



Product designation	Solid state relay
Product type designation	HS1B
Type	single-phase

### Input characteristics

Control voltage	3.5...32VDC		
Operating voltage limits			
	Operating voltage pick-up	V	3.5
	Operating voltage drop-out	V	2
Input current at min...max voltage	mA	10...13	
Input reverse voltage	V	32	

### 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	1200
Operational frequency (min...max)	Hz	45...65
Rated operating current AC-51 (resistive load) at 40°C	A	50
Rated operating current AC-51 (resistive load) at 55°C	A	42
Heatsink for use at 40°C and 55°C at rated current AC-51	K/W	≤0.9
Operational current min	A	0.05
Non repetitive surge peak on state current t=10ms	A	580
Off state leakage current	mA	1
On state output voltage drop	V	1.3
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
I <sup>2</sup> t	A <sup>2</sup> s	1680

### 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	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
	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

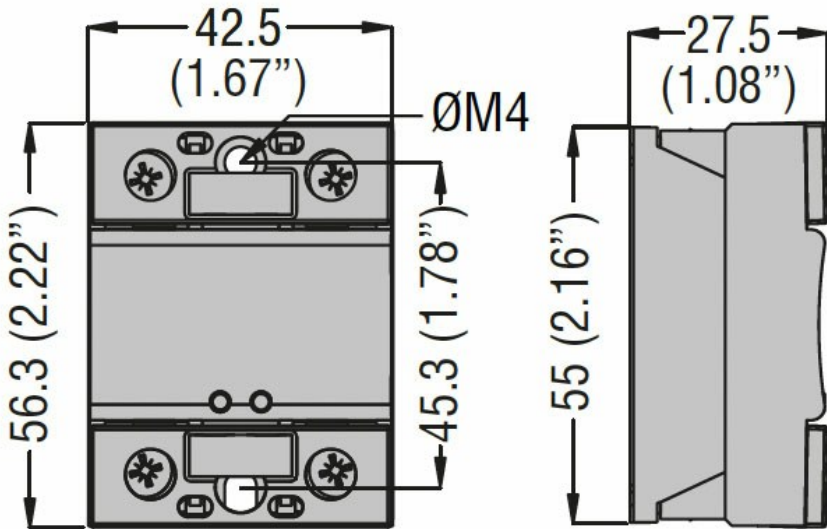
Operating temperature

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