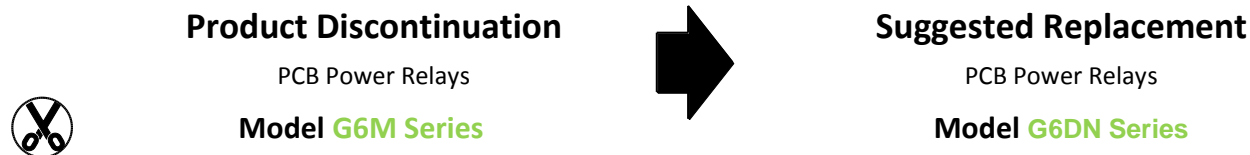


NO: REL-168
DATE: March 2016

PRODUCT: G6M Series
TYPE: **Discontinuation** Notice

G6M Series to be DISCONTINUED in 2017

Based upon a diminishing demand for the **G6M** PCB Power Relays, OMRON will discontinue **ALL** G6M models in 2017. For new designs, Omron suggests consideration of the newly released **G6DN** relays, which despite different body dimensions, has the same PCB layout and can be considered to be functional equivalents. Please carefully read through this notification and note the differences. The following details will fully explain the discontinuation and replacement considerations; should you have any additional questions, however, please communicate with the Relay Product Specialist.



NOTE: Nomenclature for the G6M may or may not include "BY OMZ" or "BY OMZ/C" at the end of the part numbers, within the Omron Computer System. This is a factory designation and has no bearing on the specifications.

LAST Order date

May 31, 2017

Caution on suggested replacement:

Although the PCB layout is identical between the two relay series, their body dimensions are different. Furthermore, the G6DN has a Must Release coil voltage equal to 5% minimum of nominal versus 10% minimum of nominal for the G6M.

→ Therefore, please consider the suggested replacement carefully, for new designs.



G6DN -- Differences from discontinued product:

Suggested replacement Model	Body Color	Dimen -sions	Wire connection	Mounting Dimensions	Charact -eristics	Operation ratings	Operation methods
Model G6DN	**	*	**	**	**	**	**

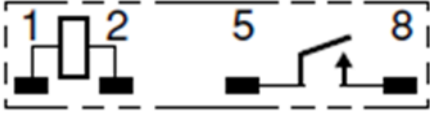
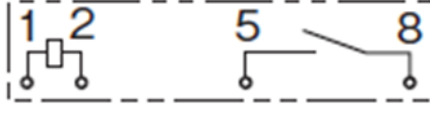
- ** : Compatible**
- * : The change is a little/Almost compatible**
- : Not compatible**
- : No corresponding specification**

* Sales teams should communicate this discontinuation with their OEM's and CEM's. For further technical support and any questions, please communicate with Product Marketing.

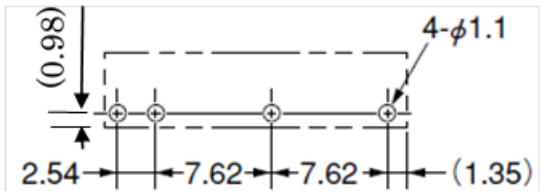
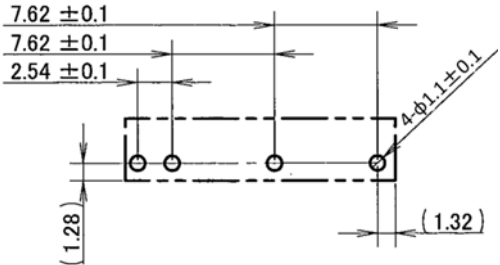
Body color:

Discontinued Product Model G6M Series	Suggested Replacement Model G6DN Series
<p>Black</p> 	<p>Black</p> 

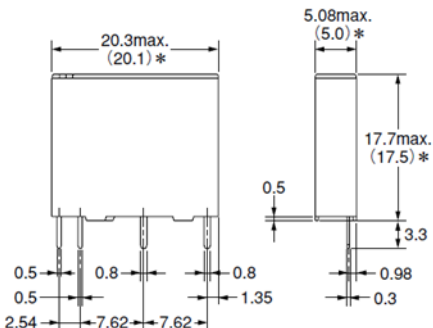
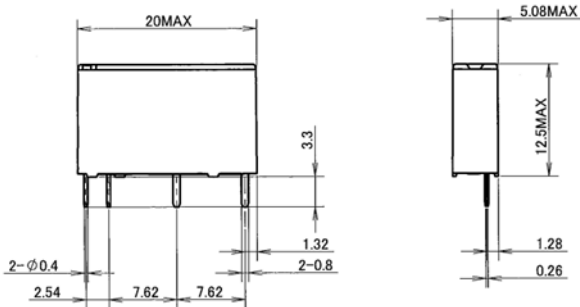
Wire connection:

Discontinued Product Model G6M Series	Suggested Replacement Model G6DN Series
<p>BOTTOM VIEW</p>  <p>No coil polarity</p>	<p>BOTTOM VIEW</p>  <p>No coil polarity</p>

Mounting dimensions:

Discontinued Product Model G6M Series	Suggested Replacement Model G6DN Series
<p>BOTTOM VIEW</p>  <p>Tolerance : ±0.1mm</p>	<p>BOTTOM VIEW</p>  <p>Tolerance : ±0.1mm</p>

Dimensions:

Discontinued Product Model G6M Series	Suggested Replacement Model G6DN Series
<p>Average Value</p> 	<p>Average Value</p> 

Characteristics and Operation ratings:

Item	Discontinued Product Model G6M Series	Suggested Replacement Model G6DN Series
Coil Rating		
Rated Voltage(VDC)	4.5V, 5V, 12V, 24V	4.5V, 5V, 12V, 24V
Operate voltage(%)	70% max. The must operate voltage is 72% or less of the rated voltage if the relay is mounted vertically and the terminals are pointed downwards.	70% max. The must operate voltage is less than 72% when the relay is sideways and the marking is right way.
Release voltage	10% min.	5% min.
Maximum voltage	160% (at 23°C)	160% (at 23°C)
Power consumption	Approx. 120 mW	Approx. 110 mW
Contact Rating		
Contact type	Single	Crossbar twin
Contact material	Ag Alloy	Ag Alloy + Au (Only stationary contact)
Rated load(resistive)	3A at 250VAC 3A at 30VDC	5A at 250VAC 5A at 30VDC
Rated carry current	5A	5A
Minimum Permissible Load (Failure Rate / P-Level. Reference value)	10mA at 5VDC	0.1mA at 0.1VDC
Characteristics		
Contact resistance (See note 1)	100 mΩ max.	100 mΩ max.
Operate time	10 ms max.	10 ms max.
Release time	5 ms max.	5 ms max.
Insulation resistance (See note 2)	1,000 MΩ min.	1,000 MΩ min.
Dielectric strength	3,000 VAC, 50/60Hz for 1min. between coil and contacts 750 VAC, 50/60Hz for 1min. between contacts of same polarity	3,000 VAC, 50/60Hz for 1min. between coil and contacts 750 VAC, 50/60Hz for 1min. between contacts of same polarity
Impulse withstand voltage Between contacts of the same polarity	6,000 V (1.2×50μs)	6,000 V (1.2×50μs)
Vibration resistance	Destruction	10 to 55 to 10 Hz, 2.5 mm single amplitude (5 mm double amplitude)
	Malfunction	10 to 55 to 10 Hz, 0.75 mm single amplitude (1.5 mm double amplitude)
Shock resistance	Destruction	1,000 m/s ² (approx.100G)
	Malfunction	100 m/s ² (approx.10G)
Service Life	Mechanical	20,000,000 operations min.
	Electrical (resistive load)	100,000 operations min. (3A at 250VAC, 30VDC at 1,800 ops/hr) 80,000 operations min. (5A at 250VAC, 30VDC at 1,200 ops/hr)
Ambient operating temperature	-40°C to 85°C (with no icing or condensation)	-40°C to 90°C (with no icing or condensation)

Note: Values in the above table are initial values

Note 1: The contact resistance is measured with 1 A applied at 5 VDC using a fall-of-potential method.

Note 2: The insulation resistance is measured between coil and contacts and between contacts of the same polarity at 500 VDC.

Operation methods

Discontinued Product Model G6M Series	Suggested Replacement Model G6DN Series
<div data-bbox="605 260 924 308" style="border: 1px solid black; padding: 5px; display: inline-block;">No difference</div>	

Discontinued product and suggested replacement:

NOTE: Nomenclature for the G6M may or may not include "BY OMZ" or "BY OMZ/C" at the end of the part numbers, within the Omron Computer System. This is a factory designation and has no bearing on the specifications.

Discontinued Product Model G6M Series	Suggested Replacement Model G6DN Series
G6M-1A DC12 BY OMZ	G6DN-1A DC12
G6M-1A DC12 BY OMZ/C	G6DN-1A DC12
G6M-1A DC20 BY OMZ	G6DN
G6M-1A DC24 BY OMZ	G6DN-1A DC24
G6M-1A DC24 BY OMZ/C	G6DN-1A DC24
G6M-1A DC4.5 BY OMZ	G6DN-1A DC4.5
G6M-1A DC5 BY OMZ	G6DN-1A DC5
G6M-1A DC5 BY OMZ/C	G6DN-1A DC5
G6M-1A DC9 BY OMZ	G6DN
G6M-1A DC9 BY OMZ/C	G6DN
G6M-1A-M DC12 BY OMZ	G6DN-1A DC12
G6M-1A-M DC12 BY OMZ/C	G6DN-1A DC12
G6M-1A-M DC24 BY OMZ	G6DN-1A DC24
G6M-1A-M DC5 BY OMZ	G6DN-1A DC5

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For further technical support and any questions, please communicate with Product Marketing.