Product data sheet
Characteristics

SSP1A125BDT
single phase relay, Harmony Solid State Relays, 25A, panel mount, zero voltage switching, thermal pad, input 3 to 32V DC, output 24 to 300V AC



Main

Range of product	Harmony Solid State Relays
Provided equipment	Thermal pad
Product or component type	Panel mount relay
Device short name	SSP1
Mounting support	Panel
Network number of phases	1 phase
[In] rated current	25 A
Solid state output type	SCR output Zero voltage switching
Output switching mode	Zero voltage switching

Complementary

Control type	Without test button
[Uc] control circuit voltage	3...32 V DC
Minimum switching voltage	3 V DC turn-on
Maximum switching voltage	1 V DC turn-off
Response time	0.5 cycle (turn-on) 0.5 cycle (turn-off)
Input current limits	10 MA at 12 V DC
Output voltage	24...300 V AC
Load current	0.15…25 A
Absolute maximum voltage	600 V
Surge current	250 A for 16.6 ms
Maximum I²t for fusing	259 A².S for 8.33 ms at 60 Hz 285 A².S for 10 ms at 50 Hz
Protection device type	Type 1 - 25 A miniature circuit breaker (MCB) - curve B Type 2 - 20 A miniature circuit breaker (MCB) - curve B
Maximum leakage current	1 MA off-state
Maximum voltage drop	<1.15 V on-state
DV/dt	500 V/µs off-state at maximum voltage
Cos phi	0.5 (with maximum load)
Motor power hp	0.5 Hp 120 V AC 1 Hp 240 V AC
Insulation resistance	1000 MOhm at 500 V DC
Capacitance unbalance	10 PF for input/output

Dielectric strength	4 KV AC for input/output 4 KV AC for input or output to case
[Uimp] rated impulse withstand voltage	6 KV output to case 6 KV input to output
Tightening torque	1.5...1.7 N.m for input 2...2.2 N.m for output
Connections - terminals	Screw terminals: 0.2...3.3 mm², (24 AWG...12 AWG) with cable end for input Screw terminals: 0.5...5.26 mm², (20 AWG...10 AWG) with cable end for output Screw terminals: 0.2...3.3 mm², (24 AWG...12 AWG) without cable end for input Screw terminals: 0.5...8.26 mm², (20 AWG...8 AWG) without cable end for output Forked type tag connectors: 9.2 x 4 mm for input Ring lugs: 9.2 x 4 mm for input Forked type tag connectors: 11.7 x 4.5 mm for output Ring lugs: 11.7 x 4.5 mm for output
Thermal resistance	0.8 °C/W junction to case
Thermal impedance	0.48 °C-in²/W at 25 psi
Local signalling	LED, green for input
IP degree of protection	IP20
Safety reliability data	B10d = 1731395 MTTFd = 1875.9 years
Net weight	89.2 G
Device presentation	Complete product

Environment

Ambient air temperature for operation	-40…80 °C
Ambient air temperature for storage	-40…125 °C
Pollution degree	2
Overvoltage category	III
Product certifications	EAC[RETURN]CE[RETURN]UL[RETURN]CSA
Marking	UL CE CSA EAC
Standards	UL 508 IEC 60950-1 IEC 62314 CSA C22.2 No 14-13

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	3.800 Cm
Package 1 Width	4.800 Cm
Package 1 Length	6.500 Cm
Package 1 Weight	94.000 G
Unit Type of Package 2	S01
Number of Units in Package 2	30
Package 2 Height	15 Cm
Package 2 Width	15 Cm
Package 2 Length	40 Cm
Package 2 Weight	3.168 Kg

Offer Sustainability

Recyclability potential, in %	56
Total lifecycle Carbon footprint	2 617 kg CO2 eq.
Carbon footprint of the manufacturing phase [A1 to A3]	1.0766
Carbon footprint of the manufacturing phase [A1 to A3]	1 kg CO2 eq.
Carbon footprint of the distribution phase [A4]	0.012515
Carbon footprint of the distribution phase [A4]	0 kg CO2 eq.
Carbon footprint of the installation phase [A5]	0.00054394

Carbon footprint of the installation phase [A5]	0 kg CO2 eq.
Carbon footprint of the use phase [B2, B3, B4, B6]	2616.0366198089
Carbon footprint of the use phase [B2, B3, B4, B6]	2 616 kg CO2 eq.
Mercury free	Yes
Sustainable packaging	Yes
Carbon footprint of the end-of-life phase [C1 to C4]	0.022964
Carbon footprint of the end-of-life phase [C1 to C4]	0 kg CO2 eq.
Environmental Disclosure	Product Environmental Profile
Total lifecycle Carbon footprint	2617
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, wh
End of life manual availability	End Of Life Information
Take-back	No

Contractual warranty

Warranty (in months)	18

Product Life Status : Commercialised