



Product designation  
Product type designation  
Type

Solid state relay  
HS1B  
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
I2t	A2s	1680

#### 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

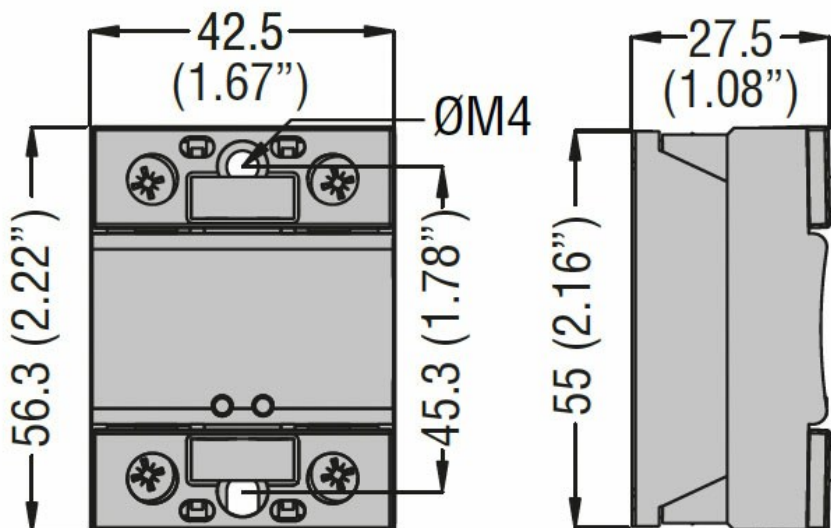
AWG stranded	n°	16...10
Flexible w/o lug	mm2	1.5...6
Flexible c/w insulated spade lug	mm2	1.5...6

Operating position	allowable	Any
Fixing		Screw

#### Ambient conditions

Temperature	Operating temperature	min	°C	-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