



Product designation
Product type designation
Type

Solid state relay
HS1B
single-phase

Input characteristics

Control voltage	18...280VAC/DC
Operating voltage limits	

Operating voltage pick-up	V	18
Operating voltage drop-out	V	8

Input current at min...max voltage	mA	4.5...6
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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	12...280
Blocking voltage	V	600
Operational frequency (min...max)	Hz	45...65
Rated operating current AC-51 (resistive load) at 40°C	A	25
Rated operating current AC-51 (resistive load) at 55°C	A	20
Heatsink for use at 40°C and 55°C at rated current AC-51	K/W	≤2.2
Operational current min	A	0.05
Non repetitive surge peak on state current t=10ms	A	340
Off state leakage current	mA	1
On state output voltage drop	V	1.25
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		TVS
I2t	A2s	600

Terminal characteristics

Control terminals	Type	Screw M4
Terminals tool		PZ2

Tightening torque control terminals

Nm	1.2...2
lbin	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	mm ²	0.75...2.5
Flexible c/w insulated spade lug	mm ²	0.75...2.5

Load terminals	Type	Screw M5
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Load terminals tool		PZ2
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Tightening torque load terminals

Nm	2...3
lbin	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

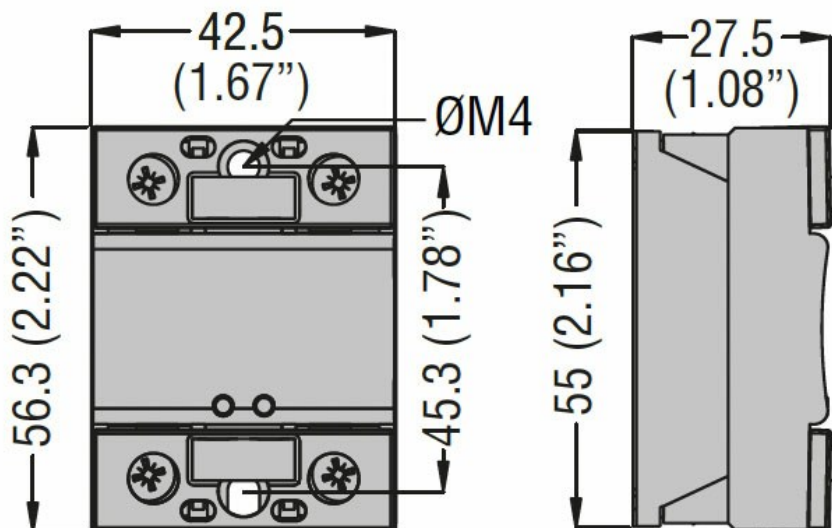
Operating temperature

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

cURus

VDE

ETIM classification

EC000066 - Power contactor, AC switching

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