

FM Approvals
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CERTIFICATE OF COMPLIANCE

HAZARDOUS (CLASSIFIED) LOCATION ELECTRICAL EQUIPMENT

This certificate is issued for the following equipment:

I. Intrinsically Safe (Div. 1) Version

NN5001, NN5002, NN5008, NN5009, NN5010 & NN5011. Intrinsically Safe Proximity Switch.

IS / I,II,III / 1 / ABCDEFG / T6 Ta = 70°C; Type 4X; IP67 – 2131; Entity

Entity Parameters:

Model No.	V _{max}	I _{max}	P _{max}	C _i	L _i
NN5001	15V	50mA	120mW	110nF	135μH
NN5002	15V	50mA	120mW	110nF	135μH
NN5008	15V	50mA	120mW	140nF	130μH
NN5009	15V	50mA	120mW	140nF	130μH
NN5010	15V	50mA	120mW	140nF	135μH
NN5011	15V	50mA	120mW	140nF	140μH

NS5002 & NS5003. Intrinsically Safe Proximity Switch.

IS / I,II,III / 1 / ABCDEFG / T6 Ta = 70°C; Type 4X; IP67 –2131; Entity

Entity Parameters:

Model No.	V _{max}	I _{max}	P _{max}	C _i	L _i
NS5002	15V	50mA	120mW	80nF	110μH
NS5003	15V	50mA	120mW	80nF	110μH

KI5030, KI5031, KI5032, KI5037, KX5001, KX5002 and KX5004. Intrinsically Safe Proximity Switch.

IS / I, II, III / 1 / ABCDEFG / T6 Ta = 70°C; Type 4X; IP67 – 2131; Entity

Entity Parameters:

Model No.	V _{max}	I _{max}	P _{max}	C _i	L _i
KI5030	15V	50mA	120mW	375nF	1μH
KI5031	15V	50mA	120mW	375.64nF	3μH
KI5032	15V	50mA	120mW	375.28nF	5μH
KI5037	15V	50mA	120mW	382.58nF	25μH
KX5001	15V	50mA	120mW	375nF	1μH
KX5002	15V	50mA	120mW	375.64nF	3μH
KX5004	15V	50mA	120mW	377.88nF	10μH

NT5001, NE5001, NF5001, NF5002, NF5003, NF5004, NG5001, NG5002, NG5003, NG5004, NI5001, NI5002, NI5003, and NI5004. Intrinsically Safe Proximity Switch.

IS / I, II, III / 1 / ABCDEFG / T6 Ta = 70°C; Type 4X; IP67 – 701865; Entity

Entity Parameters:

Model No.	V _{max}	I _{max}	P _{max}	C _i	L _i
NT5001	15V	50mA	120mW	80nF	70μH
NE5001	15V	50mA	120mW	80nF	70μH
NF5001	15V	50mA	120mW	140nF	340μH
NF5002	15V	50mA	120mW	140nF	340μH
NF5003	15V	50mA	120mW	140nF	130μH
NF5004	15V	50mA	120mW	140nF	130μH
NG5001	15V	50mA	120mW	145nF	45μH
NG5002	15V	50mA	120mW	145nF	45μH
NG5003	15V	50mA	120mW	155nF	50μH
NG5004	15V	50mA	120mW	155nF	50μH
NI5001	15V	50mA	120mW	145nF	140μH
NI5002	15V	50mA	120mW	145nF	140μH
NI5003	15V	50mA	120mW	145nF	110μH
NI5004	15V	50mA	120mW	145nF	110μH

II. Intrinsically Safe (Div. 1) Version

Na50bA. Inductive NAMUR Proximity Switches.

IS / I,II,III / 1 / ABCDEFG / T6 Ta = 70°C; T5 Ta = 80°C – 704015; Entity; IP67

- a = Enclosure Requirement: F, G, I or M.
b = Accuracy & Temperature Range: 0 or 1.

Entity Parameters:

Model No.	V _{max}	I _{max}	P _{max}	C _i	L _i
NF500A	15V	50mA	120mW	210nF	145μH
NF501A	15V	50mA	120mW	210nF	115μH
NG500A	15V	50mA	120mW	200nF	85μH
NG501A	15V	50mA	120mW	200nF	190μH
NI500A	15V	50mA	120mW	250nF	120μH
NI501A	15V	50mA	120mW	230nF	210μH
NM500A	15V	50mA	120mW	250nF	450μH
NM501A	15V	50mA	120mW	220nF	710μH

Equipment Ratings:

I. Intrinsically Safe (Div. 1) Version

Intrinsically Safe, with entity parameters, for use in Class I, II & III, Division 1, Groups A, B, C, D, E, F & G, T6 Ta = 70°C, in accordance with manufacturer's Control Drawing No. 2131, Hazardous (Classified) indoor (TYPE 4X & IP67) Locations.

II. Intrinsically Safe (Div. 1) Version

Intrinsically Safe, with entity parameters, for use in Class I, II & III, Division 1, Groups A, B, C, D, E, F & G, T6 Ta = 70°C; T5 Ta = 80°C, in accordance with manufacturer's Control Drawing No. 704015, Hazardous (Classified) indoor (IP67) Locations.

FM Approved for:

ifm electronic GmbH
Friedrichstrasse 1, Essen D-45128, Germany

This certifies that the equipment described has been found to comply with the following Approval Standards and other documents:

Class 3600	1998
Class 3610	2010
Class 3810	2005
ANSI/NEMA 250	1991
IEC 60529	1989

Original Project ID: 3015422

Approval Granted: February 26, 2004

Subsequent Revision Reports / Date Approval Amended

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3015422	March 29, 2004		
3015422	May 13, 2004		
050304	July 21, 2005		
3026340	December 11, 2006		
061213	December 21, 2006		
3045029	May 23, 2012		

FM Approvals LLC



J.E. Marquedant
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23 May 2012

Date