



## Main

Range of product	Harmony Relay
Product or component type	Solid state relay
Device short name	SSD1
Number of channels	1
Number of phases	1 phase
Product configuration type	Relay configuration
Mounting support	35 mm symmetrical DIN rail conforming to EN/IEC 60715
Rated current	20 A
Contact type	1 NO

## Complementary

Rated duty	Uninterrupted
Output voltage	1...150 V DC
Control circuit voltage	4...32 V DC
Tightening torque	1.5...1.7 N.m for control input 13...15 lb.in for control input 1.5...1.7 N.m for load output 13...15 lb.in for load output
Connections - terminals	Screw terminals, clamping connection capacity:1...4 mm <sup>2</sup> , AWG 18...AWG 12 for input Screw terminals, clamping connection capacity:1...6 mm <sup>2</sup> , AWG 18...AWG 10 for output
Dielectric strength	3.75 kV AC for input/output circuit 3.75 kV AC for input or output to case
Rated impulse withstand voltage	6 kV for input/output circuit 6 kV for input or output to case
Insulation resistance	1000 MOhm at 500 V DC
Local signalling	LED (green) for control voltage
Pick-up voltage	4 V DC turn-on
Drop-out voltage	1 V DC turn-off

Disclaimer: 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

Input current range	11...15 mA
Solid state output type	Mosfet output
Solid state switching type	DC switching
Load current	0.005...20 A
Inrush current	58 A for 10 ms
Maximum voltage drop	<0.68 V on-state
Motor controller rating	0.25 kW/0.33 hp at 120 V DC
Electromagnetic compatibility	Electrostatic discharge 4 kV criteria A contact discharge conforming to IEC 61000-4-2 Electrostatic discharge 4 kV criteria A air discharge conforming to IEC 61000-4-2 Conducted RF disturbances 10 V, 0.15...80 MHz criteria A level 3 conforming to IEC 61000-4-6 Electrical fast transient/burst immunity test 2 kV, 5/100 kHz criteria A output ports conforming to IEC 61000-4-4 Electrical fast transient/burst immunity test 1 kV, 5/100 kHz criteria A input ports conforming to IEC 61000-4-4 Radiated radio-frequency electromagnetic field immunity test 10 V/m, 80 MHz...1 GHz criteria A conforming to IEC 61000-4-3 Radiated radio-frequency electromagnetic field immunity test 3 V/m, 1.4...2 GHz criteria A conforming to IEC 61000-4-3 Radiated radio-frequency electromagnetic field immunity test 1 V/m, 2...2.7 GHz criteria A conforming to IEC 61000-4-3 Surge immunity test 1 kV criteria B output ports line to line conforming to IEC 61000-4-5 Surge immunity test 2 kV criteria B output ports line to earth conforming to IEC 61000-4-5 Radiated emission environment B for DC input supply conforming to IEC 60947-4-3 Conducted emission environment B for DC input supply conforming to IEC 60947-4-3
Device form designation	Form 5 semiconductor output DOL contactor
Resistance	0.034 Ohm on-state
Maximum leakage current	0.1 mA off-state
Response time	75 µs (turn-on) 100 µs (turn-off)
Short circuit protection coordination	Type 1 Type 2
Overvoltage category	III
Width	22.5 mm
Height	93.2 mm
Depth	116.5 mm
Net weight	0.298 kg
Device presentation	Complete product

## Environment

Flammability rating	V-0 conforming to UL 94
Vibration resistance	0.75 mm (f = 10...150 Hz) conforming to EN/IEC 60068-2-6
Shock resistance	50 gn for 11 ms (peak acceleration) , longitudinal position conforming to EN/IEC 60068-2-27 30 gn for 11 ms (peak acceleration) , vertical position conforming to EN/IEC 60068-2-27
Pollution degree	2
Standards	IEC 61373: class B: category 1 CSA C22.2 No 14-13 UL 508
IP degree of protection	IP20
Ambient air temperature for operation	-40...80 °C
Ambient air temperature for storage	-40...100 °C

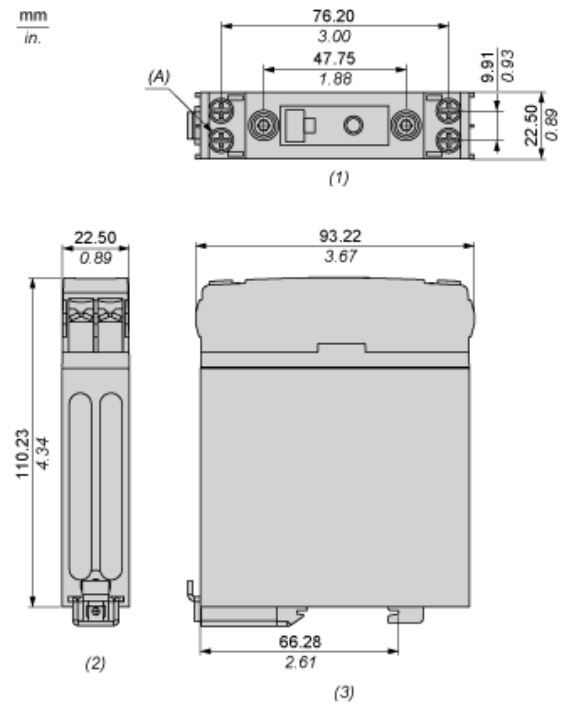
## Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Weight	320 g
Package 1 Height	2.25 cm
Package 1 width	9.32 cm
Package 1 Length	11.65 cm

## Offer Sustainability

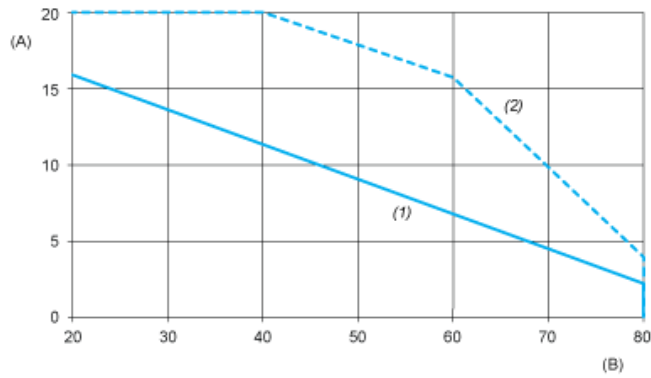
Sustainable offer status	Green Premium product
REACH Regulation	<a href="#">REACH Declaration</a>
REACH free of SVHC	Yes
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope) <a href="#">EU RoHS Declaration</a>
Mercury free	Yes
RoHS exemption information	<a href="#">Yes</a>
China RoHS Regulation	<a href="#">China RoHS declaration</a>
Environmental Disclosure	<a href="#">Product Environmental Profile</a>
Circularity Profile	<a href="#">End of Life Information</a>
WEEE	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins

Dimensions



- (1) Front view
- (2) Top view
- (3) Side view
- (A) Screw M4 Stud (4 Places)

Derating Curves



- A : Load Current (Amperes)
- B : Ambient Temperature (°C)
- 1 : Multiple units, no minimum spacing between components
- 2 : Installed single unit, distance to adjacent components more than 22.5 mm