



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
------------------------------------	----	---------

#### Operating times

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

#### Output characteristics

Switching mode		Zero crossing
Rated operating voltage	VAC	24...600
Blocking voltage	V	12300
Operational frequency (min...max)	Hz	45...65
Rated operating current AC-51 (resistive load) at 40°C	A	90
Rated operating current AC-51 (resistive load) at 55°C	A	80
Heatsink for use at 40°C and 55°C at rated current AC-51	K/W	≤0.3
Operational current min	A	0.05
Non repetitive surge peak on state current t=10ms	A	1200
Off state leakage current	mA	1
On state output voltage drop	V	1.4
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	7200

#### 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 <sup>2</sup>	0.75...2.5
Flexible c/w insulated spade lug	mm <sup>2</sup>	0.75...2.5

Load terminals	Type	Screw M5
----------------	------	----------

Load terminals tool		PZ2
---------------------	--	-----

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

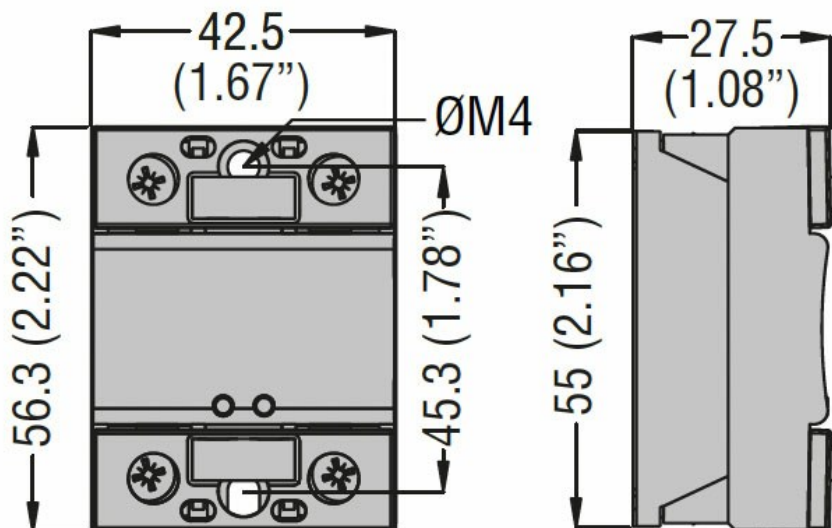
Operating temperature

min	°C	-55
max	°C	+90

Storage temperature

min	°C	-55
max	°C	+125

### 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

□