

Product Discontinuation Notices

Solid-state Relays

Issue Date
October 3, 2016

No. 2016E014C

**Discontinuation Notice of Solid State Relay, Model G3F/G3FD series.
(For OCB-CN, OEZ-ML area only)**

Product Discontinuation

Solid-state Relays



**Model G3F series
Model G3FD series**



Recommended Replacement

Solid-state Relays

**Model G3F-VD series
Model G3FD-VD series**

[Final order entry date]

The end of September, 2016

[Date of The Last Shipping]

The end of September, 2016

[Caution on recommended replacement]

•G3F/G3FD can be replaced easily to existed “-VD” series.

[Difference from discontinued product]

Recommended replacement Model	Body Color	Dimensions	Wire connection	Mounting Dimensions	Characteristics	Operation ratings	Operation methods
G3F-VD/G3FD-VD series	**	**	**	**	**	**	**

** : Compatible

* : The change is a little/Almost compatible



-- : Not compatible

- : No corresponding specification

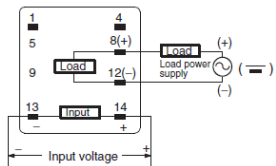
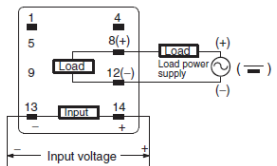
[Product Discontinuation and recommended replacement]

Product discontinuation	Recommended replacement
G3F-203SN DC5-24	G3F-203SN-VD DC5-24
G3F-202SN AC100/110	G3F-202SN-VD AC100/110
G3F-202SN AC200/220	G3F-202SN-VD AC200/220
G3F-203SLN DC5	G3F-203SLN-VD DC5
G3F-203SLN DC12	G3F-203SLN-VD DC12
G3F-203SLN DC24	G3F-203SLN-VD DC24
G3F-203S DC3-28	G3F-203S-VD DC4-24
G3F-203SL DC5	G3F-203SL-VD DC5
G3F-203SL DC12	G3F-203SL-VD DC12
G3F-203SL DC24	G3F-203SL-VD DC24
G3FD-X03SN DC5-24	G3FD-X03SN-VD DC5-24
G3FD-102SN DC5-24	G3FD-102SN-VD DC5-24
G3FD-102SN AC100/110	G3FD-102SN-VD AC100/110
G3FD-102SN AC200/220	G3FD-102SN-VD AC200/220
G3FD-X03S DC3-28	G3FD-X03S-VD DC4-24
G3FD-102S DC3-28	G3FD-102S-VD DC4-24

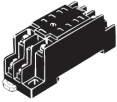
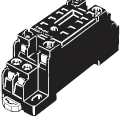


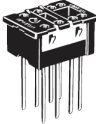
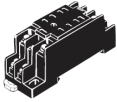
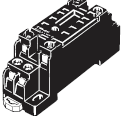


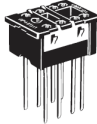
[Body color]

Product discontinuation Model G3F/G3FD series	Recommendable replacement Model G3F-VD/G3FD-VD series
	

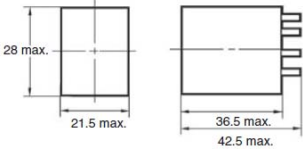
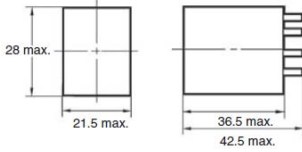
[Wire connection]

Product discontinuation Model G3F/G3FD series	Recommendable replacement Model G3F-VD/G3FD-VD series
<p>Terminal Arrangement/ Internal Connections</p> 	<p>Terminal Arrangement/ Internal Connections</p> 

[Mounting dimensions]

Product discontinuation Model G3F/G3FD series	Recommendable replacement Model G3F-VD/G3FD-VD series
<p style="text-align: center;"><Front-mounting></p> <div style="text-align: center;">  <p>PYF08A</p> </div> <div style="text-align: center;">  <p>PYF08A-E</p> </div> <p style="text-align: center;"><Back-mounting></p> <div style="text-align: center;">  <p>PY08</p> </div> <div style="text-align: center;">  <p>PY08-02</p> </div> <div style="text-align: center;">  <p>PY08QN</p> </div>	<p style="text-align: center;"><Front-mounting></p> <div style="text-align: center;">  <p>PYF08A</p> </div> <div style="text-align: center;">  <p>PYF08A-E</p> </div> <p style="text-align: center;"><Back-mounting></p> <div style="text-align: center;">  <p>PY08</p> </div> <div style="text-align: center;">  <p>PY08-02</p> </div> <div style="text-align: center;">  <p>PY08QN</p> </div>

[Dimensions]

Product discontinuation Model G3F/G3FD series	Recommendable replacement Model G3F-VD/G3FD-VD series
<div style="text-align: center;">  <p>28 max. 21.5 max. 36.5 max. 42.5 max.</p> </div>	<div style="text-align: center;">  <p>28 max. 21.5 max. 36.5 max. 42.5 max.</p> </div>

[Characteristics]
Relay Specifications (AC load)

Item	Product discontinuation Model G3F	Recommendable replacement Model G3F-VD
Rated input voltage	5 to 24 VDC /4 to 24 VDC 100/110 VAC /200/220 VAC 5 VDC /12 VDC /24 VDC	5 to 24 VDC /4 to 24 VDC 100/110 VAC /200/220 VAC 5 VDC /12 VDC /24 VDC
Input current	(16 mA) / (16 mA) (26.8 mA) / (30.5 mA) (12.8 mA) / (13.3 mA) / (12.0 mA)	15 mA max. (26.8 mA) / (30.5 mA) (12.8 mA) / (13.3 mA) / (12.0 mA)
Impedance	1,500Ω /1,500Ω 4,100Ω /7,200Ω 390Ω /900Ω /2,000Ω	- 4,100Ω /7,200Ω 390Ω /900Ω /2,000Ω
Must-operate voltage	4 VDC max. /3 VDC max. 75 VAC max. /150 VAC max. 4 VDC max. /9.6 VDC max. /19.2 VDC max.	4 VDC max. /3 VDC max. 75 VAC max. /150 VAC max. 4 VDC max. /9.6 VDC max. /19.2 VDC max.
Must-release voltage	1 VDC min. /1 VDC min. 20 VAC min. /40 VAC max. 1 VDC min. /1 VDC min. /1 VDC min.	1 VDC min. /1 VDC min. 20 VAC min. /40 VAC max. 1 VDC min. /1 VDC min. /1 VDC min.
Rated load voltage	100 to 240 VAC	100 to 240 VAC
Load current	0.1 to 3 A/0.1 to 2 A	0.1 to 3 A/0.1 to 2 A
Surge withstand current	45 A (60 Hz, 1cycle)	45 A (60 Hz, 1cycle)

Relay Specifications (DC load)

Item	Product discontinuation Model G3FD	Recommendable replacement Model G3FD-VD
Rated input voltage	5 to 24 VDC /4 to 24 VDC 100/110 VAC /200 /220 VAC	5 to 24 VDC /4 to 24 VDC 100/110 VAC /200/220 VAC
Input current	(16 mA) / (16 mA) (26.8 mA) / (30.5 mA)	(16 mA) / (16 mA) (26.8 mA) / (30.5 mA)
Impedance	1,500Ω /1,500Ω 4,100Ω /7,200Ω	1,500Ω /1,500Ω 4,100Ω /7,200Ω
Must-operate voltage	4 VDC max. /3 VDC max. 75 VAC max. /150 VAC max.	4 VDC max. /3 VDC max. 75 VAC max. /150 VAC max.
Must-release voltage	1 VDC min. /1 VDC min. 20 VAC min. /40 VAC max.	1 VDC min. /1 VDC min. 20 VAC min. /40 VAC max.
Rated load voltage	4 to 48 VDC /5 to 110 VDC	4 to 48 VDC /5 to 110 VDC
Load current	0.1 to 3 A /0.1 to 2 A	0.1 to 3 A /0.1 to 2 A
Surge withstand current	18 A (10 ms) /10 A (10 ms)	18 A (10 ms) /10 A (10 ms)

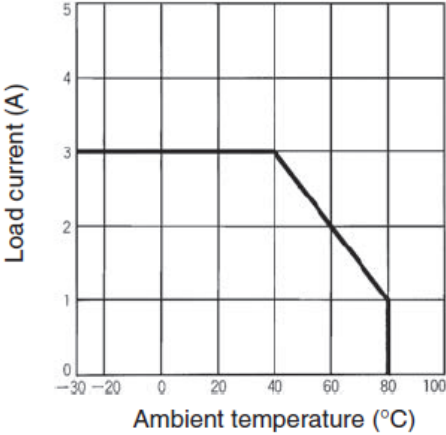
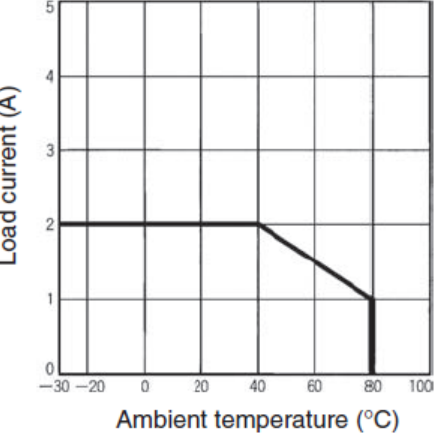
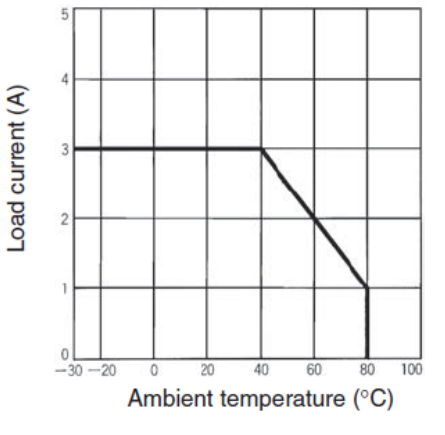
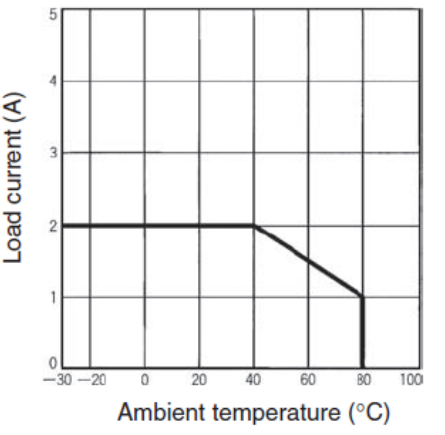
[Operation ratings]
Relay output (AC load)

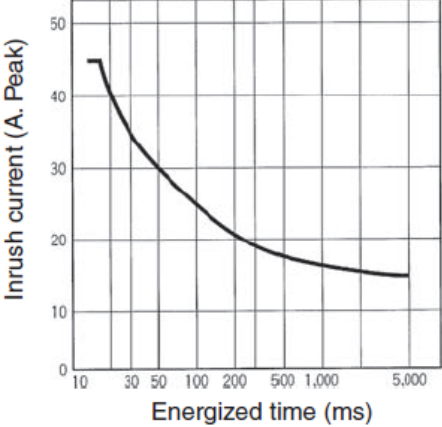
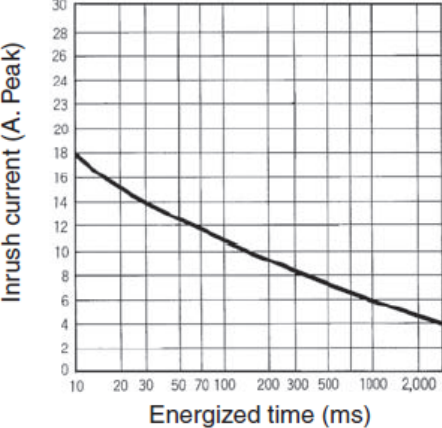
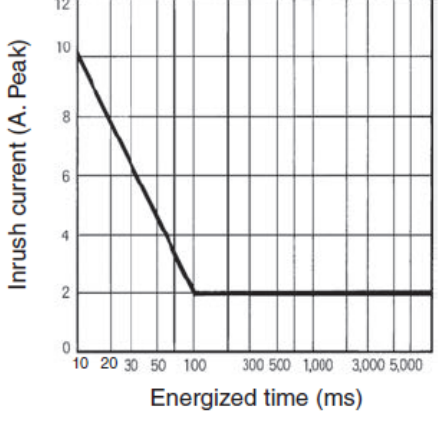
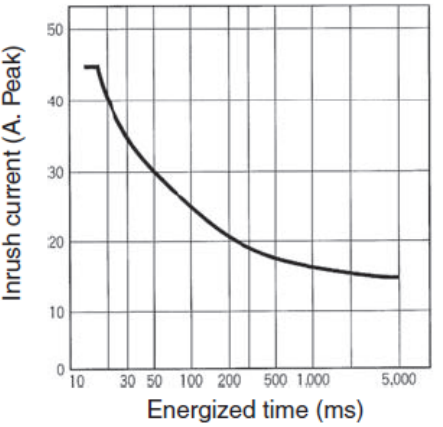
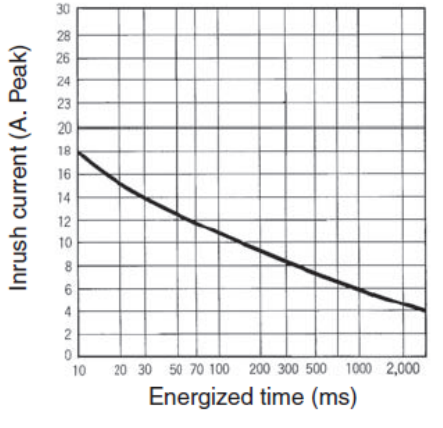
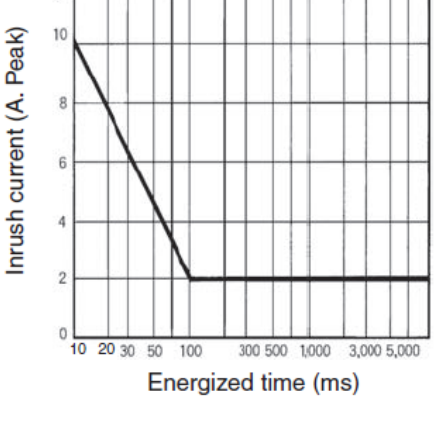
Item	Product discontinuation Model G3F	Recommendable replacement Model G3F-VD
Operation time	1/2 load power supply cycle + 1 ms max. (DC input ; zero-cross) 1 + 1/2 load power supply cycle + 1 ms max. (AC input ; zero-cross) 1 ms max. (non-zero-cross)	1/2 load power supply cycle + 1 ms max. (DC input ; zero-cross) 1 + 1/2 load power supply cycle + 1 ms max. (AC input ; zero-cross) 1 ms max. (non-zero-cross)
Release time	1/2 load power supply cycle + 1 ms max. (DC input) 1 + 1/2 load power supply cycle + 1 ms max. (AC input ; zero-cross)	1/2 load power supply cycle + 1 ms max. (DC input) 1 + 1/2 load power supply cycle + 1 ms max. (AC input ; zero-cross)
Output ON voltage drop	1.6 V max.	1.6 V max.
OFF leakage current	5 mA max (at 100 VAC; zero-cross) 10 mA max (at 200 VAC; zero-cross) 2.5 mA max (at 100 VAC; non-zero-cross) 5 mA max (at 200 VAC; non-zero-cross)	5 mA max (at 100 VAC; zero-cross) 10 mA max (at 200 VAC; zero-cross) 2.5 mA max (at 100 VAC; non-zero-cross) 5 mA max (at 200 VAC; non-zero-cross)
Insulation resistance	100 MΩ min	100 MΩ min
Dielectric strength	1,500 VAC at 50/60 Hz for 1 min.	2,000 VAC at 50/60 Hz for 1 min.
Vibration resistance	10 to 55 to 10 Hz, 0.75 mm single amplitude	10 to 55 to 10 Hz, 0.75 mm single amplitude
Shock resistance	1,000 m/s ²	1,000 m/s ²
Storage temperature	-30 to 100°C	-30 to 100°C
Ambient operating temperature	-30 to 80°C	-30 to 80°C
Ambient operating humidity	45 to 85% RH	45 to 85% RH
Weight	Approx. 50 g	Approx. 50 g

Relay output (DC load)

Item	Product discontinuation Model G3FD	Recommendable replacement Model G3FD-VD
Operation time	0.5 ms max. (DC input) 20 ms max. (AC input)	0.5 ms max. (DC input) 20 ms max. (AC input)
Release time	2 ms /2.5 ms max. (DC input) 20 ms max. (AC input)	2 ms /2.5 ms max. (DC input) 20 ms max. (AC input)
Output ON voltage drop	1.5 V max.	1.5V max.
OFF leakage current	5 mA max (at 50 VDC; G3FD-X03S) 0.1 mA max (at 100 VDC; G3FD-102S)	5 mA max (at 50 VDC; G3FD-X03S) 0.1 mA max (at 100 VDC; G3FD-102S)
Insulation resistance	100 MΩ min	100 MΩ min
Dielectric strength	1,500 VAC at 50/60 Hz for 1 min.	1,500 VAC at 50/60 Hz for 1 min.
Vibration resistance	10 to 55 to 10 Hz, 0.75 mm single amplitude	10 to 55 to 10 Hz, 0.75 mm single amplitude
Shock resistance	1,000 m/s ²	1,000 m/s ²
Storage temperature	-30 to 100°C	-30 to 100°C
Ambient operating temperature	-30 to 80°C	-30 to 80°C
Ambient operating humidity	45 to 85% RH	45 to 85% RH
Weight	Approx. 50 g	Approx. 50 g

[Operation methods]

<p>Product discontinuation Model G3F/G3FD</p>	<p>Recommendable replacement Model G3F-VD/G3FD-VD</p>																																																																
<p>Load Current vs. Ambient Temperature Rating</p> <p>G3F-203SN-VD/203S-VD/203SLN-VD/ 203SL-VD G3FD-X03SN-VD/X03S-VD</p>  <table border="1"> <caption>Data for G3F-203SN-VD/203S-VD/203SLN-VD/203SL-VD and G3FD-X03SN-VD/X03S-VD</caption> <thead> <tr> <th>Ambient temperature (°C)</th> <th>Load current (A)</th> </tr> </thead> <tbody> <tr><td>-30</td><td>3</td></tr> <tr><td>-20</td><td>3</td></tr> <tr><td>0</td><td>3</td></tr> <tr><td>20</td><td>3</td></tr> <tr><td>40</td><td>3</td></tr> <tr><td>60</td><td>2</td></tr> <tr><td>80</td><td>1</td></tr> </tbody> </table> <p>G3F-202SN-VD G3FD-102SN-VD/102S-VD</p>  <table border="1"> <caption>Data for G3F-202SN-VD and G3FD-102SN-VD/102S-VD</caption> <thead> <tr> <th>Ambient temperature (°C)</th> <th>Load current (A)</th> </tr> </thead> <tbody> <tr><td>-30</td><td>2</td></tr> <tr><td>-20</td><td>2</td></tr> <tr><td>0</td><td>2</td></tr> <tr><td>20</td><td>2</td></tr> <tr><td>40</td><td>2</td></tr> <tr><td>60</td><td>1.5</td></tr> <tr><td>80</td><td>1</td></tr> </tbody> </table>	Ambient temperature (°C)	Load current (A)	-30	3	-20	3	0	3	20	3	40	3	60	2	80	1	Ambient temperature (°C)	Load current (A)	-30	2	-20	2	0	2	20	2	40	2	60	1.5	80	1	<p>Load Current vs. Ambient Temperature Rating</p> <p>G3F-203SN-VD/203S-VD/203SLN-VD/ 203SL-VD G3FD-X03SN-VD/X03S-VD</p>  <table border="1"> <caption>Data for G3F-203SN-VD/203S-VD/203SLN-VD/203SL-VD and G3FD-X03SN-VD/X03S-VD</caption> <thead> <tr> <th>Ambient temperature (°C)</th> <th>Load current (A)</th> </tr> </thead> <tbody> <tr><td>-30</td><td>3</td></tr> <tr><td>-20</td><td>3</td></tr> <tr><td>0</td><td>3</td></tr> <tr><td>20</td><td>3</td></tr> <tr><td>40</td><td>3</td></tr> <tr><td>60</td><td>2</td></tr> <tr><td>80</td><td>1</td></tr> </tbody> </table> <p>G3F-202SN-VD G3FD-102SN-VD/102S-VD</p>  <table border="1"> <caption>Data for G3F-202SN-VD and G3FD-102SN-VD/102S-VD</caption> <thead> <tr> <th>Ambient temperature (°C)</th> <th>Load current (A)</th> </tr> </thead> <tbody> <tr><td>-30</td><td>2</td></tr> <tr><td>-20</td><td>2</td></tr> <tr><td>0</td><td>2</td></tr> <tr><td>20</td><td>2</td></tr> <tr><td>40</td><td>2</td></tr> <tr><td>60</td><td>1.5</td></tr> <tr><td>80</td><td>1</td></tr> </tbody> </table>	Ambient temperature (°C)	Load current (A)	-30	3	-20	3	0	3	20	3	40	3	60	2	80	1	Ambient temperature (°C)	Load current (A)	-30	2	-20	2	0	2	20	2	40	2	60	1.5	80	1
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<p>One Cycle Surge Current</p> <p align="center">G3F-203SN-VD/203S-VD/202SN-VD/ 203SLN-VD/203SL-VD</p>  <p align="center">G3FD-X03SN-VD/X03S-VD</p>  <p align="center">G3FD-102SN-VD/102S-VD</p> 	<p>One Cycle Surge Current</p> <p align="center">G3F-203SN-VD/203S-VD/202SN-VD/ 203SLN-VD/203SL-VD</p>  <p align="center">G3FD-X03SN-VD/X03S-VD</p>  <p align="center">G3FD-102SN-VD/102S-VD</p> 

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