proreact®
Specialist linear heat detection

Datasheet

Proreact® Fixed Activation Temperature Digital Interface Monitor Module

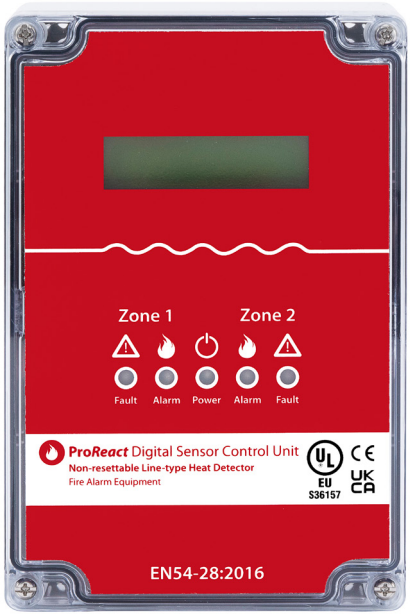
A1397

A unique and flexible dual zone digital LHD interface monitor module, offering advanced functionality to traditional digital LHD systems. The Proreact Digital Interface Monitor Module (DIMM) is designed to work with the Proreact Digital Linear Heat Detection Cable and effectively monitor up to two zones at any one time.

Approved to the UL864 10th edition standard, the Proreact DIMM has undergone stringent testing, including new tests to confirm the integrity of the software in the device.

The Proreact DIMM simultaneously monitors two zones of digital LHD cable for an alarm or fault condition. If an overheat or fire situation triggers either zone of the cable, the Proreact DIMM automatically calculates and displays the distance along the cable, in feet and metres, to the alarm point. The two zones can operate independently of each other or in interlock/coincidence detection mode to eliminate the possibility of false alarms.

The Proreact DIMM is intended to be installed between the Digital Linear Heat Detection cable and a conventional or addressable fire alarm control panel. An RS-485 Modbus RTU output also allows direct connection into a PLC or other process control system.



FEATURES
Power indicator, fault and alarm lights for each zone
Wide coverage – up to 1,000 metres (3,280 ft) of Proreact Fixed Activation Temperature LHD cable per zone
Volt-free outputs for fault and alarm, corresponding to each zone
Can be connected to an industrial process control system using the two-wire RS485 Modbus RTU output
Built-in sounder for audible annunciation
Interlock/Coincidence detection eliminates the possibility of false alarms by requiring both LHD cables to trigger before transmitting an alarm

APPROVALS
Worldwide approvals to meet end user specifications certification. Visit our website for up-to-date approvals information.

BENEFITS
Simultaneous monitoring of up-to two zones increases potential applications. For example: pre-alarm on one zone/alarm on the other, fault-tolerant triggering of alarm (both zones must activate before alarm at panel).
Immediately pinpoints exact location and responds to an incident
Connects to addressable fire alarm control panels for fast response to faults
Low installation and maintenance costs reduce total cost of ownership

APPLICATIONS	
Cable trays	Oil and gas industries
Cold storage and industrial freezers	Power generation industries
Floating roof storage tanks	Tunnels
Mines	Warehousing

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MECHANICAL SPECIFICATION	
UL model mumber	DSCU-EN
UL file number	S36157
Revision	1.9.2-EN
Approvals	EN54-28:2016
Enclosure:	
Dimensions	180(h) x 120(w) x 60.5(d) mm (7"(h) x 4¾"(w) x 2½"(d))
Rating	NEMA 4, 4X (IP65)
Finish	Light gray with clear lid
Display	2 line, 16 character backlit display showing zone status

POWER REQUIREMENTS*			
**All circuits power limited if powered from a power limited supply*	**Min.**	**Nominal**	**Max.**
Operating voltage	12 Vdc	24 Vdc	36 Vdc
Current consumption:			
Normal operation	<15 mA	<7 mA	<5 mA
Alarm	<40 mA	<23mA	<15 mA

ENVIRONMENTAL	
Operating temperature range	-20°C – +50°C (-4°F – +122°F)
Supervised circuits	Power, Input Zone 1 & Input Zone 2

TERMINAL BLOCKS	
Spacing	5mm rising clamp
Rating	16A
Wire size	0.08 mm^2 (28AWG) to 4 mm^2 (11 AWG)

INPUTS	
Up to two Class B zones of Proreact EN Digital LHD Cable	
Max zone length	1000 m (3,280 ft)
Min zone length	1 m (3¼ ft)
End of line resistor	3.6 kohm (included)
Short circuit current	0.5 mA
Max zone voltage	5 V

OUTPUTS		
Communications	Two wire RS-485 Modbus RTU/ASCII	
Sounder	2.4 kHz 92 dBa @ 10 cm buzzer	
Alarm	2x Form C volt-free relay contacts (resistive, common)	
	Max V	30 Vac or 42.4 Vdc
	Max current	2A
	Max switching power	60 W, 62.5 VA
Fault	2 x optoisolated phototransistor output (resistive, common)	
	Max V	35 Vdc
	Max current	80 mA
	Max power dissipation	150 mW

FFE

FFE Limited, 9 Hunting Gate, Hitchin, Hertfordshire SG4 0TJ, UK
t: +44 (0) 1462 444 740 **e:** sales@ffeuk.com **w:** ffeuk.com

FFE Limited, 1455 Jamike Ave Ste 200, Erlanger, KY 41018-3147, USA
t: +1 859 957 1570 **e:** america@ffeus.com **w:** ffeus.com

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