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)

Item	Rated voltage	Operating voltage range	Rated input current	Voltage level		
Model	nateu voitage		nateu input current	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	12 to 24 VDC		15 mA max.	9.6 VDC max.		

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)
Item	GO: 2 2102(2)	GO: 2 2205(2)	GO: 2 2002(2)	GO! 2 2 102(2)	GO: 2 0102(2)	uo. 2 0202(2)	uo: 2 0002(2)	GO: 2 0102(2)
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 l 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 Item	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) ma	x.							
Leakage current	10 mA max. (at 2	200 VAC)							
Insulation resistance	100 $\text{M}\Omega$ min. (at	500 VDC)							
Dielectric strength	2,500 VAC, 50/6	0 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/s² (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				
				T.					
Model Item	G3PE -515B	G3PE -525B	G3PE -535B	G3PE -545B	G3PE -515BL	G3PE -525BL	G3PE -535BL	G3PE -545BL	
Operate time	1/2 of load powe	er source cycle +	1 ms max.	I	1 ms max.		1		
Release time	1/2 of load powe	er source cycle +	1 ms max.						
Output ON voltage drop	1.8 V (RMS) max.								
	1.8 V (RMS) ma	х.							
Leakage current	1.8 V (RMS) ma 20 mA max. (at								
	` '	480 VAC)							
Insulation resistance	20 mA max. (at	480 VAC) 500 VDC)							
Insulation resistance	20 mA max. (at 4 100 MΩ min. (at 2,500 VAC, 50/6	480 VAC) 500 VDC) 60 Hz for 1 min	e amplitude (0.75	i-mm double amp	olitude) (Mounted t	o DIN track)			
Leakage current Insulation resistance Dielectric strength Vibration resistance Shock resistance	20 mA max. (at 4 100 M Ω min. (at 2,500 VAC, 50/6 10 to 55 to 10 Hz	480 VAC) 500 VDC) 60 Hz for 1 min	• `	i-mm double amp	olitude) (Mounted t	o DIN track)			
Insulation resistance Dielectric strength Vibration resistance	20 mA max. (at 4 100 M Ω min. (at 2,500 VAC, 50/6 10 to 55 to 10 Hz Destruction: 294	480 VAC) 500 VDC) 60 Hz for 1 min r, 0.375-mm singl	to DIN track)	i-mm double amp	olitude) (Mounted t	o DIN track)			
Insulation resistance Dielectric strength Vibration resistance Shock resistance Ambient storage	20 mA max. (at 4 100 MΩ min. (at 2,500 VAC, 50/6 10 to 55 to 10 Hz Destruction: 294 -30 to 100°C (w	480 VAC) 500 VDC) 60 Hz for 1 min 7, 0.375-mm singl 1 m/s² (Mounted to	ndensation)	i-mm double amp	olitude) (Mounted t	o DIN track)			
Insulation resistance Dielectric strength Vibration resistance Shock resistance Ambient storage temperature Ambient operating	20 mA max. (at 4 100 MΩ min. (at 2,500 VAC, 50/6 10 to 55 to 10 Hz Destruction: 294 -30 to 100°C (w	480 VAC) 500 VDC) 60 Hz for 1 min 7, 0.375-mm singl 1 m/s² (Mounted to the content of the conten	ndensation)	i-mm double amp	olitude) (Mounted t	o DIN track)			