

Single-phase G3PE

Specifications

Certification

UL508 (pending), CSA22.2 No.14 (pending), and EN60947-4-3 (pending)

Note: The G3PE-2□□□B (L) Series has already been certified for the above standards.

Ratings

Input (at an Ambient Temperature of 25°C)

Model	Item	Rated voltage	Operating voltage range	Rated input current	Voltage level	
					Must operate voltage	Must release voltage
G3PE-□□□□B	12 to 24 VDC	9.6 to 30 VDC	7 mA max.	9.6 VDC max.	1.0 VDC max.	
G3PE-□□□□BL						

Output

Model	G3PE-215B(L)		G3PE-225B(L)		G3PE-235B(L)		G3PE-245B(L)		G3PE-515B(L)		G3PE-525B(L)		G3PE-535B(L)		G3PE-545B(L)	
Rated load voltage	100 to 240 VAC (50/60 Hz)								200 to 480 VAC (50/60 Hz)							
Load voltage range	75 to 264 VAC (50/60 Hz)								180 to 528 VAC (50/60 Hz)							
Applicable load current *	0.1 to 15 A (at 40°C)		0.1 to 25 A (at 40°C)		0.5 to 35 A (at 25°C)		0.5 to 45 A (at 25°C)		0.1 to 15 A (at 40°C)		0.1 to 25 A (at 40°C)		0.5 to 35 A (at 25°C)		0.5 to 45 A (at 25°C)	
Inrush current resistance	150 A (60 Hz, 1 cycle)		220 A (60 Hz, 1 cycle)		440 A (60 Hz, 1 cycle)				150 A (60 Hz, 1 cycle)		220 A (60 Hz, 1 cycle)		440 A (60 Hz, 1 cycle)			
Permissible I ² t (reference value)	121A ² s		260A ² s		1,260A ² s				128A ² s		1,350A ² s				6,600A ² s	
Applicable load (resistive load)	3 kW (at 200 VAC)		5 kW (at 200 VAC)		7 kW (at 200 VAC)		9 kW (at 200 VAC)		6 kW (at 400 VAC)		10 kW (at 400 VAC)		14 kW (at 400 VAC)		18 kW (at 400 VAC)	

* The applicable load current depends on the ambient temperature. For details, refer to *Load Current vs. Ambient Temperature* in *Engineering Data* on page 3.

Characteristics

Model	G3PE-215B		G3PE-225B		G3PE-235B		G3PE-245B		G3PE-215BL		G3PE-225BL		G3PE-235BL		G3PE-245BL	
Operate time	1/2 of load power source cycle + 1 ms max.								1 ms max.							
Release time	1/2 of load power source cycle + 1 ms max.															
Output ON voltage drop	1.6 V (RMS) max.															
Leakage current	10 mA max. (at 200 VAC)															
Insulation resistance	100 MΩ min. (at 500 VDC)															
Dielectric strength	2,500 VAC, 50/60 Hz for 1 min															
Vibration resistance	10 to 55 to 10 Hz, 0.375-mm single amplitude (0.75-mm double amplitude) (Mounted to DIN track)															
Shock resistance	Destruction: 294 m/s ² (Mounted to DIN track)															
Ambient storage temperature	-30 to 100°C (with no icing or condensation)															
Ambient operating temperature	-30 to 80°C (with no icing or condensation)															
Ambient operating humidity	45% to 85%															
Weight	Approx. 240 g				Approx. 400 g				Approx. 240 g				Approx. 400 g			

Model	G3PE-515B		G3PE-525B		G3PE-535B		G3PE-545B		G3PE-515BL		G3PE-525BL		G3PE-535BL		G3PE-545BL	
Operate time	1/2 of load power source cycle + 1 ms max.								1 ms max.							
Release time	1/2 of load power source cycle + 1 ms max.															
Output ON voltage drop	1.8 V (RMS) max.															
Leakage current	20 mA max. (at 480 VAC)															
Insulation resistance	100 MΩ min. (at 500 VDC)															
Dielectric strength	2,500 VAC, 50/60 Hz for 1 min															
Vibration resistance	10 to 55 to 10 Hz, 0.375-mm single amplitude (0.75-mm double amplitude) (Mounted to DIN track)															
Shock resistance	Destruction: 294 m/s ² (Mounted to DIN track)															
Ambient storage temperature	-30 to 100°C (with no icing or condensation)															
Ambient operating temperature	-30 to 80°C (with no icing or condensation)															
Ambient operating humidity	45% to 85%															
Weight	Approx. 240 g				Approx. 400 g				Approx. 240 g				Approx. 400 g			