FM Approvals
Member of the FM Global Group

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CERTIFICATE OF COMPLIANCE

HAZARDOUS (CLASSIFIED) LOCATION ELECTRICAL EQUIPMENT

This certificate is issued for the following equipment:

Group I.

9410/34-3d0-f0, Field Device Coupler
NI / I / 2 / ABCD / T4 Ta = 75°C;
ANI / I, II, III / 2 / ABCDEFG; 9410 6 031 001 1; NIFW
I / 2 / AEx nA [ic] IIC T4 Ta = 75°C; 9410 6 031 001 1; Entity

d = design of terminals; 1 (screw type), 2 (Cage clamp), or 3 (detachable blocks)
f = number of channels; 3 (4 Channel), 4 (8 Channel) or 6 (12 Channel)

Entity Parameters:

Voc (V)	Isc (mA)	Po (W)	Lo [Cl. I, Div. 2, A, B]	Co [Cl. I, Div. 2, A, B]
< 25	54	1.35	0.27mH	80nF

Special Conditions of Use:
1. Shall be installed in compliance with the enclosure, mounting, spacing and segregation requirements of the ultimate application.

9411/34-3d0-f0, *Field Device Coupler*
NI / I / 2 / ABCD / T4 Ta = 75°C
ANI / I, II, III / 2 / ABCDEFG; 9411 6 031 003 1; NIFW
I / 2 / AEx nA [ic] / IIC / T4 Ta = 75°C; 9411 6 031 003 1; Entity
d = design of terminals; 1 (screw type) or 2 (Cage clamp)
f = number of channels; 3 (4 Channel) or 4 (8 Channel)

Entity Parameters:

Voc (V)	Isc (mA)	Po (W)	Lo [Cl. I, Div. 2, A, B]	Co [Cl. I, Div. 2, A, B]
< 25	54	1.35	0.27mH	80nF

Special Conditions of Use:
1. Shall be installed in compliance with the enclosure, mounting, spacing and segregation requirements of the ultimate application.

9411/34-3de-f0, *Field Device Coupler*
NI / I / 2 / ABCD / T4 Ta = 70°C; IP54
DIP / II, III / 1,2 / EFG / T4 Ta = 70°C; IP54
ANI / I, II, III / 2 / ABCDEFG; 9411 6 031 003 1; NIFW
I / 2 / AEx nA [ic] / IIC / T4 Ta = 70°C; 9411 6 031 003 1; Entity; IP54
d = design of terminals; 1 (screw type), 2 (Cage clamp)
e = type of enclosure; 3 (Plastic Type 8146), 4 (Metal Type 8125)
f = number of channels; 3 (4 Channel) or 4 (8 Channel)

Entity Parameters:

Voc (V)	Isc (mA)	Po (W)	Lo [Cl. I, Div. 2, A, B]	Co [Cl. I, Div. 2, A, B]
< 25	54	1.35	0.27mH	80nF

Special Conditions of Use:
1. For enclosure options 3, bonding between the conduit hubs shall be required.

9415/00-310-4g, Diagnosis Communication Module
NI / I / 2 / ABCD / T4 Ta = 70°C
ANI / I, II, III / 2 / ABCDEFG; 9415 6 031 001 1; Entity
I / 2 / AEx nA [ic] IIC T4 Ta = 70°C
g = Service interface; 0 (without) or 2 (RS232)

Special Conditions of Use:
1. Shall be installed in compliance with the enclosure, mounting, spacing and segregation requirements of the ultimate application.

Group II.

9411/11-2d0-f0, *Field Device Coupler*
NI / I / 2 / ABCD / T4 Ta = 75°C
I / 1 / AEx m e / IIC / T4 Ta = 75°C; 9411 6 031 002 1
d = design of terminals; 1 (screw type), 2 (Cage clamp)
f = number of channels; 3 (4 Channel) or 4 (8 Channel)

Special Conditions of Use:
1. Shall be installed in compliance with the enclosure, mounting, spacing and segregation requirements of the ultimate application.

9411/11-2de-f0, *Field Device Coupler*
NI / I / 2 / ABCD / T4 Ta = 70°C; IP54
DIP / II, III / 1,2 / EFG / T4 Ta = 70°C; IP54
I / 1 / AEx m e / IIC / T4 Ta = 70°C; 9411 6 031 002 1; IP54
d = design of terminals; 1 (screw type), 2 (Cage clamp)
e = type of enclosure; 3 (Plastic Type 8146), 4 (Metal Type 8125)
f = number of channels; 3 (4 Channel) or 4 (8 Channel)

Special Conditions of Use:
1. For enclosure options 3, bonding between the conduit hubs shall be required.

Group III.

9411/21-2d0-f1, Field Device Coupler
NI / I / 2 / ABCD / T4 Ta = 75°C
AIS / I, II, III / 1 / ABCDEFG; 9411 6 031 001 1; Entity
I / 1 / AEx m e [ia] / IIC / T4 Ta = 75°C; 9411 6 031 001 1; Entity

Entity Parameters:
V_{oc} = 15.7 V dc, I_{sc} = 245 mA, P_o = 960mW, C_o = 476 nF, L_o = 0.58 mH, L_o/R_o = 37 µH/Ω

d = design of terminals; 1 (screw type), 2 (Cage clamp), or 3 (detachable blocks, at spur only)
f = number of channels; 3 (4 Channel) or 4 (8 Channel)

Special Conditions of Use:
1. Shall be installed in compliance with the enclosure, mounting, spacing and segregation requirements of the ultimate application.

9411/21-2de-f1, Field Device Coupler
NI / I / 2 / ABCD / T4 Ta = 70°C; IP54
DIP / II, III / 1, 2 / EFG / T4 Ta = 70°C; IP54
AIS / I, II, III / 1 / ABCDEFG; 9411 6 031 001 1; Entity
I / 1 / AEx m e [ia] / IIC / T4 Ta = 70°C; 9411 6 031 001 1; Entity; IP54

Entity Parameters:
V_{oc} = 15.7 V dc, I_{sc} = 245 mA, P_o = 960mW, C_o = 476 nF, L_o = 0.58 mH, L_o / R_o = 37µH/Ω

d = design of terminals: 1 (screw type), 2 (Cage clap) or 3 (detachable terminal blocks, at spur only).
e = type of enclosure: 3 (Plastic Type 8146) or 4 (Metal Type 8125).
f = channels: 3 (4 channels) or 4 (8 channels).

Special Conditions of Use:
1. For enclosure options 3, bonding between the conduit hubs shall be required.

Group IV.

9411/24-3d0-f1, Field Device Coupler
NI / I / 2 / ABCD / T4 Ta = 75°C;
AIS / I, II, III / 1 / ABCDEFG; 9411 6 031 004 1; Entity
I / 2 / AEx nA [ia] / IIC / T4 Ta = 75°C; 9411 6 031 004 1; Entity;

d = design of terminals: 1 (screw type), 2 (Cage clamp) or 3 (detachable terminal blocks, at spur only).
f = channels: 3 (4 channels) or 4 (8 channels).

Entity Parameters:
V_{oc} = 15.7 V dc, I_{sc} = 245 mA, P_o = 960mW, C_o = 476 nF, L_o = 0.58 mH, L_o / R_o = 37µH/Ω

Special Conditions of Use:
1. Shall be installed in compliance with the enclosure, mounting, spacing and segregation requirements of the ultimate application.

9411/24-3de-f1, Field Device Coupler
NI / I / 2 / ABCD / T4 Ta = 70°C; IP54
DIP / II, III / 1, 2 / EFG /T4 Ta = 70°C; IP54;
AIS / I, II, III / 1 / ABCDEFG; 9411 6 031 004 1; Entity
I / 2 / AEx nA [ia] IIC T4 Ta = 70°C; 9411 6 031 004 1; Entity, IP54

d = design of terminals; 1 (screw type), 2 (Cage clamp) or 3 (detachable terminal blocks, at spur only)
e = type of enclosure; 3 (Plastic Type 8146), 4 (Metal Type 8125)
f = number of channels; 3 (4 Channel) or 4 (8 Channel)

Entity Parameters:
V_{oc} = 15.7 V dc, I_{sc} = 245 mA, P_o = 960mW, C_o = 476 nF, L_o = 0.58 mH, L_o / R_o = 37µH/Ω

Special Conditions of Use:
1. For enclosure options 3, bonding between the conduit hubs shall be required.

Group V.

9412/0b-3d0-1g, Fieldbus Power Supply
NI / I / 2 / ABCD / T4 Ta = 70°C;
I / 2 / AEx nA nC / IIC / T4 Ta = 70°C; 9412 6 031 001 1;

b = output voltage: 0 (Voc =30.4), 1 (Voc = 17.3) or 2 (Voc = 23.7).
d = design: 0 (project version), 1 (with fault monitoring) or 4 (with signal diagnosis).
g = terminator function: 0 (terminator active "ON") or 1 (selectable terminator "ON" or "OFF").

Special Conditions of Use:
1. Shall be installed in compliance with the enclosure, mounting, spacing and segregation requirements of the ultimate application.

9419/abc-def-ghij, bus-Carrier
NI / I / 2 / ABCD / T4 Ta = 70°C;
I / 2 / AEx nA nC IIC T4 Ta = 70°C; 9419 6 031 001 1;

ab = segments supplied: 04 (4 segments) or 08 (8 segments).
c = type of supply: F (Simplex) or R (Redundant)
de = type of DCS system: XX (Universal)
f = version of bus-carrier: 1 to 9 (with DCM slot)
gh = type of host: 01 (simplex) or 02 (redundant)
ij = host connector: C1 (screw type terminal)

Special Conditions of Use:
1. Shall be installed in compliance with the enclosure, mounting, spacing and segregation requirements of the ultimate application.

Protection Group VI.

9418/0b-201-10, Fieldbus Terminator
NI / I / 2 / ABCD / T5 Ta = 75°C / T6 Ta = 40°C;
DIP / II, III / 2 / EFG / T5 Ta = 75°C / T6 Ta = 40°C;
I / 1 / AEx ib / IIC / T5 Ta = 75°C / T6 Ta = 40°C; 9418 6 031 001 1;
II, III / 21 / AEx ibD T100°C, Ta = 75°C or T65°C, Ta = 40°C; 9418 6 031 001 1;

b = type of external circuit: 1 (Non I.S. circuit) or 2 (I.S. circuit).

Special Conditions of Use:
1. Shall be installed in compliance with the enclosure, mounting, spacing and segregation requirements of the ultimate application.

Equipment Ratings:

Group I
Nonincendive for Class I, Division 2, Groups A, B, C & D,
Nonincendive Field Wiring Outputs, with Nonincendive Field Wiring parameters, for Connections to Class I, II & III, Division 2, Groups A, B, C, D, E, F & G, in accordance with manufacturer's Control Drawing.
Non-Sparking for use in Class I, Zone 2, Group IIC and Intrinsically Safe Outputs, with entity parameters, for Connections to Class I, Zone 2, Group IIC, in accordance with manufacturer's Control Drawing
Dust-Ignition Proof for Class II & III, Division 1, Groups E, F & G (excluding 941*/**-3*0-**)
Hazardous (Classified) indoor/outdoor (IP54) Locations (excluding 941*/**-3*0-**)

Group II.
Nonincendive for Class I, Division 2, Groups A, B, C & D,
Encapsulation and Increased Safety for use in Class I, Zone 1, Group IIC;
Dust-Ignition Proof for Class II & III, Division 1, Groups E, F & G (excluding 9411/11-2*0-*0 only)
Hazardous (Classified) indoor/outdoor (IP54) Locations (excluding 9411/11-2*0-*0 only)

Group III.
Nonincendive for Class I, Division 2, Groups A, B, C & D,
Intrinsically Safe Outputs, with entity parameters, for Connections to Class I, II & III, Division 1, Groups A, B, C, D, E, F & G
Encapsulation and Increased Safety for use in Class I, Zone 1, Group IIC and Intrinsically Safe Outputs, with entity parameters, for Connections to Class I, Zone 0, Group IIC, in accordance with manufacturer's Control Drawing.
Dust-Ignition Proof for Class II & III, Division 1, Groups E, F & G (excluding 9411/21-2*0-*1)
Hazardous (Classified) indoor/outdoor (IP54) Locations (excluding 9411/21-2*0-*1)

Group IV.
Nonincendive for Class I, Division 2, Groups A, B, C & D,
Intrinsically Safe Outputs, with entity parameters, for Connections to Class I, II & III, Division 1, Groups A, B, C, D, E, F & G
Non-Sparking for use in Class I, Zone 2, Group IIC and Intrinsically Safe Outputs, with entity parameters, for Connections to Class I, Zone 0, Group IIC, in accordance with manufacturer's Control Drawing
Dust-Ignition Proof for Class II & III, Division 1, Groups E, F & G (excluding 9411/24-3*0-*1)
Hazardous (Classified) indoor/outdoor (IP54) Locations (excluding 9411/24-3*0-*1)

Group V
Nonincendive for Class I, Division 2, Groups A, B, C & D,
Non-Sparking and Enclosed Break for use in Class I, Zone 2, Group IIC

Group VI
Nonincendive for Class I, Division 2, Groups A, B, C & D,
Dust-Ignition Proof for Class II & III, Division 1, Groups E, F & G
Intrinsically Safe, with entity parameters, for Installation in Class I, Zone 1, Group IIC, in accordance with manufacturer's Control Drawing
Intrinsically Safe, with entity parameters, for Installation in Class II & III, Zone 21, in accordance with manufacturer's Control Drawing

FM Approved for:

R. STAHL Schaltgeraete GmbH
Am Bahnhof 30
D-74638 Waldenburg (Wurtt.) Germany

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

3600	1998
3610	2010
3611	2004
3810	2005
ANSI/ISA-82.02.01	2004
ANSI/ISA 12.23.01	2002
ISA 12.16.01	2002
IEC60079-0	2004
IEC60079-11	2006
IEC60079-15	2005
IEC60529	2001

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Subsequent Revision Reports / Date Approval Amended

Report Number	Date	Report Number	Date
3042885	November 17, 2011		
120423	April 23, 2012		

FM Approvals LLC

J. E. Marquedant

James Marquedant
Group Manager Electrical

23 April 2012
Date