



Product designation	Solid state relay
Product type designation	HS1A
Type	single-phase

**Input characteristics**

Control voltage	4...30VDC
Operating voltage limits	

	Operating voltage pick-up	V	4
	Operating voltage drop-out	V	1

Input current at min...max voltage	mA	3...29
Input reverse voltage	V	30

**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	22
Heatsink for use at 40°C and 55°C at rated current AC-51	K/W	≤1.2
Rated operating current AC-53 (motor load) at 40°C	A	7
Operational current min	A	0.005
Non repetitive surge peak on state current t=10ms	A	250
Off state leakage current	mA	3
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	2500
I <sup>2</sup> t	A <sup>2</sup> s	340

**Terminal characteristics**

Control terminals	Type	Faston 4.8x0.8
Conductor section connectable (control terminals) with 1 or 2 wires min...max		

	AWG stranded	n°	16...14 (Faston lug)
	Flexible c/w insulated spade lug	mm <sup>2</sup>	0.75...6 (Faston lug)

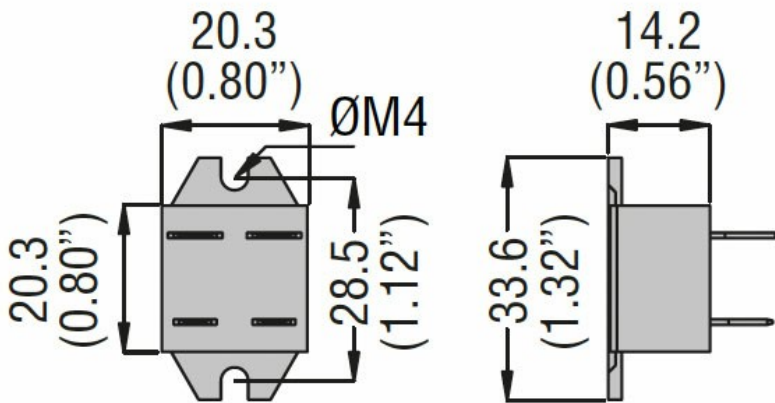
Load terminals	Type	Faston 6.3x0.8
Conductor section connectable (load terminals) with 1 or 2 wires min...max		

	AWG stranded	n°	16...10 (Faston lug)
	Flexible c/w insulated spade lug	mm <sup>2</sup>	0.75...6 (Faston lug)

Operating position	allowable	Any
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Fixing				Screw
Weight	g			13
<b>Ambient conditions</b>				
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 60335-1
	IEC/EN/BS 60947-4-2
	IEC/EN/BS 60947-4-3
	IEC/EN/BS 62314
Compliance	
	cURus
	VDE

**ETIM classification**

EC000066 - Power contactor, AC switching