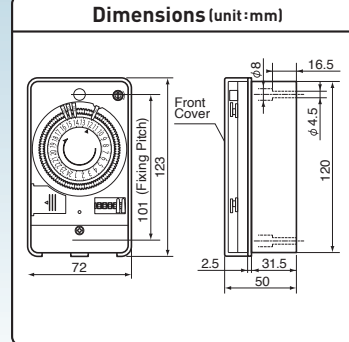


Applicable Installation	Indoor Use			
Type	Daily			
Series	TB35N series	TB36N series	TB38N series	TB39N series
Item No.	TB35809NE6P (220-240V AC 60Hz)	TB36809NE5P (220-240V AC 50Hz)	TB38809NE7P (220-240V AC 50-60Hz)	TB39809NE7P (220-240V AC 50-60Hz)
Drive Method	AC Motor		Quartz Motor	
Power Failure Backup Time	300 hours		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 Construction	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		
	Incandescent Lamp Load	250V AC 10A		
	Inductive Load(cos φ ≥ 0.6)	250V AC 12A		
	Motor Load(cos φ ≥ 0.6)	220V AC 1500W		
	Minimum Setting Time	15 minutes		
No. of On/Off Operation	96 operations			

TB11N, TB17N



- Features**
- 24-hour 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.

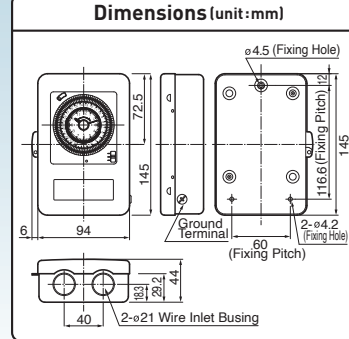


Applicable Installation Type	Indoor Use	
	Daily	
Series	TB17N series	TB11N series
Item No.	TB178NE6P (220-240V AC 60Hz)	TB118NE7P (220-240V AC 50-60Hz)
Drive Method	AC Motor	
Power Failure Backup Time	300 hours	
Time Precision	Same as AC frequency	
Time Precision	±15 sec/month(at 25°C)	
Circuit Configuration	Voltage Contact Output	
Switch Construction	Single Pole, Single Through (1a Contact)	
Load Capacity	Resistive Load	250V AC 15A
	Incandescent Lamp Load	250V AC 15A
	Inductive Load(cos φ ≥ 0.6)	250V AC 12A
	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



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

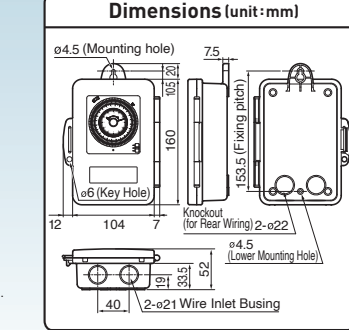


Applicable Installation Type	Indoor Use	
	Daily	
Series	TB35N series	TB38N series
Item No.	TB358NE6P (220-240V AC 60Hz)	TB388NE7P (220-240V AC 50-60Hz)
Drive Method	AC Motor	
Power Failure Backup Time	300 hours	
Time Precision	Same as AC frequency	
Time Precision	±15 sec/month(at 25°C)	
Circuit Configuration	Voltage Contact Output	
Switch Construction	Single Pole, Single Through (1a Contact)	
Load Capacity	Resistive Load	250V AC 20A
	Incandescent Lamp Load	250V AC 10A
	Inductive Load(cos φ ≥ 0.6)	250V AC 12A
	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



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



Applicable Installation Type	Outdoor & Indoor Use	
	Daily	
Series	TB43N Series	
Item No.	TB438NE7P (220-240V AC 50-60Hz)	
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 Construction	Single Pole, Single Through (1a Contact)	
Load Capacity	Resistive Load	250V AC 20A
	Incandescent Lamp Load	250V AC 10A
	Inductive Load(cos φ ≥ 0.6)	250V AC 12A
	Motor Load(cos φ ≥ 0.6)	220V AC 1500W
Minimum Setting Time	15 minutes	
No. of On/Off Operation	96 operations	

Safe and comfortable life
Delivered by Panasonic

MCBs, RCBOs, RCCBs, MCB-BOXes



Panasonic, with more than 100 years of expertise forged in the Electrical Construction Material field with its Wiring Devices series, has also been expanding Switchgear devices business throughout the world. Panasonic focuses 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 MCBs, to allow our worldwide customers to experience a new level of safety and comfort in your life.

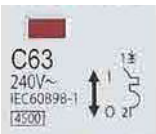


Adequate Line-Up

Rated breaking capacity (Icn): 4.5kA / 6kA / 10kA
Rated current (In): 6,8,10,13,16,20,25,32,40,50,63A
Thermo-magnetic release characteristic: B / C / D

Clear Indicator

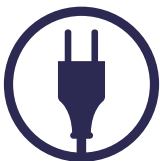
Current markings indicated by 2 colors (Green / Red)
Easy to know the status (ON / OFF)



On: Red



Off, Trip: Green



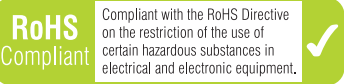
IEC60898-1
IEC61008-1
IEC61009-1

Compliant with IEC standards

Panasonic's products have been recognized and certified by worldwide famous organizations as the complied products with IEC(International Electrotechnical Commission) standards, the top reference for electrical and electronic safety standards.

Compliant with the RoHS Directive

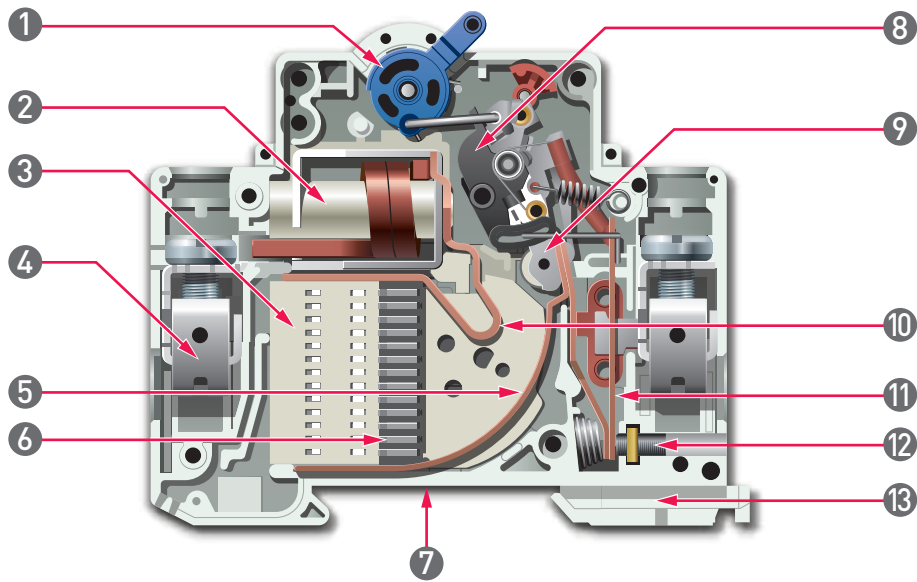
Panasonic's manufacturing processes are based on management standards for chemical substances by complying with the EU RoHS directive in order to provide all of our customers safer products with less impact on the environment.



THE TRIPPING MECHANISM OF MCBs is THERMAL MAGNETIC TYPE

Thermal operation - The thermal operation provides protection from moderate overloads. Under overload condition, a thermo-metallic element (bimetallic strip) deflects until it operates a latching mechanism allowing the main contacts to open.

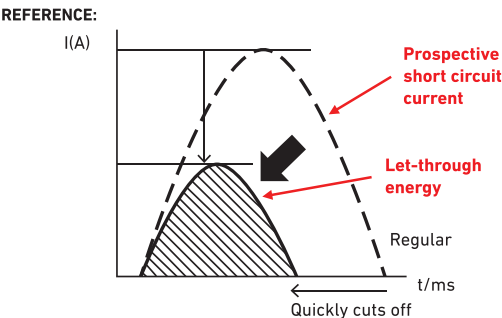
Magnetic operation - In magnetic operation, large overloads or short circuit current actuates a solenoid causing a plunger to strike the latching mechanism, rapidly opening the main contacts.



- | | | |
|----------------------|--------------------------|--------------------------------|
| 1 Operating Knob | 6 Arc Chute Plate | 11 Thermostatic Bi-metal Strip |
| 2 Magnetic Element | 7 Body or Housing of MCB | 12 Calibration Screw |
| 3 Arc Chute Assembly | 8 Operating Mechanism | 13 DIN Clip |
| 4 Terminal | 9 Moving Contact | |
| 5 Arc Runner | 10 Arc Horn | |

Comply with Class 3 (MCB 63AF)

Shortens the cutoff time during a short circuit and suppresses ignitions and explosions



*Circuit breakers of B-type and C-type up to and including 63A shall be classified into energy limiting classes in 1 or 3.

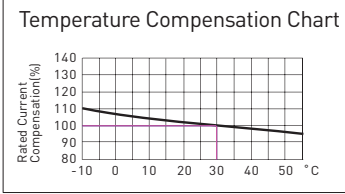
SPECIFICATIONS

Series	MCBs		
	BD-63AA		BD-125R
			
Reference Standards	IEC60898-1		IEC60947-2
Electrical properties			
Pole	1P, 2P, 3P, 4P		1P, 2P, 3P, 4P
Rated current (In)	6, 8, 10, 13, 16, 20, 25, 32, 40, 50, 63A		80,100,125A
Rated conditional residual short-circuit current (IΔc)	-		-
Rated voltage (Ue)	240V~(1P) / 415V~ (2, 3, 4P)		AC230 / 240V (1P), AC400 / 415V (2, 3, 4P)
Insulation voltage (Ui)	500V		500V
Rated frequency	50 / 60Hz		50 / 60Hz
Rated impulse withstand voltage(1.2 / 50) (Uimp)	4,000V		4,000V
Rated short-circuit capacity (Icn)	4.5kA	6kA, 10kA	10kA
Energy limiting class	-	class 3	-
Thermo-magnetic release characteristic	B, C, D		C, D
Mechanical properties			
Mechanical endurance	10,000 Cycles	20,000 Cycles	7,000 Cycles
Electrical endurance	4,000 Cycles		3,000 Cycles
Protection degree	IP20		IP20
Reference temperature for setting of thermal element	30°C		30°C
Storage temperature	-25°C~+70°C		-10°C~+60°C
Other properties			
Terminal connection type	Cable / Pin-type busbar		Cable / Pin-type busbar
Connections	1mm² to 25mm² for Cu conductors		25mm² to 50mm² for Cu conductors
Tightening torque	2Nm 22In-lb		3.5Nm
Status display	On: Red Off, Trip: Green		On: Red Off, Trip: Green

Series	RCBOs	RCCBs
	BDE-63AA (AC Type) BDF-63AA (A Type)	BDR-63AA (AC Type) BDG-63AA (A Type)
		
Reference Standards	IEC61009-1	IEC61008-1
Electrical properties		
Pole	1P+N, 3P+N	
Rated current (In)	6, 10, 16, 20, 25, 32, 40, 50, 63A	25, 40, 50, 63A
Rated conditional residual short-circuit current (IΔc)	30mA	
Rated voltage (Ue)	240V~ (1P+N) / 415V~ (3P+N)	
Insulation voltage (Ui)	500V	
Rated frequency	50 / 60Hz	
Rated impulse withstand voltage(1.2 / 50) (Uimp)	4,000V	
Rated short-circuit capacity (Icn)	6kA	-
Thermo-magnetic release characteristic	B, C, D	-
Mechanical properties		
Mechanical endurance	10,000 Cycles	4,000 Cycles
Electrical endurance	4,000 Cycles	2,000 Cycles
Protection degree	IP20	
Reference temperature for setting of thermal element	30 °C	-
Storage temperature	-25 °C~+70 °C	
Other properties		
Terminal connection type	Cable / Pin-type busbar	
Connections	1mm ² to 25mm ² for Cu conductors	
Tightening torque	2Nm 22In-lb	
Status display	On: Red Off, Trip: Green	

MCBs (IEC60898-1)
MINIATURE CIRCUIT BREAKERS

BD-63AA 4.5kA

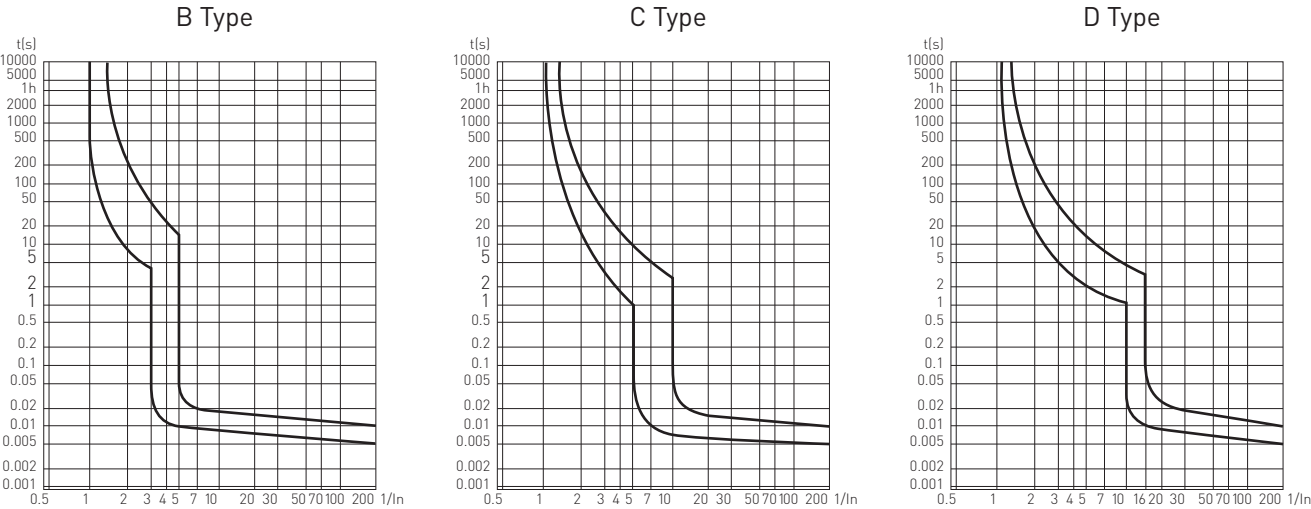


Rated short-circuit capacity (Icn)	4.5kA
Rated voltage (Ue)	240V~(1P) / 415V~(2,3,4P)
Mechanical endurance	10,000 Cycles
Electrical endurance	4,000 Cycles
Storage temperature	-25°C~+70°C
Terminal connection type	Cable / Pin-type busbar
Connections	1mm ² to 25mm ² for Cu conductors
Thermo-magnetic release characteristic	B,C,D

				
Rated current (In)	MCBs 4.5kA			
	1P1E	2P2E	3P3E	4P4E
6A	BBD1061□STB	BBD2062□STB	BBD3063□STB	BBD4064□STB
8A	BBD1081□STB	BBD2082□STB	BBD3083□STB	BBD4084□STB
10A	BBD1101□STB	BBD2102□STB	BBD3103□STB	BBD4104□STB
13A	BBD1131□STB	BBD2132□STB	BBD3133□STB	BBD4134□STB
16A	BBD1161□STB	BBD2162□STB	BBD3163□STB	BBD4164□STB
20A	BBD1201□STB	BBD2202□STB	BBD3203□STB	BBD4204□STB
25A	BBD1251□STB	BBD2252□STB	BBD3253□STB	BBD4254□STB
32A	BBD1321□STB	BBD2322□STB	BBD3323□STB	BBD4324□STB
40A	BBD1401□STB	BBD2402□STB	BBD3403□STB	BBD4404□STB
50A	BBD1501□STB	BBD2502□STB	BBD3503□STB	BBD4504□STB
63A	BBD1631□STB	BBD2632□STB	BBD3633□STB	BBD4634□STB

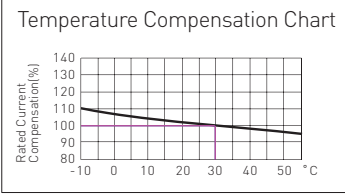
*□ Depending on Thermo-magnetic release characteristic B: B Curve, C: C Curve, D: D Curve

Characteristics Curves



MCBs (IEC60898-1)
MINIATURE CIRCUIT BREAKERS

BD-63AA 6/10kA

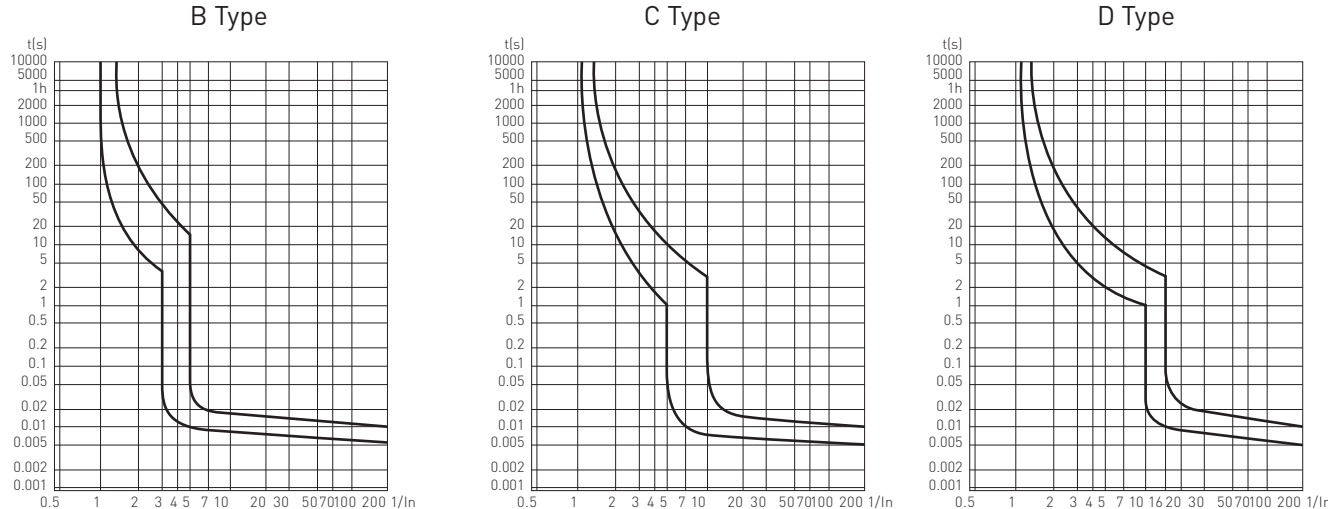


Rated short-circuit capacity (Icn)	6kA / 10kA
Rated voltage (Ue)	240V~(1P) / 415V~(2,3,4P)
Mechanical endurance	20,000 Cycles
Electrical endurance	4,000 Cycles
Storage temperature	-25°C~+70°C
Terminal connection type	Cable / Pin-type busbar
Connections	1mm ² to 25mm ² for Cu conductors
Thermo-magnetic release characteristic	B,C,D
Energy limiting class	Class3

								
Rated current (In)	MCBs 6kA				MCBs 10kA			
	1P1E	2P2E	3P3E	4P4E	1P1E	2P2E	3P3E	4P4E
6A	BBD1061□NTB	BBD2062□NTB	BBD3063□NTB	BBD4064□NTB	BBD1061□HTB	BBD2062□HTB	BBD3063□HTB	BBD4064□HTB
8A	BBD1081□NTB	BBD2082□NTB	BBD3083□NTB	BBD4084□NTB	BBD1081□HTB	BBD2082□HTB	BBD3083□HTB	BBD4084□HTB
10A	BBD1101□NTB	BBD2102□NTB	BBD3103□NTB	BBD4104□NTB	BBD1101□HTB	BBD2102□HTB	BBD3103□HTB	BBD4104□HTB
13A	BBD1131□NTB	BBD2132□NTB	BBD3133□NTB	BBD4134□NTB	BBD1131□HTB	BBD2132□HTB	BBD3133□HTB	BBD4134□HTB
16A	BBD1161□NTB	BBD2162□NTB	BBD3163□NTB	BBD4164□NTB	BBD1161□HTB	BBD2162□HTB	BBD3163□HTB	BBD4164□HTB
20A	BBD1201□NTB	BBD2202□NTB	BBD3203□NTB	BBD4204□NTB	BBD1201□HTB	BBD2202□HTB	BBD3203□HTB	BBD4204□HTB
25A	BBD1251□NTB	BBD2252□NTB	BBD3253□NTB	BBD4254□NTB	BBD1251□HTB	BBD2252□HTB	BBD3253□HTB	BBD4254□HTB
32A	BBD1321□NTB	BBD2322□NTB	BBD3323□NTB	BBD4324□NTB	BBD1321□HTB	BBD2322□HTB	BBD3323□HTB	BBD4324□HTB
40A	BBD1401□NTB	BBD2402□NTB	BBD3403□NTB	BBD4404□NTB	BBD1401□HTB	BBD2402□HTB	BBD3403□HTB	BBD4404□HTB
50A	BBD1501□NTB	BBD2502□NTB	BBD3503□NTB	BBD4504□NTB	BBD1501□HTB	BBD2502□HTB	BBD3503□HTB	BBD4504□HTB
63A	BBD1631□NTB	BBD2632□NTB	BBD3633□NTB	BBD4634□NTB	BBD1631□HTB	BBD2632□HTB	BBD3633□HTB	BBD4634□HTB

*□ Depending on Thermo-magnetic release characteristic B: B Curve, C: C Curve, D: D Curve

Characteristics Curves
6/10kA



MCBs
MINIATURE CIRCUIT BREAKERS

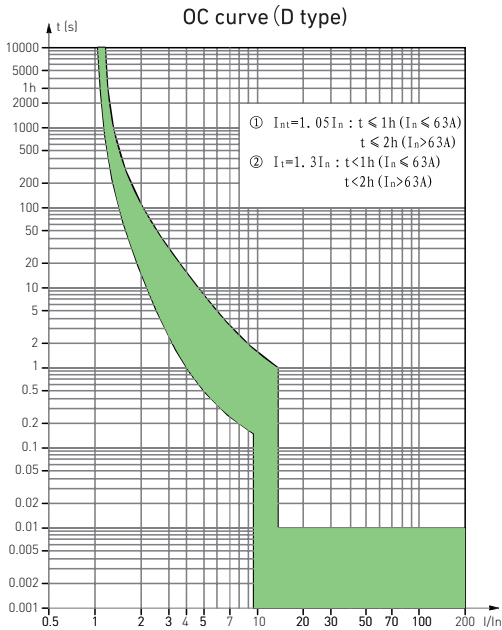
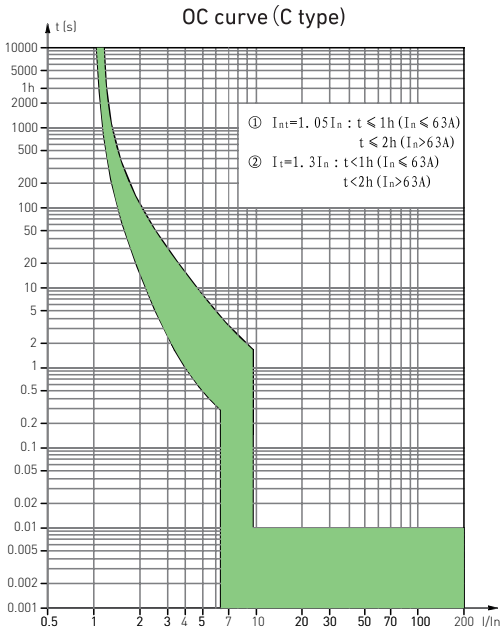
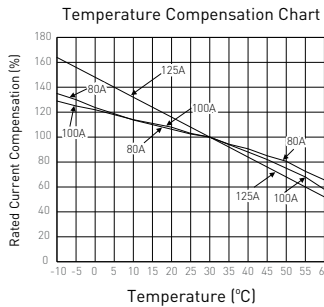
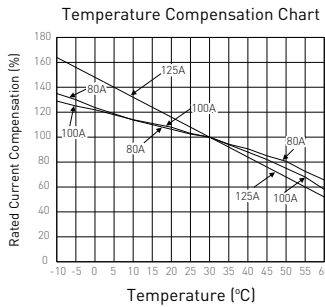
BD-125R 10kA

Rated short-circuit capacity	10kA
Rated voltage	AC230/240(1P), AC400/415V(2,3,4P)
Mechanical endurance	7,000 Cycles
Electrical endurance	3,000 Cycles
Storage temperature	-10~60°C
Terminal connection type	Cable / Pin-type busbar
Connections	25mm² to 50mm² for Cu conductors
Thermo-magnetic release characteristic	C,D



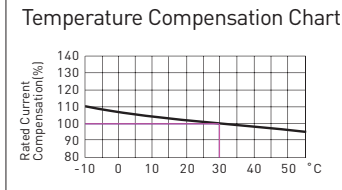
Rated current (In)	MCBs 10kA			
	1P1E	2P2E	3P3E	3P3E
80A	BBD10801□HB	BBD20802□HB	BBD30803□HB	BBD40804□HB
100A	BBD11001□HB	BBD21002□HB	BBD31003□HB	BBD41004□HB
125A	BBD11251□HB	BBD21252□HB	BBD31253□HB	BBD41254□HB

*□ Depending on Thermo-magnetic release characteristic C: Curve, D: D Curve



RCBOs (IEC61009-1)
RESIDUAL CURRENT CIRCUIT BREAKERS WITH OVERCURRENT PROTECTION

BDE-63AA (AC Type)
BDF-63AA (A Type)



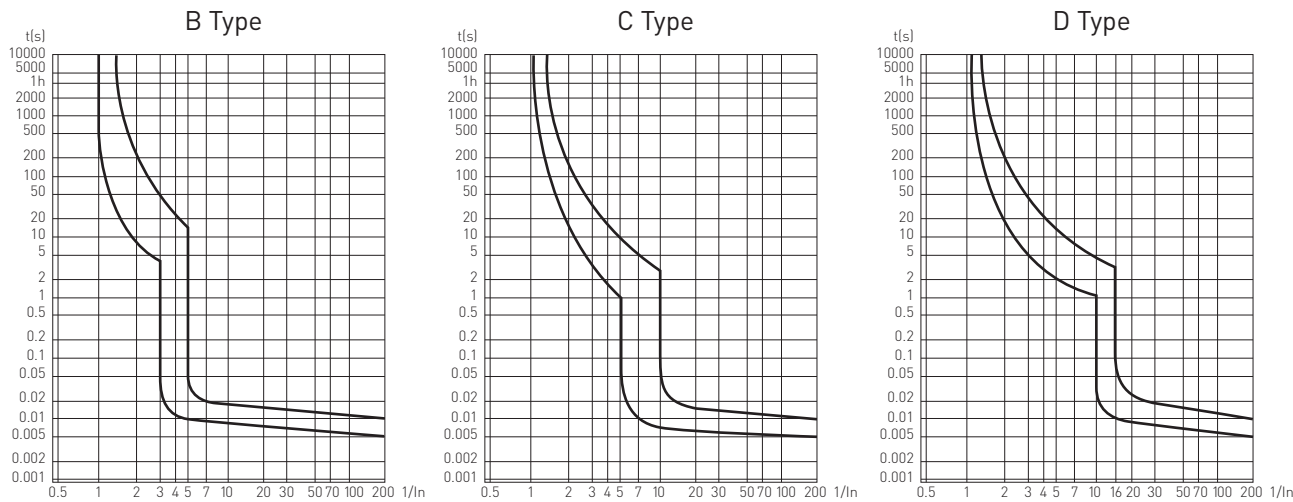
Rated short-circuit capacity (Icn)	6kA
Rated voltage (Ue)	240V~(1P+N) / 415V~(3P+N)
Rated conditional residual short-circuit current (IΔc)	30mA
Rated residual non-operating current (IΔno)	15mA
Break time under IΔn	≤0.1s
Mechanical endurance	10,000 Cycles
Electrical endurance	4,000 Cycles
Storage temperature	-25°C~+70°C
Terminal connection type	Cable / Pin-type busbar
Connections	1mm² to 25mm² for Cu conductors
Type	AC,A
Thermo-magnetic release characteristic	B,C,D



Tripping Characteristics	Rated current (In)	RCBOs 6kA			
		1P+N	3P+N	1P+N	3P+N
		AC Type		A Type	
B Type	6A	BBDE20631BNTB	BBDE40633BNTB	BBDF20631BNTB	BBDF40633BNTB
	10A	BBDE21031BNTB	BBDE41033BNTB	BBDF21031BNTB	BBDF41033BNTB
	16A	BBDE21631BNTB	BBDE41633BNTB	BBDF21631BNTB	BBDF41633BNTB
	20A	BBDE22031BNTB	BBDE42033BNTB	BBDF22031BNTB	BBDF42033BNTB
	25A	BBDE22531BNTB	BBDE42533BNTB	BBDF22531BNTB	BBDF42533BNTB
	32A	BBDE23231BNTB	BBDE43233BNTB	BBDF23231BNTB	BBDF43233BNTB
	40A	BBDE24031BNTB	BBDE44033BNTB	BBDF24031BNTB	BBDF44033BNTB
	50A	BBDE25031BNTB	BBDE45033BNTB	BBDF25031BNTB	BBDF45033BNTB
C Type	63A	BBDE26331BNTB	BBDE46333BNTB	BBDF26331BNTB	BBDF46333BNTB
	6A	BBDE20631CNTB	BBDE40633CNTB	BBDF20631CNTB	BBDF40633CNTB
	10A	BBDE21031CNTB	BBDE41033CNTB	BBDF21031CNTB	BBDF41033CNTB
	16A	BBDE21631CNTB	BBDE41633CNTB	BBDF21631CNTB	BBDF41633CNTB
	20A	BBDE22031CNTB	BBDE42033CNTB	BBDF22031CNTB	BBDF42033CNTB
	25A	BBDE22531CNTB	BBDE42533CNTB	BBDF22531CNTB	BBDF42533CNTB
	32A	BBDE23231CNTB	BBDE43233CNTB	BBDF23231CNTB	BBDF43233CNTB
	40A	BBDE24031CNTB	BBDE44033CNTB	BBDF24031CNTB	BBDF44033CNTB
D Type	50A	BBDE25031CNTB	BBDE45033CNTB	BBDF25031CNTB	BBDF45033CNTB
	63A	BBDE26331CNTB	BBDE46333CNTB	BBDF26331CNTB	BBDF46333CNTB
	6A	BBDE20631DNTB	BBDE40633DNTB	BBDF20631DNTB	BBDF40633DNTB
	10A	BBDE21031DNTB	BBDE41033DNTB	BBDF21031DNTB	BBDF41033DNTB
	16A	BBDE21631DNTB	BBDE41633DNTB	BBDF21631DNTB	BBDF41633DNTB
	20A	BBDE22031DNTB	BBDE42033DNTB	BBDF22031DNTB	BBDF42033DNTB
	25A	BBDE22531DNTB	BBDE42533DNTB	BBDF22531DNTB	BBDF42533DNTB
	32A	BBDE23231DNTB	BBDE43233DNTB	BBDF23231DNTB	BBDF43233DNTB
	40A	BBDE24031DNTB	BBDE44033DNTB	BBDF24031DNTB	BBDF44033DNTB
	50A	BBDE25031DNTB	BBDE45033DNTB	BBDF25031DNTB	BBDF45033DNTB
	63A	BBDE26331DNTB	BBDE46333DNTB	BBDF26331DNTB	BBDF46333DNTB

RCBOs(IEC61009-1)
RESIDUAL CURRENT CIRCUIT BREAKERS WITH OVERCURRENT PROTECTION

Characteristics Curves



RCCBs (IEC61008-1)
RESIDUAL CURRENT CIRCUIT BREAKERS

BDR-63AA (AC Type)
BDG-63AA (A Type)

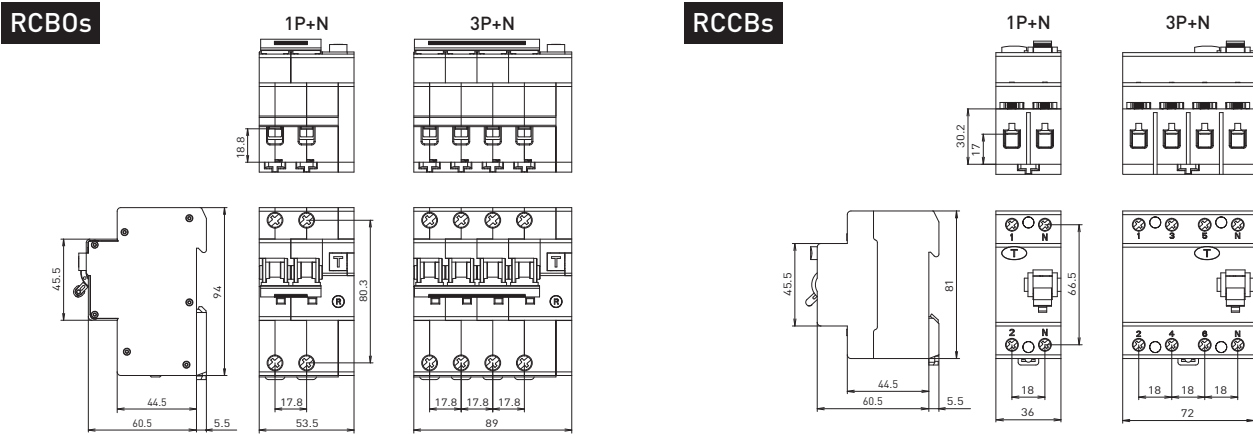
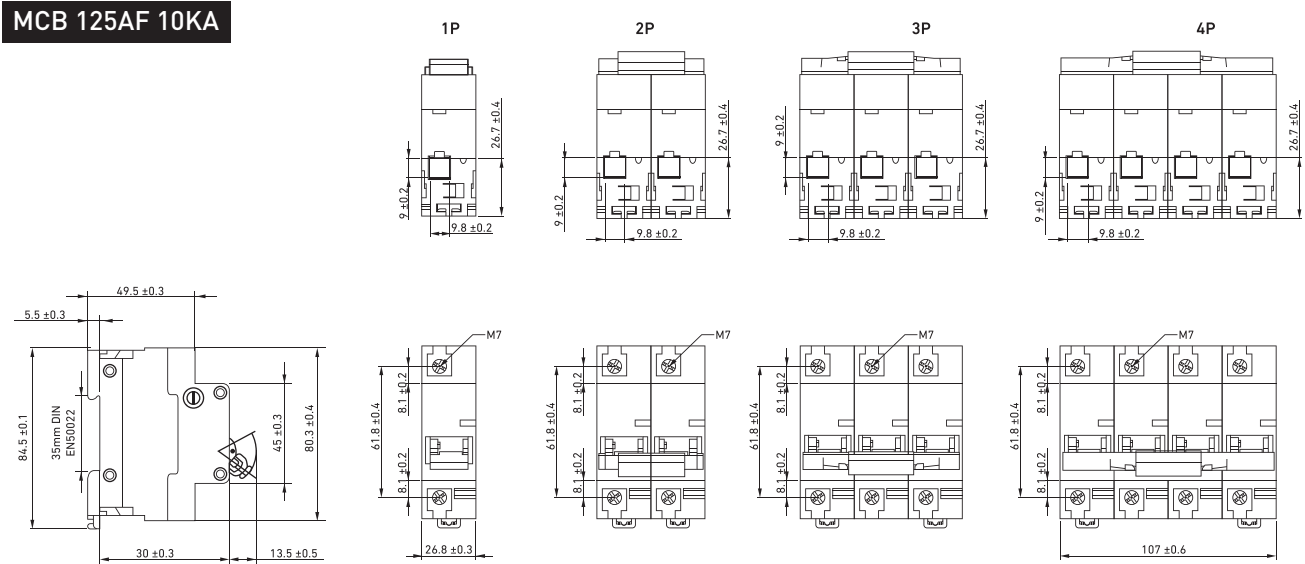
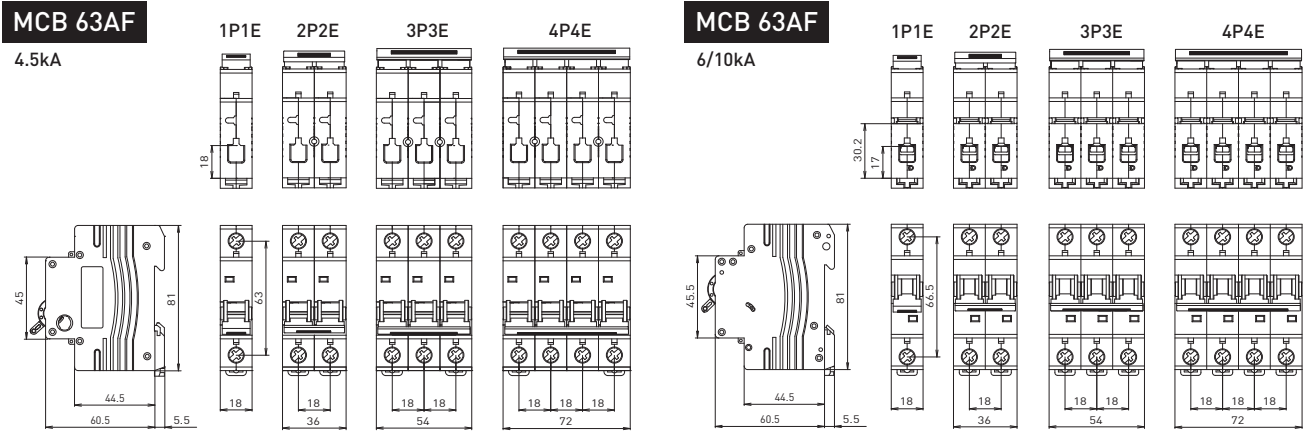
Rated voltage (Ue)	240V~(1P+N) / 415V~(3P+N)
Rated conditional residual short-circuit current (IΔc)	30mA
Rated residual non-operating current (IΔno)	15mA
Break time under IΔn	≤0.1s
Mechanical endurance	4,000 Cycles
Electrical endurance	2,000 Cycles
Storage temperature	-25°C~+70°C
Terminal connection type	Cable / Pin-type busbar
Connections	1mm² to 25mm² for Cu conductors
Type	AC,A

Rated current (In)	RCCBs			
	1P+N	3P+N	1P+N	3P+N
	AC Type		A Type	
25A	BBDR22530TB	BBDR42530TB	BBDG22530TB	BBDG42530TB
40A	BBDR24030TB	BBDR44030TB	BBDG24030TB	BBDG44030TB
50A	BBDR25030TB	BBDR45030TB	BBDG25030TB	BBDG45030TB
63A	BBDR26330TB	BBDR46330TB	BBDG26330TB	BBDG46330TB

ITEM CODIFICATION

			No. of Poles	Rated Current	IΔc	No. of Elements	Characteristics Curve	Icn		
MCBs	6~63A	BBD	1: 1P 2: 2P 3: 3P 4: 4P	06: 6A 08: 8A 10: 10A 13: 13A 16: 16A 20: 20A 25: 25A 32: 32A 40: 40A 50: 50A 63: 63A	—	1: 1E 2: 2E 3: 3E 4: 4E	B: B Curve C: C Curve D: D Curve	S: 4.5kA N: 6kA H: 10kA	T	B
RCBOs	AC type	BBDE	2: 1P+N 4: 3P+N	25: 25A 40: 40A 50: 50A 63: 63A	3: 30mA	1: 1E 3: 3E	B: B Curve C: C Curve D: D Curve	N: 6kA		
RCCBs	AC type	BBDR				0: 0E	—	—		
	A type	BBDG								
MCBs	80~125A	BBD	1: 1P 2: 2P 3: 3P 4: 4P	80: 80A 100: 100A 125: 125A	—	1: 1E 2: 2E 3: 3E 4: 4E	C: C Curve D: D Curve	H: 10kA	—	B

Overall and Installation Dimension (mm)



Precautions for installation and use

- Circuit Breakers conform to the IEC60898-1(or IEC61008-1 or IEC61009-1), which is intended for use in homes and similar facilities. Do not install for other use.
- The personnel for installing and maintaining Circuit Breakers shall be qualified electric worker.
- Use Circuit Breakers under environment and conditions defined in IEC standard.

[Category of warranty]
If the products become defective which are responsible to manufacturer, replacements of the defective products will be done. However, in case of the following cases, the warranty is invalid.

(1) Applied to the safety equipment or control system used for the area listed below:
☐ Railway, aviation or medical
☐ There is the possibility to harm human/animal life, to damage human body or to influence personal property.
As these products are designed to be used only for electrical equipment, the customer is requested to consider safer design, like redundant design, fire-spread or anti-malfunction design when the customer intend to use the products under the area listed above.

(2) Improper use or incorrect installation/operation by the customer which are not complied to the specification of the products.

(3) Defects caused by any reasons originating from other products or matters.

(4) Defects caused by unauthorized modifications or repairs by the customer.

(5) Other defects caused by natural disaster.

This warranty compensates only replacement of the products and excludes the induced damage by defect of the products.

MCB BOXes

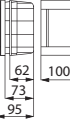
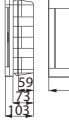
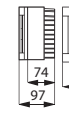
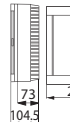
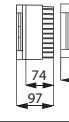
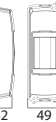
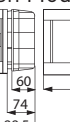
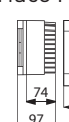
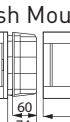
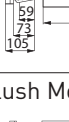
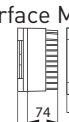
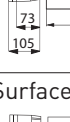
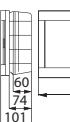
■ Features

- Clear cover that lets you check the MCB status easily
- Compliant with IP performance below
IP40:2-36 Modules (Flush/Surface Mounted)
IP20:1,1-2,3-4 Modules (Surface Mounted)
- Heat resistance up to 650°C
- Includes ground terminal with insulating cover
- Water level gauge that supports horizontal construction (16-36 Modules)
- Locked cover system



				
No. of Row	No. of Modules per Row	Capacity in 18mm Modules in Row	Flush Mounted	Surface Mounted
1	1	1	-	BQDT20101-PH
1	1-2	1-2	-	BQDT20201-PH
1	2	2	BQDT10211-PH	BQDT20211-PH
1	3-4	3-4	-	BQDT20401-PH
1	4	4	BQDT10411-PH	BQDT20411-PH
1	6	6	BQDT10611-PH	BQDT20611-PH
1	8	8	BQDT10811-PH	BQDT20811-PH
1	12	12	BQDT11211-PH	BQDT21211-PH
2	8	16	BQDT11611-PH	BQDT21611-PH
1	18	18	BQDT11811-PH	BQDT21811-PH
2	12	24	BQDT12411-PH	BQDT22411-PH
3	12	36	BQDT13611-PH	BQDT23611-PH

Flush Mounted		Surface Mounted		
2-Flush Mounted 	16-Flush Mounted 	2-Surface Mounted 	16-Surface Mounted 	1-Surface Mounted 
4-Flush Mounted 	18-Flush Mounted 	4-Surface Mounted 	18-Surface Mounted 	1-2-Surface Mounted 
6-Flush Mounted 	24-Flush Mounted 	6-Surface Mounted 	24-Surface Mounted 	3-4-Surface Mounted 
8-Flush Mounted 	36-Flush Mounted 	8-Surface Mounted 	36-Surface Mounted 	
12-Flush Mounted 		12-Surface Mounted 		

Flush Mounted		Surface Mounted		
2-Flush Mounted 	16-Flush Mounted 	2-Surface Mounted 	16-Surface Mounted 	1-Surface Mounted 
4-Flush Mounted 	18-Flush Mounted 	4-Surface Mounted 	18-Surface Mounted 	1-2-Surface Mounted 
6-Flush Mounted 	24-Flush Mounted 	6-Surface Mounted 	24-Surface Mounted 	3-4-Surface Mounted 
8-Flush Mounted 	36-Flush Mounted 	8-Surface Mounted 	36-Surface Mounted 	
12-Flush Mounted 		12-Surface Mounted 		

Flexible wiring systems for stationary loads. Select from four types according to the capacity you desire, from single-phase 20A to three-phase 100A.

FactoryLine

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.

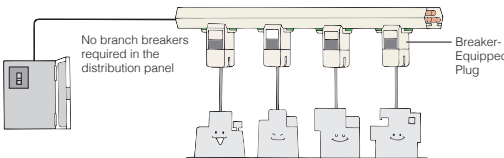


Basic advantages

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.

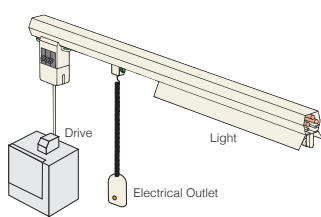


Basic advantages

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

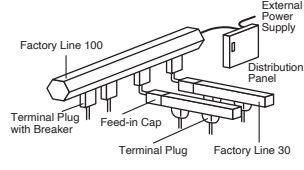
Four types of main duct are available — 100A, 60A, 30A and 20A.
You can combine them to create your own flexible wiring systems for factories.

Multi-purpose Factory Flexible wiring System — it provides three-phase & single-phase power supplies at a time.

Factory Line 100



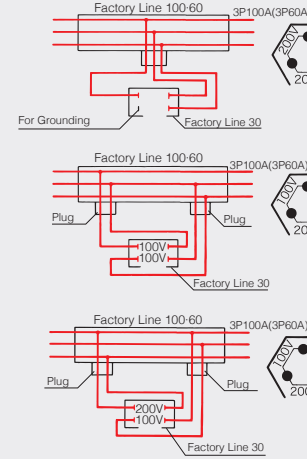
- Three-phase power supply (100A max.)
 - Single-phase power supply (20A max.) with breaker-equipped plugs
- Can be used simultaneously



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 outlets, and lighting.

Branching from the 3 wires of the upper level to Factory Line 30. [The rating in () is of Factory Line 60.]

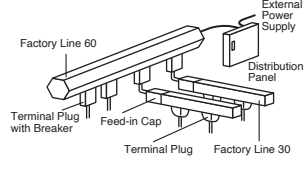


Multi-purpose Factory Flexible wiring System — it provides three-phase & single-phase power supplies at a time.

Factory Line 60

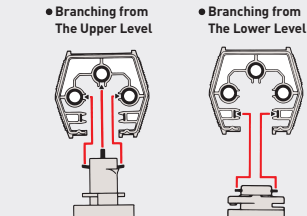


- Three-phase power supply (60A max.)
 - Single-phase power supply (20A max.) with breaker-equipped plug
- Can be used simultaneously



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 outlets, and lighting.



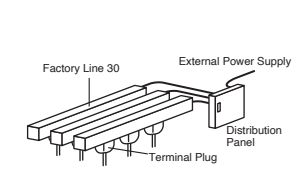
The plugs of Factory Line 30, and 60 & 100 are NOT exchangeable. — they have different ground connection.

Four wire Factory Flexible wiring System — it provides one or the other: three-phase circuit, or two single-phase circuits.

Factory Line 30

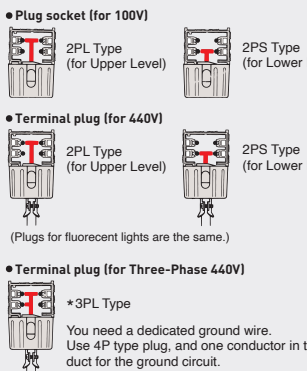


- Three-phase power supply, one circuit (30A max.)
- Single-phase power supply, two circuits (30A max.)



4P 30A 440V, Grounded

Standard Power Supply Take-Off

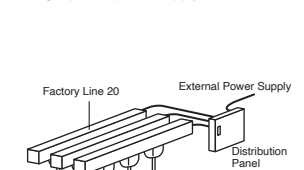


Factory Flexible wiring System for small-scale branching — it provides one single-phase power supply circuit.

Factory Line 20



- Single-phase power supply (20A max.)



2P 20A 250V, with Ground

FACTORY LINE SYSTEMS

Factory Line 100/60

	Cat. No.	Length & (mm)	Weight (kg)	Rating
Factory Line 100 Main Unit (Cream-Gray Finish: Munsell SY7.2/1.4)	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 Main Unit (Cream-Gray Finish: Munsell SY7.2/1.4)	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 fixture)	DH2452K1	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.

Factory Line 30

	Cat. No.	Length & (mm)	Weight (kg)	Rating
Factory Line 30 Main Unit (Cream-Gray Finish: Munsell SY7.2/1.4)	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)	DGHU2781	2PS	0.08	2P 15A 440V with Ground
	DGHU2782	2PL		3P 15A 440V with Ground
	DGHU2783	3P		4P 15A 440V with Ground
	DGHU2784	4P		
*1 Plug Socket (Cream-Gray Finish)	DH2773	S	0.05	Ground 2P 15A 125V
	DH2774	L		
*2 Locking Plug Socket (Cream-Gray Finish)	DH2791	S	0.05	Ground 2P 15A 125V Locking
	DH2792	L		
*2 Reel-Type Plug Socket (White Finish)	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

	Cat. No.	Length & (mm)	Weight (kg)	Rating
Factory Line 20 Main Unit (Cream-Gray Finish: Munsell SY7.2/1.4)	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 (with Ground) (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 with Ground
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	—



Factories

You can get power from optimal location quickly even after layout change.

Factory Line 100



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



Schools

One single duct can supply power for two circuits at a time — it allows you to connect more devices, and keep the floor clean & tidy.

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/lifesolutions/ecm/ffs/products/factorylinesystem/index.html>

● Specification drawings, operation and installation manuals can also be downloaded.

The smartest way
to fire proof your business

FIRE ALARM SYSTEMS



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.



Convenience

Multi master configuration

Control panels can be connected up to 30 panels.



Efficiency

Auto-addressing

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



Tested not once but twice

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



WEB server integration

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



EBL App

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



Product line-up

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

EBL512 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

FIRE ALARM SYSTEMS

System Monitoring



Display unit



Gateway



Software Products



Remote Monitoring

Detectors



Smoke Heat
Smoke/Heat detector



Multi with Isolator CO multi
Multi Detector



Intrinsically Safe Detector

Special Detectors



Aspirating Detector



Beam Detector



Flame 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



Loop Tester



Address Setting Tool



EBLWin Key



TLON Manager



Provides prompt notification
in the event of a fire.

SLIM SMOKE & VOICE ALARM WITH LONG-LIFE-BATTERY



Clear and easy-to-understand "alarm voice" and a long-life battery of up to 10 years

Approx. 87 dB 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 0.3 kHz to 4.0 kHz is adopted for
easy catching even by old people and children.
The battery lasts up to 10 years.



Immediately understands what happened.

When there is a fire

Whiz,whiz,
Fire,fire

It's serious.

When failures occur

Blip,Blip,Blip,
"Problem,Please
check."

Please replace
the unit.

When testing

"Blip,
Operating
normally"

Fine

**When battery is
running out**

Blip,
"Low Battery"

Please replace
the unit.

SH28455911PH

Smoke alarm for residential use

Model No.		SH28455911
Power Supply		Dedicated Lithium Battery (3V)x1
Battery Life		Approximately 10 years(-)
Detecting Method		Smoke Type (Photoelectric Method)
Class		Type2
Alarm Sound/ Voice Alarm	Fire	Whiz, whiz, fire, fire!
	Low Battery	"Blip, Low Battery!" × 3 times. "Blip, approx. every 40 seconds after that."
	Trouble	"Blip, blip, blip, Problem, Please check" × 3 times. "Blip, blip, blip," approx. every 40 seconds after that."
Alarm Volume		84 dB or more at 1 m distance from equipment
Dimension		Approx. Ø100 mm × 44 mm (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.			
Function	Mode	Voice Alarm	Indication
	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

MEMO

Smart choices for energy saving

LIGHTING SOLUTIONS



LED Lamp

	Model No.	Power Consumption(W)	Fixture Luminous Flux (lm)	lm/w	Color Temperature
	LDACL03WG1A7	3	280	93	4000K
	LDACL03HG1A7	3	280	93	6500K
	LDACL05WG1A7	5	470	94	4000K
	LDACL05HG1A7	5	470	94	6500K
	LDACL07WG1A7	7	640	91	4000K
	LDACL07HG1A7	7	640	91	6500K
	LDACL09WG1A7	9	806	90	4000K
	LDACL09HG1A7	9	806	90	6500K
	LDACL11WG1A7	11	1055	96	4000K
	LDACL11HG1A7	11	1055	96	6500K
	LDACL13WG1A7	13	1521	117	4000K
	LDACL13HG1A7	13	1521	117	6500K
	LDACL15WG1A7	15	1650	110	4000K
	LDACL15HG1A7	15	1650	110	6500K

Compact Fluorescent Lamp (U Shape)

	Model No.	Power Consumption(W)	Fixture Luminous Flux (lm)	lm/w	Color Temperature
	EFU5E672V	5	235	47	6500K Cool Daylight
	EFUHV8D65A	8	430	54	6500K Cool Daylight
	EFUHV11D65A	11	620	56	6500K Cool Daylight
	EFUHV14D65A	14	810	58	6500K Cool Daylight
	EFU11E652V	11	595	54	6500K Cool Daylight
	EFU14E652V	14	760	54	6500K Cool Daylight
	EFUHV18D65A3	18	1100	61	6500K Cool Daylight
	EFUHV23D65A3	23	1380	60	6500K Cool Daylight

Emergency Light

	Model No.	Power Consumption(W)	Fixture Luminous Flux (lm)	Battery Lamp	Color Temperature
	LDR400N	6W x 2	400 x 2	12V~ 7.2Ah	5000K
	LDS300D2N	3.2W x 2	300 x 2	6V~ 4.5Ah	6500K

LED Downlight DN 2G Series (Burning hours: 20,000hrs)

	Power Consumption	6W	9W	9W	12W	12W
	CRI 80	3000K	NNV70030WE1A 480 lm Cutout: ø90	NNV70031WE1A 720 lm Cutout: ø90	NNV70036WE1A 720 lm Cutout: ø110	NNV70032WE1A 960 lm Cutout: ø110
		4000K	NNV70040WE1A 480 lm Cutout: ø90	NNV70041WE1A 720 lm Cutout: ø90	NNV70046WE1A 720 lm Cutout: ø110	NNV70042WE1A 960 lm Cutout: ø110
		6500K	NNV70060WE1A 480 lm Cutout: ø90	NNV70061WE1A 720 lm Cutout: ø90	NNV70066WE1A 720 lm Cutout: ø110	NNV70062WE1A 960 lm Cutout: ø110
	Power Consumption	15W	15W	18W	18W	24W
	CRI 80	3000K	NNV70033WE1A 1275 lm Cutout: ø125	NNV70038WE1A 1275 lm Cutout: ø150	NNV70034WE1A 1530 lm Cutout: ø150	NNV70039WE1A 1530 lm Cutout: ø175
		4000K	NNV70043WE1A 1275 lm Cutout: ø125	NNV70048WE1A 1275 lm Cutout: ø150	NNV70044WE1A 1530 lm Cutout: ø150	NNV70049WE1A 1530 lm Cutout: ø175
		6500K	NNV70063WE1A 1275 lm Cutout: ø125	NNV70068WE1A 1275 lm Cutout: ø150	NNV70064WE1A 1530 lm Cutout: ø150	NNV70069WE1A 1530 lm Cutout: ø175

Surface Mounted Frame for LED Downlight DN 2G Series

	Cutout ø90	Cutout ø110	Cutout ø125	Cutout ø150	Cutout ø175
	NNV90000WM1A	NNV90001WM1A	NNV90002WM1A	NNV90003WM1A	NNV90004WM1A

LED Downlight SP Series (Burning hours: 30,000hrs)

	Power Consumption	6W	9W	12W	15W	18W	24W
	CRI 80	3000K	NNV71000WE1A 600 lm - 100 lm/W	NNV71003WE1A 900 lm - 100 lm/W	NNV71006WE1A 1200 lm - 100 lm/W	NNV71009WE1A 1500 lm - 100 lm/W	NNV71012WE1A 1800 lm - 100 lm/W
		4000K	NNV71001WE1A 600 lm - 100 lm/W	NNV71004WE1A 900 lm - 100 lm/W	NNV71007WE1A 1200 lm - 100 lm/W	NNV71010WE1A 1500 lm - 100 lm/W	NNV71013WE1A 1800 lm - 100 lm/W
		6500K	NNV71002WE1A 600 lm - 100 lm/W	NNV71005WE1A 900 lm - 100 lm/W	NNV71008WE1A 1200 lm - 100 lm/W	NNV71011WE1A 1500 lm - 100 lm/W	NNV71014WE1A 1800 lm - 100 lm/W

LED Downlight DN Series (Burning hours: 15,000hrs) *While Stocks Last

	Power Consumption	3W	6W	9W	12W	15W	18W
	CRI 80	3000K	NNNC7581188 195 lm • 65.0 lm/W	NNNC7581388 450 lm • 75.0 lm/W	NNNC7581488 675 lm • 75.0 lm/W	NNNC7581588 900 lm • 75.0 lm/W	NNNC7581888 1125 lm • 75.0 lm/W
		4000K	NNNC7586188 195 lm • 65.0 lm/W	NNNC7586388 450 lm • 75.0 lm/W	NNNC7586488 675 lm • 75.0 lm/W	NNNC7586588 900 lm • 75.0 lm/W	NNNC7586888 1125 lm • 75.0 lm/W
		6500K	NNNC7596188 195 lm • 65.0 lm/W	NNNC7596388 450 lm • 75.0 lm/W	NNNC7596488 675 lm • 75.0 lm/W	NNNC7596588 900 lm • 75.0 lm/W	NNNC7596888 1125 lm • 75.0 lm/W

LED Downlight DN 2G Series IP44 Type (Burning hours: 20,000hrs)

	NEW	Power Consumption	6W	9W	12W
	CRI 80	 3000K	NNV70026WE1A 480lm • 80 lm/W Cutout: ø90	NNV70027WE1A 720lm • 80 lm/W Cutout: ø90	NNV70028WE1A 960lm • 80 lm/W Cutout: ø110
		 4000K	NNV70086WE1A 480lm • 80 lm/W Cutout: ø90	NNV70087WE1A 720lm • 80 lm/W Cutout: ø90	NNV70088WE1A 960lm • 80 lm/W Cutout: ø110
		 6500K	NNV70076WE1A 480lm • 80 lm/W Cutout: ø90	NNV70077WE1A 720lm • 80 lm/W Cutout: ø90	NNV70078WE1A 960lm • 80 lm/W Cutout: ø110

LIGHTING SOLUTIONS

LED Downlight DN Series IP44 Type (Burning hours: 15,000hrs) *While Stocks Last

	Power Consumption	6W	9W	12W	
	CRI 80	 3000K	NNNC7642088 450 lm • 75.0 lm/W	NNNC7642188 675 lm • 75.0 lm/W	NNNC7642288 900 lm • 75.0 lm/W
		 4000K	NNNC7647088 450 lm • 75.0 lm/W	NNNC7647188 675 lm • 75.0 lm/W	NNNC7647288 900 lm • 75.0 lm/W
		 6500K	NNNC7643088 450 lm • 75.0 lm/W	NNNC7643188 675 lm • 75.0 lm/W	NNNC7643288 900 lm • 75.0 lm/W

LED Downlight DN 2G Series CCT Type (Burning hours: 20,000hrs)

	Power Consumption	9W	12W	15W
	 3000K	NNV70090WE1A 675 lm · 75 lm/W Cutout: ø110	NNV70091WE1A 900 lm · 75 lm/W Cutout: ø125	NNV70092WE1A 1200 lm · 80 lm/W Cutout: ø150
	CRI 80  4000K			
	 6500K			

*Color temperature is changed 6500K > 3000K > 4000K

LED Slim Panel Light (Burning hours: 20,000hrs)

	NEW		Power Consumption	6W	9W	12W	15W	18W
	CRI 80	 3000K	NNNC7650088 450 lm • 75.0 lm/W	NNNC7650188 675 lm • 75.0 lm/W	NNNC7650288 900 lm • 75.0 lm/W	NNNC7650388 1200 lm • 80.0 lm/W	NNNC7650488 1440 lm • 80.0 lm/W	
		 4000K	NNNC7655088 450 lm • 75.0 lm/W	NNNC7655188 675 lm • 75.0 lm/W	NNNC7655288 900 lm • 75.0 lm/W	NNNC7655388 1200 lm • 80.0 lm/W	NNNC7655488 1440 lm • 80.0 lm/W	
		 6500K	NNNC7651088 450 lm • 75.0 lm/W	NNNC7651188 675 lm • 75.0 lm/W	NNNC7651288 900 lm • 75.0 lm/W	NNNC7651388 1200 lm • 80.0 lm/W	NNNC7651488 1440 lm • 80.0 lm/W	

LED Rimless Downlight (Burning hours: 20,000hrs)

	Power Consumption	ROUND		SQUARE		
		9W	12W	9W	12W	
	CRI 80	 3000K	NNNC7620088 720 lm • 80 lm/W	NNNC7620188 960 lm • 80 lm/W	NNNC7620388 720 lm • 80 lm/W	NNNC7620488 960 lm • 80 lm/W
		 4000K	NNNC7625088 720 lm • 80 lm/W	NNNC7625188 960 lm • 80 lm/W	NNNC7625388 720 lm • 80 lm/W	NNNC7625488 960 lm • 80 lm/W
		 6500K	NNNC7621088 720 lm • 80 lm/W	NNNC7621188 960 lm • 80 lm/W	NNNC7621388 720 lm • 80 lm/W	NNNC7621488 960 lm • 80 lm/W

LED Adjustable Downlight (Round) (Burning hours: 15,000hrs)

	Power Consumption	5W	7W	12W
	 3000K	NNNC7630188 400 lm • 80 lm/W • 38°	NNNC7630288 560 lm • 80 lm/W • 38°	NNNC7630388 720 lm • 80 lm/W • 40°
		NNNC7624088 400 lm • 80 lm/W • 60°	NNNC7624188 560 lm • 80 lm/W • 60°	
	CRI 80  4000K	NNNC7631188 400 lm • 80 lm/W • 38°	NNNC7631288 560 lm • 80 lm/W • 38°	NNNC7635388 720 lm • 80 lm/W • 40°
		NNNC7629088 400 lm • 80 lm/W • 60°	NNNC7629188 560 lm • 80 lm/W • 60°	
	 6500K	NNNC7635188 400 lm • 80 lm/W • 38°	NNNC7635288 560 lm • 80 lm/W • 38°	NNNC76311388 720 lm • 80 lm/W • 40°
		NNNC7628088 400 lm • 80 lm/W • 60°	NNNC7628188 560 lm • 80 lm/W • 60°	

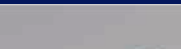
LED Adjustable Downlight (Square) (Burning hours: 15,000hrs)

 NEW	Power Consumption	5W	7W
	CRI 80	 3000K NNNC7630688 400 lm • 80 lm/W • 38°	NNNC7630788 560 lm • 80 lm/W • 38°
		NNNC7624588 400 lm • 80 lm/W • 60°	NNNC7624688 560 lm • 80 lm/W • 60°
		NNNC7631688 400 lm • 80 lm/W • 38°	NNNC7631788 560 lm • 80 lm/W • 38°
		NNNC7629588 400 lm • 80 lm/W • 60°	NNNC7629688 560 lm • 80 lm/W • 60°
		 6500K NNNC7635688 400 lm • 80 lm/W • 38°	NNNC7635788 560 lm • 80 lm/W • 38°
		NNNC7628588 400 lm • 80 lm/W • 60°	NNNC7628688 560 lm • 80 lm/W • 60°

SP Big Panel 2G (Burning hours: 30,000hrs)

	NEW	Power Consumption	40W	
		Shape	2 x 2	1 x 4
	CRI 80	 3000K	NFV60140WE1T 4400 lm - 110 lm/W	NFV60144WE1T 4400 lm - 110 lm/W
		 4000K	NFV60141WE1T 4400 lm - 110 lm/W	NFV60145WE1T 4400 lm - 110 lm/W
		 6500K	NFV60143WE1T 4400 lm - 110 lm/W	NFV60147WE1T 4400 lm - 110 lm/W

Big Panel Light (Burning hours: 30,000hrs) *While Stocks Last

 	Power	32W	
	Size	2 x 2	1 x 4
	CRI 80	 3000K NNFC7014788 3200 lm • 100.0 lm/W	NNFC7014588 3200 lm • 100.0 lm/W
		 4000K NNFC7011788 3200 lm • 100.0 lm/W	NNFC7011588 3200 lm • 100.0 lm/W
		 5000K NNFC7016788 3200 lm • 100.0 lm/W	NNFC7016588 3200 lm • 100.0 lm/W
		 6500K NNFC7019788 3200 lm • 100.0 lm/W	NNFC7019588 3200 lm • 100.0 lm/W

LED Simple Ceiling Light 2G (Burning hours: 25,000hrs)

	Power Consumption	12W	18W	24W
	CRI 80	4000K	HHGXQ243488 900 lm - 75 lm/W	HHGXQ243688 1800 lm - 75 lm/W
		6500K	HHGXQ143588 900 lm - 75 lm/W	HHGXQ243788 1800 lm - 75 lm/W

LIGHTING SOLUTIONS

LED Batten SP Series (Burning hours: 25,000hrs)

	Power Consumption	20W	40W
	 3000K	NFV50101WE1A 2000 lm-100 lm/W	NFV50104WE1A 4000 lm-100 lm/W
	CRI 80  4000K	NFV50102WE1A 2000 lm-100 lm/W	NFV50105WE1A 4000 lm-100 lm/W
	 6500K	NFV50103WE1A 2000 lm-100 lm/W	NFV50106WE1A 4000 lm-100 lm/W

LED T8 (G13) Set (Burning hours: 15,000hrs)

	Type	10W	20W
	 3000K	BPT100S830ST 1000 lm-100 lm/W	BPT200S830ST 1000 lm-100 lm/W
	CRI 80  4000K	BPT100S865ST 1000 lm-100 lm/W	BPT200S865ST 1000 lm-100 lm/W
	 6500K		

LED Strip Light IP65 (Burning hours: 30,000hrs)

	Power Consumption	8W/m	
	 3000K	NFV80003CE1A 620 lm/W	
	CRI 80  4000K	NFV80004CE1A 620 lm/W	
	 6500K	NFV80006CE1A 620 lm/W	

LED Mini Flood Light 2G (Burning hours: 25,000hrs)

	Power Consumption	10W	20W	30W	50W
	 3000K	NYV00001BE1AK 900 lm · 90 lm/W	NYV00002BE1AK 1800 lm · 90 lm/W	NYV00003BE1AK 2700 lm · 90 lm/W	NYV00004BE1AK 4500 lm · 90 lm/W
	CRI 80  4000K	NYV00011BE1AK 900 lm · 90 lm/W	NYV00012BE1AK 1800 lm · 90 lm/W	NYV00013BE1AK 2700 lm · 90 lm/W	NYV00014BE1AK 4500 lm · 90 lm/W
	 6500K	NYV00051BE1AK 900 lm · 90 lm/W	NYV00052BE1AK 1800 lm · 90 lm/W	NYV00053BE1AK 2700 lm · 90 lm/W	NYV00054BE1AK 4500 lm · 90 lm/W
	Power Consumption	70W	100W	150W	200W
	 3000K	NYV00005BE1AK 6300 lm · 90 lm/W	NYV00006BE1AK 9000 lm · 90 lm/W	NYV00007BE1AK 13500 lm · 90 lm/W	NYV00008BE1AK 18000 lm · 90 lm/W
	CRI 80  4000K	NYV00015BE1AK 6300 lm · 90 lm/W	NYV00016BE1AK 9000 lm · 90 lm/W	NYV00017BE1AK 13500 lm · 90 lm/W	NYV00018BE1AK 18000 lm · 90 lm/W
	 6500K	NYV00055BE1AK 6300 lm · 90 lm/W	NYV00056BE1AK 9000 lm · 90 lm/W	NYV00057BE1AK 13500 lm · 90 lm/W	NYV00058BE1AK 18000 lm · 90 lm/W

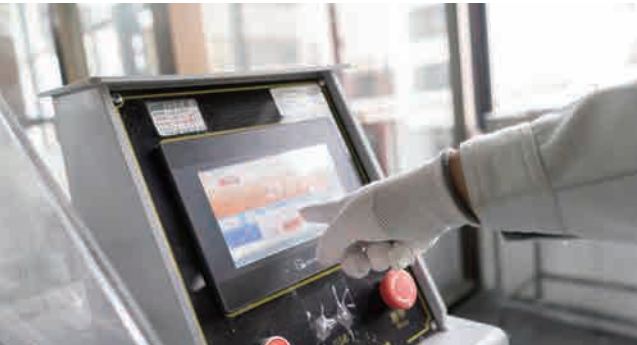
QUALITY CONTROL FOR LIGHTING PRODUCTS

MATERIAL TESTING



We carry out flammable test, light distribution test and surge endurance test etc. on the LED chips and circuit used in indoor and outdoor lighting fixtures, to observe and analyze the internal structure of the parts with a digital microscope to improve the defect points.

ENVIRONMENT SIMULATION



We simulate the transportation environment and actual use environment of the fixtures through shock experiments, high and low temperature environmental testing, salt mist, etc., and screen the qualified materials which can withstand strict outdoor environment, to ensure that products are delivered to the end user with the highest quality.

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