

Discontinuation Notice of Floatless Level Switch (Compact, Plug-in Type) model 61F-GP-N series, model 61F-GPN□ series, Conductive Level Controller model 61F-GPN-B[].

Product Discontinuation

Floatless Level Switch (Compact, Plug-in Type)

Model 61F-GP-N series

Model 61F-GPN□ series

Conductive Level Controller

Model 61F-GPN-B[]



Recommended Replacement

Floatless Level Switch (Compact, Plug-in Type)

**Model 61F-LS-CP series
or No recommended
replacement**

Conductive Level Controller (Compact,
Plug-in Type) DC power supply type

Model 61F-LS-CP11-B□



[Final order entry date]

The end of June, 2023

[Date of The Last Shipping]

The end of September, 2023

[Scheduled date of maintenance close]

The end of June, 2024

[Caution on recommended replacement]

- After powering up, the LED lights up for 1 to 3 seconds.
- The operating sensitivity of the form 61F-LS-CPD-S/-A (high function) is switched by the dip switch.
- Use the 61F-GP-LS-CP11-SRA, which is a recommended alternative to the 61F-GPN1, with the DIP switch set to low sensitivity.

[Difference from discontinued product]
Product Discontinuation: Model 61F-GP-N series, Model 61F-LS-CP11-B[]

Recommended replacement Model	Body Color	Dimensions	Wire connection	Mounting Dimensions	Characteristics	Operation ratings	Operation methods
61F-LS-CP[]-N	-	**	**	**	**	**	**
61F-LS-C[]-S/-A	-	**	**	**	**	**	*
61F-LS-CP11-B[]	-	**	**	**	**	**	**

Product Discontinuation: Model 61F-GP-N2 series

Recommended replacement Model	Body Color	Dimensions	Wire connection	Mounting Dimensions	Characteristics	Operation ratings	Operation methods
61F-LS-CP08-NRA	-	**	**	**	**	**	**
61F-LS-CP11-SRA	-	**	**	**	**	*	**

** : Compatible

* : The change is a little/Almost compatible

-- : Not compatible

- : No corresponding specification

[Product Discontinuation and recommended replacement]

Product discontinuation	Recommended replacement
61F-GP-N AC100	61F-LS-CP11-NRA
61F-GP-N AC110	61F-LS-CP11-NRA
61F-GP-N AC115	61F-LS-CP11-NRA
61F-GP-N AC120	61F-LS-CP11-NRA
61F-GP-N AC200	61F-LS-CP11-NRA
61F-GP-N AC220	61F-LS-CP11-NRA
61F-GP-N AC230	61F-LS-CP11-NRA
61F-GP-N AC24	No recommended replacement
61F-GP-N AC240	61F-LS-CP11-NRA
61F-GP-N-TDL AC100	No recommended replacement
61F-GP-N-TDL AC110V	No recommended replacement
61F-GP-N-TDL AC115V	No recommended replacement
61F-GP-N-TDL AC200V	No recommended replacement
61F-GP-N-TDL AC220V	No recommended replacement
61F-GP-N15 AC100V	No recommended replacement
61F-GP-N15 AC200	No recommended replacement
61F-GP-N2 110VAC	61F-LS-CP08-NRA
61F-GP-N2 120VAC	61F-LS-CP08-NRA
61F-GP-N2 220VAC	61F-LS-CP08-NRA
61F-GP-N2 230VAC	61F-LS-CP08-NRA
61F-GP-N2 240VAC	61F-LS-CP08-NRA
61F-GP-N2 24VAC	61F-LS-CP08-SRB
61F-GP-N8 100VAC	61F-LS-CP08-NRA
61F-GP-N8 110VAC	61F-LS-CP08-NRA
61F-GP-N8 120VAC	61F-LS-CP08-NRA
61F-GP-N8 200VAC	61F-LS-CP08-NRA
61F-GP-N8 220VAC	61F-LS-CP08-NRA
61F-GP-N8 230VAC	61F-LS-CP08-NRA
61F-GP-N8 240VAC	61F-LS-CP08-NRA
61F-GP-N8 24VAC	61F-LS-CP08-SRB
61F-GP-N8D 100VAC	61F-LS-CP08-SRA
61F-GP-N8D 110VAC	61F-LS-CP08-SRA
61F-GP-N8D 120VAC	61F-LS-CP08-SRA
61F-GP-N8D 200VAC	61F-LS-CP08-SRA
61F-GP-N8D 220VAC	61F-LS-CP08-SRA
61F-GP-N8D 230VAC	61F-LS-CP08-SRA
61F-GP-N8D 240VAC	61F-LS-CP08-SRA
61F-GP-N8D 24VAC	61F-LS-CP08-SRB
61F-GP-N8H 100VAC	61F-LS-CP08-ARA
61F-GP-N8H 110VAC	61F-LS-CP08-ARA
61F-GP-N8H 120VAC	61F-LS-CP08-ARA
61F-GP-N8H 200VAC	61F-LS-CP08-ARA
61F-GP-N8H 220VAC	61F-LS-CP08-ARA
61F-GP-N8H 230VAC	61F-LS-CP08-ARA

Product discontinuation	Recommended replacement
61F-GP-N8H 240VAC	61F-LS-CP08-ARA
61F-GP-N8H 24VAC	61F-LS-CP08-ARB
61F-GP-N8HY 100VAC	61F-LS-CP08-SRA
61F-GP-N8HY 110VAC	61F-LS-CP08-SRA
61F-GP-N8HY 200VAC	61F-LS-CP08-SRA
61F-GP-N8HY 220VAC	61F-LS-CP08-SRA
61F-GP-N8HY AC24V	61F-LS-CP08-SRB
61F-GP-N8L 100VAC 2KM	61F-LS-CP08-NRA
61F-GP-N8L 100VAC 4KM	61F-LS-CP08-NRA
61F-GP-N8L 110VAC 2KM	61F-LS-CP08-NRA
61F-GP-N8L 110VAC 4KM	61F-LS-CP08-NRA
61F-GP-N8L 120VAC 2KM	61F-LS-CP08-NRA
61F-GP-N8L 120VAC 4KM	61F-LS-CP08-NRA
61F-GP-N8L 200VAC 2KM	61F-LS-CP08-NRA
61F-GP-N8L 200VAC 4KM	61F-LS-CP08-NRA
61F-GP-N8L 220VAC 2KM	61F-LS-CP08-NRA
61F-GP-N8L 220VAC 4KM	61F-LS-CP08-NRA
61F-GP-N8L 230VAC 2KM	61F-LS-CP08-NRA
61F-GP-N8L 230VAC 4KM	61F-LS-CP08-NRA
61F-GP-N8L 240VAC 2KM	61F-LS-CP08-NRA
61F-GP-N8L 240VAC 4KM	61F-LS-CP08-NRA
61F-GP-N8L 24VAC 2KM	61F-LS-CP08-SRB
61F-GP-N8L 24VAC 4KM	61F-LS-CP08-SRB
61F-GP-N8R 100VAC	No recommended replacement
61F-GP-N8R 110VAC	No recommended replacement
61F-GP-N8R 120VAC	No recommended replacement
61F-GP-N8R 200VAC	No recommended replacement
61F-GP-N8R 220VAC	No recommended replacement
61F-GP-N8R 230VAC	No recommended replacement
61F-GP-N8R 240VAC	No recommended replacement
61F-GP-N8R 24VAC	No recommended replacement
61F-GP-N8Y 110VAC	61F-LS-CP08-ARA
61F-GP-N8Y 240VAC	61F-LS-CP08-ARA
61F-GP-N8Y 24VAC	61F-LS-CP08-ARB
61F-GP-ND AC100	61F-LS-CP11-SRA
61F-GP-ND AC110	61F-LS-CP11-SRA
61F-GP-ND AC120	61F-LS-CP11-SRA
61F-GP-ND AC200	61F-LS-CP11-SRA
61F-GP-ND AC220	61F-LS-CP11-SRA
61F-GP-ND AC240	61F-LS-CP11-SRA
61F-GP-NH AC100	61F-LS-CP11-ARA
61F-GP-NH AC110	61F-LS-CP11-ARA
61F-GP-NH AC115	61F-LS-CP11-ARA
61F-GP-NH AC120	61F-LS-CP11-ARA
61F-GP-NH AC200	61F-LS-CP11-ARA

Product discontinuation	Recommended replacement
61F-GP-NH AC220	61F-LS-CP11-ARA
61F-GP-NH AC230V	61F-LS-CP11-ARA
61F-GP-NH AC240	61F-LS-CP11-ARA
61F-GP-NH3 AC100	61F-LS-CP11-ARA
61F-GP-NH3 AC200	61F-LS-CP11-ARA
61F-GP-NL 2KM AC100	61F-LS-CP11-NRA
61F-GP-NL 2KM AC110	61F-LS-CP11-NRA
61F-GP-NL 2KM AC120	61F-LS-CP11-NRA
61F-GP-NL 2KM AC200	61F-LS-CP11-NRA
61F-GP-NL 2KM AC220	61F-LS-CP11-NRA
61F-GP-NL 2KM AC240	61F-LS-CP11-NRA
61F-GP-NL 4KM AC100	61F-LS-CP11-NRA
61F-GP-NL 4KM AC110	61F-LS-CP11-NRA
61F-GP-NL 4KM AC120	61F-LS-CP11-NRA
61F-GP-NL 4KM AC200	61F-LS-CP11-NRA
61F-GP-NL 4KM AC220	61F-LS-CP11-NRA
61F-GP-NL 4KM AC240	61F-LS-CP11-NRA
61F-GP-NL AC115V 2KM	61F-LS-CP11-NRA
61F-GP-NR AC100	No recommended replacement
61F-GP-NR AC110	No recommended replacement
61F-GP-NR AC200	No recommended replacement
61F-GP-NR AC220	No recommended replacement
61F-GP-NR AC240	No recommended replacement
61F-GP-NT 230VAC CE	61F-LS-CP11-NRA
61F-GP-NT AC100	61F-LS-CP11-NRA
61F-GP-NT AC110	61F-LS-CP11-NRA
61F-GP-NT AC120	61F-LS-CP11-NRA
61F-GP-NT AC200	61F-LS-CP11-NRA
61F-GP-NT AC220 .	61F-LS-CP11-NRA
61F-GP-NT AC240	61F-LS-CP11-NRA
61F-GPN-BC DC24V	61F-LS-CP11-BRC
61F-GPN-BT DC24V	61F-LS-CP11-BTC
61F-GPN1-TDL AC100V	No recommended replacement
61F-GPNT2 AC100V	No recommended replacement

[Body color]

Product discontinuation Model 61F-GP-N series, Model 61F-GPN-B[]	Recommendable replacement Model 61F-LS-CP series
Gray	Black

Product discontinuation Model 61F-GP-N series, Model 61F-GPN-B[]	Recommended replacement Model 61F-LS-CP series
 Two beige Omron floatless level switches are shown. The one on the left is labeled '61F-GP-N' and the one on the right is labeled '61F-GP-N8'. Both have black labels with white text. The 61F-GP-N8 label includes a QR code and a CE mark.	 Three black Omron floatless level switches are shown. The one on the left is labeled '61F-LS-CP11-NRA', the middle one is labeled '61F-LS-CP11-SRA', and the one on the right is labeled '61F-LS-CP11-BRC'. All three have black labels with white text and a QR code.

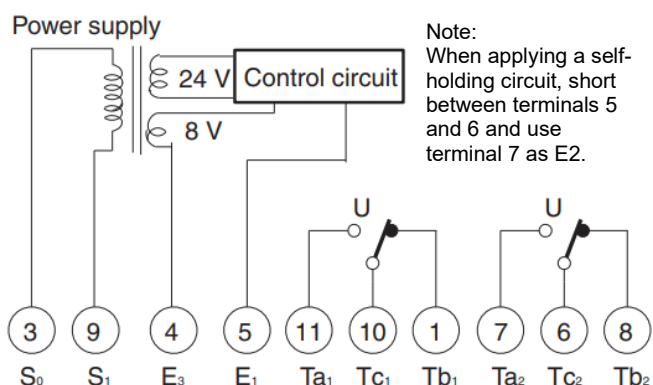
[Dimensions]

Dimensions Product discontinuation Model 61F-GP-N series, Model 61F-GPN-B□	Recommendable replacement Model 61F-LS-CP series
11-pin type Product discontinuation: 61F-GP-N/-NT/-NL/-NH/-ND/-NR, 61F-GPN-B□ Recommendable replacement: 61F-LS-CP11-□ series Applied socket: PF113A(Sold separately)	PF113A
8-pin type Product discontinuation: 61F-GP-N8/-N2 series Recommendable replacement: 61F-LS-CP08-□ series Applied socket: PF083A (Sold separately)	PF083A

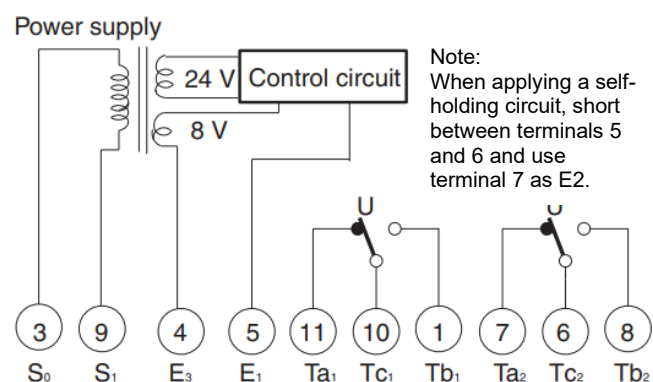
[Wire connection]

Product discontinuation Model 61F-GP-N series, Model 61F-GPN-B□	Recommendable replacement Model 61F-LS-CP series
Internal Circuit Diagrams 61F-GP-N,-NT,-NL,-ND series	Internal Circuit Diagrams 61F-LS-CP11-N、-S

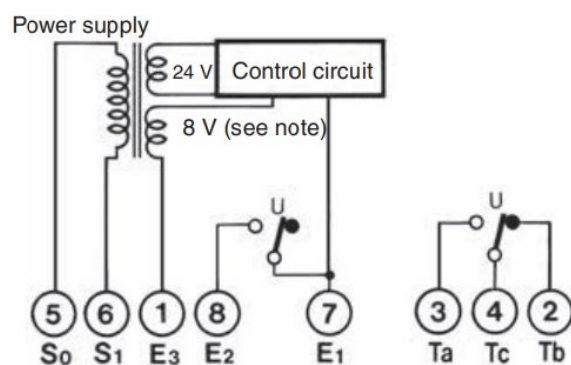
Product discontinuation
Model 61F-GP-N series, Model 61F-GPN-B[]



61F-GP-NH(3) series

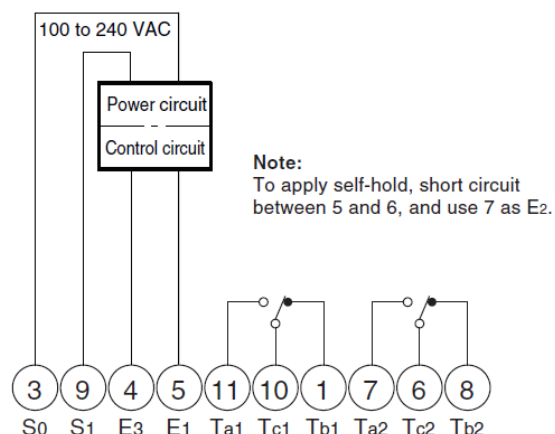


61F-GP-N8, -N8L, -N8D, -N8HY series

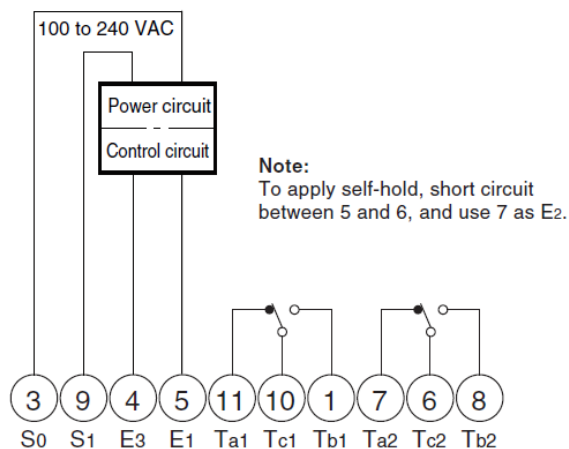


61F-GP-N8H, -N8Y series

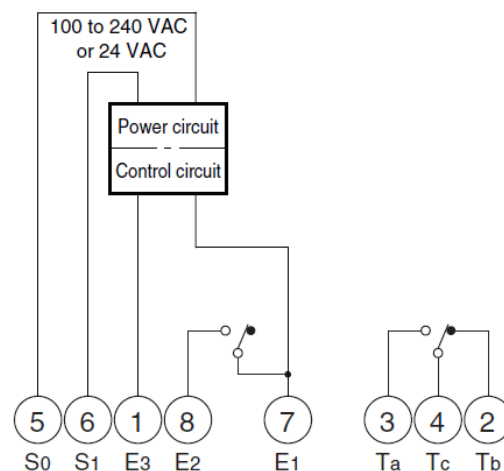
Recommendable replacement
Model 61F-LS-CP series



61F-LS-CP11-A

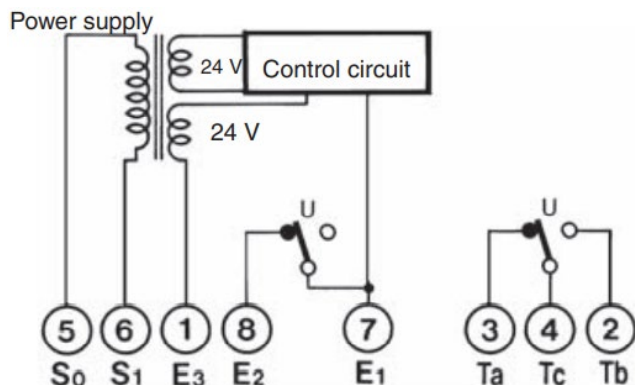


61F-LS-CP08-N, -S



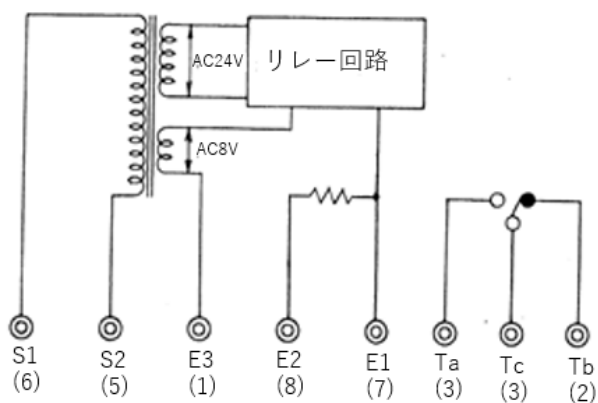
61F-LS-CP08-A

Product discontinuation
Model 61F-GP-N series, Model 61F-GPN-B[]

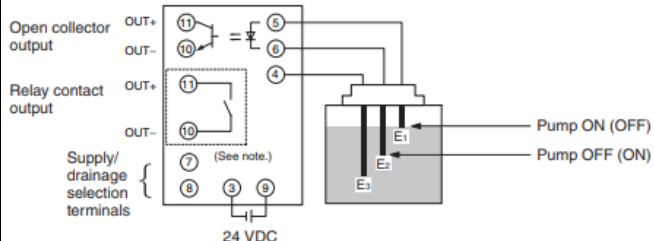


61F-GP-N2 series

Relay circuit

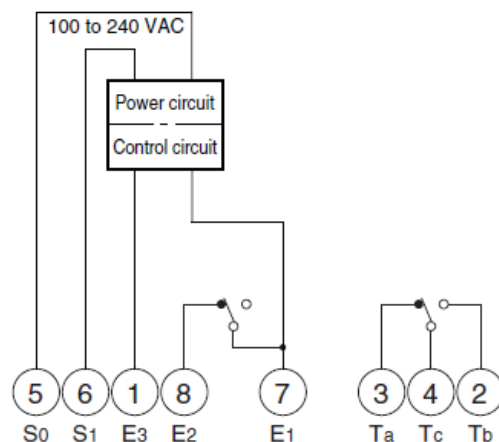


61F-GPN-BT

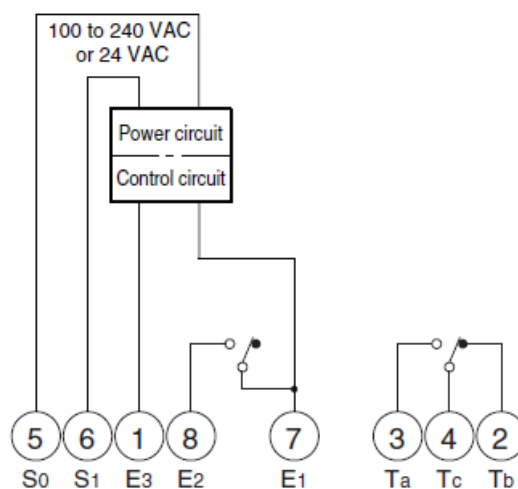


Note: 1. The part within the dotted-line box is for the 61F-GPN-BC (relay-output type) only.
2. The power supply does not have any polarity.

Recommendable replacement
Model 61F-LS-CP series

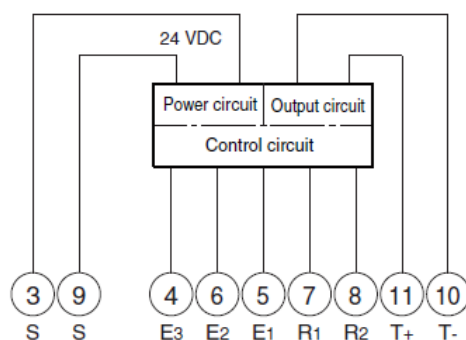


61F-LS-CP08-N



61F-LS-CP11-B

Output specifications (10 to 11)
BR: Relay output (1a)
BT: Open collector (NPN)



Note: Output is inverted when 7 and 8 are short-circuited.

[Characteristics]

Item	Product discontinuation Model 61F-GP-N series	Recommendable replacement Model 61F-LS-CP[]-N 61F-LS-CP[]-S/-A
Supply voltage/frequency	24, 100, 110, 115, 120, 200, 220, 230 or 240 VAC; 50/60 Hz	61F-LS-CP[]-N(Normal): 100 - 240 VAC 50/60 Hz 61F-LS-CP[]-S/-A (High functionality): 100 - 240 VAC 50/60 Hz 24 VAC 50/60 Hz
Power consumption	Approx. 3.5 VA max.	Approx. 3.2 VA max.
Contact ratings	61F-GP-N series (Excluding 61F-GP-N2): 1 A, 250 VAC (Inductive load: $\cos\phi$ = 0.4) 3 A, 250 VAC (Resistive load) 61F-GP-N2: 5A, 220VAC (Inductive load: $\cos\phi$ = 0.4) 8A, 220VAC (Resistive load) 2A, 24VDC (Inductive load: $\cos\phi$ = 0.4) 5A, 24VDC (Resistive load)	5 A at 250 VAC (Resistive load ($\cos\phi$ = 1)) 1 A at 250 VAC (Inductive load ($\cos\phi$ = 0.4)) Minimum applicable load 5 VDC, 1 mA (reference value)
Ambient temperature	-10 to 55°C(-10 to 70°C for high- temperature controller)	-10 to +70°C
Ambient humidity	45% to 85% RH	25 to 90% RH
Ambient storage temperature	-10 to 55°C	-10 to +70°C
Ambient storage humidity	45% to 85% RH	25 to 90% RH
Weight	Approx. 155 g	Approx. 100 g
Accessories	Hold-down clip PFC-N8	
Wiring distance	General-purpose, Low- sensitivity, 61F-GP-N2: 1 km max. High-temperature: 600 m max. Long-distance: 2 km max. 4 km max. High-sensitivity: 50 m max.	61F-LS-CP[]-N(Normal): 4 km or less 61F-LS-CP[]-S/-A (High functionality): Ultra low-sensitivity, low-sensitivity, general-sensitivity: 4 km or less High-sensitivity: 50 m or less Ultra high-sensitivity: 30 m or less
Operation resistance	General-purpose, High- temperature, 61F-GP-N2: 4 k Ω or more Long-distance(for 2 km): 1.3 k Ω or more Long-distance (for 4 km): 0.5 k Ω or more High-sensitivity(11-pin type): 10k~40 k Ω High-sensitivity(8-pin type): 15k~70 k Ω Low-sensitivity: 1.3 k Ω or more 61F-GP-NH3: 200 k Ω or more	61F-LS-CP[]-N(Normal): 4 k Ω or more 61F-LS-CP[]-S/-A (High functionality): Dip Switch Settings Ultra low-sensitivity: 0.5 k Ω or more Low-sensitivity: 1.3 k Ω or more General-purpose: 4 k Ω or more High-sensitivity: 70 k Ω or more Ultra high-sensitivity: 200 k Ω or more
Release resistance	General-purpose, High- temperature, 61F-GP-N2: 15 k Ω or less Long-distance(for 2 km): 4 k Ω or less Long-distance (for 4 km): 2.5 k Ω or less High-sensitivity(11-pin type):	61F-LS-CP[]-N(Normal): 15 k Ω or less 61F-LS-CP[]-S/-A (High functionality): Dip Switch Settings Ultra low-sensitivity: 2.5 k Ω or less Low-sensitivity: 4 k Ω or less General-purpose: 15 k Ω or less

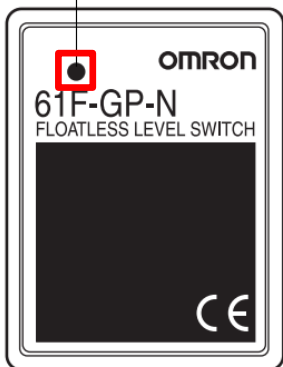
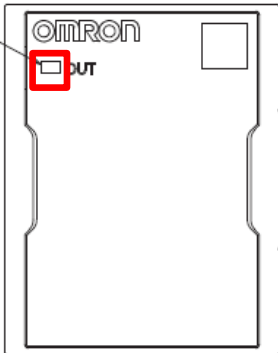
Item	Product discontinuation Model 61F-GP-N series	Recommendable replacement Model 61F-LS-CP[]-N 61F-LS-CP[]-S/-A
	100 kΩ or less High-sensitivity(8-pin type): 300 kΩ or less Low-sensitivity: 4 kΩ or less 61F-GP-NH3: 500 kΩ or less	High-sensitivity: 300 kΩ or less Ultra high-sensitivity: 500 kΩ or less
Interelectrode voltage	8 VAC 24 VAC(High-sensitivity(8-pin type))	5 VAC
Response time	Operate: 80 ms max. Release: 160 ms max.	61F-LS-CP[]-N(Normal): Operate: 80 ms max. Release: 160 ms max. 61F-LS-CP[]-S/-A (High functionality): Dip Switch Settings 5S/ INSTANT (Instantaneous)
Startup lock time	-	3 s after turning on the power supply (The LED blinks during the startup lock time)
Insulation resistance	100 MΩ min. (at 500 VDC)	
Dielectric strength	2000 VAC, 50/60 Hz for 1 min.	
Life expectancy	Electrical: 100,000 operations min. Mechanical: 5,000,000 operations min.	
Approved standards	UL508 CSA C22.2 No.14 EN61010-1 EN61326-1 Industrial electromagnetic environment	UL61010-1 CAN/CSA C22.2 No.61010-1 CE, RCM EN61010-1 EN61326-1 Industrial electromagnetic environment

[Characteristics]

Item	Product discontinuation Model 61F-GPN-B[]	Recommendable replacement Model 61F-LS-CP11-B[]
Supply voltage/frequency	24 VDC	
Power consumption	2 W max.	Approx. 1 W max.
Contact ratings	61F-GPN-BT: Open collector (NPN) 30 VDC, 100 mA max. Leak current: 100 μA max. 61F-GPN-BC Relay output, SPST-NO 5 A, 240 VAC (Resistive load) 5 A, 30 VDC	Transistor output Open collector (NPN) 30 VDC, 100 mA, leak current 100 μA or less Relay output (1a) 30 VDC 5 A, 240 VAC 5 A (resistive load) Minimum applicable load 5 VDC, 10 mA (reference value)
Ambient temperature	-10 to +55°C	
Ambient humidity	25 to 85% RH	
Ambient storage temperature	-10 to +55°C	
Ambient storage humidity	25 to 85% RH	
Weight	Approx. 155 g	Approx. 100 g
Accessories	Hold-down clip PFC-N8	
Wiring distance	100 m or less	
Operation resistance	Variable (0 to 100 kΩ)	
Operation resistance error	Scale 0 : 0 to 10 kΩ Scale 100 : 100 ± 10 kΩ	

Item	Product discontinuation Model 61F-GPN-B[]	Recommendable replacement Model 61F-LS-CP11-B[]
Release resistance	200% max. of the operation resistance	
Interelectrode voltage	5 VAC max.	5 VAC
Response time	Operate: 1.5 s max. Release: 3.0 s max.	
Startup lock time	-	3 s after turning on the power supply (The LED blinks during the startup lock time)
Insulation resistance	100 MΩ min. (at 500 VDC)	
Dielectric strength	2000 VAC, 50/60 Hz for 1 min.	
Life expectancy	Relay specification only Electrical: 70,000 operations min. Mechanical: 20,000,000 operations min.	
Switching between supply and drainage	Terminals 7 and 8 open: Automatic drainage operation Terminals 7 and 8 shorted: Automatic supply operation	
Approved standards	UL61010-1 CAN/CSA C22.2 No.61010-1 EN61010-1 EN61326-1 Industrial electromagnetic environment	UL61010-1 CE, RCM EN61010-1 EN61326-1 Industrial electromagnetic environment

[Operation ratings]

Product discontinuation Model 61F-GP-N series, Model 61F-GPN-B[]	Recommendable replacement Model 61F-LS-CP series
LED action Lit: Indicates that water has been detected. Unlit: Indicates standby state.	LED action Lit: Indicates that water has been detected. Unlit: Indicates standby state. Blinking: Indicates that power has turned on. (3 seconds when power is turned on)
Position of LED indicator 	Position of LED indicator 

Specifications and prices 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.