



## Main

Range of product	Zelio Relay
Product or component type	Solid state relay
Provided equipment	Thermal pad
Device short name	SSP1
Phase	1 phase
Contacts type and composition	1 NO
Line Rated Current	50 A
Solid state output type	SCR output Zero voltage switching

## Complementary

Control circuit voltage	90...280 V AC
Switching voltage	$\geq 90$ V AC turn-on $\leq 10$ V AC turn-off
Response time	30 ms turn-off 25 ms turn-on
Input current limits	5...10 mA
Output voltage	24...300 V
Load current	0.15...50 A
Absolute maximum voltage	600 V
Surge current	$\leq 625$ A for 16.6 ms
Maximum I <sup>2</sup> t for fusing	1621 A <sup>2</sup> .s for 8.33 ms at 60 Hz half cycle 1770 A <sup>2</sup> .s for 10 ms at 50 Hz half cycle
Protection device type	Type 1 - 40 A miniature circuit breaker (MCB) - curve B Type 2 - 32 A miniature circuit breaker (MCB) - curve B
Leakage current	$\leq 1$ mA off-state
Voltage drop	1.15 V on-state
DV/Dt	500 V/ $\mu$ s off-state at maximum voltage
Cos phi	0.5 with maximum load

Motor power hp	0.75 hp 120 V AC 2 hp 240 V AC
Insulation resistance	1000 MOhm at 500 V DC
Capacitance unbalance	8 pF input/output
Dielectric strength	4 kV AC input/output 4 kV AC 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 input 2...2.2 N.m output
Connections - terminals	Forked type tag connectors : 9.2 x 4 mm input Ring lugs : 9.2 x 4 mm input Forked type tag connectors : 11.7 x 4.5 mm output Ring lugs : 11.7 x 4.5 mm output Screw terminals : 0.2...3.3 mm <sup>2</sup> , (AWG 24...AWG 12) with cable end input Screw terminals : 0.5...5.26 mm <sup>2</sup> , (AWG 20...AWG 10) with cable end output Screw terminals : 0.2...3.3 mm <sup>2</sup> , (AWG 24...AWG 12) without cable end input Screw terminals : 0.5...8.26 mm <sup>2</sup> , (AWG 20...AWG 8) without cable end output
Thermal resistance	0.45 °C/W junction to case
Thermal impedance	0.48 °C-in <sup>2</sup> /W at 25 psi
Local signalling	LED, green input
IP degree of protection	IP20
Safety reliability data	B10d = 1731395 MTTFd = 1875.9 years
Product weight	89.2 g

## Environment

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	RoHS UL CE CSA EAC REACH
Marking	CE CSA UL EAC
Standards	EN/IEC 60950-1 EN/IEC 62314 CSA C22.2 No 14-13 UL 508

## Offer Sustainability

Sustainable offer status	Green Premium product
RoHS (date code: YYWW)	Compliant - since 1522 - Schneider Electric declaration of conformity <a href="#">Schneider Electric declaration of conformity</a>
REACH	Reference not containing SVHC above the threshold <a href="#">Reference not containing SVHC above the threshold</a>
Product environmental profile	Available <a href="#">Product Environmental Profile</a>
Product end of life instructions	Available <a href="#">End of life manual</a>