



Main

Range of product	Harmony Relay
Product or component type	Solid state relay
Device short name	SSD1
Number of channels	1
Network number of phases	1 phase
Product configuration type	Relay configuration
Mounting support	35 mm symmetrical DIN rail conforming to EN/IEC 60715
[In] rated current	20 A
Contacts type and composition	1 NO

Complementary

Network frequency	47...440 Hz
Rated duty	Uninterrupted
Output voltage	48...600 V AC
[Uc] control circuit voltage	90...280 V AC/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 m- m², AWG 18...AWG 12 for input Screw terminals, clamping connection capacity:1...6 m- m², AWG 18...AWG 10 for output
Dielectric strength	4 KV AC for input/output circuit 4 KV AC for input or output to case
[Uimp] 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
Minimum switching voltage	90 V AC/DC turn-on
Maximum switching voltage	5 V AC/DC turn-off
Input current limits	6...10 MA
Output type	SCR output
Solid state output type	Random voltage switching
Load current	0.1...20 A
Absolute maximum voltage	1200 V
Inrush current	300 A at 60 Hz
Maximum voltage drop	<1.3 V on-state

Motor power kW	0.37 KW/0.5 Hp at 120 V AC 1.12 KW/1.5 Hp at 240 V AC 2.24 KW/3 Hp at 480 V AC
Electromagnetic compatibility	Electrostatic discharge 6 kV criteria A contact discharge conforming- to IEC 61000-4-2 Electrostatic discharge 8 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 B output- ports conforming to IEC 61000-4-4 Electrical fast transient/burst immunity test 1 kV, 5/100 kHz criteria B input- ports conforming to IEC 61000-4-4 Radiated radio-frequency electromagnetic field immuni- ty test 10 V/m, 80 MHz...1 GHz criteria A conforming to IEC 61000-4-3 Radiated radio-frequency electromagnetic field immuni- ty test 3 V/m, 1.4...2 GHz criteria A conforming to IEC 61000-4-3 Radiated radio-frequency electromagnetic field immuni- ty test 1 V/m, 2...2.7 GHz criteria A conforming to IEC 61000-4-3 Surge immunity test 1 kV criteria A output ports line to line conforming- to IEC 61000-4-5 Surge immunity test 2 kV criteria A output ports line to earth conforming- to IEC 61000-4-5 Surge immunity test 1 kV criteria A input ports line to line conforming- to IEC 61000-4-5 Surge immunity test 2 kV criteria A input ports line to earth conforming- to IEC 61000-4-5 Radiated emission environment B for AC input supply conforming- to IEC 60947-4-3 Conducted emission environment A for AC input supply conforming- to IEC 60947-4-3 Immunity to microbreaks and voltage drops 30 %, 500 ms criteria A conforming- to IEC 61000-4-11 Immunity to microbreaks and voltage drops 100 %, 20 ms criteria B conforming- to IEC 61000-4-11
Contact form	Form 5 semiconductor output DOL contactor
Maximum I ² t for fusing	409 A ² .S for 10 ms 375 A ² .S for 8.33 ms
Maximum leakage current	1 MA off-state
DV/dt	500 V/μs off-state at maximum rated voltage
Response time	20 ms (turn-on) 30 ms (turn-off)
Power factor	0.5 with maximum load
Coordination type	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

Flame retardance	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 IEC 60947-4-3 IEC 62314 IEC 60950-1 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	REACH Declaration
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope) EU RoHS Declaration
Mercury free	Yes
RoHS exemption information	Yes
China RoHS Regulation	China RoHS Declaration
Environmental Disclosure	Product Environmental Profile
Circularity Profile	End Of Life Information
WEEE	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins

Product Life Status : **Commercialised**