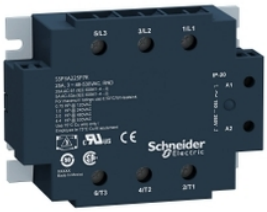
Product data sheet
Characteristics

SSP3A250BDR
three phase relay, Harmony Solid State Relays, 50A, panel mount, random switching, input 4 to 32V DC, output 48 to 530V 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 phase
Line Rated Current	50 A
Solid state output type	Random voltage switching
Output switching mode	Random voltage switching

Complementary

Test button	Without test button
Minimum switching voltage	4 V DC turn-on
Maximum switching voltage	1 V DC turn-off
Response time	8.33 ms (turn-off) 0.1 ms (turn-on)
Input current	24…35 mA
Load current	0.1…50 A
Transient overvoltage	1200 V
Surge current	715 A 20 ms 750 A 16.6 ms 150 A 1 s
Maximum I²t for fusing	2520 A².S for 10 ms at 50 Hz 2320 A².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 104 °F (40 °C) 120 V AC 3 Hp 104 °F (40 °C) 240 V AC 7.5 Hp 104 °F (40 °C) 480 V AC 8.8 hp 104 °F (40 °C) 530 V AC
Motor power kW	1.11 KW 104 °F (40 °C) 120 V AC 2.22 KW 104 °F (40 °C) 240 V AC 5.55 KW 104 °F (40 °C) 480 V AC 6.47 kW 104 °F (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
Connections - terminals	Screw terminals 1 x 0.2...1 x 2.5 mm², AWG 24...AWG 14) input Screw terminals 1 x 1.5...1 x 10 mm², AWG 16...AWG 8) output
Thermal resistance	0.12 °C/W
LED indicator	LED, green input
IP degree of protection	IP20

The information provided in this documentation contains general descriptions and/or technical characteristics of the performance of the products contained herein.
This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications.
It is the duty of any such user or integrator to perform the appropriate and complete risk analysis, evaluation and testing of the products with respect to the relevant specific application or use thereof.
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Net Weight	0.53 lb(US) (0.24 kg)
Width	4.0 in (101.3 mm)
Height	3.1 in (79.7 mm)
Depth	1.4 in (35.4 mm)
Device presentation	Complete product

Environment

Flame retardance	V0 conforming to UL 94
Ambient Air Temperature for Operation	-40…176 °F (-40…80 °C)
Ambient Air Temperature for Storage	-40…257 °F (-40…125 °C)
Pollution degree	2
Overvoltage category	III
Product Certifications	CSA[RETURN]UL
Marking	CE
Standards	IEC 60950-1 IEC 62314 IEC 61000

Ordering and shipping details

Category	US10CP222375
Discount Schedule	0CP2
GTIN	3606480579943
Returnability	No
Country of origin	MX

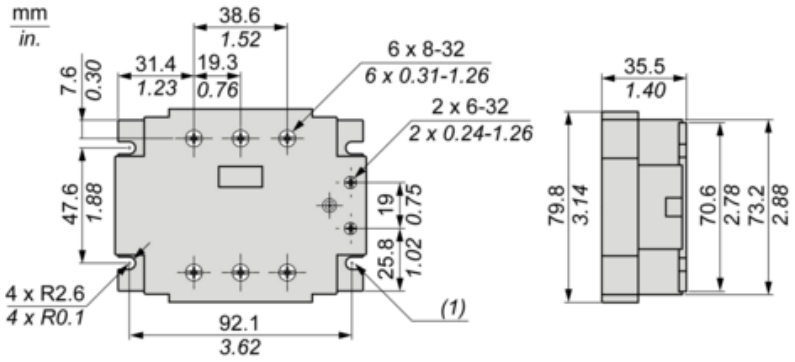
Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	1.7 in (4.3 cm)
Package 1 Width	3.5 in (8.8 cm)
Package 1 Length	4.8 in (12.3 cm)
Package 1 Weight	9.7 oz (275.0 g)
Unit Type of Package 2	S02
Number of Units in Package 2	27
Package 2 Height	5.9 in (15.0 cm)
Package 2 Width	11.8 in (30.0 cm)
Package 2 Length	15.7 in (40.0 cm)
Package 2 Weight	17.214 lb(US) (7.808 kg)

Offer Sustainability

Sustainable offer status	Green Premium product
California proposition 65	WARNING: This product can expose you to chemicals including: Lead and lead compounds, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov
REACh Regulation	REACh Declaration
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope)
Mercury free	Yes
China RoHS Regulation	China RoHS Declaration
RoHS exemption information	Yes
Environmental Disclosure	Product Environmental Profile
Circularity Profile	End Of Life Information

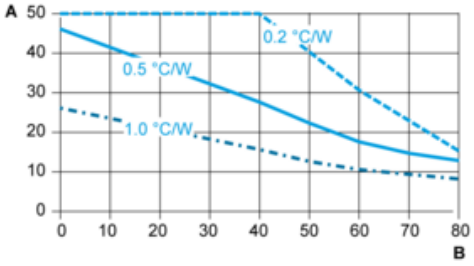
Dimensions



(1) 4 Mounting slots

SSP3A250BDR

Derating Curves



A : Load Current (Amperes)

B : Ambient Temperature (°C)