



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			
Static output type	SCR (silicon controlled rectifier)		
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	
Thermal resistance between junction to case	K/W	0.55	
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	
I2t	A2s	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	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
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Fixing

Screw

Ambient conditions

Temperature

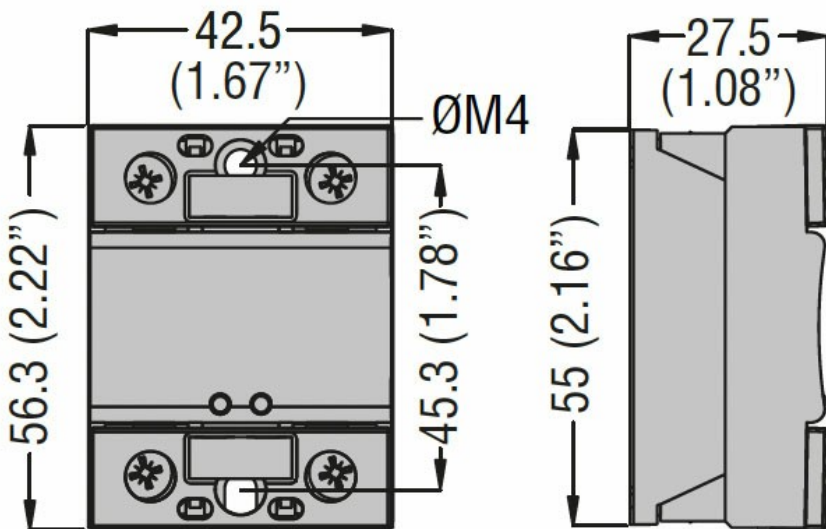
Operating temperature

min	°C	-40
max	°C	+90

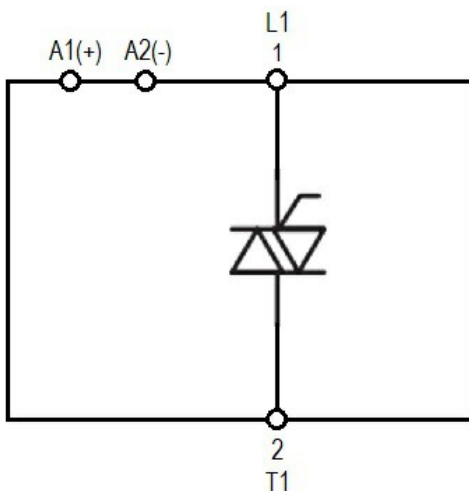
Storage temperature

min	°C	-40
max	°C	+100

Dimensions



Wiring diagrams



Certifications and compliance

Certifications

IEC/EN/BS 60335-1
IEC/EN/BS 60947-4-2
IEC/EN/BS 60947-4-3
IEC/EN/BS 62314

Compliance

CSA
cURus
VDE

ETIM classification

EC000066 - Power contactor, AC switching