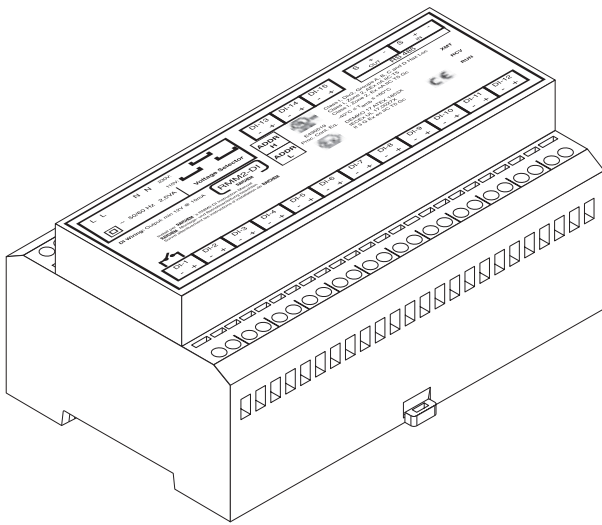


CONNECT AND PROTECT

Remote monitoring module for Digital Inputs

DESCRIPTION



The Remote Monitoring Module for Digital Inputs (nVent RAYCHEM RMM2-DI) provides the capability for the nVent RAYCHEM NGC controller family to read the status of devices remotely and can link them back to the electrical heat-tracing circuits.

The RMM2-DI has in total 15 digital inputs. Multiple RMM2-DI units can communicate with a single User Interface providing centralized monitoring capabilities.

CONTROL AND MONITORING

A nVent RAYCHEM NGC network controls up to 260 heat-tracing circuits per system based on ambient or pipe temperatures. The RMM2-DI module can be used to collect circuit breaker status, contactor status or other digital information in the field. This information will be communicated back to a central location via one communication cable, reducing installation and wiring cost.

CIRCUIT BREAKER TRIP ALARMS

When monitoring the circuit breaker status with the RMM2-DI module, the information can be linked in the NGC control system to the associated electrical heat-tracing circuits. An alarm will be generated when a circuit breaker trips. As a result the User Interface will show in detail which circuit breaker tripped and the associated electrical heat-tracing circuit(s) effected. The alarms may be reported remotely through an alarm relay in the User Interface, via nVent RAYCHEM Supervisor and upstream to a Process Control system via a Modbus communication link.

CONFIGURATIONS

The RMM2-DI is an electronic device that clips to a DIN 35 rail. The complete kit for ordinary and hazardous areas (Zone 2) include an RMM2 mounted in a rugged polyester enclosure with appropriate terminals and cable glands. For other installation options, contact nVent.

GENERAL

Area of use

Hazardous area when mounted in Ex-d enclosure
RMM-DI panel mount, safe area

APPROVALS

RMM2-DI module



E490519
Proc. Cont Eq

Class I, Div2, Groups A, B, C and D Haz Loc
Class I, Zone 2, AEx nA IIC T5
Class I, Zone 2, Ex nA IIC T5 Gc
DEMKO 17 ATEX 1853X
IECEX UL 17.0027 II 3 G Ex ec IIC T5 Gc

RMM2-DI-8GL-EX-E and
RMM2-DI-15GL-EX-E System

DEMKO 17 ATEX 1760X
IECEX UL 17.0026
II 3 G Ex ec IIC T5 Gc
Ex tc IIC T60°C Dc $-40^{\circ}\text{C} \leq T_{\text{amb}} \leq +60^{\circ}\text{C}$



Ambient operating temperature range

-40°C to $+60^{\circ}\text{C}$

Ambient storage temperature range

-51°C to $+60^{\circ}\text{C}$

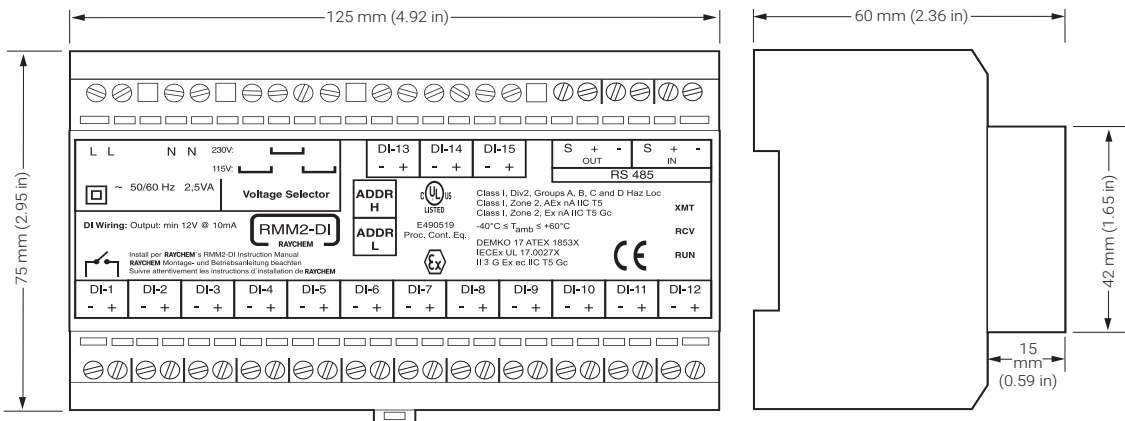
Relative humidity

Max. 95%, noncondensing

Supply voltage

(nominal) 115/230 Vac $+10\%$ -10%
50/60 Hz (jumper selectable)

DIMENSIONS (IN MM)



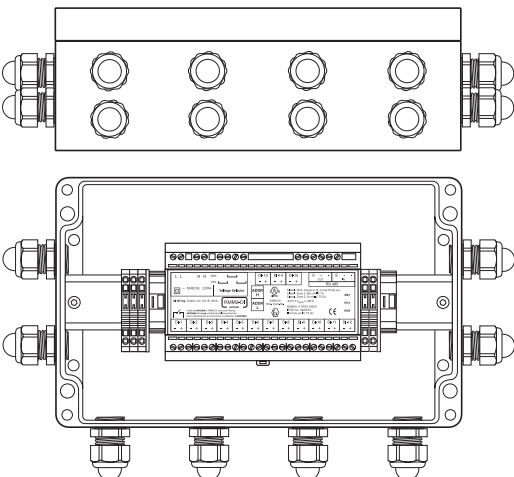
DIMENSIONS AND MOUNTING

Dimensions

125 mm x 75 mm x 60 mm, see drawing

Mounting

DIN rail mountable



RMM2-DI-EX-E ENCLOSURE

RMM2-DI-8GL-EXE-E	RMM2-DI enclosure with 8 Glands for Digital input signals
Dimensions	260 mm x 160 mm x 91 mm
RMM2-DI-15GL-E	RMM2-DI enclosure with 15 Glands for Digital input signals
Dimensions	360 mm x 160 mm x 91 mm

DIGITAL INPUT

Type	2 wire digital input
Supplied power	Minimum power per DI connection supplied by RMM2-DI module 12V 10mA (Sink/source)
Number of signals	15 Digital inputs

COMMUNICATION TO NVENT RAYCHEM NGC CONTROL SYSTEM

Type	RS-485
Protocol	Modbus RTU
Cable type	Shielded twisted pair
Length cable	1200 m max.
Address switch	Selectable on RMM2-DI, address range: 1-255

CONNECTION TERMINALS

Supply (in-out)	4 terminals for cables 0.2 mm ² to 4 mm ²
RS-485 connection	2 x 3 terminals for cables 0.2 mm ² to 2.5 mm ²
DI connections	15 x 2 terminals for cables 0.2 mm ² to 2.5 mm ²

ELECTROMAGNETIC COMPATIBILITY

EN 60730-1: 2011	
EN 61000-6-3:2007+A1:2011	EN 61000-3-2:2006 +A1:2009+A2:2009
EN 61000-3-3:2008	
EN 61000-6-2:2005	

ORDERING DETAILS

Additional Details	Part Description	Product Number	EAN Number
RMM2-DI, no enclosure	RMM2-DI	1244-018083	5414506018479
With Zone 2 enclosure and 8 Glands for DI signals	RMM2-DI-8GL-EX-E	1244-018858	7350027271611
With Zone 2 enclosure and 15 Glands for DI signals	RMM2-DI-15GL-EX-E	1244-018859	7350027271628

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