



Product designation
Product type designation
Type

Solid state relay
HS1B
single-phase

Input characteristics

Control voltage	20...265VAC/DC
Operating voltage limits	

Operating voltage pick-up	V	95
Operating voltage drop-out	V	5

Input current at min...max voltage	mA	5...10
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Operating times

Switching-on	Half cycle max
Switching-off	Half cycle max

Output characteristics

Switching mode		Zero crossing
Rated operating voltage	VAC	24...510
Blocking voltage	V	1200
Operational frequency (min...max)	Hz	45...65
Rated operating current AC-51 (resistive load) at 40°C	A	40
Rated operating current AC-51 (resistive load) at 55°C	A	35
Heatsink for use at 40°C and 55°C at rated current AC-51	K/W	≤0.9
Rated operating current AC-53 (motor load) at 40°C	A	7
Operational current min	A	0.05
Non repetitive surge peak on state current t=10ms	A	500
Off state leakage current	mA	1
On state output voltage drop	V	1.5
Critical rate of rise of off-state voltage dv/dt	V/μs	500
Input - Output isolation	V	4000
Input - Output to metal base	V	4000
Output protection type		VDR
I ² t	A ² s	1250

Terminal characteristics

Control terminals	Type	Screw M4	
Terminals tool		PZ2	
Tightening torque control terminals	Nm	1.2...2	
	Ibin	10.6...17.7	
Conductor section connectable (control terminals) with 1 or 2 wires min...max			
	AWG stranded	n°	18...14
	Flexible w/o lug	mm2	0.75...2.5
	Flexible c/w insulated spade lug	mm2	0.75...2.5
Load terminals	Type	Screw M5	
Load terminals tool		PZ2	
Tightening torque load terminals	Nm	2...3	
	Ibin	20.4	

Conductor section connectable (load terminals) with 1 or 2 wires min...max

AWG stranded	n°	16...10
Flexible w/o lug	mm2	1.5...6
Flexible c/w insulated spade lug	mm2	1.5...6

Operating position

allowable	Any
Fixing	Screw

Ambient conditions

Temperature

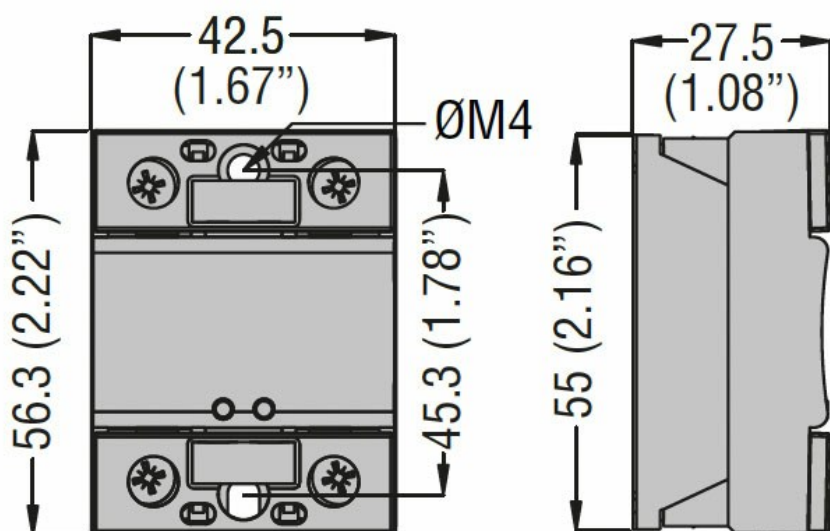
Operating temperature

min	°C	-40
max	°C	+90

Storage temperature

min	°C	-40
max	°C	+100

Dimensions



Certifications and compliance

Certifications

IEC/EN/BS 60947-4-2
IEC/EN/BS 60947-4-3
IEC/EN/BS 62314
IEC/EN/BS 6335-1

Compliance

CSA
cURus
VDE

ETIM classification

EC000066 - Power contactor, AC switching

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