

NO: REL - 191
DATE: March 2017

PRODUCT: G5PA-2 – PCB Power Relays
TYPE: DISCONTINUATION – Diminishing Global Demand

G5PA-2 PCB Power Relays – DISCONTINUATION Due to Diminishing Global Demand

Due to a diminishing global demand, Omron will discontinue the G5PA-2 PCB Power Relay series in February 2018. Although there is no direct replacement for this series, Omron recommends consideration of the **G2R-2A**, **G2RL-2A** or **G2RG-2A4** PCB Power Relays for **new** designs. Please carefully read through this notification and note the differences; the models to be affected include, but are not limited to the models listed below; should you have any additional questions, however, please communicate with the Relay Product Specialist.

LAST Order date (Last Time Buy Date)

February 28, 2018

All orders entered by the LTB date will be shipped by the factory by the end of:

June, 2018

Product Discontinuation

PCB Power Relay



Model **G5PA-2**
Model **G5PA-28-MC**
Model **G5PA-28-MC DC9**
Model **G5PA-28-X-MC**



Suggested Replacement

PCB Power Relay





Model **G2R-2A**
Model **G2RL-2A**
Model **G2R-2A DC9**
Model **G2RG-2A4**

Differences from discontinued product:

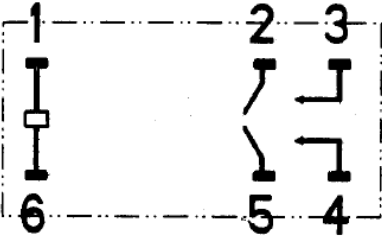

Suggested replacement Model	Body Color	Dimen-sions	Wire connection	Mounting Dimensions	Charact-eristics	Operation ratings	Operation methods
G2R-2A	--	--	*	--	*	*	**
G2RL-2A	**	--	*	--	*	*	**
G2RG-2A4	**	--	*	--	*	*	**

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

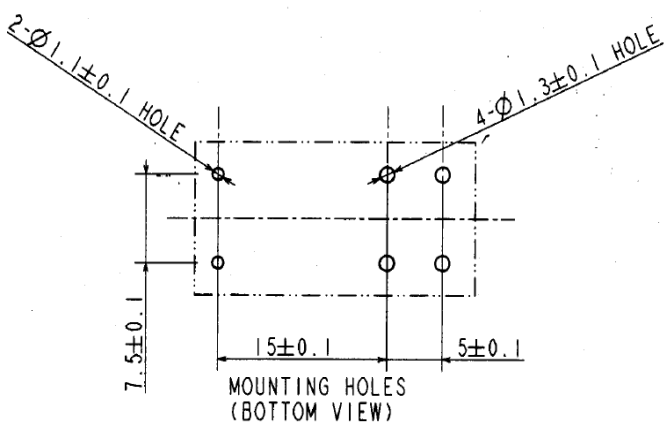
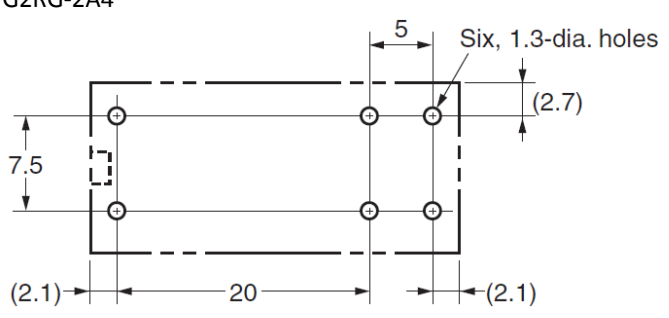
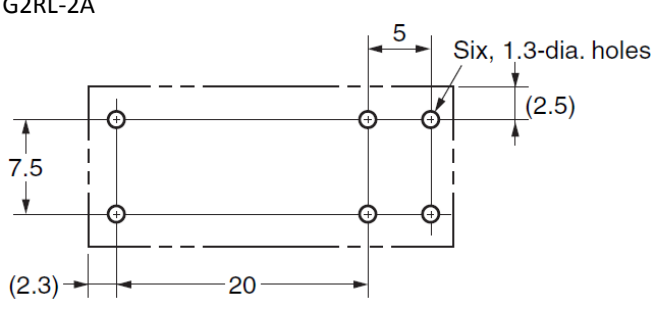
Body Color:

Discontinued Model G5PA-2	Suggested Replacement Model G2R-2A, G2RL-2A and G2RG-2A4
<p>Black</p>  <p>OMRON G5PA-2 12VDC COIL: 12VDC CONTACT: 5A 250VAC 5A 24VDC MADE IN INDONESIA Bottom View</p>	<p>G2R-2A Transparent</p> 
	<p>G2RL-2A Black</p> 
	<p>G2RG-2A4 Black</p> 

Wire Connections:

Discontinued Model G5PA-2	Suggested Replacement Model G2R-2A, G2RL-2A and G2RG-2A4
 <p>No Coil Polarity</p>	 <p>No Coil Polarity</p>

Mounting Dimensions:

<p align="center">Discontinued Model G5PA-2</p>	<p align="center">Suggested Replacement Model G2R-2A, G2RL-2A and G2RG-2A4</p>
 <p>2-$\varnothing 1.1 \pm 0.1$ HOLE</p> <p>4-$\varnothing 1.3 \pm 0.1$ HOLE</p> <p>7.5± 0.1</p> <p>15± 0.1</p> <p>5± 0.1</p> <p align="center">MOUNTING HOLES (BOTTOM VIEW)</p>	<p>G2R-2A G2RG-2A4</p>  <p>5</p> <p>Six, 1.3-dia. holes</p> <p>(2.7)</p> <p>7.5</p> <p>(2.1)</p> <p>20</p> <p>(2.1)</p> <p align="center">Bottom View</p>
	<p>G2RL-2A</p>  <p>5</p> <p>Six, 1.3-dia. holes</p> <p>(2.5)</p> <p>7.5</p> <p>(2.3)</p> <p>20</p> <p align="center">Bottom View</p>

Dimension:

Discontinued Model G5PA-2	Suggested Replacement Model G2R-2A, G2RL-2A and G2RG-2A4
<p>Technical drawing of the discontinued G5PA-2 component. It includes a front view and a side view. The front view shows a width of 24.5MAX (24.3) and a height of 25MAX (24.8). The side view shows a depth of 13MAX (12.8). Other dimensions include a 0.5 offset, a 4mm distance to the first pin, and pin spacings of 0.2, 0.42, and 0.4. A 7.5mm dimension is shown for the side view's base.</p>	<p>G2R-2A</p> <p>Technical drawing of the suggested replacement G2R-2A component. It includes a front view and a side view. The front view shows a width of 29max. (28.8)* and a height of 25.5max. (25.2)*. The side view shows a depth of 13max. (12.7)*. Other dimensions include a 0.3 offset, a 4mm distance to the first pin, and pin spacings of 0.3, 0.15, and 0.5. A 1mm dimension is shown for the side view's base.</p>
	<p>G2RL-2A</p> <p>Technical drawing of the suggested replacement G2RL-2A component. It includes a front view and a side view. The front view shows a width of 29max. (28.8)* and a height of 15.7max. (15.5)*. The side view shows a depth of 12.7max. (12.5)*. Other dimensions include a 3.5mm distance to the first pin, and pin spacings of 0.5, 0.5, and 0.5. A 0.8mm dimension is shown for the side view's base.</p>
	<p>G2RG-2A4</p> <p>Technical drawing of the suggested replacement G2RG-2A4 component. It includes a front view and a side view. The front view shows a width of 29max. (28.6)* and a height of 25.5max. (24.7)*. The side view shows a depth of 13.5max. (12.8)*. Other dimensions include a 4mm distance to the first pin, and pin spacings of 0.3, 0.15, and 0.5. A 1mm dimension is shown for the side view's base.</p>

Operating Ratings – Coil:

	Rated Voltage (VDC)	Rated Current (mA)	Coil Resistance (Ω)	Must operate voltage (%)	Must release voltage (%)	Max. voltage (%)	Power consumption (mW)
Discontinued Model G5PA-2	5	106	47	70% max.	10% min.	110%	Approx.530
	6	88.2	68				
	9	58.9	152.8				
	12	44.2	272				
	24	22.1	1087				
Suggested Replacement Model G2R-2A	5	106	47	70% max.	15% min	170% (at23°C)	Approx.530
	6	88.2	68				
	9	58.9	152.8				
	12	43.6	275				
	24	21.8	1110				
Suggested Replacement Model G2RL-2A	5	80	62.5	70% max.	10% min	130% (at85 °C)	Approx.400
	9	44.4	202.5				
	12	33.3	360				
	24	16.7	1440				
Suggested Replacement Model G2RG-2A4	12	66.6	180	80% max.	10% min	140% (at23 °C)	Approx.800
	24	33.3	720				

Operating Ratings – Contacts:

Item	Discontinued Model		Suggested Replacement Model		
	G5PA-2	G5PA-28(-X)-MC	G2R-2A	G2RL-2A	G2RG-2A4
Contact Type	Single	Single Crossbar	Single	Single	Single
Contact material	Ag-alloy (Cd free)	Base material Ag Face material AuAg	Ag-alloy (Cd free)	Ag-alloy (Cd free)	Ag-alloy (Cd free)
Rated load (resistive)	120 VAC 5 A 30 VDC 5 A	50VAC 5A 24VDC 3A	AC 250V 5 A DC 30V 5 A	8 A at 250 VAC 8 A at 30 VDC	AC 250V 8 A
Rated carry current	5 A	5 A	5 A	8 A (70°C) / 5 A (85°C)	8 A

Differences from discontinued product:

Item		Discontinued Model		Suggested Replacement Model		
		G5PA-2	G5PA-28(-X)-MC	G2R-2A	G2RL-2A	G2RG-2A4
Contact resistance*1		100mΩ max.	50mΩ max.	50mΩ max.	100mΩ max.	100mΩ max.
Operate time		15ms max.		10ms max.	15ms max.	15ms max.
Release time		5ms min.		5ms min.	5ms min.	5ms min.
Insulation resistance*2		1,000 MΩ min.		1,000 MΩ min.	1,000 MΩ min.	1,000 MΩ min.
Dielectric strength	Between coil and contacts	AC 4,000V		AC 5,000V	AC 5,000V	AC 4,000V
	Between contacts of different polarity	AC 2,000V		AC 3,000V	AC 2,500V	AC 3,000V
	Between contacts of the same polarity	AC 1,000V		AC 1,000V		
Vibration resistance	Destruction	10 to 55 to 10Hz 0.75mm single amplitude (1.5mm double amplitude)				
	Malfunction	10 to 55 to 10Hz 0.75mm single amplitude (1.5mm double amplitude)				
Shock resistance	Destruction	1,000m/s ²				
	Malfunction	100m/s ²	100m/s ²	200m/s ²	100m/s ²	200m/s ²
Durability	Mechanical (18,000 operations per hour)	5,000,000 operations	1,000,000 operations	20,000,000 operations	20,000,000 operations	1,000,000 operations
	Electrical	100,000 operations: 5 A at 120 VAC 3A at 30VDC (operation: ON for 1 sec, OFF for 1 sec)	50,000 operations: 5 A at 50 VAC 3A at 24VDC (operation: ON for 1 sec, OFF for 1 sec)	100,000 operations: 5 A at 250 VAC 5A at 30VDC (operation: ON for 1 sec, OFF for 1 sec)	30,000 operations: 8 A at 250 VAC 8A at 30VDC (operation: ON for 1 sec, OFF for 1 sec)	10,000 operations: 8 A at 250 VAC (operation: ON for 1 sec, OFF for 1 sec)
Ambient operating temperature (with no icing or condensation)		-25 °C to 70 °C	-25 °C to 70 °C	-40 °C to 70 °C	-40 °C to 85 °C	-40 °C to 70 °C

Note. The data shown above are initial values.

*1 The contact resistance is possible with 1 A applied at 5 VDC using a fall-of-potential method.

*2. Testing conditions: The insulation resistance was measured with a 500 VDC meg ohmmeter at the same locations as the dielectric strength was measured.

Operation Methods:

Discontinued Model G5PA-2	Suggested Replacement Model G2R-2A, G2RL-2A and G2RG-2A4
No change of Operation Methods	

Details of Applicable Models:

NOTE: Nomenclature may or may not include "BY OMZ (PF)" or "BY OMZ (PF)/C" or "BY OMZ (PF)(Z)" or "BY OMZ/C (PF)" or "BY OMZ/C (PF)(Z)" or "BY OMI" or "BY OMB" 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 Model G5PA-2	Suggested Replacement Model G2R-2A, G2RL-2A and G2RG-2A4
G5PA-2 DC12 BY OMZ (PF)	G2R-2A DC12 BY OMI
G5PA-2 DC12 BY OMZ (PF)/C	G2R-2A DC12 BY OMI
G5PA-2 DC24 BY OMZ (PF)	G2R-2A DC24 BY OMI
G5PA-2 DC24 BY OMZ (PF)/C	G2R-2A DC24 BY OMI
G5PA-2 DC5 BY OMZ (PF)	G2R-2A DC5 BY OMI
G5PA-2 DC6 BY OMZ (PF)	G2R-2A DC6 BY OMI
G5PA-2 DC9 BY OMZ (PF)	G2R-2A DC9 BY OMI
G5PA-2 DC9 BY OMZ (PF)/C	G2R-2A DC9 BY OMI
G5PA-28-MC DC12 BY OMZ (PF)	G2RL-2A DC12 BY OMB
G5PA-28-MC DC12 BY OMZ(PF)(Z)	G2RL-2A DC12 BY OMB
G5PA-28-MC DC12 BY OMZ/C (PF)	G2RL-2A DC12 BY OMB
G5PA-28-MC DC24 BY OMZ (PF)	G2RL-2A DC24 BY OMB
G5PA-28-MC DC24 BY OMZ (PF)(Z)	G2RL-2A DC24 BY OMB
G5PA-28-MC DC24 BY OMZ/C (PF)	G2RL-2A DC24 BY OMB
G5PA-28-MC DC24 BY OMZ/C(PF)(Z)	G2RL-2A DC24 BY OMB
G5PA-28-MC DC5 BY OMZ (PF)	G2RL-2A DC5 BY OMB
G5PA-28-MC DC5 BY OMZ/C (PF)	G2RL-2A DC5 BY OMB
G5PA-28-MC DC9 BY OMZ (PF)	G2R-2A DC9 BY OMI
G5PA-28-X-MC DC12 BY OMZ (PF)	G2RG-2A4 DC12 BY OMI
G5PA-28-X-MC DC12 BY OMZ/C (PF)	G2RG-2A4 DC12 BY OMI
G5PA-28-X-MC DC24 BY OMZ (PF)	G2RG-2A4 DC24 BY OMI
G5PA-28-X-MC DC24 BY OMZ/C (PF)	G2RG-2A4 DC24 BY OMI

* 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.

Specifications in this product news are as of the issue date and are subject to change without notice.
Only main changes in specifications are described in this document. Please be sure to read the relevant catalogs, datasheets, product specifications, instructions, and manuals for precautions and necessary information when using products.

Last time buy dates are subject to change based on availability