

1. A LIST OF NAME

MASTER PMFAT
PANASONIC MANUFACTURING
P.O. BOX 100, LTD.

Product No.	Product Name
WTEGP51552S-1	ALUFILA Series Illuminated Switch "C",3-Way,1-Device with Plate, Quick Connect Terminal (Vertical Type) (Silver) 16AX 250V ~
WTEGP52562S-1	ALUFILA Series Illuminated Switch "C",3-Way,2-Device with Plate, Quick Connect Terminal (Vertical Type) (Silver) 16AX 250V ~
WTEGP53572S-1	ALUFILA Series Illuminated Switch "C",3-Way,3-Device with Plate, Quick Connect Terminal (Vertical Type) (Silver) 16AX 250V ~
WTEGP54562S-1	ALUFILA Series Illuminated Switch "C",3-Way,2+2-Device with Plate, Quick Connect Terminal (Vertical Type) (Silver) 16AX 250V ~
WTEGP55582S-1	ALUFILA Series Illuminated Switch "C",3-Way,2+3-Device with Plate, Quick Connect Terminal (Vertical Type) (Silver) 16AX 250V ~
WTEGP56572S-1	ALUFILA Series Illuminated Switch "C",3-Way,3+3-Device with Plate, Quick Connect Terminal (Vertical Type) (Silver) 16AX 250V ~

2.TYPE

- 2-1 Rating : 16AX 250V ~ (Neon lamp 220V ~)
- 2-2 Contact method : Silver alloy - Silver alloy contact
- 2-3 Circuit : 3-WAY (Switch "C"/Pattern No.6 on IEC606691-1)
- 2-4 Terminal : Screwless terminal (Quick connect terminal)

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Catalog No. WTEGP51552S-1	Name ALUFILA Series Illuminated Switch "C",3-Way, 1-Device with Plate, Quick Connect Terminal (Vertical Type) (Silver) 16AX 250V ~	Date: 2012.06.11
Panasonic Corporation	Designed by <i>Rubina D</i>	Evaluated by <i>Abhinav</i>
	Checked by <i>Rubina D</i>	Approved by <i>Nabe</i>

Title	SPECIFICATION		Page	2 / 8
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3. GUARANTEED QUALITY

3-1 Shape and dimension : As per attached specification drawing

3-2 Performance

- Testing methods are based on IEC 60669-1(2000)

(INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC60669-1)

Switches for household and similar fixed-electrical installations-

- Following are tested at normal temperature (15 °C to 35 °C)

Resistance to ageing	Temperature : 70 °C \pm 2 °C for 168 hours(7 days)
Resistance to humidity	Temperature : 20 °C to 30 °C Humidity : 91% to 95% for 48 hours(2 days)
Insulation resistance (Insulation tester 500V DC)	<ul style="list-style-type: none"> • Between all poles connected together and the body, with the switch in the "On" position. : Not less than 5M Ω • Between each pole in turn and all other poles connected to the body, with the switch in the "On" position. : Not less than 2M Ω • Between live parts which are separated when the contacts are open. : Not less than 2M Ω Not : Neon glow lamp and resistor disconnected.
Electric strength	<ul style="list-style-type: none"> • Between all poles connected together and the body, with the switch in the "On" position. : 2000 V for 1 minute • Between each pole in turn and all other pole connected to the body, with the switch in the "On" position : 2000 V for 1 minute • Between live parts which are separated when the contacts are open. : 2000 V for 1 minute Note : Neon glow lamp and resistor disconnected.
Temperature rise	Test current : 20A(2.5 mm ²) Not more than 45 K (terminal)

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WTEGP51552S-1	ALUFILA Series Illuminated Switch "C", 3-Way, 1-Device with Plate, Quick Connect Terminal (Vertical Type) (Silver) 16AX 250V ~	2012.06.11










Panasonic Corporation	Designed by <i>[Signature]</i>	Evaluated by <i>[Signature]</i>
	Checked by <i>[Signature]</i>	Approved by _____

Title	SPECIFICATION	Page	3 / 8
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Making and breaking capacity	<table><tr><td>Voltage(V)</td><td>Current(A)</td><td>Power Factor</td><td>Number of operation</td><td>Operation Rate (times/min)</td></tr><tr><td>275 V</td><td>20 A</td><td>0.3 ± 0.05</td><td>200</td><td>15</td></tr><tr><td>※ 250V</td><td>19.2 A</td><td>-</td><td>200</td><td>15</td></tr></table> ※tungsten filament lamp	Voltage(V)	Current(A)	Power Factor	Number of operation	Operation Rate (times/min)	275 V	20 A	0.3 ± 0.05	200	15	※ 250V	19.2 A	-	200	15																
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275 V	20 A	0.3 ± 0.05	200	15																												
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Normal operation	<div>(1)<table><tr><td>Voltage(V)</td><td>Current(A)</td><td>Power Factor</td><td>Number of operation</td><td>Operation Rate (times/min)</td></tr><tr><td>250 V</td><td>16 A</td><td>0.6 ± 0.05</td><td>40000</td><td>15</td></tr></table>Temperature rise : Not more than 45 K (terminal) Electric strength : 1500 V for 1 minute</div> <div>(2)<table><tr><td></td><td>Voltage(V)</td><td>Current(A)</td><td>Power Factor</td><td>Number of operation</td><td>Operation Rate (times/min)</td><td>Capacitor</td></tr><tr><td>Load A</td><td>250 V</td><td>16 A</td><td>0.9 ± 0.05</td><td>5000</td><td>15</td><td>140μF±10%</td></tr><tr><td>Load B</td><td>250 V</td><td>-</td><td>-</td><td>100</td><td>15</td><td>7.3μF±10%</td></tr></table>Temperature rise : Not more than 45 K (terminal) Electric strength : 1500 V for 1 minute</div>	Voltage(V)	Current(A)	Power Factor	Number of operation	Operation Rate (times/min)	250 V	16 A	0.6 ± 0.05	40000	15		Voltage(V)	Current(A)	Power Factor	Number of operation	Operation Rate (times/min)	Capacitor	Load A	250 V	16 A	0.9 ± 0.05	5000	15	140μF±10%	Load B	250 V	-	-	100	15	7.3μF±10%
Voltage(V)	Current(A)	Power Factor	Number of operation	Operation Rate (times/min)																												
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Mechanical strength (impact-test)	height of fall : 100 mm striking element : 150 g ± 1 g 9 blows																															
Resistance to heat	Temperature : 100 °C ± 2 °C for 1 hour																															
Ball-pressure test	<div>• The parts which is necessary to retain current-carrying parts. Temperature : 125 °C ± 2 °C Force : 20 N for 1 hour</div> <div>• The parts which is not necessary to retain current-carrying parts. Temperature : 70 °C ± 2 °C or 40 °C ± 2 °C plus the highest. Temperature rise Force : 20 N for 1 hour</div>																															
Resistance of rusting	10% solution of ammonium chloride in water for 10 minutes																															
Performance of screwless terminal	<table><tr><td>Wire pull test</td><td>30 N for 1 minute</td></tr><tr><td>Wire circular-motion test</td><td>(10±2) rev./min. for 15 minutes</td></tr><tr><td>The voltage drop</td><td>Not more than 15 mV</td></tr><tr><td>Terminal heat cycle</td><td>The difference between the voltage drop at 24 cycle and that at 192 cycle shall not exceed 22.5 mV or two times the value measured after the 24 cycle, whichever is the smaller.</td></tr><tr><td>Wire deflect test</td><td>1.5 mm² : 0.5 N 2.5 mm² : 1 N The voltage drop : Not more than 25 mV</td></tr></table>	Wire pull test	30 N for 1 minute	Wire circular-motion test	(10±2) rev./min. for 15 minutes	The voltage drop	Not more than 15 mV	Terminal heat cycle	The difference between the voltage drop at 24 cycle and that at 192 cycle shall not exceed 22.5 mV or two times the value measured after the 24 cycle, whichever is the smaller.	Wire deflect test	1.5 mm ² : 0.5 N 2.5 mm ² : 1 N The voltage drop : Not more than 25 mV																					
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Not : In this specification, units are the International System of Units (SI) based on International Electrotechnical Commission (IEC).

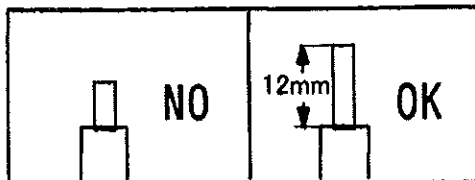
Catalog No. WTEGP51552S-1	Name ALUFILA Series Illuminated Switch "C", 3-Way, 1-Device with Plate, Quick Connect Terminal (Vertical Type) (Silver) 16AX 250V ~	Date: 2012.06.11
Panasonic Corporation	Designed by <i>Lutwa D</i>	Evaluated by <i>AK Namin</i>
	Checked by <i>Lutwa D</i>	Approved by _____

Title	SPECIFICATION		Page 4 / 8									
<p>3-3 The other performance</p> <p>Life of neon glow lamp Not less than 80,000 hours (220 V)</p> <p>Note : The life of the neon glow lamp may be short by the frequent operation.</p>												
<p>4. ENVIRONMENTAL CONDITIONS</p> <p>4-1 Ambient Temperature : -10°C to +40°C</p> <p>4-2 Installation</p> <p>(1) This switch is allowed to be used only in indoor office and the like.</p> <p>(2) This switch is not allowed to be used in workshop which is subject to get severe handling and in damp place open air and under the eaves.</p>												
<p>5. CONDITIONS FOR USE</p> <p>5-1 Connection System</p> <p>(1) Applicable Wire</p> <p>1.5 mm² - 2.5mm² Only Rigid (Solid or Stranded) Copper Conductor Type</p> <p>Not : Only use the applicable wire (Thickness & Rated current).</p> <p>Please make it sure before connecting to the terminal.</p> <p>Warning : Never use other types of conductors than those specified above.</p> <p>Or, it may result in abnormal heating or faulty contact in the wiring.</p>												
<table border="1" style="width: 100%; text-align: center;"> <tr> <td>Flexible conductor</td> <td>Stranded conductor</td> <td>Solid conductor</td> </tr> <tr> <td></td> <td></td> <td></td> </tr> <tr> <td>NO</td> <td>OK</td> <td>OK</td> </tr> </table>				Flexible conductor	Stranded conductor	Solid conductor				NO	OK	OK
Flexible conductor	Stranded conductor	Solid conductor										
												
NO	OK	OK										
<div style="border: 1px solid black; padding: 5px; display: inline-block;"> <p>CONTROLLED COPY</p> <p>02 JUL 2012</p> <p>Issued to : PDD-PES</p> </div>												
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Panasonic Corporation		Designed by <i>Rukawa D</i>	Evaluated by <i>A. Nawa</i>									
		Checked by <i>Rukawa D</i>	Approved by _____									

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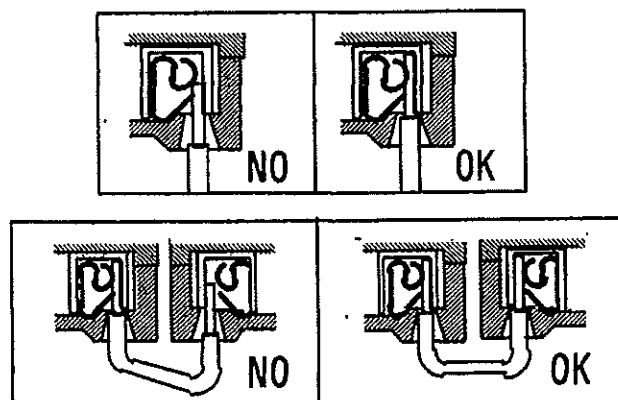
(2) Connection method

- (i) Strip off the covering of the conductor by $12 \pm \frac{2}{3}$ mm by matching with the strip-off gauge provided on the rear side of the switch.



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- (ii) Insert each of the conductor as far as it goes in the hole receiving it.

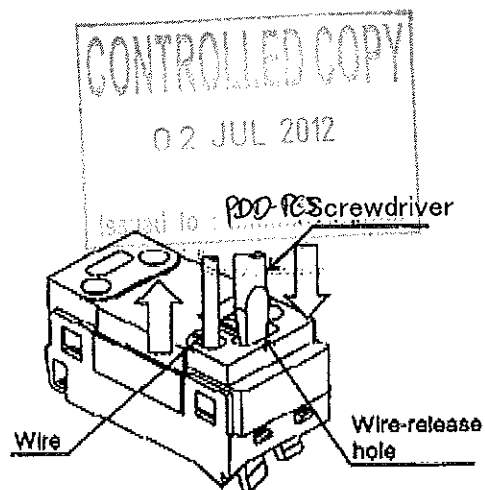


Warning : Be careful not to pull or twist the connected conductor with an excessive force to avoid damaging the conductor.

5-2 Disconnection method

- (1) Insert a screwdriver straight into the wire-release until it lands on the bottom of the hole.
- (2) Extract the wire and pull out the screwdriver.

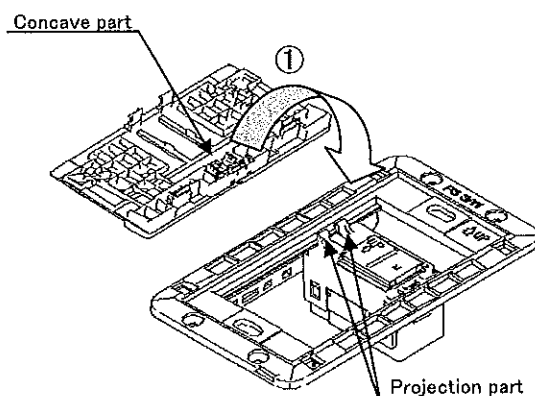
Warning : When disconnecting the wire, be careful not to pry it out with the screwdriver, which may cause chipping off the molded parts used around it.



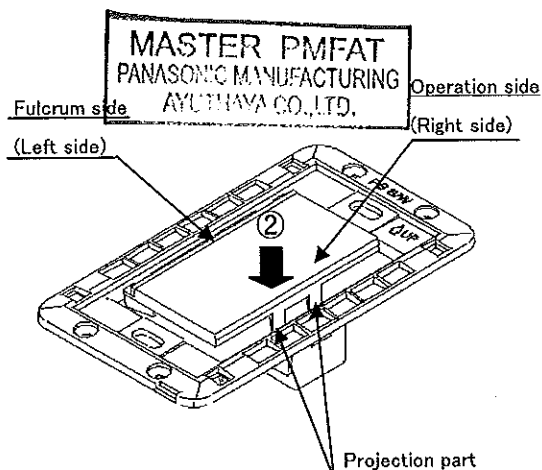
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Panasonic Corporation	Designed by <i>Rufawa D</i>	Evaluated by <i>A. Nami</i>
	Checked by <i>Rufawa D</i>	Approved by _____

5-3 How to install handle

- ① Push the concave part of the handle into the projection part of the switch body, and rotate in the arrowing direction



- ② The projection part of the handle (right side) is pushed into the ditch part of the switch body

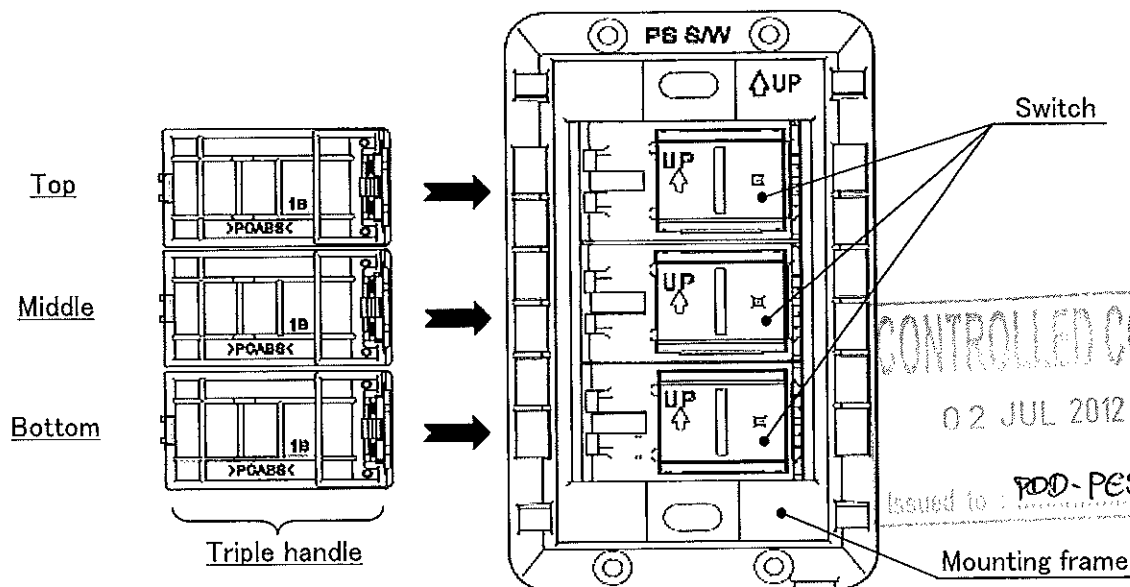


(Note 1) When the operation side of the handle (right side) is pushed first, the handle might be damaged.

(Note 2) As for a triple handle, the installation position is different.

Please install after confirming the installation position.

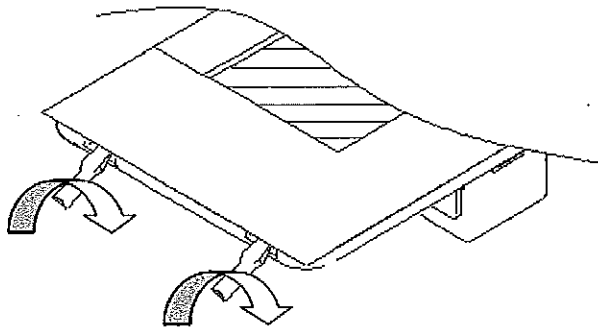
(Refer to the figure below)



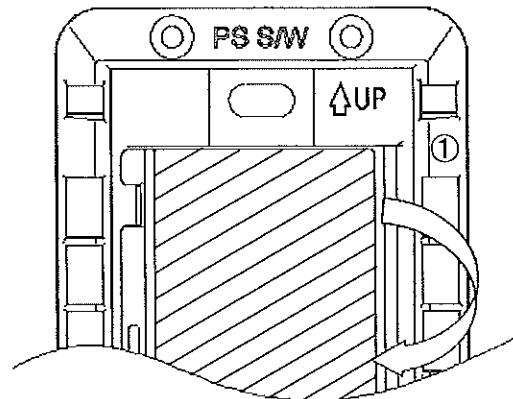
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Panasonic Corporation	Designed by <i>Rukawa</i>	Evaluated by <i>A. Nami</i>
	Checked by <i>Rukawa</i>	Approved by _____

5-3 How to remove handle

- ① Please hang a minus driver (6mm or less in the width of the blade) on the plate removing ditch, and remove the cover-plate



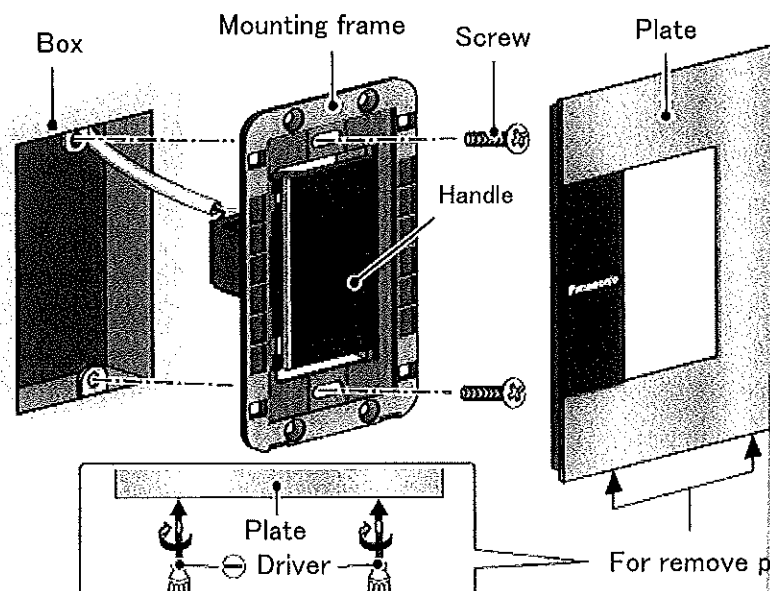
- ② Please hang the finger on a right side of the handle and remove.



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(Note) Please do not remove the handle from the fulcrum side (left side)

③ How to install



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Panasonic Corporation	<div style="display: flex; justify-content: space-between;"> <div style="width: 48%;"> Designed by <i>Sakura</i> Checked by <i>Sakura</i> </div> <div style="width: 48%;"> Evaluated by <i>A. Name</i> Approved by _____ </div> </div>	

Title	SPECIFICATION		Page 8 / 8
<p>6. CAUTIONS FOR SAFE USE</p> <p>We are not liable for any problem caused by noncompliance with the following items.</p> <p>6-1 Cautions during use</p> <div style="float: right; border: 1px solid black; padding: 5px; margin-top: 10px;"> MASTER PMFAT PANASONIC MANUFACTURING AYUTHAYA CO.,LTD. </div> <p>(1) Improper during use</p> <ul style="list-style-type: none"> · When connecting this product, follow the details in the specification (See "5 : CONDITIONS FOR USE") An improper connection may cause electric shock, abnormal heating or ignition in the terminals. <p>(2) Improper use</p> <ul style="list-style-type: none"> · When using this product, follow the detail in the specification (See "4 : ENVIRONMENTAL CONDITIONS") If you use the product in an unsuitable place, such as outdoors, an insulation fault in the appliance may cause electric shock or short circuit. · DO NOT use the electric wire if it has a damaged cover. Faulty insulation may cause electric shock or short circuit. · DO NOT pull use or twist the connected wire with excessive force. The core of the wire may be damaged, causing abnormal heating or ignition in the terminal. · DO NOT use soldered flexible or stranded wire. It may cause abnormal heating or ignition in the terminal. <div style="text-align: right; margin-top: 20px;"> <div style="border: 1px solid black; padding: 5px; display: inline-block;"> CONTROLLED COPY 02 JUL 2012 Issued to : PDD-PES </div> </div>			
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