



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 ² t	A ² s	340	

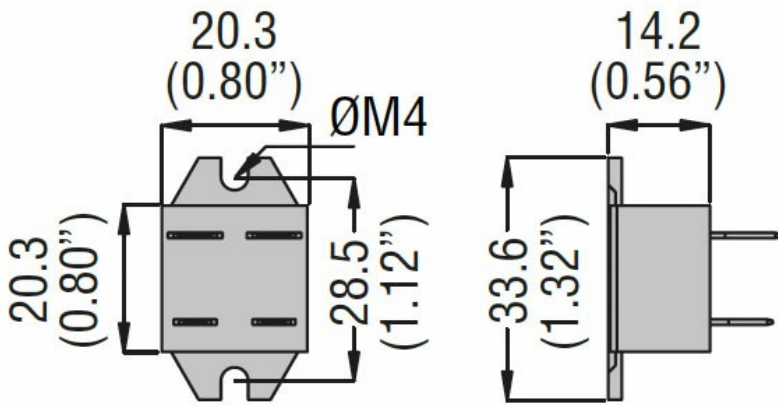
Terminal characteristics

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 ²	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 ²	0.75...6 (Faston lug)

Operating position	allowable	Any
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Fixing				Screw
Weight	g			13
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	
	cURus
	VDE

ETIM classification

EC000066 - Power contactor, AC switching