

# The XM420-DW series to meet EXTREME environmental requirements



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XM420 series

## Device characteristics

- Model according to flammability class UL 94V-0
- For use at system components that generate vibrations/shocks
- For use in places with highly fluctuating temperatures
- Flexible interface options for devices of the XM420-DW series
- Easy transfer of measured values for measurement and control technology
- Galvanic separation prevents inaccurate measurement results (option M)
- Start-up delay, response delay and delay on release can be set
- Digital measured value indication on LC display
- LEDs for operation, alarm 1, alarm 2
- Test/reset button internal/external
- Two separate alarm relays with 1 changeover contact each
- N/O or N/C operation and fault memory are selectable
- Permanent self monitoring
- Multifunctional LC display (until -25 °C)
- Password protection for device settings
- Sealable transparent cover
- Push-wire terminal (two terminals per connection)
- 2-module enclosure (36 mm)

## Approvals



## Description

The measuring and monitoring relays of the XM420-DW series are increasingly used where extreme climatic and mechanical environmental conditions prevail. The XM420-DW series is characterised by its robustness under harsh ambient conditions. In particular, it is extremely weather resistant, interference resistant as well as vibration resistant.

The measuring and monitoring relays of this series are designed as standard with two alarm relays with one changeover contact each. In addition, the devices are also available with the following standardised analogue interfaces:

### Option M

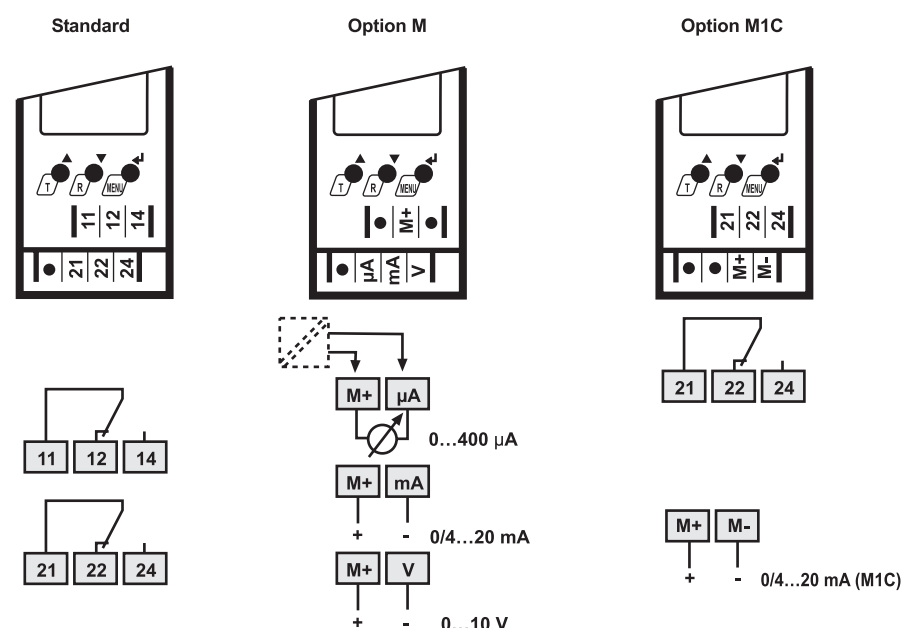
Analogue output with galvanic separation, output signal selectable in the menu:

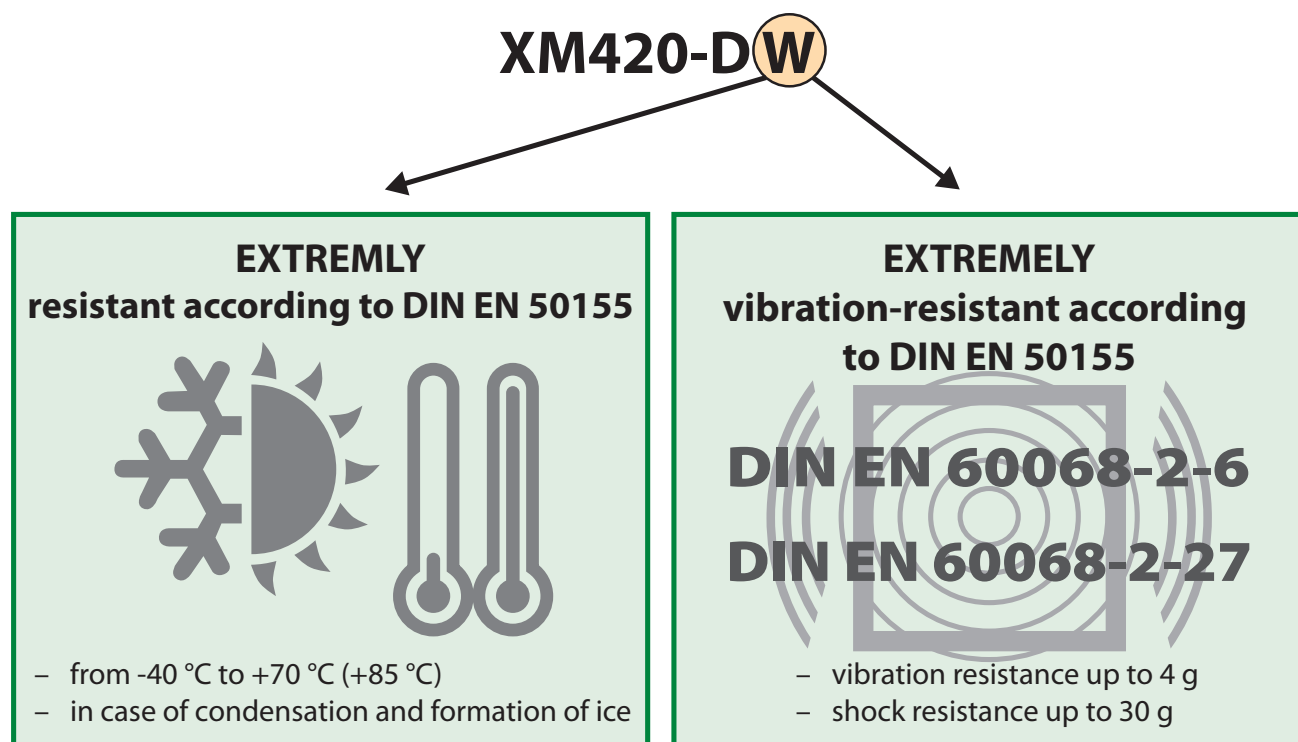
- DC 0...400  $\mu$ A      Current output, e.g. for Bender measuring instruments of series 96...
- DC 0...10 V      Standard voltage signal
- DC 0/4...20 mA      Standard current output

### Option M1C

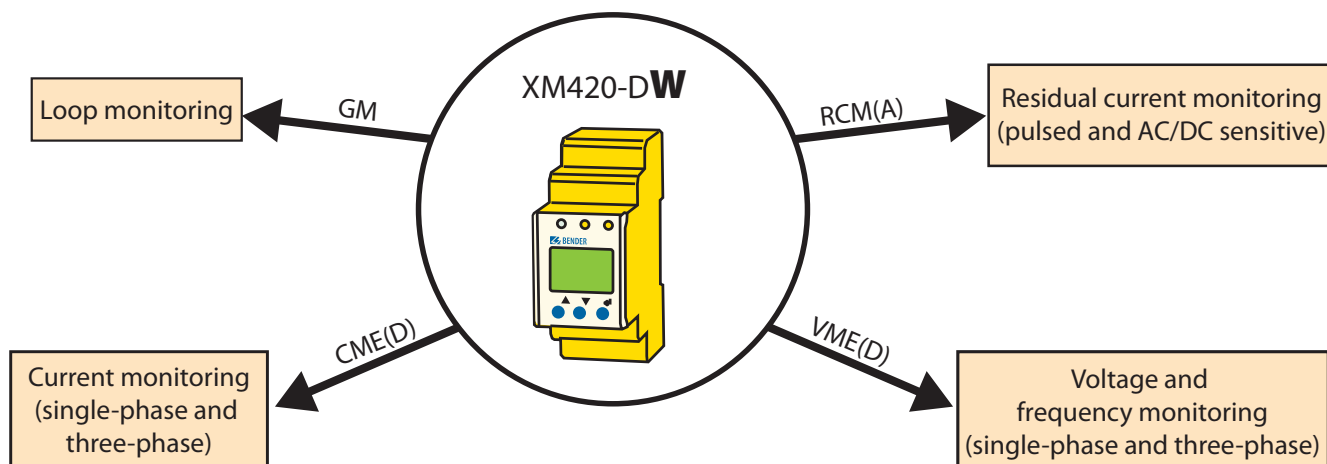
Analogue output 0/4...20 mA (without galvanic separation), one changeover contact as freely configurable alarm message.

## Interface options





#### Overview of the extreme weather resistant product series



Ideal for critical applications such as:

- high shock impact
- high vibration impact
- extreme humidity/formation of ice
- severe pollution
- strong temperature variations (large temperature ranges)

## Overview

Series	Option M	Option M1C	2 changeover contacts
RCM420	■	■	■
RCMA423	■	■	■
VME42...	■		■
VMD42...	■		■
CME42...	■		■
CMD42...	■		■
GM42...	■		■

Additional information:

You can find additional information about the listed device series in our product range on [www.bender.de](http://www.bender.de).

## Technical data

### Switching elements

Default amount	2 x 1 changeover contacts				
Electrical endurance in rated operating conditions	10,000 cycles				
Contact data according to IEC 60947-5-1					
Utilisation category	AC-13	AC-14	DC-12	DC-12	DC-12
Rated operational voltage	230 V	230 V	24 V	110 V	220 V
Rated operational current	5 A	3 A	1 A	0.2 A	0.
Minimum contact rating	1 mA at AC/DC ≥ 10 V				

### Interfaces

Max. no-load voltage (open terminals)	DC 20 V
Max. short-circuit current	30 mA short-circuit-proof
Voltage output	DC 0...10 V
Min. load	1 k $\Omega$
Current output	DC 0/4...20 mA
Max. load	500 $\Omega$
Current output	DC 0...400 $\mu$ A
Max. load	12.5 k $\Omega$

( ) \* Factory setting



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