

Product data sheet

Characteristics

SSP3A250BD

Harmony, Solid state relay, 50 A, panel mount, zero voltage switching, input 4...32 V DC, output 48...530 V AC



Main

Range of product	Harmony Solid State Relays
Product or component type	Solid state relay up to 50 A
Device short name	SSP
Mounting support	Panel
Number of phases	3 phases
[In] rated current	50 A
Solid state output type	Zero voltage switching
Output switching mode	Zero voltage switching

Complementary

Control type	Without test button
[Uc] control circuit voltage	4...32 V DC
Minimum switching voltage	4 V DC turn-on
Maximum switching voltage	1 V DC turn-off
Response time	8.33 ms (turn-on) 8.33 ms (turn-off)
Input current	24...35 mA
Output voltage	48...530 V AC
Load current	0.1...50 A
Transient overvoltage	1200 V
Surge current	715 A for 20 ms 750 A for 16.6 ms 150 A for 1 s
Maximum I ² t for fusing	2520 A ² .S for 10 ms at 50 Hz 2320 A ² .s for 8.3 ms at 60 Hz
Maximum leakage current	3 mA off-state
Maximum voltage drop	<1.35 V on-state
DV/dt	500 V/μs off-state at maximum voltage
Power factor	0.5 (with maximum load)
Motor controller rating	1.5 Hp 40 °C 120 V AC 3 Hp 40 °C 240 V AC 7.5 Hp 40 °C 480 V AC 8.8 hp 40 °C 530 V AC
Motor power kW	1.11 KW at 40 °C 120 V AC 2.22 KW at 40 °C 240 V AC 5.55 KW at 40 °C 480 V AC 6.47 kW at 40 °C 530 V AC
Insulation resistance	>= 1000 MOhm at 500 V DC
Maximum capacitance	8 pF for input/output
Dielectric strength	4 KV AC for input/output 4 kV AC for input or output to case
Tightening torque	0.9...1.1 N.m for input 1.7...2.2 N.m for output

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Connections - terminals	Screw terminals: 1 x 0.2...1 x 2.5 mm ² , (AWG 24...AWG 14) for input Screw terminals: 1 x 1.5...1 x 10 mm ² , (AWG 16...AWG 8) for output
Thermal resistance	0.12 °C/W
LED indicator	LED, green for input
IP degree of protection	IP20
Net weight	0.24 kg
Width	101.3 mm
Height	79.7 mm
Depth	35.4 mm
Device presentation	Complete product

Environment

Flame retardance	V0 conforming to UL 94
Ambient air temperature for operation	-40...80 °C
Ambient air temperature for storage	-40...125 °C
Pollution degree	2
Overvoltage category	III
Product certifications	UL CSA
Marking	CE
Standards	IEC 60950-1 IEC 61000 IEC 62314

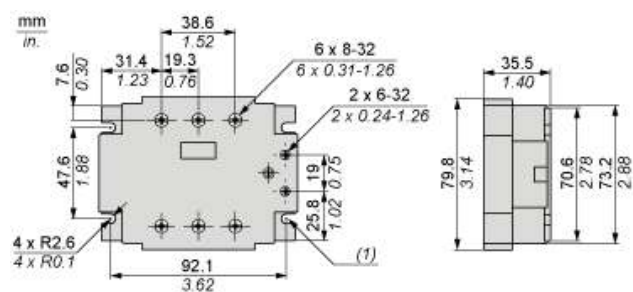
Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Weight	278 g
Package 1 Height	4 cm
Package 1 width	8.4 cm
Package 1 Length	11.8 cm
Unit Type of Package 2	S02
Number of Units in Package 2	27
Package 2 Weight	11.508 kg
Package 2 Height	15 cm
Package 2 width	30 cm
Package 2 Length	40 cm

Offer Sustainability

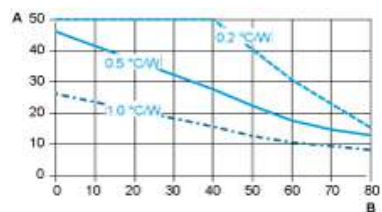
Sustainable offer status	Green Premium product
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope)  EU RoHS Declaration
Mercury free	Yes
RoHS exemption information	 Yes
China RoHS Regulation	 China RoHS Declaration
Environmental Disclosure	 Product Environmental Profile
Circularity Profile	 End Of Life Information

Dimensions



(1) 4 Mounting slots

Derating Curves



A : Load Current (Amperes)
B : Ambient Temperature (°C)