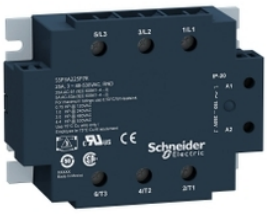
Product data sheet
Characteristics

SSP3A250F7T
Harmony Solid State Relays, Solid state relay, 50A, panel mount, zero voltage switching, thermal pad, input 90…140V AC, output 48…530V AC



Main

Range of product	Harmony Solid State Relays
Provided accessory	Thermal interface
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	90...140 V AC
Minimum switching voltage	90 V AC turn-on
Maximum switching voltage	10 V AC turn-off
Response time	20 ms (turn-on) 30 ms (turn-off)
Input current	7…16 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 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 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
Connections - terminals	Screw terminals: 1 x 0.2...1 x 2.5 mm², (AWG 24...AWG 14) for input Screw terminals: 1 x 1.5...1 x 10 mm², (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	CSA[RETURN]UL
Marking	CE
Standards	IEC 61000 IEC 60950-1 IEC 62314

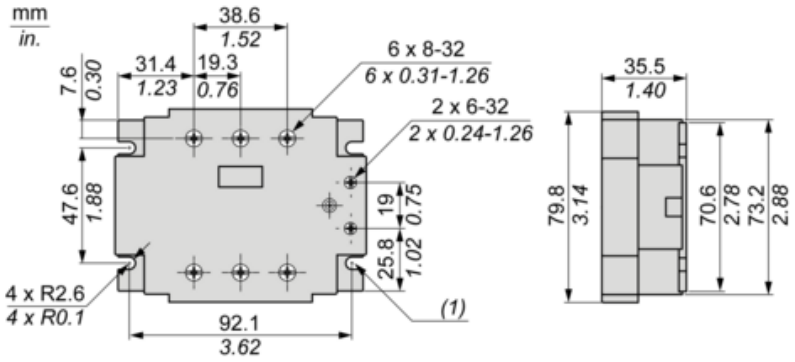
Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	4 cm
Package 1 Width	8.5 cm
Package 1 Length	12 cm
Package 1 Weight	282 g
Unit Type of Package 2	S02
Number of Units in Package 2	27
Package 2 Height	15 cm
Package 2 Width	30 cm
Package 2 Length	40 cm
Package 2 Weight	7.982 kg

Offer Sustainability

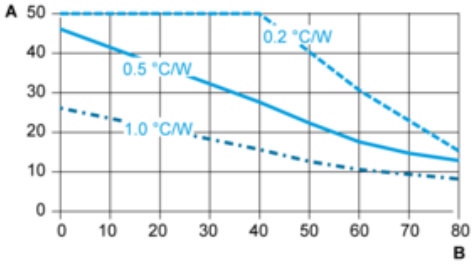
Sustainable offer status	Green Premium product
REACh Regulation	REACh Declaration
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope)
Mercury free	Yes
China RoHS Regulation	China RoHS Declaration
RoHS exemption information	Yes
Environmental Disclosure	Product Environmental Profile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

Dimensions



(1) 4 Mounting slots

Derating Curves



A : Load Current (Amperes)

B : Ambient Temperature (°C)