

MD301Ex THORN 20VDC 1W Intrinsically Safe Heat Detector Datasheet



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Category: Safety & PPE

Price: **\$1,542.86**

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Product Description

THORN MD301Ex (Part No. 516.023.002) is a 20 VDC, 1 W intrinsically safe rate-of-rise heat detector featuring a lightweight 0.050 kg ABS construction. Engineered for 2-wire operation, the unit utilizes a thick-film hybrid circuit with NTC thermistors printed on a ceramic substrate for precise thermal tracking. It operates with a maximum safety voltage of 28 VDC, an equivalent capacitance of 1.5 nF, and zero equivalent inductance, mounting seamlessly via the M300 conventional base.

MD301Ex Specifications

Manufacturer: THORN Security (Tyco)

Model Number: MD301Ex

Part Number: 516.023.002

Series: MD300 Ex Series

Product Type: Intrinsically Safe Heat Detector

Detection Method: Rate-of-Rise (R-O-R)

Response Grade: Grade 1

Nominal Operating Voltage: 20 VDC

Maximum Safety Voltage: 28 VDC

Maximum Power Input: 1 W

Equivalent Inductance: 0 mH

Equivalent Capacitance: 1.5 nF

Weight: 0.050 kg

Enclosure Material: ABS

Startup Time: 10 seconds

Wiring Configuration: 2-Wire

Compatible Base: M300 Conventional Base

Sensor Technology: NTC Thermistors on Ceramic Substrate

Intrinsic Safety Certification: E Ex ia IIC T5

Standard Compliance: BS5445:Pt 5, EN54 Pt 5, BS5501: Pt 7, EN 50 020

MD301Ex Applications

Primary applications include integration into marine fire detection panels, offshore oil rig safety systems, and hazardous area monitoring networks. Deployed within machinery spaces, engine rooms, and volatile chemical processing facilities requiring ATEX-certified E Ex ia IIC T5 thermal monitoring.

Supplemental Images

