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Data Sheet

August 15, 2026

CRYDOM

Crydom D1225 SPST-NO Relay

Crydom Sensata D1225 Series 1 Solid State Relay 25 A 24-140 VAC The D1225 isaCrydom Series 1 panel-mount SPST-NO (Form A) zero-cross AC solid-state relay. OEM Series 1 120 VAC table lists 24-140 Vrms operating (47-440 Hz), 3-32 VDC control, 25 Arms maximum load, 150 mArms minimum load, 600 Vpk transient, 1 mArms max off-state leakage, 500 V/us min dv/dt, 239/250 Apk 1-cycle surge (50/60 Hz), 1.15 Vrms max on-state drop, 0.8 C/W Rjc, 285/259 A2s I2t (50/60 Hz), 0.5 min power factor, 4000 Vrms dielectric, 10⁹ ohm insulation at 500 VDC, 8 pF max I/O capacitance, minus 40 to 80 C operating, minus 40 to 125 C storage, 2.6 oz (74.9 g), aluminum baseplate, UL 94 V-0 housing. The D1225 isaCrydom Series 1 panel-mount SPST-NO (Form A) zero-cross AC solid-state relay. OEM Series 1 120 VAC table lists 24-140 Vrms operating (47-440 Hz), 3-32 VDC control, 25 Arms maximum load, 150 mArms minimum load, 600 Vpk transient, 1 mArms max off-state leakage, 500 V/us min dv/dt, 239/250 Apk 1-cycle surge (50/60 Hz), 1.15 Vrms max on-state drop, 0.8 C/W Rjc, 285/259 A2s I2t (50/60 Hz), 0.5 min power factor, 4000 Vrms dielectric, 10⁹ ohm insulation at 500 VDC, 8 pF max I/O capacitance, minus 40 to 80 C operating, minus 40 to 125 C storage, 2.6 oz (74.9 g), aluminum baseplate, UL 94 V-0 housing. Panel-mount 120 VAC class solid-state switching of heaters, motors, and industrial AC loads to 25 A.



MODEL

Crydom D1225

CALIBRATION

Available on request

CONDITION

Used

STATUS

In stock

RFQ / SKU

D1225

LISTING

<https://aumictechlabs.com/products/d1225-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 • 811210 • 541380

This unit

The Crydom D1225 is a photo-coupled solid-state relay with SPST-NO contact configuration, engineered for AC load switching across 24 VAC to 140 VAC systems. This Series 1 device delivers 25 A maximum load current with SCR output topology optimized for heavy industrial switching demands. Zero-crossing operation minimizes EMI and extends load life, while the back-to-back SCR architecture handles inrush transients up to 250 A peak at 16.6 ms intervals.

Technical Specifications Load Voltage Range: 24 VAC to 140 VAC Maximum Load Current: 25 A Control Voltage: 3 VDC to 32 VDC Input Current: 7 mA to 12 mA On-State Voltage Drop: 1.15 Vrms (maximum) Off-State Leakage Current: 8 mA RMS (maximum) Switching Time: 1/2 cycle (maximum) Blocking Voltage: 600 V Surge Current Rating: 250 A peak @ 16.6 ms Dielectric Strength: 4000 V RMS Input Impedance: 1500 Ohms nominal Thermal Resistance (J-to-C): 1.02 °C/W Capacitance: 8 pF Key Features Zero-voltage crossing for resistive load applications Direct bond copper substrate for superior thermal management Internal snubber circuitry Aluminum base plate with UL94V-0 housing Screw terminal connections (4-pin) Optional LED input status indicator (G option) Optional overvoltage protection module (P option) Epoxy-free design with anti-rotation barriers Typical Applications Heater control, motor soft-starts, lighting systems, industrial process automation, and AC equipment switching in temperature-controlled environments (-40 °C to +80 °C). Compatibility & Integration Panel or chassis mount hockey-puck package measuring 57.3 × 44.5 × 22.6 mm. CE, CSA, TUV, and UL approved per EN 60950-1 with Level-3 EMC compliance. RoHS compliant with no SVHC content.

D1225 Characteristics / Specifications

PARAMETER	VALUE
Model	D1225
Instrument Type	Panel-mount solid-state relay
Family	Crydom Sensata Series 1
Circuit	SPST-NO (1 Form A)
Output Type	AC zero-cross SCR
Control Voltage	3-32 VDC
Load Voltage	24-140 Vrms, 47-440 Hz
Maximum Load Current	25 Arms
Minimum Load Current	150 mArms
Transient Overvoltage	600 Vpk
Off State Leakage	1 mArms maximum at rated voltage
Off State Dvdt	500 V/us minimum
Surge Current	239 Apk (50 Hz) / 250 Apk (60 Hz) 1 cycle
On State Drop	1.15 Vrms maximum at rated current
Thermal Resistance	0.8 C/W junction to case
I2t	285 A2s (50 Hz) / 259 A2s (60 Hz) 1/2 cycle
Power Factor Min	0.5 at maximum load
Dielectric Strength	4000 Vrms input/output/base 50/60 Hz
Insulation Resistance	10^9 ohm minimum at 500 VDC
Capacitance	8 pF maximum input to output
Operating Temperature	minus 40 to 80 C
Storage Temperature	minus 40 to 125 C
Weight	2.6 oz (74.9 g) typical
Housing	UL 94 V-0
Baseplate	aluminum

PARAMETER	VALUE
Input Torque	13-15 in-lb / 1.5-1.7 Nm
Load Torque	18-20 in-lb / 2.0-2.2 Nm
Mount Torque	18-20 in-lb / 2.0-2.2 Nm
Manufacturer	Crydom / Sensata
Literature	Crydom Series 1 120 VAC panel-mount SSR data sheet (D1225 column)

General Specifications & Supplementary Characteristics

PARAMETER	VALUE
Storage temperature	minus 40 to 125 C
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Weight	2.6 oz (74.9 g) typical
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Baseplate	aluminum
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Load Torque	18-20 in-lb / 2.0-2.2 Nm
Mount Torque	18-20 in-lb / 2.0-2.2 Nm
Manufacturer	Crydom / Sensata
Literature	Crydom Series 1 120 VAC panel-mount SSR data sheet (D1225 column) Notes From Crydom Sensata Series 1 120 VAC SSR data sheet D1225 column. Heat-sink curves for full 25 A are on that sheet; do not invent sink C/W beyond the published 0.8 C/W Rjc.

Full OEM specifications

Complete technical content extracted from the manufacturer datasheet. Sparse OEM tables are reconstructed as tables below; other text is preserved as paragraphs.

Specifications	
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Minimum Load Current	150 mA rms
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Notes

From Crydom Sensata Series 1 120 VAC SSR data sheet D1225 column. Heat-sink curves for full 25 A are on that sheet; do not invent sink C/W beyond the published 0.8 C/W Rjc.

Available from Aumictech

Used and refurbished unit evaluated in-house. Calibration: Available on request. Used · In stock.

Request a quote: sales@aumictech.com · +1 (484) 841-9341

Aumictech

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NIST-traceable calibration · SAM registered ·
30-day returns
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Technical content from manufacturer specifications. Unit photo/stock from Aumictech listing when available. Specifications subject to OEM documentation and unit condition.