

Product Discontinuation Notices

May 9, 2011

Measuring/Motor Protective Relays

No. 2011147E

Discontinuation Notice of Zero-phase Voltage Detection Unit. VOC-3S

Product Discontinuation

Zero-phase Voltage Detection Unit

Recommended Replacement

Zero-phase Voltage Detection Unit



VOC-3S

VOC-1MS2

Discontinuation date : The end of March, 2012

Caution on recommended replacement

Wiring and outer diameter will be changed.
Please be careful with when installing.

Difference from discontinued product

Model	Body Color	Dimensions	Wire connection	Mounting Dimensions	Characteristics	Operation ratings	Operation methods
VOC-1MS2	--	--	--	--	*	*	*

** : Fully compatible

* : The change is a little/Almost compatible



-- : Not compatible

- : No corresponding specification

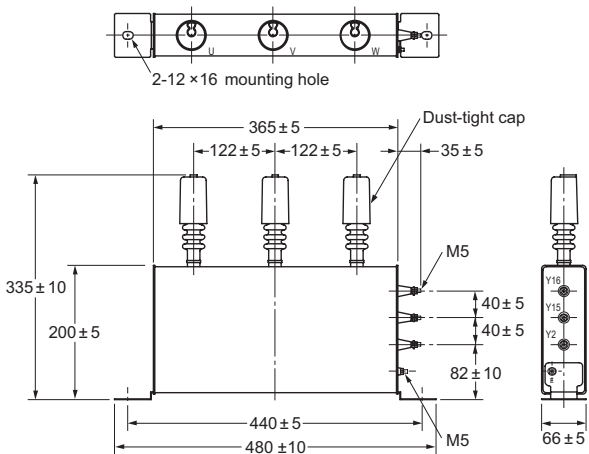
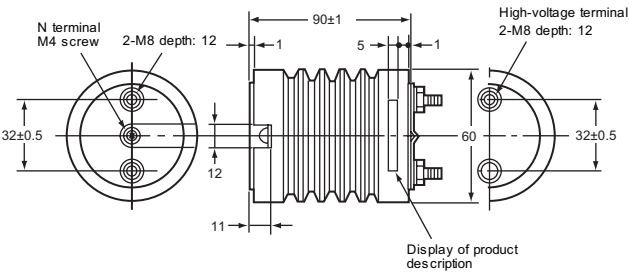
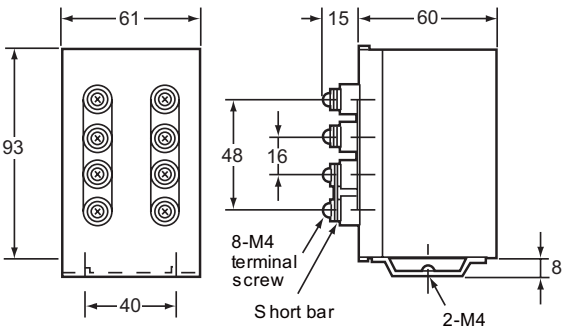
Product Discontinuation and recommended replacement

Product discontinuation	Recommended replacement
VOC-3S	VOC-1MS2

Body color

Product discontinuation VOC-3S	Recommendable replacement VOC-1MS2
<p>Body color : White</p> 	<p>VOC-1M : Brown K3P-M : Black</p>  <p>VOC-1M K3P-M</p>

Dimensions

Product discontinuation VOC-3S	Recommendable replacement VOC-1MS2
 <p>2-12 × 16 mounting hole</p> <p>365 ± 5</p> <p>122 ± 5 122 ± 5</p> <p>35 ± 5</p> <p>Dust-tight cap</p> <p>335 ± 10</p> <p>200 ± 5</p> <p>M5</p> <p>40 ± 5</p> <p>40 ± 5</p> <p>82 ± 10</p> <p>440 ± 5</p> <p>480 ± 10</p> <p>M5</p> <p>66 ± 5</p>	<p>VOC-1M</p>  <p>N terminal M4 screw</p> <p>2-M8 depth: 12</p> <p>90 ± 1</p> <p>5</p> <p>1</p> <p>1</p> <p>High-voltage terminal 2-M8 depth: 12</p> <p>32 ± 0.5</p> <p>12</p> <p>60</p> <p>32 ± 0.5</p> <p>11</p> <p>Display of product description</p> <p>K3P-M</p>  <p>61</p> <p>15</p> <p>60</p> <p>93</p> <p>48</p> <p>16</p> <p>8-M4 terminal screw</p> <p>S hort bar</p> <p>2-M4</p> <p>8</p>

Wire Connection

Product discontinuation VOC-3S	Recommendable replacement VOC-1MS2
<p>High-voltage (U, V, W)</p> <p>Low-voltage (Y₁, Y₂)</p> <p>Output for 60 Hz</p> <p>Output for 50 Hz</p> <p>Output terminal for 50 Hz</p> <p>Output terminal for 60 Hz</p> <p>Common</p> <p>Ground terminal (E)</p> <p>Case</p> <p>Note: When used in combination with K2GS, connect the Y16 or Y15 terminal to the Y1 terminal of the relay.</p>	<p>High-voltage</p> <p>VOC-1M</p> <p>Low-voltage</p> <p>Cable length 0.3m, 0.3m</p> <p>Cable 1m</p> <p>K2GS Static Earth-fault Directional Relay</p> <p>K2GV-C Static Earth-fault Overvoltage Relay</p> <p>To Y₁-Y₂ terminal</p> <p>K3P-M</p> <p>50Hz short</p> <p>60Hz short</p> <p>50Hz, 60Hz short bar</p> <p>E1</p>

Mounting dimensions

Product discontinuation VOC-3S	Recommendable replacement VOC-1MS2
<p>2-12×16 mounting hole</p>	<p>VOC-1M</p> <p>2-2 dia. hole</p> <p>32</p> <p>K3P-M</p> <p>2-5 dia.</p> <p>40</p>

Characteristics

Product discontinuation VOC-3S

Rated voltage	6,600 VAC
Rated frequency	50/60 Hz
Output voltage	7.6 VAC (when 6,600 VAC line is in complete ground fault condition)
I/O phase angle	180± 10°
Insulation rank	No.6 A (JEC1201)
Dielectric strength	22,000 VAC for 1 min (between each high-voltage terminal and case and between high-voltage terminals) 2,000 VAC for 1 min (between output terminal and case)
Insulation resistance	1,000 MΩ min. (between each high-voltage terminal and case); 10 MΩ min. (between output terminal and case) at 1,000 VDC
Impulse withstand voltage	1.2/50 μs, peak value: 65,000 V (JEC212) (between high-voltage terminal and case)
Ambient temperature	Operating: -20 to 60°C
Operation condition	Indoor (in air)
Weight	Approx. 6.2 kg

Note: Changing between 50 Hz operation and 60 Hz operation can be achieved through selective connections at output terminals.

Recommendable replacement VOC-1MS2

VOC-1M

Rated voltage	6,600 VAC
Rated frequency	50/60 Hz
Rated capacity	250pF
Insulation rank	No.6 A (JEC1201)
Dielectric strength	22,000 VAC for 1 min (between high-voltage terminal and mounted terminal) 2,000 VAC for 1 min (between low-voltage terminal and mounted terminal)
Insulation resistance	1,000 MΩ min. (between high-voltage terminal and mounted terminal) at 1,000 VDC
Lightning impulse withstand voltage	1.2/50 μs, between high-voltage terminal and mounted terminal, peak value: 65,000 V
Ambient temperature	Operating: -20 to 60°C
Operation condition	Indoor (in air)
Weight	Approx. 550 g (per 1 product)

K3P-M

Rated frequency	50/60 Hz (Select short bar of terminal.)
Rated output voltage	7.6 VAC (when 6,600 VAC line is in complete ground fault condition)
Dielectric strength	2,000 VAC for 1 min (between output terminal and case)
Insulation resistance	10 MΩ min. (between output terminal and case) at 1,000 VDC
Ambient temperature	Operating: -20 to 60°C
Operation condition	Indoor (in air)
Weight	Approx. 600 g