# HS1B5NV040D024

HOCKEY PUCK, SINGLE-PHASE, 40A, 3,5,..32VDC, SCREW TERMINALS



| | | | |
|---|---|---|---|
| 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** | | | |
| 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 | 40 |
| Rated operating current AC-51 (resistive load) at 55°C | | A | 35 |
| 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 |
| Rated operating current AC-53 (motor load) at 40°C | | A | 7 |
| Operational current min | | A | 0.05 |
| Non repetitive surge peak on state current t=10ms | | A | 500 |
| Off state leakage current | | mA | 1 |
| On state output voltage drop | | V | 1.5 |
| 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 | 1250 |
| **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 | 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 | | | |

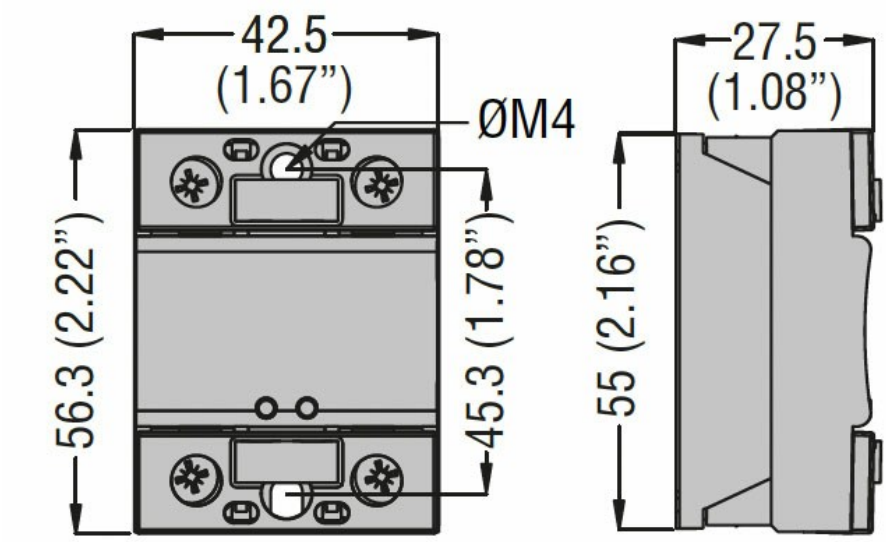

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| | | | |
|---|---|---|---|
| | | Nm | 2…3 |
| | | lbin | 20.4 |
| Conductor section connectable (load terminals) with 1 or 2 wires min…max | | | |
| | AWG stranded | n° | 16…10 |
| | Flexible w/o lug | mm2 | 1.5…6 |
| | Flexible c/w insulated spade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

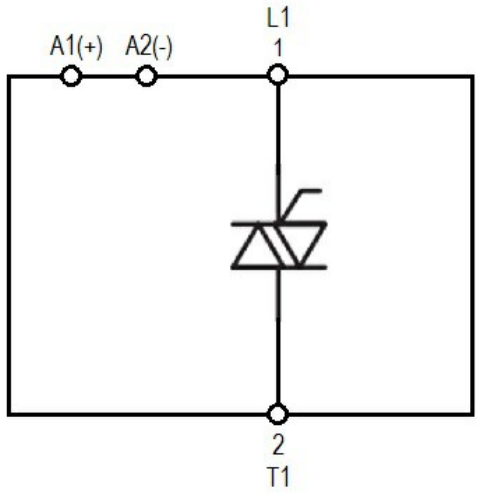
## Ambient conditions

| | | | |
|---|---|---|---|
| Temperature | | | |
| Operating temperature | | | |
| | min | °C | -40 |
| | max | °C | +90 |
| Storage temperature | | | |
| | min | °C | -40 |
| | max | °C | +100 |

## 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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