

# **Certificate of Compliance**

### FIRE PROTECTION EQUIPMENT

This certificate is issued for the following equipment:

#### NAR300 Oil Leak Detector System

Approval Guide Listing: Category:

Ignitable Flammable Liquid Equipment, Hydrocarbon Leak Detectors

NAR300 Leak Detector System. System consists of NAR300 Float Sensor and Transmitter combination used with NRR261 Converter and Transmitter combination or NRR262 Converter. The system requires one converter, one transmitter and one float sensor. The system provides detection of water-insoluble petrochemical hydrocarbon liquids and vegetable oils. The converter assembly provides a system alarm relay output rated 5A 250VAC/30VDC. The converter is connected to the float sensor via the transmitter. The NRR261 converter is explosionproof for Class I, Division 1, Group C and D and Class I, Zone 1, AEx db [ia] IIB with intrinsically safe circuits for connection to Class I, Division 1, Groups C and D and Class I, Zone 0, AEx ia IIB hazardous (classified) locations when installed in accordance with Control Drawing Ex1088-1282. The NRR262 converter is an associated intrinsically safe apparatus for connection to Class I, Division 1, Groups C and D and Class I, Zone 0, AEx ia IIB hazardous (classified) locations when installed in accordance with Control Drawing Ex1089-1283 The NAR300 transmitter is intrinsically safe for Class I, Division 1, Groups C and D and Class I, Zone 0, AEx ia IIB hazardous (classified) locations when installed in accordance with Control Drawing Ex1087-1281. The float sensor is intrinsically safe for Class I, Division 1, Groups C and D and Class I, Zone 0, AEx ia IIB hazardous (classified) locations when installed in accordance with Control Drawing Ex1087-1281. The system is suitable for operation in ambient temperatures from -20°C to 60°C (-4°F to 140°F). The input power rating is 22 – 26 VDC or 90 – 250 VAC 50/60 Hz. The NRR261 and NAR300 enclosures are rated Type 4X and IP67, the NRR262 enclosure is rated IP20.

#### NAR300-abAcde. Float and Transmitter for Oil Leak Detector System.

IS / I / 1 / CD / T5 Ta =  $60^{\circ}$ C - Ex1087-1281; IP67 (Float Sensor) I / 0 / AEx ia / IIB / T5 Ta =  $60^{\circ}$ C - Ex1087-1281; IP67 (Float Sensor) IS-AIS / I / 1 / CD / T4 Ta =  $60^{\circ}$ C - Ex1087-1281; IP67 (Transmitter) I / 1 [0] / AEx ia [ia] / IIB / T4 Ta =  $60^{\circ}$ C - Ex1087-1281; Type 4X, IP65 (Transmitter) a = Approval C b = Type 1, 5 or 6 c = Signal Cable A, B, C, D, E, F or Y d = Float Guide 1, 2, 3 or 9 e = Cable Entry A, B, C, E or F

1. Potential Electrostatic Discharge hazard, clean surfaces with a damp cloth

#### NRR261-abc. Converter and Transmitter for Oil Leak Detector System.

XP-AIS / I / 1 / CD / T6 Ta =  $60^{\circ}$ C - Ex1088-1282; Type 4X, IP65 I / 1 [0] / AEx db ia [ia] / IIB / T4 Ta =  $60^{\circ}$ C - Ex1088-1282; Type 4X, IP65 (a = C) I / 1 [1] / AEx db [ia] / IIB / T6 Ta =  $60^{\circ}$ C - Ex1088-1282; Type 4X, IP65 (a = F) a = Approval C or F b = Power Supply A or B c = Cable Entry Q, R, T, U or W

- 1. Contact manufacturer for flamepath joint details if repair is required.
- 2. Potential Electrostatic Discharge hazard, clean surfaces with a damp cloth.



Member of the FM Global Group



## **Certificate of Compliance**

NRR262-ab. Converter for Oil Leak Detector System.

AIS / I / 1 / CD / Ta = 60°C - Ex1089-1283 [I / 0] / AEx [ia] / IIB / Ta = 60°C - Ex1089-1283 a = Approval C

b = Power Supply A or B

Endress+Hauser Yamanashi Co Ltd 862-1 Mitsukunugi Sakaigawa-cho Fuefuki-shi, Yamanashi Prefect, 406-0846 Japan

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		Other Standards	
Class Number	Date	Organization, Designation	Date
3600	2011	ANSI/ISA 61010-1	2004
3610	2010	ANSI/NEMA 250	2003
3615	2018	ANSI/IEC 60529	2004
3810	2005	ANSI/ISA 60079-0	2013
7745	2012	ANSI/ISA 60079-1	2015
		ANSI/ISA 60079-11	2011

Original Approval Job Identification: 3049525 Approval Granted: August 4, 2015

Related Report: PR450372

Subsequent Revisions:

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

J/E. Marquedant

VP, Manager of Electrical Systems

FM Approvals

1151 Boston-Providence Turnpike,

Norwood MA, 02062 USA

2 July 2018

Date



Member of the FM Global Group