

Fail-safe capillary temperature controller in stainless steel enclosure (1.4404 / 316L) for use in hazardous area.

Mechanical Controllers Ex



- Compact design
- 16A/230V AC switching capacity
- Robust and rugged design
- 4/6mm sensor diameter
- Highly resistant to aggressive chemicals
- Huge temperature range: -20...+500°C

Description

The IRM..VAEx series of fail-safe capillary temperature devices consist of capillary type temperature thermostats with mechanical change-over contacts in a robust and rugged stainless steel enclosure.

This robust enclosure is used in applications for controlling and connecting self-limiting heating tapes and heating cables in hazardous areas.

These stainless steel enclosures are approved to ATEX/IECEX and NEMA 4X and have proven themselves extremely well under harsh conditions and for food & hygienic areas.

Aggressive chemicals or severe mechanical impacts cannot harm or even damage these rugged & robust enclosures.



Technical Data

Permitted Ambient Temperatures:	-55°C ... +50°C in T6
Material:	Stainless steel 1.4404 / 316L
Protection Class:	IP66
Dimensions (LxWxH in mm):	200 x 200 x 120

Marking

- II 2G Ex ed IIC T6
- II 2D Ex tb IIIC T80°C IP65

Approval

ATEX, IECEX, EAC

Further Information

Operation instruction must be consulted before use.

Ordering Information

Fail-safe temperature controller	IR2M	...	VAEx
Code temperature range (see code below)			
Stainless steel and Ex version			

Available Temperature Ranges

Controller (safety temperature monitor):

Code: -205	=	-20...+50°C
Code: 0012	=	0...+120°C
Code: 0019	=	0...+190°C
Code: 0630	=	+60...+300°C
Code: 1450	=	+140...+500°C

Example

IR2M0630VAEx
(controller with temperature range: +60...+300°C)

Other temperature ranges available upon special request.

IR2M..VAEx

Additional Technical Data

Rated Voltage: 230V AC
(400V upon request)

Rated Current ($\cos \varphi = 1$): 16A
(25A upon request)

Switching Point Deviation:

Temp. Range in °C	Deviation (% of full scale)	Sensor Diameter (mm)
-20...+50°C	+7/-0	6
0...+120°C	+7/-0	4
0...+190°C	+7/-0	4
+60...+300°C	+7/-0	6
+140...+500°C	+7/-0	6

Max. Permitted Sensor Temperature: +15% of full scale or max. +25K

Capillary Length: 1,000mm
(3,000mm upon request)

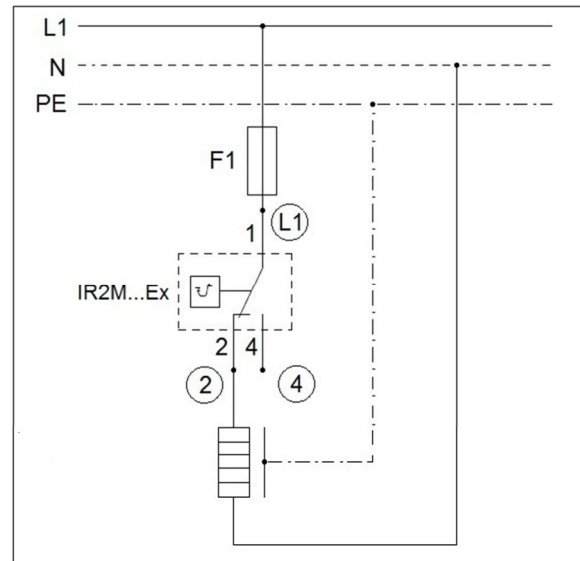
Bulb Diameter: 4mm

Cable Glands: 1x M25 Ni-plated brass
1x M20 blind plug

Terminal Cross Section (Cage Clamp Type): 0.5 – 6mm² (solid or stranded cable)

Weight: ca. 3.5kg

Typical Schematic



(L1) (2) (4) = Terminal ids

F1: MCB (by others)

Internal Layout

