Product data sheet
Characteristics

SSP3A250F7
three phase relay, Harmony Solid State Relays, 50A, panel mount, zero voltage switching, input 90 to 140V AC, output 48 to 530V AC



Commercial status
End of Commercialisation : MAY 30, 2025

⚠ End of Commercialisation

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
Network 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 limits	7…16 MA
Output voltage	48...530 V AC
Load current	0.1…50 A
Absolute maximum voltage	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
Cos phi	0.5 (with maximum load)
Motor power hp	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
Capacitance unbalance	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, (24 AWG...14 AWG) for input Screw terminals: 1 x 1.5...1 x 10 mm², (16 AWG...8 AWG) for output
Thermal resistance	0.12 °C/W
Local signalling	LED, green for input
IP degree of protection	IP20
Electromagnetic compatibility	Immunity to voltage dips 0 %/20 ms criteria B conforming to IEC 61000-4-11
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 62314 IEC 60950-1 IEC 61000

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	4.000 Cm
Package 1 Width	8.000 Cm
Package 1 Length	12.000 Cm
Package 1 Weight	407.900 G
Unit Type of Package 2	S02
Number of Units in Package 2	27
Package 2 Height	15.000 Cm
Package 2 Width	30.000 Cm
Package 2 Length	40.000 Cm
Package 2 Weight	11.372 Kg

Offer Sustainability

Total lifecycle Carbon footprint	5 222 kg CO2 eq.
Carbon footprint of the manufacturing phase [A1 to A3]	2.1511719368
Carbon footprint of the manufacturing phase [A1 to A3]	2 kg CO2 eq.
Carbon footprint of the distribution phase [A4]	0.0526408696
Carbon footprint of the distribution phase [A4]	0.1 kg CO2 eq.
Carbon footprint of the installation phase [A5]	0.0033566265
Carbon footprint of the installation phase [A5]	0 kg CO2 eq.
Carbon footprint of the use phase [B2, B3, B4, B6]	5219.9148411974
Carbon footprint of the use phase [B2, B3, B4, B6]	5 220 kg CO2 eq.
Mercury free	Yes
Sustainable packaging	Yes
Carbon footprint of the end-of-life phase [C1 to C4]	0.0878409486

Carbon footprint of the end-of-life phase [C1 to C4]	0.1 kg CO2 eq.
Environmental Disclosure	Product Environmental Profile
Total lifecycle Carbon footprint	5222
Packaging made with recycled cardboard	Yes
Packaging without single use plastic	Yes
SCIP Number	134201bc-d293-4667-9cca-10a7f11729e0
REACh Regulation	Reference contains Substances of Very High Concern above the threshold
EU RoHS Directive	Compliant By Exemption
California proposition 65	WARNING: This product can expose you to chemicals including: Lead and lead compounds, wi
End of life manual availability	End Of Life Information
Take-back	No

Contractual warranty

Warranty (in months)	18

Product Life Status : End of commercialisation

SSP3A250F7 may be replaced by any of the following products:



SSP3A250P7T

three phase relay, Harmony Solid State Relays, 50A, panel mount, zero voltage switching, thermal pad, input 90...280

Qty 1

Substitution date: |