Lovato electric
ENERGY AND AUTOMATION

HS1B5NV060D024

HOCKEY PUCK, SINGLE-PHASE, 60A, 3,5...32VDC, SCREW TERMINALS

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…510
Blocking voltage		V	1200
Operational frequency (min…max)		Hz	45...65
Rated operating current AC-51 (resistive load) at 40°C		A	60
Rated operating current AC-51 (resistive load) at 55°C		A	52
Thermal resistance between junction to case		K/W	0.4
Heatsink for use at 40°C and 55°C at rated current AC-51		K/W	≤0.55
Rated operating current AC-53 (motor load) at 40°C		A	12
Operational current min		A	0.05
Non repetitive surge peak on state current t=10ms		A	750
Off state leakage current		mA	1
On state output voltage drop		V	1.45
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
Output protection type			VDR
I2t		A2s	2800
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			

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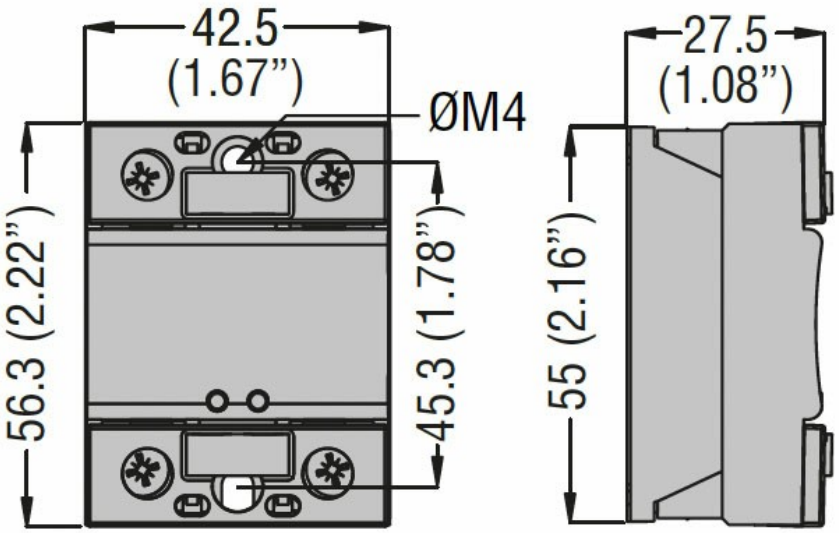
		Nm	2…3
		lbin	20.4
Conductor section connectable (load terminals) with 1 or 2 wires min…max			
	AWG stranded	n°	16…10
	Flexible w/o lug	mm2	1.5…6
	Flexible c/w insulated spade lug	mm2	1.5…6
Operating position			
	allowable		Any
Fixing			Screw

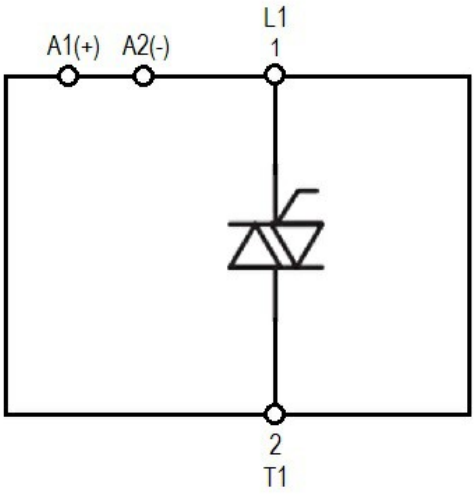
Ambient conditions

Temperature			
Operating temperature			
	min	°C	-55
	max	°C	+90
Storage temperature			
	min	°C	-55
	max	°C	+125

Dimensions



Wiring diagrams



Certifications and compliance

Certifications

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	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

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