

Data sheet

Danfoss gas detection

Warning module



The gas detection warning module is used for increasing safety of a centrally controlled gas detection system by managing the warning/ alarm devices and continuous monitoring the circuiting to the warning/alarm devices. Potential wire breaks or wire interruptions in the alarm device loop will be detected immediately and reported to the central control.

Communication with the controller takes place via the RS 485 fieldbus interface.

Warning modules can be installed close to the Controller (Controller Solution) or alternatively in the field.

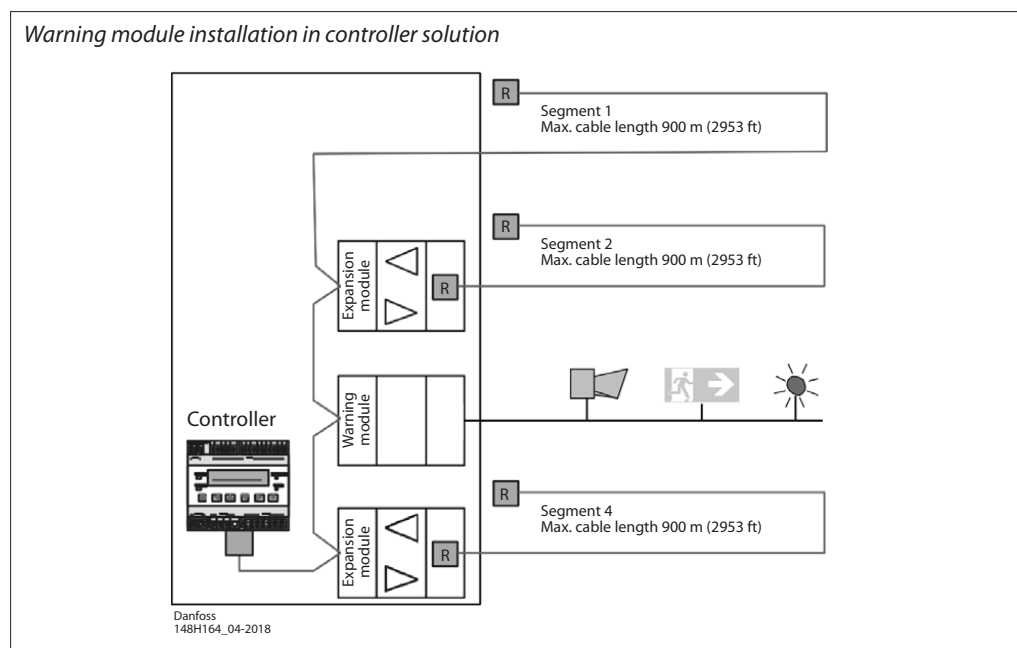
Features

- Testing of the warning/alarm device circuiting with intervals < 1 minute
- Flexible connection to local gas detection units by either Analog or RS485 fieldbus communications
- Located in Controller Solution or in the field
- Easy configuration via intuitive user-interface; helps simplify operator handling and minimize risk of operational setting errors
- Simple commissioning by standard parameter configuration
- Conformity to Low Voltage Directive 2014/35/EU, EMC Directive 2014/30/EU, EN 50271 / IEC 615078, EN 61010-1, ANSI / UL 61010 1, CAN / CSA-C22.2 No. 61010-1

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Installation/Connection

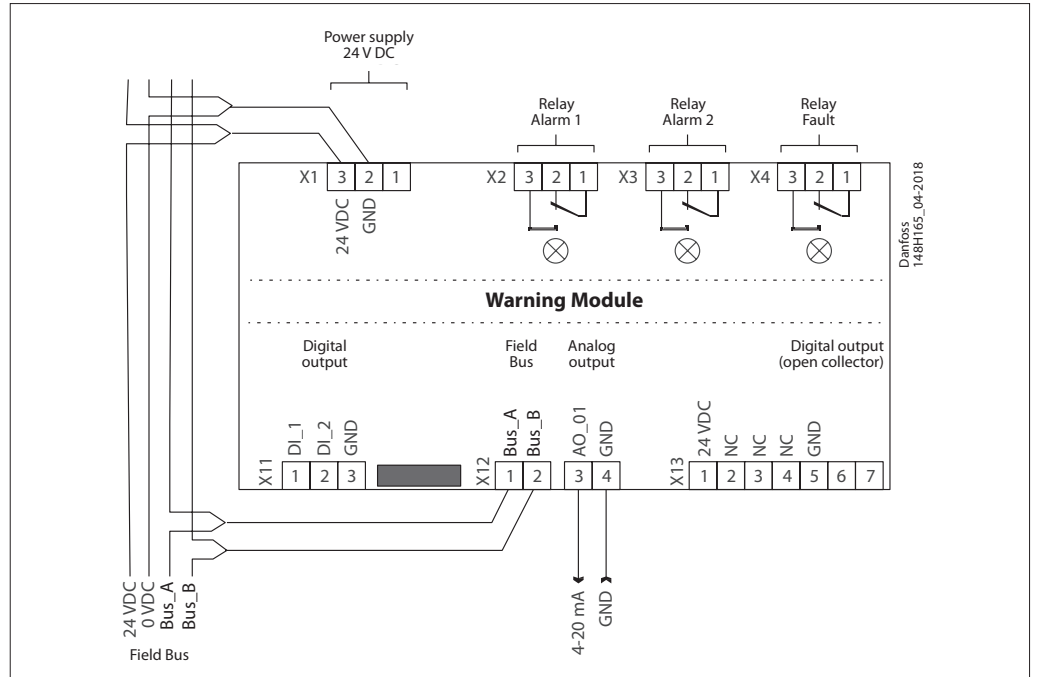
Expansion modules are installed close to the Controller (Controller Solution). See example below



Specifications

Electrical	
Power supply	16 – 29 V DC, reverse-polarity protected
Power consumption (24 V DC) only MSB2 board	100 mA (2.4 VA)
Digital input	
Signal input	Potential-free contact
Function	Acknowledge or test function
Analog output	
Analog output signal	Proportional, overload and short-circuit proof, load ≤ 500 Ohm 4 - 20 mA = measuring range 3.0 < 4 mA = underrange >20 - 21.2 mA = overrange 2.0 mA = fault
Digital output	
Alarm relays (2)	250 V AC, 5 A, potential-free, changeover contact (SPDT)
General	
Temperature range	-10 °C to +50 °C (+14 °F to +122 °F)
Humidity range	15 - 95 % RH non-condensing
Storage temperature	-10 °C to +40 °C (+14 °F to +104 °F)
Storage time	6 months
Serial interface	
Fieldbus	RS 485 / 19200 Baud
Tool bus	2-wire / 19200 Baud
Physical	
Protection class	IP 65
Wire connection:	
Fieldbus	Screw-type terminal min. 0.25 mm ² , max. 2.5 mm ²
Digital input, analog output	Screw-type terminal min. 0.25 mm ² , max. 1.3 mm ²
Power supply, relays	Screw-type terminal min. 0.25 mm ² , max. 2.5 mm ²
Standards & regulations	
EMC Directive 2014/30/EU	
Low voltage directive 2014/35/EU	
Conformity to: EN 50271 / IEC 615078, EN 61010-1:2010, ANSI/UL 61010-1, CAN/CSA-C22.2 No. 61010-1E	

Wiring configuration



Ordering

Description	Code number
Warning module	148H6223