Certificate of Compliance

FIRE PROTECTION EQUIPMENT

This certificate is issued for the following equipment:

Series CTI Linear Heat Detectors

Approval Guide Listing: Category: (see page 2 for listing text)
Electrical Signaling; Electrical Signaling, Alarm Signal Initiating Devices, Fire Detection, Heat-Actuated, Fire Detection, Heat-Actuated

Listing appears on following pages.

The Protectowire Company
60 Washington Street
Pembroke, MA 02359 USA

This certifies that the equipment described has been found to comply with the applicable requirements, as stated in the Approval Report(s), of the following FM Approval Standards and other documents:

Approval Standards		*Approval Standards*		*Other Standards*	
Class Number	*Date*	*Class Number*	*Date*	*Organization, Designation*	*Date*
3210	2021	3010	2021	ANSI/ ISA 60079-0	2013
3610	2021			ANSI/ISA 60079-11	2014
3600	2022				

Original Approval Project Identification: 3047325 Approval Granted: 22 February 2007

Related Reports & Subsequent Revisions: 3047325_RR202305-283, 3047325_RR203685-283, 3047325_RR207635-283, 3047325_171108_RR211883-283, 3057614, PR451548, PR452760, PR459276, RR233234, RR235041

To verify the availability of the Approved product, please refer to www.approvalguide.com

J.E. Marquedant
VP, Manager - Electrical Systemstitle
FM Approvals
1151 Boston-Providence Turnpike,
Norwood MA, 02062 USA

30 March 2023
Date

Member of the FM Global Group

Certificate of Compliance

Electrical Signaling, Alarm Signal Initiating Devices, Fire Detection, Heat-Actuated, Fire Detection, Heat-Actuated

Series CTI

Series CTI (Confirmed Temperature Initiation) Linear Heat Detectors			
CTI-EPC Multi-Purpose/Commercial & Industrial Applications	**Alarm Temp.**	**Max Ambient Temp.**	**Max. Spacing**
CTI-155-EPC	**155°F (68°C)**	**115°F (46°C)**	**30 ft. / 9.1m**
CTI-190-EPC	**190°F (88°C)**	**150°F (66°C)**	**30 ft. / 9.1m**
CTI-220-EPC	**220°F (105°C)**	**175°F (79°C)**	**25 ft. / 7.6m**
CTI-280-EPC	**280°F (138°C)**	**200°F (93°C)**	**25 ft. / 7.6m**
CTI-356-EPC	**356°F (180°C)**	**221°F (105C)**	**Special App.**
CTI-XCR High Performance/Industrial Applications Excellent Abrasion & Chemical Resistance			
CTI-155-XCR	**155°F (68°C)**	**115°F (46°C)**	**30 ft. / 9.1m**
CTI-190-XCR	**190°F (88°C)**	**150°F (66°C)**	**30 ft. / 9.1m**
CTI-220-XCR	**220°F (105°C)**	**175°F (79°C)**	**25 ft. / 7.6m**
CTI-280-XCR	**280°F (138°C)**	**200°F (93°C)**	**25 ft. / 7.6m**
CTI-356-XCR	**356°F (180°C)**	**221°F (105C)**	**Special App.**
CTI-LSZH Multi-Purpose/Low Smoke Zero Halogen			
CTI-135-LSZH	**135°F (57°C)**	**100°F (38°C)**	**30 ft. / 9.1m**
CTI-155-LSZH	**155°F (68°C)**	**115°F (46°C)**	**30 ft. / 9.1m**
CTI-190-LSZH	**190°F (88°C)**	**150°F (66°C)**	**30 ft. / 9.1m**
CTI-220-LSZH	**220°F (105°C)**	**175°F (79°C)**	**25 ft. / 7.6m**
CTI-280-LSZH	**280°F (138°C)**	**200°F (93°C)**	**25 ft. / 7.6m**
CTI-356-LSZH	**356°F (180°C)**	**250°F (121C)**	**Special App.**
CTI-EPR Good Weathering Properties & Flexibility Over a Wide Temperature Range			
CTI-155-EPR	**155°F (68°C)**	**115°F (46°C)**	**30 ft. / 9.1m**
CTI-190-EPR	**190°F (88°C)**	**150°F (66°C)**	**30 ft. / 9.1m**
CTI-220-EPR	**220°F (105°C)**	**175°F (79°C)**	**25 ft. / 7.6m**
CTI-280-EPR	**280°F (138°C)**	**194°F (90°C)**	**25 ft. / 7.6m**
CTI-356-EPR	**356°F (180°C)**	**194°F (90°C)**	**Special App.**
CTI-XLT Multi-Purpose/Excellent Low Temp. Properties			
CTI-135-XLT	**135°F (57°C)**	**100°F (38°C)**	**30 ft. / 9.1m**

Interface Modules	
CTM-230/-E	operating range is -40°F (-40°C) to 140°F (60°C)
CTM-530/-E	CTM-530 operating temperature range is -20ºF (-29ºC) to 140ºF (60ºC). Operates on 12 or 24 V dc and provides relay, 4-20 mA, Modbus RTU over RS-485 outputs for connection to a compatible Approved control.
CTM-530-EI Interface Module is associated apparatus with intrinsically safe connections to Class I, II and III, Division 1, Groups A, B,C, D, E, F and G; [AEx ia Ga] IIC hazardous (classified) locations.	
Series CTI Linear Heat Detectors and ZB-HD-5-QC Zone Boxes are intrinsically safe for use in Class I, II and III, Division 1, Groups A, B,C, D, E, F and G; Class I, Zone 0, AEx ia IIC T6 Ga -29ºC ≤ Ta ≤ +60ºC hazardous (classified) locations when connected via the CTM-530-EI, CTM-530I, in accordance with Control Drawing IL1622	

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