Product Certifications
00825-0200-4408, Rev AB
February 2017

Rosemount™ 5408 and 5408:SIS Level Transmitters

Product Certifications

HART COMMUNICATION PROTOCOL

EMERSON™

1.0 Product certifications

Rev 1.2

1.1 European Directive Information

A copy of the EU Declaration of Conformity can be found on page 16. The most recent revision of the EU Declaration of Conformity can be found at Emerson.com/Rosemount.

1.2 Telecommunication compliance

Measurement principle

Frequency Modulated Continuous Wave (FMCW), 26 GHz

Maximum output power

-5 dBm (0.32 mW)

Frequency range

24.05 to 27.0 GHz (TLPR)

24.05 to 26.5 GHz (LPR)

LPR (Level Probing Radar) equipment are devices for measurement of level in the open air or in a closed space. Model option “OA”. Hardware Version Identification Number (HVIN) is 5408L.

TLPR (Tank Level Probing Radar) equipment are devices for measurement of level in a closed space only (i.e metallic, concrete or reinforced fiberglass tanks, or similar enclosure structures made of comparable attenuating material). Hardware Version Identification Number (HVIN) is 5408T.

1.3 FCC

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

FCC ID: K8C5408L (for LPR)

K8C5408T (for TLPR)

1.4 IC

This device complies with Industry Canada's licence-exempt RSS standard. Operation is subject to the following conditions:

1. This device may not cause interference.
2. This device must accept any interference received, including interference that may cause undesired operation.
3. The installation of the LPR/TLPR device shall be done by trained installers in strict compliance with the manufacturer's instructions.
4. The use of this device is on a "no-interference, no-protection" basis. That is, the user shall accept operations of high-powered radar in the same frequency band which may interfere with or damage this device. However, devices found to interfere with primary licensing operations will be required to be removed at the user's expense.
5. Devices operating under TLPR conditions (i.e. not operating in "Open Air" Mode) shall be installed and operated in a completely enclosed container to prevent RF emissions, which can otherwise interfere with aeronautical navigation.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux conditions suivantes:

1. l'appareil ne doit pas produire de brouillage.
2. l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.
3. L'installation d'un dispositif LPR ou TLPR doit être effectuée par des installateurs qualifiés, en pleine conformité avec les instructions du fabricant.
4. Ce dispositif ne peut être exploité qu'en régime de non-brouillage et de non-protection, c'est-à-dire que l'utilisateur doit accepter que des radars de haute puissance de la même bande de fréquences puissent brouiller ce dispositif ou même l'endommager. D'autre part, les capteurs de niveau qui perturbent une exploitation autorisée par licence de fonctionnement principal doivent être enlevés aux frais de leur utilisateur.
5. Un dispositif visé comme TLPR ("Open Air") doit être installé et exploité dans un réservoir entièrement fermé afin de prévenir les rayonnements RF qui pourraient autrement perturber la navigation aéronautique.

Certificate: 2827A-5408L (for LPR)

2827A-5408T (for TLPR)

1.5 Radio Equipment Directive (RED) 2014/53/EU

This device complies with ETSI EN 302 372 (TLPR), ETSI EN 302 729 (LPR) and EN 62479.

For the receiver test that covers the influence of an interferer signal to the device, the performance criterion has at least the following level of performance according to ETSI TS 103 361 [6].

- Performance criterion: measurement value variation Δd over time during a distance measurement
- Level of performance: Δd ≤ ± 2 mm

LPR (Level Probing Radar), model code "OA"

- Install at a separation distance of >4 km from Radio Astronomy sites, unless a special authorization has been provided by the responsible National regulatory authority (a list of Radio Astronomy sites may be found at www.craf.eu).
- Between 4 km to 40 km around any Radio Astronomy site the LPR antenna height shall not exceed 15 m height above ground.

TLPR (Tank Level Probing Radar)

- The device must be installed in closed tanks. Install according to requirements in ETSI EN 302 372 (Annex E).

1.6 Installing Equipment in North America

The US National Electrical Code® (NEC) and the Canadian Electrical Code (CEC) permit the use of Division marked equipment in Zones and Zone marked equipment in Divisions. The markings must be suitable for the area classification, gas, and temperature class. This information is clearly defined in the respective codes.

1.7 USA

E5 FM Explosionproof (XP), Dust-Ignitionproof (DIP)

Certificate: FM16US0010X

Standards: FM Class 3600 – 2011; FM Class 3615 – 2006; FM Class 3810 – 2005; ANSI/ISA 60079-0 – 2013; ANSI/UL 60079-1 – 2015; ANSI/ISA 60079-26 – 2011; ANSI/ISA 60079-31 – 2015; ANSI/NEMA® 250 – 1991; ANSI/IEC 60529 – 2004

Markings: XP CL I, DIV 1, GRPS A, B, C, D T6...T2
DIP CLII/III, DIV 1, GRPS E, F, G; T6...T3
CL I Zone 0/1 AEx db IIC T6...T2 Ga/Gb
Zone 21 AEx tb IIIC T85 °C...T250 °C Db
(-40°C≤Ta≤70°C)[1]; Type 4X/IP6X

Specific Conditions of Use (X):

1. Flamepath joints are not for repair. Contact the manufacturer.
2. Non-standard paint options (paint options other than Rosemount Blue) and plastic wire-on tag may cause risk from Electrostatic discharge. Avoid installation that could cause electrostatic build-up, and only clean with a damp cloth.
3. Appropriate cable, glands, and plugs need to be suitable for a temperature of 5°C greater than the maximum specified ambient temperature for location where installed.
4. The Transmitter can be installed in the boundary wall between a Zone 0 and Zone 1 area. In this configuration, the process connection is installed in Zone 0, while the transmitter housing is installed in Zone 1. Refer to Control Drawing D7000002-885.
5. Cable entries must be used which maintain the ingress protection of the enclosure to at least IP65 and/or Type 4X rating. To maintain the ingress protection ratings, Covers and Sensor Module to be fully tightened and PTFE tape or pipe dope is required for

1. *Other temperature ranges may apply, see Specific Conditions of Use (X).*

cable entries and blanking plugs. See Instruction Manual on application requirements.
6. Install per Control drawing D7000002-885.
7. Using the box provided on the nameplate, the User shall permanently mark the type of protection chosen for the specific installation. Once the type of protection has been marked it shall not be changed.
8. Display glass shall be positioned in such a way as to minimize the risk of mechanical impact.
9. The applicable temperature class, ambient temperature range and process temperature range of the equipment is as follows;

For Divisions:

Temperature class / Maximum surface temperature	Ambient temperature range	Process temperature range
Division Gas groups:		
T2	-40°C ≤ Ta ≤ 70°C	-40°C to 250°C
T3	-40°C ≤ Ta ≤ 70°C	-40°C to 195°C
T4	-40°C ≤ Ta ≤ 70°C	-40°C to 130°C
T5	-40°C ≤ Ta ≤ 70°C	-40°C to 95°C
T6	-40°C ≤ Ta ≤ 70°C	-40°C to 80°C
Division Dust groups:		
T3	-50°C ≤ Ta ≤ 70°C	-50°C to 160°C
T4	-50°C ≤ Ta ≤ 70°C	-50°C to 130°C
T5	-50°C ≤ Ta ≤ 70°C	-50°C to 95°C
T6	-50°C ≤ Ta ≤ 70°C	-50°C to 80°C

For Zones:

Temperature class / Maximum surface temperature	Ambient temperature range	Process temperature range
Zone Gas groups:		
T2	-50°C ≤ Ta ≤ 70°C	-50°C to 250°C
T3	-50°C ≤ Ta ≤ 70°C	-50°C to 195°C
T4	-50°C ≤ Ta ≤ 70°C	-50°C to 130°C
T5	-50°C ≤ Ta ≤ 70°C	-50°C to 95°C
T6	-50°C ≤ Ta ≤ 70°C	-50°C to 80°C
Zone Dust groups:		
T250°C	-60°C ≤ Ta ≤ 70°C	-60°C to 250°C
T200°C	-60°C ≤ Ta ≤ 70°C	-60°C to 195°C
T135°C	-60°C ≤ Ta ≤ 70°C	-60°C to 130°C
T100°C	-60°C ≤ Ta ≤ 70°C	-60°C to 95°C
T85°C	-60°C ≤ Ta ≤ 70°C	-60°C to 80°C

I5 FM Intrinsic Safety (IS), Non-Incendive (NI)
Certificate: FM16US0010X
Standards: FM Class 3600 – 2011; FM Class 3610 – 2015; FM Class 3611 – 2016; FM Class 3810 – 2005; ANSI/ISA 60079-0 – 2013; ANSI/ISA 60079-11 – 2013; ANSI/ISA 60079-26 – 2011; ANSI/NEMA 250 – 1991; ANSI/IEC 60529 – 2004
Markings: IS CL I, II, III DIV 1, GRPS A-G T4...T2
NI CL I, DIV 2, GRPS A-D T4...T2
S CL II, III DIV 2, GRPS E-G T4...T3
CL I Zone 0 AEx ia IIC T4...T2 Ga
CL I Zone 0/1 AEx ib IIC T4...T2 Ga/Gb
Zone 20 AEx ia IIIC T85°C...T250°C Da
(-60°C ≤ Ta ≤ +70°C)
When installed per Control Drawing D7000002-885

Safety parameter	HART®
Voltage U_i	30 V
Current I_i	133 mA
Power P_i	1.0 W
Capacitance C_i	7.3 nF
Inductance L_i	0

Specific Conditions of Use (X):

1. The Model 5408 Level Transmitter will not pass the 500Vrms dielectric strength test between the circuits and the earth ground. This must be taken into account during installation.
2. Non-standard paint options (paint options other than Rosemount Blue) and plastic wire-on tag may cause risk from Electrostatic discharge. Avoid installation that could cause electrostatic build-up, and only clean with a damp cloth.
3. Appropriate cable, glands, and plugs need to be suitable for a temperature of 5°C greater than the maximum specified ambient temperature for location where installed.
4. The Transmitter can be installed in the boundary wall between a Zone 0 and Zone 1 area. In this configuration, the process connection is installed in Zone 0, while the transmitter housing is installed in Zone 1. Refer to Control Drawing D7000002-885.
5. Using the box provided on the nameplate, the User shall permanently mark the type of protection chosen for the specific installation. Once the type of protection has been marked it shall not be changed.
6. The applicable temperature class, ambient temperature range and process temperature range of the equipment is as follows;

For Divisions:

Temperature class / Maximum surface temperature	Ambient temperature range	Process temperature range
Division Gas groups:		
T2	-60°C ≤ Ta ≤ 70°C	-60°C to 250°C
T3	-60°C ≤ Ta ≤ 70°C	-60°C to 195°C
T4	-60°C ≤ Ta ≤ 70°C	-60°C to 130°C
Division Dust groups:		
T3	-60°C ≤ Ta ≤ 70°C	-60°C to 160°C
T4	-60°C ≤ Ta ≤ 70°C	-60°C to 130°C
T5	-60°C ≤ Ta ≤ 70°C	-60°C to 95°C
T6	-60°C ≤ Ta ≤ 70°C	-60°C to 80°C

For Zones:

Temperature class / Maximum surface temperature	Ambient temperature range	Process temperature range
Zone Gas groups:		
T2	-60°C ≤ Ta ≤ 70°C	-60°C to 250°C
T3	-60°C ≤ Ta ≤ 70°C	-60°C to 195°C
T4	-60°C ≤ Ta ≤ 70°C	-60°C to 130°C
Zone Dust groups:		
T250°C	-60°C ≤ Ta ≤ 70°C	-60°C to 250°C
T200°C	-60°C ≤ Ta ≤ 70°C	-60°C to 195°C
T135°C	-60°C ≤ Ta ≤ 70°C	-60°C to 130°C
T100°C	-60°C ≤ Ta ≤ 70°C	-60°C to 95°C
T85°C	-60°C ≤ Ta ≤ 70°C	-60°C to 80°C

1.8 Canada

E6 CSA Explosionproof, Dust-Ignitionproof

Certificate: FM16CA0011X

Standards: C22.2 NO. 0.4-04:2004 (R2013), C22.2 NO. 0.5-16:2016, C22.2 No. 25-1966:1966 (R:2014), C22.2 No.30-M1986:1986 (R:2012), C22.2 No.94-M91:1991 (R:2011), C22.2 No. 1010.1:2004, CAN/CSA C22.2 No. 60079-0:2015 Ed. 3, C22.2 No. 60079-1:2016 Ed. 3, C22.2 No. 60079-26:2016; CAN/CSA-C22.2 No. 60079-31:2015, C22.2. 60529:2005 (R:2015)

Markings: XP CL I, DIV 1, GRPS A-D T6...T2
DIP CLII/III, DIV 1, GRPS E-G; T6...T3
Ex db IIC T6...T3 Gb
Ex tb IIIC T85 °C...T250°C Db
(-40°C ≤ Ta ≤ +70°C)[1]; Type 4X/IP6X

1. *Other temperature ranges may apply, see Specific Conditions of Use (X).*

Specific Conditions of Use (X):

1. Flamepath joints are not for repair. Contact the manufacturer.
2. Non-standard paint options (paint options other than Rosemount Blue) and plastic wire-on tag may cause risk from Electrostatic discharge. Avoid installation that could cause electrostatic build-up, and only clean with a damp cloth.
3. Appropriate cable, glands, and plugs need to be suitable for a temperature of 5°C greater than the maximum specified ambient temperature for location where installed.
4. Metric Field Wiring Entries are not allowed for Divisions.
5. The Transmitter can be installed in the boundary wall between a Zone 0 and Zone 1 area. In this configuration, the process connection is installed in Zone 0, while the transmitter housing is installed in Zone 1. Refer to Control Drawing D7000002-885.
6. Cable entries must be used which maintain the ingress protection of the enclosure to at least IP65 and/or Type 4X rating. To maintain the ingress protection ratings, Covers and Sensor Module to be fully tightened and PTFE tape or pipe dope is required for cable entries and blanking plugs. See Instruction Manual on application requirements.
7. Install per Control Drawing D7000002-885.
8. Using the box provided on the nameplate, the User shall permanently mark the type of protection chosen for the specific installation. Once the type of protection has been marked it shall not be changed.
9. Display glass shall be positioned in such a way as to minimize the risk of mechanical impact.
10. The applicable temperature class, ambient temperature range and process temperature range of the equipment is as follows;

For Divisions:

Temperature class / Maximum surface temperature	Ambient temperature range	Process temperature range
Division Gas groups:		
T2	-40°C ≤ Ta ≤ 70°C	-40°C to 250°C
T3	-40°C ≤ Ta ≤ 70°C	-40°C to 195°C
T4	-40°C ≤ Ta ≤ 70°C	-40°C to 130°C
T5	-40°C ≤ Ta ≤ 70°C	-40°C to 95°C
T6	-40°C ≤ Ta ≤ 70°C	-40°C to 80°C
Division Dust groups:		
T3	-50°C ≤ Ta ≤ 70°C	-50°C to 160°C
T4	-50°C ≤ Ta ≤ 70°C	-50°C to 130°C
T5	-50°C ≤ Ta ≤ 70°C	-50°C to 95°C
T6	-50°C ≤ Ta ≤ 70°C	-50°C to 80°C

For Zones:

Temperature class / Maximum surface temperature	Ambient temperature range	Process temperature range
Zone Gas groups:		
T2	-50°C ≤ Ta ≤ 70°C	-50°C to 250°C
T3	-50°C ≤ Ta ≤ 70°C	-50°C to 195°C
T4	-50°C ≤ Ta ≤ 70°C	-50°C to 130°C
T5	-50°C ≤ Ta ≤ 70°C	-50°C to 95°C
T6	-50°C ≤ Ta ≤ 70°C	-50°C to 80°C
Zone Dust groups:		
T250°C	-60°C ≤ Ta ≤ 70°C	-60°C to 250°C
T200°C	-60°C ≤ Ta ≤ 70°C	-60°C to 195°C
T135°C	-60°C ≤ Ta ≤ 70°C	-60°C to 130°C
T100°C	-60°C ≤ Ta ≤ 70°C	-60°C to 95°C
T85°C	-60°C ≤ Ta ≤ 70°C	-60°C to 80°C

I6 CSA Intrinsically Safe and Non-Incendive Systems
Certificate: FM16CA0011X
Standards: C22.2 NO. 0.4-04:2004 (R2013), C22.2 NO. 0.5-16:2016, C22.2 No. 25-1966:1966 (R:2014), C22.2 No.94-M91:1991 (R:2011), C22.2 No. 213-16:2016, C22.2 No. 1010.1:2004, CAN/CSA C22.2 No. 60079-0:2015 Ed. 3, CAN/CSAC22.2 No. 60079-11:2014 Ed. 2, CAN/CSAC22.2 No. 60079-15:2015 Ed.2, C22.2 No. 60079-26:2016, C22.2. 60529:2005 (R:2015)
Markings: IS CL I, II, III DIV 1, GRPS A-G T4...T2
NI CL I, DIV 2, GRPS A-D T4...T2
S CL II, III DIV 2, GRPS E-G T4...T3
Ex ia IIC T4...T2 Ga
Ex ib IIC T4...T2 Ga/Gb
Ex ia IIIC T85°C...T250°C Da
(-60°C ≤ Ta ≤ +70°C)
When installed per Control Drawing D7000002-885

Safety parameter	HART
Voltage U_i	30 V
Current I_i	133 mA
Power P_i	1.0 W
Capacitance C_i	7.3 nF
Inductance L_i	0

Specific Conditions of Use (X):

1. The Model 5408 Level Transmitter will not pass the 500Vrms dielectric strength test between the circuits and the earth ground. This must be taken into account during installation.
2. Non-standard paint options (paint options other than Rosemount Blue) and plastic wire-on tag may cause risk from Electrostatic discharge. Avoid installation that could cause electrostatic build-up, and only clean with a damp cloth.

3. Appropriate cable, glands, and plugs need to be suitable for a temperature of 5°C greater than the maximum specified ambient temperature for location where installed.
4. The Transmitter can be installed in the boundary wall between a Zone 0 and Zone 1 area. In this configuration, the process connection is installed in Zone 0, while the transmitter housing is installed in Zone 1. Refer to Control Drawing D7000002-885.
5. Using the box provided on the nameplate, the User shall permanently mark the type of protection chosen for the specific installation. Once the type of protection has been marked it shall not be changed.
6. The applicable temperature class, ambient temperature range and process temperature range of the equipment is as follows;

For Divisions:

Temperature class / Maximum surface temperature	Ambient temperature range	Process temperature range
Division Gas groups:		
T2	-60°C ≤ Ta ≤ 70°C	-60°C to 250°C
T3	-60°C ≤ Ta ≤ 70°C	-60°C to 195°C
T4	-60°C ≤ Ta ≤ 70°C	-60°C to 130°C
Division Dust groups:		
T3	-60°C ≤ Ta ≤ 70°C	-60°C to 160°C
T4	-60°C ≤ Ta ≤ 70°C	-60°C to 130°C
T5	-60°C ≤ Ta ≤ 70°C	-60°C to 95°C
T6	-60°C ≤ Ta ≤ 70°C	-60°C to 80°C

For Zones:

Temperature class / Maximum surface temperature	Ambient temperature range	Process temperature range
Zone Gas groups:		
T2	-60°C ≤ Ta ≤ 70°C	-60°C to 250°C
T3	-60°C ≤ Ta ≤ 70°C	-60°C to 195°C
T4	-60°C ≤ Ta ≤ 70°C	-60°C to 130°C
Zone Dust groups:		
T250°C	-60°C ≤ Ta ≤ 70°C	-60°C to 250°C
T200°C	-60°C ≤ Ta ≤ 70°C	-60°C to 195°C
T135°C	-60°C ≤ Ta ≤ 70°C	-60°C to 130°C
T100°C	-60°C ≤ Ta ≤ 70°C	-60°C to 95°C
T85°C	-60°C ≤ Ta ≤ 70°C	-60°C to 80°C

1.9 Europe

E1 ATEX Flameproof

Certificate: FM15ATEX0055X

Standards: EN 60079-0:2012, EN 60079-1:2014, EN 60079-26:2015, EN 60079-31:2014, EN 60529+A1+A2:2013

Markings:  II 1/2G Ex db IIC T6...T2 Ga/Gb
II 2D Ex tb IIIC T85°C... T250°C Db, IP6X
(-60°C ≤ Ta ≤ +70 °C)

Specific Conditions of Use (X):

1. Flamepath joints are not for repair. Contact the manufacturer.
2. Non-standard paint options (paint options other than Rosemount Blue) and plastic wire-on tag may cause risk from Electrostatic discharge. Avoid installation that could cause electrostatic build-up, and only clean with a damp cloth.
3. Appropriate cable, glands, and plugs need to be suitable for a temperature of 5°C greater than the maximum specified ambient temperature for location where installed.
4. The Transmitter can be installed in the boundary wall between a Category 1 and Category 2 location. In this configuration, the process connection is installed in Category 1, while the transmitter housing is installed in Category 2. Refer to Control Drawing D7000002-885.
5. Cable entries must be used which maintain the ingress protection of the enclosure to at least IP65. To maintain the ingress protection ratings, Covers and Sensor Module to be fully tightened and PTFE tape or pipe dope is required for cable entries and blanking plugs. See Instruction Manual on application requirements.
6. Install per Control Drawing D7000002-885.
7. Using the box provided on the nameplate, the User shall permanently mark the type of protection chosen for the specific installation. Once the type of protection has been marked it shall not be changed.
8. Display glass shall be positioned in such a way as to minimize the risk of mechanical impact.
9. The applicable temperature class, ambient temperature range and process temperature range of the equipment is as follows;

Temperature class / Maximum surface temperature	Ambient temperature range	Process temperature range
Gas & Dust groups:		
T2 / T250°C	-60°C ≤ Ta ≤ 70°C	-60°C to 250°C
T3 / T200°C	-60°C ≤ Ta ≤ 70°C	-60°C to 195°C
T4 / T135°C	-60°C ≤ Ta ≤ 70°C	-60°C to 130°C
T5 / T100°C	-60°C ≤ Ta ≤ 70°C	-60°C to 95°C
T6 / T85°C	-60°C ≤ Ta ≤ 70°C	-60°C to 80°C

I1 ATEX Intrinsic Safety
Certificate: FM15ATEX0055X
Standards: EN 60079-0:2012, EN 60079-11:2012, EN 60079-26:2015
Markings: ⟨Ex⟩ II 1G Ex ia IIC T4...T2 Ga
II 1/2G Ex ib IIC T4...T2 Ga/Gb
II 1D Ex ia IIIC T135°C...T250°C Da
II 2D Ex ib IIIC T135°C...T250°C Db
(-60°C ≤ Ta ≤ +70°C)

Safety parameter	HART
Voltage U_i	30 V
Current I_i	133 mA
Power P_i	1.0 W
Capacitance C_i	7.3 nF
Inductance L_i	0

Specific Conditions of Use (X):

1. The Model 5408 Level Transmitter will not pass the 500Vrms dielectric strength test between the circuits and the earth ground. This must be taken into account during installation.
2. Non-standard paint options (paint options other than Rosemount Blue) and plastic wire-on tag may cause risk from Electrostatic discharge. Avoid installation that could cause electrostatic build-up, and only clean with a damp cloth.
3. Appropriate cable, glands, and plugs need to be suitable for a temperature of 5°C greater than the maximum specified ambient temperature for location where installed.
4. The Transmitter can be installed in the boundary wall between a Category 1 and Category 2 location. In this configuration, the process connection is installed in Category 1, while the transmitter housing is installed in Category 2. Refer to Control Drawing D7000002-885.
5. Using the box provided on the nameplate, the User shall permanently mark the type of protection chosen for the specific installation. Once the type of protection has been marked it shall not be changed.
6. The applicable temperature class, ambient temperature range and process temperature range of the equipment is as follows;

Temperature class / Maximum surface temperature	Ambient temperature range	Process temperature range
Gas groups:		
T2	-60°C ≤ Ta ≤ 70°C	-60°C to 250°C
T3	-60°C ≤ Ta ≤ 70°C	-60°C to 195°C
T4	-60°C ≤ Ta ≤ 70°C	-60°C to 130°C
Dust groups:		
T250°C	-60°C ≤ Ta ≤ 70°C	-60°C to 250°C
T200°C	-60°C ≤ Ta ≤ 70°C	-60°C to 195°C
T135°C	-60°C ≤ Ta ≤ 70°C	-60°C to 130°C
T100°C	-60°C ≤ Ta ≤ 70°C	-60°C to 95°C
T85°C	-60°C ≤ Ta ≤ 70°C	-60°C to 80°C

N1 ATEX Type N: Non-Sparking
Certificate: FM15ATEX0056X
Standards: EN 60079-0:2012, EN 60079-15:2010
Markings:  II 3G Ex nA IIC T4...T2 Gc, IP65
(-34°C ≤ Ta ≤ +70°C)
V≤42.4V, I≤23 mA

Specific Conditions of Use (X):

1. The Model 5408 Level Transmitter will not pass the 500Vrms dielectric strength test between the circuits and the earth ground. This must be taken into account during installation.
2. Cable entries must be used which maintain the ingress protection of the enclosure to at least IP65. To maintain the ingress protection ratings, Covers and Sensor Module to be fully tightened and PTFE tape or pipe dope is required for cable entries and blanking plugs. See Instruction Manual on application requirements.
3. The applicable temperature class, ambient temperature range and process temperature range of the equipment is as follows;

Temperature class	Ambient temperature range	Process temperature range
T2	-34°C ≤ Ta ≤ 70°C	-34°C to 250°C
T3	-34°C ≤ Ta ≤ 70°C	-34°C to 195°C
T4	-34°C ≤ Ta ≤ 70°C	-34°C to 130°C

1.10 International

E7 IECEx Flameproof
Certificate: IECEx FMG15.0033X
Standards: IEC 60079-0:2011, IEC 60079-1:2014; IEC 60079-26:2014, IEC 60079-31:2013
Markings: Ex db IIC T6...T2 Ga/Gb
Ex tb IIIC T85 °C...T250°C Db IP65
(-60°C ≤ Ta ≤ +70 °C)

Specific Conditions of Use (X):

1. Flamepath joints are not for repair. Contact the manufacturer.
2. Non-standard paint options (paint options other than Rosemount Blue) and plastic wire-on tag may cause risk from Electrostatic discharge. Avoid installation that could cause electrostatic build-up, and only clean with a damp cloth.
3. Appropriate cable, glands, and plugs need to be suitable for a temperature of 5°C greater than the maximum specified ambient temperature for location where installed.
4. The Transmitter can be installed in the boundary wall between EPL Ga and EPL Gb. In this configuration, the process connection is EPL Ga, while the transmitter housing is EPL Gb. Refer to Control Drawing D7000002-885.
5. Cable entries must be used which maintain the ingress protection of the enclosure to at least IP65. To maintain the ingress protection ratings, Covers and Sensor Module to be fully tightened and PTFE tape or pipe dope is required for cable entries and blanking plugs. See Instruction Manual on application requirements.
6. Install per Control Drawing D7000002-885.
7. Using the box provided on the nameplate, the User shall permanently mark the type of protection chosen for the specific installation. Once the type of protection has been marked it shall not be changed.

8. Display glass shall be positioned in such a way as to minimize the risk of mechanical impact.
9. The applicable temperature class, ambient temperature range and process temperature range of the equipment is as follows;

Temperature class / Maximum surface temperature	Ambient temperature range	Process temperature range
Gas & Dust groups:		
T2 / T250°C	-60°C ≤ Ta ≤ 70°C	-60°C to 250°C
T3 / T200°C	-60°C ≤ Ta ≤ 70°C	-60°C to 195°C
T4 / T135°C	-60°C ≤ Ta ≤ 70°C	-60°C to 130°C
T5 / T100°C	-60°C ≤ Ta ≤ 70°C	-60°C to 95°C
T6 / T85°C	-60°C ≤ Ta ≤ 70°C	-60°C to 80°C

I7 IECEx Intrinsic Safety
Certificate: IECEx FMG15.0033X
Standards: IEC 60079-0:2011, IEC 60079-11:2011, IEC 60079-26:2014
Markings: Ex ia IIC T4...T2 Ga
Ex ib IIC T4...T2 Ga/Gb
Ex ia IIIC T135°C...T250°C Da
Ex ib IIIC T135°C...T250°C Db
(-60°C ≤ Ta ≤ +70°C)

Safety parameter	HART
Voltage U_i	30 V
Current I_i	133 mA
Power P_i	1.0 W
Capacitance C_i	7.3 nF
Inductance L_i	0

Specific Conditions of Use (X):

1. The Model 5408 Level Transmitter will not pass the 500Vrms dielectric strength test between the circuits and the earth ground. This must be taken into account during installation.
2. Non-standard paint options (paint options other than Rosemount Blue) and plastic wire-on tag may cause risk from Electrostatic discharge. Avoid installation that could cause electrostatic build-up, and only clean with a damp cloth.
3. Appropriate cable, glands, and plugs need to be suitable for a temperature of 5°C greater than the maximum specified ambient temperature for location where installed.
4. The Transmitter can be installed in the boundary wall between EPL Ga and EPL Gb. In this configuration, the process connection is EPL Ga, while the transmitter housing is EPL Gb. Refer to Control Drawing D7000002-885.
5. Using the box provided on the nameplate, the User shall permanently mark the type of protection chosen for the specific installation. Once the type of protection has been marked it shall not be changed.

6. The applicable temperature class, ambient temperature range and process temperature range of the equipment is as follows;

Temperature class / Maximum surface temperature	Ambient temperature range	Process temperature range
Gas groups:		
T2	-60°C ≤ Ta ≤ 70°C	-60°C to 250°C
T3	-60°C ≤ Ta ≤ 70°C	-60°C to 195°C
T4	-60°C ≤ Ta ≤ 70°C	-60°C to 130°C
Dust groups:		
T250°C	-60°C ≤ Ta ≤ 70°C	-60°C to 250°C
T200°C	-60°C ≤ Ta ≤ 70°C	-60°C to 195°C
T135°C	-60°C ≤ Ta ≤ 70°C	-60°C to 130°C
T100°C	-60°C ≤ Ta ≤ 70°C	-60°C to 95°C
T85°C	-60°C ≤ Ta ≤ 70°C	-60°C to 80°C

N7 IECEx Type N: Non-Sparking
Certificate: IECEx FMG15.0033X
Standards: IEC 60079-0:2011, IEC 60079-15:2010
Markings: Ex nA IIC T4...T2 Gc
(-34°C ≤ Ta ≤ +70°C), IP65
V ≤ 42.4V, I ≤ 23 mA

Specific Conditions of Use (X):

1. The Model 5408 Level Transmitter will not pass the 500Vrms dielectric strength test between the circuits and the earth ground. This must be taken into account during installation.
2. Cable entries must be used which maintain the ingress protection of the enclosure to at least IP65. To maintain the ingress protection ratings, Covers and Sensor Module to be fully tightened and PTFE tape or pipe dope is required for cable entries and blanking plugs. See Instruction Manual on application requirements.
3. The applicable temperature class, ambient temperature range and process temperature range of the equipment is as follows;

Temperature class	Ambient temperature range	Process temperature range
T2	-34°C ≤ Ta ≤ 70°C	-34°C to 250°C
T3	-34°C ≤ Ta ≤ 70°C	-34°C to 195°C
T4	-34°C ≤ Ta ≤ 70°C	-34°C to 130°C

Figure 1. Rosemount 5408 EU Declaration of Conformity

ROSEMOUNT™

CE

EU Declaration of Conformity

No: 5408

We,

Rosemount Tank Radar AB
Layoutvägen 1
S-435 33 MÖLNLYCKE
Sweden

declare under our sole responsibility that the product,

Rosemount™ 5408 Level Transmitter

manufactured by,

Rosemount Tank Radar AB
Layoutvägen 1
S-435 33 MÖLNLYCKE
Sweden

is in conformity with the provisions of the European Community Directives, including the latest amendments, as shown in the attached schedule.

Presumption of conformity is based on the application of the harmonized standards, normative documents or other documents and, when applicable or required, a European Community notified body certification, as shown in attached schedule.

(signature)	Manager Product Approvals (function name - printed)
Dajana Prastalo (name - printed)	2016-11-25 (date of issue)

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CE

Schedule
No: 5408

EMC, Electromagnetic Compatibility Directive (2014/30/EU)

EN 61326-1:2013

ATEX, Explosive Atmospheres Directive (2014/34/EU)

FM15ATEX0055X

Intrinsic Safety (Hart@ 4-20mA):
Equipment Group II, Category 1G, Ex ia IIC T4…T2 Ga
Equipment Group II, Category 1/2G, Ex ib IIC T4…T2 Ga/Gb
Equipment Group II, Category 1D, Ex ia IIIC T85°C…T250°C Da

Flameproof (Hart@ 4-20mA)::
Equipment Group II, Category 1/2G, Ex db IIC T6…T2 Ga/Gb
Equipment Group II, Category 2D, Ex tb IIIC T85°C…T250°C Db

EN 60079-0:2012; EN 60079-1:2014; EN 60079-11:2012; EN 60079-26:2015; EN 60079-31:2014

FM15ATEX0056X

Type of protection N, Non-sparking (Hart@ 4-20mA)::
Equipment Group II, Category 3G, Ex nA IIC T4…T2 Gc

EN60079-0:2012; EN60079-15:2010

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CE

Schedule
No: 5408

RE, Radio Equipment Directive (2014/53/EU)

ETSI EN 302 372:2011; ETSI EN 302 729:2011; EN 62479:2010

Low Voltage Directive (2014/35/EU)

EN 61010-1:2010

ATEX Notified Body for EU Type Examination Certificates and Type Examination Certificates

FM Approvals Ltd [Notified Body Number: 1725]
1 Windsor Dials
Bershire
UK. SL4 1RS

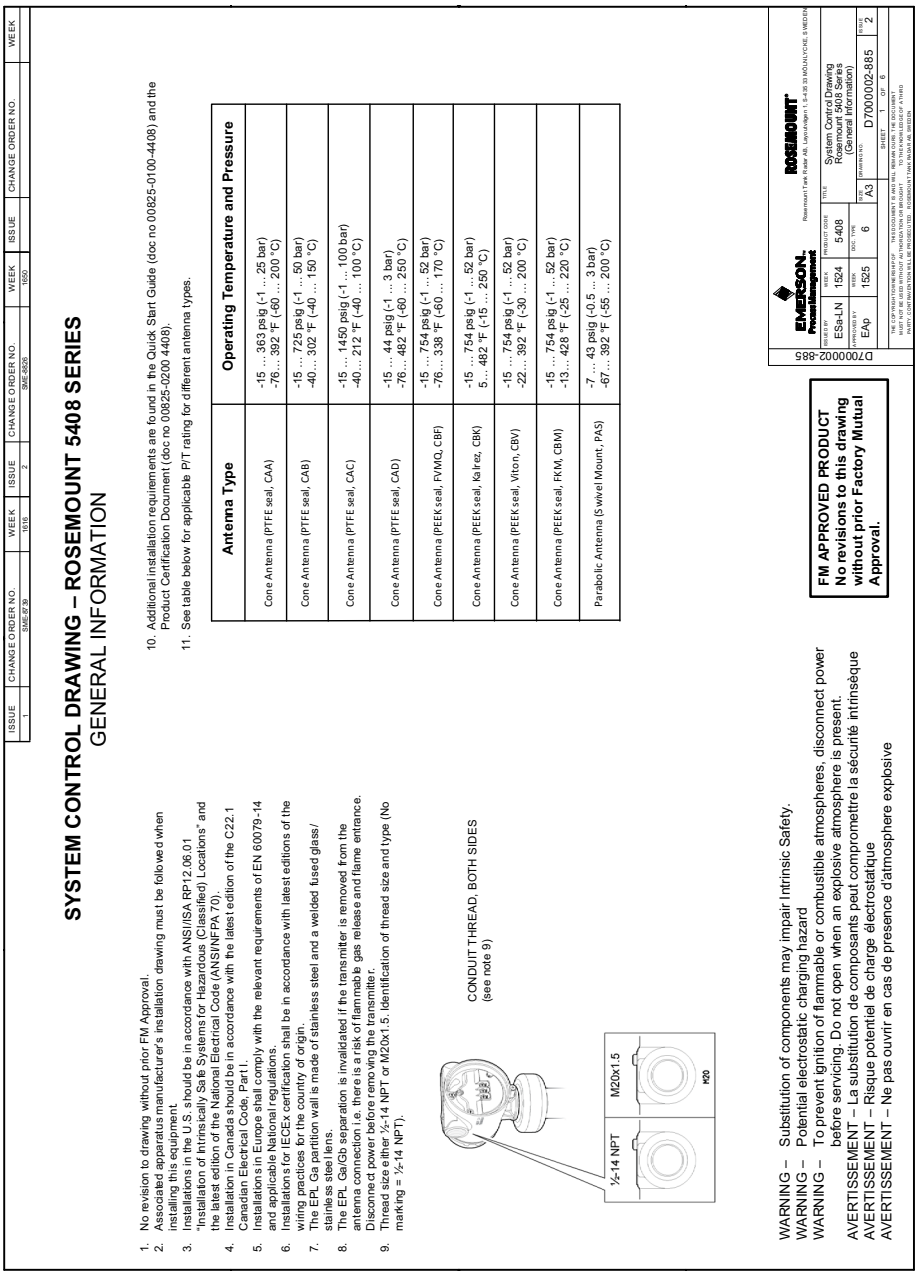
ATEX Notified Body for Quality Assurance

DNV Nemko Presafe AS [Notified Body Number: 2460]
P.O. Box 73, Blindern
0314 Oslo
Norway

EMERSON™

Page 3 of 3

Figure 2. D7000002-885 - System Control Drawing

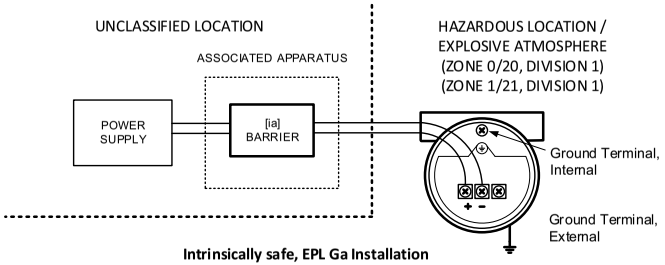


Antenna Type	Operating Temperature and Pressure
Cone Antenna (PTFE seal, CAA)	-15 … 363 psig (-1 … 25 bar) -76… 392 °F (-60 … 200 °C)
Cone Antenna (PTFE seal, CAB)	-15 … 725 psig (-1 … 50 bar) -40… 302 °F (-40 … 150 °C)
Cone Antenna (PTFE seal, CAC)	-15 … 1450 psig (-1 … 100 bar) -40… 212 °F (-40 … 100 °C)
Cone Antenna (PTFE seal, CAD)	-15 … 44 psig (-1 … 3 bar) -76… 482 °F (-60 … 250 °C)
Cone Antenna (PEEK seal, FVMQ, CBF)	-15 … 754 psig (-1 … 52 bar) -76… 338 °F (-60 … 170 °C)
Cone Antenna (PEEK seal, Kalrez, CBK)	-15 … 754 psig (-1 … 52 bar) 5… 482 °F (-15 … 250 °C)
Cone Antenna (PEEK seal, Viton, CBV)	-15 … 754 psig (-1 … 52 bar) -22… 392 °F (-30 … 200 °C)
Cone Antenna (PEEK seal, FKM, CBM)	-15 … 754 psig (-1 … 52 bar) -13… 428 °F (-25 … 220 °C)
Parabolic Antenna (Swivel Mount, PAS)	-7 … 43 psig (-0.5 … 3 bar) -67… 392 °F (-55 … 200 °C)

ISSUE	CHANGE ORDER NO.	WEEK	ISSUE	CHANGE ORDER NO.	WEEK	ISSUE	CHANGE ORDER NO.	WEEK
1	SME-8739	1616	2	SME-8826	1650			

ENTITY CONCEPT APPROVALS

The Entity concept allows interconnection of intrinsically safe apparatus to associated apparatus not specifically examined in combination as a system. The approved values of max. open circuit voltage (Uo, Voc or Vt) and max. short circuit current (Io, Isc or It) and max. power (Po or Voc x Isc / 4 or Vt x It / 4), for the associated apparatus must be less than or equal to the maximum safe input voltage (Ui), maximum safe input current (Ii), and maximum safe input power (Pi) of the intrinsically safe apparatus. In addition, the approved max. allowable connected capacitance (Ca or Co) of the associated apparatus must be greater than the sum of the interconnecting cable capacitance and the unprotected internal capacitance (Ci) of the intrinsically safe apparatus, and the approved max. Allowable connected inductance (La or Lo) of the associated apparatus must be greater than the sum of the interconnecting cable inductance and the unprotected internal inductance (Li) of the intrinsically safe apparatus.



Intrinsically safe, EPL Ga Installation

	Safe Apparatus for use in:	Ambient Temperature Limits
FM_{US}	IS Class I, II, III, DIV 1, GP A-G T4…T2 CL I, Zone 0 AEx ia IIC T4…T2 Ga/Gb Zone 20 AEx ia IIIC T85°C…T250°C Da	-60°C≤Ta≤+70°C
FMc	IS Class I, II, III, DIV 1, GP A-G T4…T2 Ex ia IIC T4…T2 Ga Ex ia IIIC T85°C…T250°C Da	-60°C≤Ta≤+70°C
ATEX	II 1G Ex ia IIC T4..T2 Ga II 1D Ex ia IIIC T135°C…T250°C Da	-60°C≤Ta≤+70°C
IECEx	Ex ia IIC T4..T2 Ga Ex ia IIIC T135°C...T250°C Da	-60°C≤Ta≤+70°C

Model	Intrinsic Entity Parameters
4-20mA / HART	Ui ≤ 30V, Ii ≤ 133 mA Pi ≤1W, Ci = 7.3 nF, Li = 0 uH

Notes

1. No revision to drawing without prior FM Approval.
2. The Associated Apparatus must be FM Approved for installations in the U.S.
3. The Associated Apparatus must be Canadian Approved for Installations in Canada.
4. The Associated Apparatus must be ATEX Certified for Installations in Europe.
5. The Associated Apparatus must be IECEx Certified for IECEx installations.
6. Associated apparatus manufacturer's installation drawing must be followed when installing this equipment.
7. Installations in the U.S. should be in accordance with ANSI/ISA RP12.06.01 "Installation of Intrinsically Safe Systems for Hazardous (Classified) Locations" and the latest edition of the National Electrical Code (ANSI/NFPA 70).
8. Resistance between Intrinsically Safe Ground and earth ground must be less than 1.0 Ohm.
9. Installation in Canada should be in accordance with the latest edition of the C22.1 Canadian Electrical Code, Part I.
10. Installations in Europe shall comply with the relevant requirements of EN 60079-14 and applicable National regulations.
11. Installations for IECEx certification shall be in accordance with latest editions of the wiring practices for the country of origin.
12. The Entity Concept allows interconnection of associated apparatus and intrinsically safe apparatus with when the following is true:
$U_o \leq U_i$, $I_o \leq I_i$, $P_o \leq P_i$, $C_o \leq C_i + C_{cable}$; $L_o \leq L_i + L_{cable}$.

WARNING – Substitution of components may impair Intrinsic Safety.
WARNING – Potential electrostatic charging hazard
WARNING – To prevent ignition of flammable or combustible atmospheres, disconnect power before servicing.
AVERTISSEMENT – La substitution de composants peut compromettre la sécurité intrinsèque
AVERTISSEMENT – Risque potentiel de charge électrostatique
AVERTISSEMENT – Ne pas ouvrir en cas de presence d'atmosphere explosive

FM APPROVED PRODUCT
No revisions to this drawing without prior Factory Mutual Approval.

D7000002-885

EMERSON. Process Management

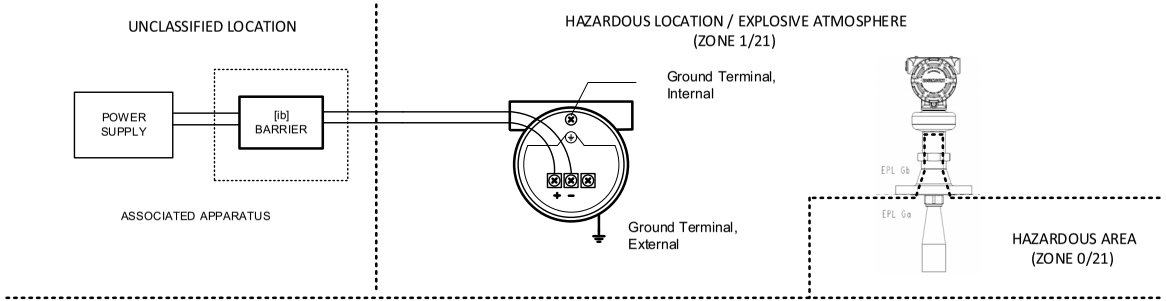
ROSEMOUNT®
Rosemount Tank Radar AB, Layoutvägen 1, S-435 33 MÖLNLYCKE, SWEDEN

ISSUED BY	WEEK	PRODUCT CODE	TITLE
ESa-LN	1524	5408	System Control Drawing Rosemount 5408 Series (Intrinsically safe, EPL Ga installation)
APPROVED BY	WEEK	DOC TYPE	
EAp	1525	6	

SIZE	DRAWING NO.	ISSUE
A3	D7000002-885	2

SHEET 2 OF 6

ISSUE	CHANGE ORDER NO.	WEEK	ISSUE	CHANGE ORDER NO.	WEEK	ISSUE	CHANGE ORDER NO.	WEEK
1	SME-8739	1616	2	SME-8826	1650			



Notes

1. No revision to drawing without prior FM Approval.
2. The Associated Apparatus must be FM Approved for installations in the U.S.
3. The Associated Apparatus must be Canadian Approved for Installations in Canada.
4. The Associated Apparatus must be ATEX Certified for Installations in Europe.
5. The Associated Apparatus must be IECEx Certified for IECEx installations.
6. Associated apparatus manufacturer's installation drawing must be followed when installing this equipment.
7. Installations in the U.S. should be in accordance with ANSI/ISA RP12.06.01 "Installation of Intrinsically Safe Systems for Hazardous (Classified) Locations" and the latest edition of the National Electrical Code (ANSI/NFPA 70).
8. Resistance between Intrinsically Safe Ground and earth ground must be less than 1.0 Ohm.
9. Installation in Canada should be in accordance with the latest edition of the C22.1 Canadian Electrical Code, Part I.
10. Installations in Europe shall comply with the relevant requirements of EN 60079-14 and applicable National regulations.
11. Installations for IECEx certification shall be in accordance with latest editions of the wiring practices for the country of origin.
12. The Entity Concept allows interconnection of associated apparatus and intrinsically safe apparatus with when the following is true:
$U_o \leq U_i$, $I_o \leq I_i$, $P_o \leq P_i$, $C_o \leq C_i + C_{cable}$; $L_o \leq L_i + L_{cable}$.
13. Listed intrinsic safety parameters apply only to associated apparatus with linear output.

Intrinsically safe, EPL Gb installation

	Safe Apparatus for use in:	Ambient Temperature Limits
FM_{US}	CL I, Zone 0/1 AEx ib IIC T4…T2 Ga/Gb	-60°C≤Ta≤+70°C
FMc	Ex ib IIC T4…T2 Ga/Gb	-60°C≤Ta≤+70°C
ATEX	II 1/2G Ex ib IIC T4…T2 Ga/Gb	-60°C≤Ta≤+70°C
IECEx	Ex ib IIC T4…T2 Ga/Gb	-60°C≤Ta≤+70°C

Model	Intrinsic Entity Parameters
4-20mA / HART	Ui ≤ 30V, Ii ≤ 133 mA Pi ≤ 1 W, Ci = 7.3 nF, Li = 0 uH

WARNING – Substitution of components may impair Intrinsic Safety.
WARNING – Potential electrostatic charging hazard
WARNING – To prevent ignition of flammable or combustible atmospheres, disconnect power before servicing.
AVERTISSEMENT – La substitution de composants peut compromettre la sécurité intrinsèque
AVERTISSEMENT – Risque potentiel de charge électrostatique
AVERTISSEMENT – Ne pas ouvrir en cas de presence d'atmosphere explosive

FM APPROVED PRODUCT
No revisions to this drawing without prior Factory Mutual Approval.

D7000002-885

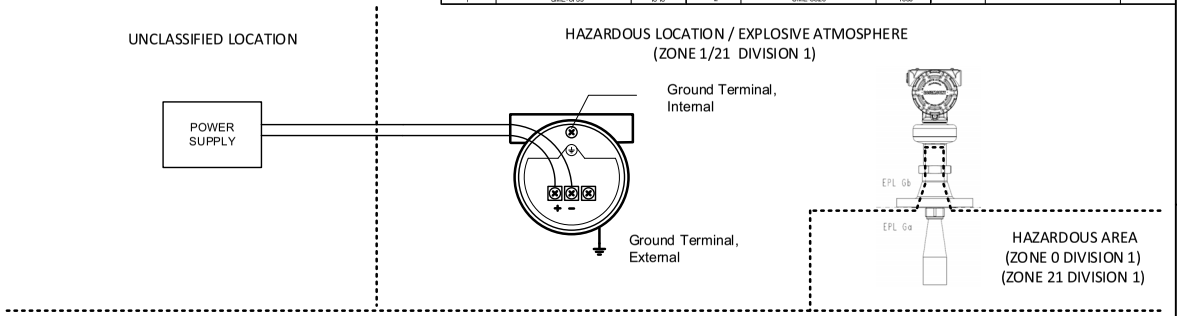
EMERSON. Process Management

ROSEMOUNT
Rosemount Tank Radar AB, Layoutvägen 1, S-435 33 MÖLNLYCKE, SWEDEN

ISSUED BY	WEEK	PRODUCT CODE	TITLE
ESa-LN	1524	5408	System Control Drawing Rosemount 5408 Series (Intrinsically safe, EPL Gb installation)
APPROVED BY	WEEK	DOC TYPE	SIZE / DRAWING NO. / ISSUE
EAp	1525	6	A3 / D7000002-885 / 2

SHEET 3 OF 6

ISSUE	CHANGE ORDER NO.	WEEK	ISSUE	CHANGE ORDER NO.	WEEK	ISSUE	CHANGE ORDER NO.	WEEK
1	SME-8739	1616	2	SME-8826	1650			



Notes

1. No revision to drawing without prior FM Approval.
2. The control room equipment connected to Associated Apparatus must not generate more than 250 Vrms or Vdc.
3. Installations in the U.S. should be in accordance with the latest edition of the National Electrical Code (ANSI/NFPA 70).
4. Installation in Canada should be in accordance with the latest edition of the C22.1 Canadian Electrical Code, Part I.
5. Installations in Europe shall comply with the relevant requirements of EN 60079-14 and applicable National regulations.
6. Installations for IECEx certification shall be in accordance with latest editions of the wiring practices for the country of origin.
7. -50°C for Division Dust, -60°C for Zone Dust and -50°C for Zone Gas installations.

Flameproof/XP installation

	Safe Apparatus for use in:	Ambient Temperature Limits
FM_{US}	XP Class I, DIV 1, GP A-D T6…T2 DIP CL II, III DIV 1, GP E-G T6…T3 CL I Zone 0/1 AEx db IIC T6..T2 Ga/Gb Zone 21 AEx tb IIIC T85°C…T250°C Db	-40°C≤Ta≤+70°C (see note 7)
FMc	XP Class I, DIV 1, GP A-D T6…T2 DIP CL II, III DIV 1, GP E-G T6…T3 Ex db IIC T6..T2 Ga/Gb Ex tb IIIC T85°C…T250°C Db	-40°C≤Ta≤+70°C (see note 7)
ATEX	II 1/2G Ex db IIC T6..T2 Ga/Gb II 2D Ex tb IIIC T85°C…T250°C Db	-60°C≤Ta≤+70°C
IECEx	Ex db IIC T6..T2 Ga/Gb Ex tb IIIC T85°C…T250°C Db	-60°C≤Ta≤+70°C

Model	Normal Operating Parameters
4-20mA / HART	$U \leq 42.4V$, $I \leq 23$ mA

WARNING – Substitution of components may impair Intrinsic Safety.
WARNING – Potential electrostatic charging hazard.
WARNING – To prevent ignition of flammable or combustible atmospheres, disconnect power before servicing. Do not open when an explosive atmosphere is present.
WARNING – In explosive atmosphere keep tight when circuit are alive.
WARNING – Seal to be installed within 50 mm of the enclosure (applicable for Canada/Zone).
AVERTISSEMENT – La substitution de composants peut compromettre la sécurité intrinsèque
AVERTISSEMENT – Risque potentiel de charge électrostatique
AVERTISSEMENT – Ne pas ouvrir en cas de presence d'atmosphere explosive
AVERTISSEMENT – Ouvrir le circuit avant d'enlever le couvercle
AVERTISSEMENT – Un dispositif d'étanchéité doit être installé à 50mm du boitier (applicable pour Canada/Zone).

FM APPROVED PRODUCT
No revisions to this drawing without prior Factory Mutual Approval.

D7000002-885

EMERSON. Process Management

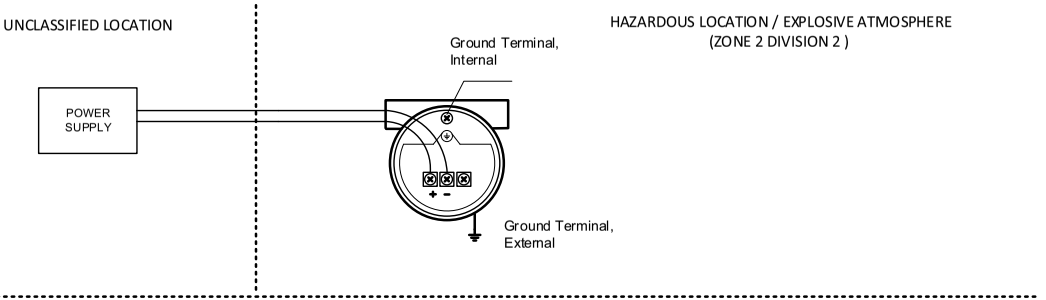
ROSEMOUNT
Rosemount Tank Radar AB, Layoutvägen 1, S-435 33 MÖLNLYCKE, SWEDEN

ISSUED BY	WEEK	PRODUCT CODE	TITLE
ESa-LN	1524	5408	System Control Drawing Rosemount 5408 Series (Flameproof/XP installation)
APPROVED BY	WEEK	DOC TYPE	
EAp	1525	6	

SIZE	DRAWING NO.	ISSUE
A3	D7000002-885	2

SHEET 4 OF 6

ISSUE	CHANGE ORDER NO.	WEEK	ISSUE	CHANGE ORDER NO.	WEEK	ISSUE	CHANGE ORDER NO.	WEEK
1	SME-8739	1616	2	SME-8826	1650			



Notes

1. No revision to drawing without prior FM Approval.
2. Installations in the U.S. should be in accordance with the latest edition of the National Electrical Code (ANSI/NFPA 70).
3. Installation in Canada should be in accordance with the latest edition of the C22.1 Canadian Electrical Code, Part I.
4. Installations in Europe shall comply with the relevant requirements of EN 60079-14 and applicable National regulations.
5. Installations for IECEx certification shall be in accordance with latest editions of the wiring practices for the country of origin.

Non-incendive installation

	Safe Apparatus for use in:	Ambient Temperature Limits
FM_{US}	NI CL I,DIV 2, GP A-D T4…T2 S CL II, III DIV 2, GP E-G T4…T3	-60°C≤Ta≤+70°C
FMc	NI CL I,DIV 2, GP A-D T4…T2 S CL II, III DIV 2, GP E-G T4…T3	-60°C≤Ta≤+70°C
ATEX	II 3 G Ex Na IIC T4…T2 Gc	-34°C≤Ta≤+70°C
IECEx	Ex Na IIC T4…T2 Gc	-34°C≤Ta≤+70°C

Model	Normal operating parameters
4-20mA / HART	U ≤ 42.4V, I ≤ 23 mA

WARNING – Substitution of components may impair Intrinsic Safety.
WARNING – Potential electrostatic charging hazard
WARNING – To prevent ignition of flammable or combustible atmospheres, disconnect power before servicing.
AVERTISSEMENT – La substitution de composants peut compromettre la sécurité intrinsèque
AVERTISSEMENT – Risque potentiel de charge électrostatique
AVERTISSEMENT – Ne pas ouvrir en cas de presence d'atmosphere explosive

FM APPROVED PRODUCT
No revisions to this drawing without prior Factory Mutual Approval.

D7000002-885

EMERSON. Process Management

ROSEMOUNT
Rosemount Tank Radar AB, Layutvägen 1, S-435 33 MÖLNLYCKE, SWEDEN

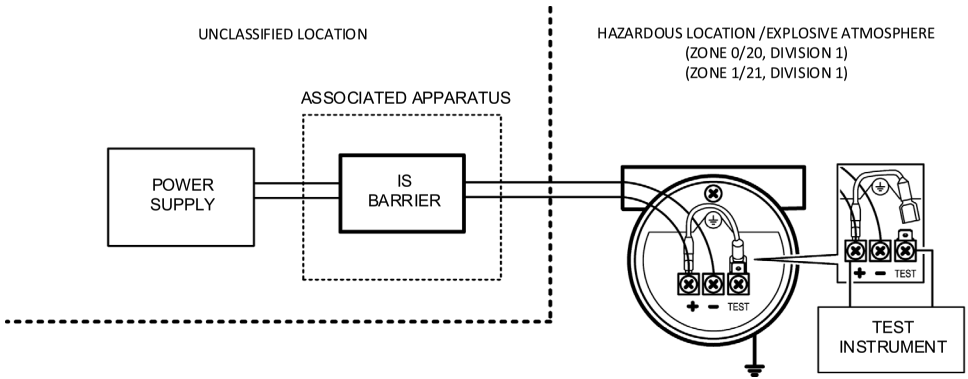
ISSUED BY	WEEK	PRODUCT CODE	TITLE
ESa-LN	1524	5408	System Control Drawing Rosemount 5408 Series (Non-incendive installation)
APPROVED BY	WEEK	DOC. TYPE	SIZE / DRAWING NO. / ISSUE
EAp	1525	6	A3 / D7000002-885 / 2

SHEET 5 OF 6

ISSUE	CHANGE ORDER NO.	WEEK	ISSUE	CHANGE ORDER NO.	WEEK	ISSUE	CHANGE ORDER NO.	WEEK
1	SME-8739	1616	2	SME-8826	1650			

SYSTEM CONTROL DRAWING – ROSEMOUNT 5408 SERIES
TRANSMITTERS WITH TEST TERMINAL OPTION

1. In hazardeous locations/explosive atmospheres, this test can only be done for intrinsically safe installations.
2. The instrument used for loop current measurement must have correct intrinsically safe type of protection.
3. The combined entity parameters of the transmitter and the test instrument must be compatible with the output parameters of the associated apparatus.
4. The cable/plug must be re-attached to the TEST terminal after completed test.



WARNING – Substitution of components may impair Intrinsic Safety.
WARNING – Potential electrostatic charging hazard
WARNING – To prevent ignition of flammable or combustible atmospheres, disconnect power before servicing.
AVERTISSEMENT – La substitution de composants peut compromettre la sécurité intrinsèque
AVERTISSEMENT – Risque potentiel de charge électrostatique
AVERTISSEMENT – Ne pas ouvrir en cas de presence d'atmosphere explosive

FM APPROVED PRODUCT
No revisions to this drawing without prior Factory Mutual Approval.

D7000002-885

EMERSON. Process Management

ROSEMOUNT®
Rosemount Tank Radar AB, Layoutvägen 1, S-435 33 MÖLNLYCKE, SWEDEN

ISSUED BY	WEEK	PRODUCT CODE	TITLE
ESa-LN	1524	5408	System Control Drawing Rosemount 5408 Series (Transmitter with test terminal option)
APPROVED BY	WEEK	DOC TYPE	
EAp	1525	6	

SIZE	DRAWING NO.	ISSUE
A3	D7000002-885	2

SHEET 6 OF 6

00825-0200-4408

Product Certifications
00825-0200-4408, Rev AB
February 2017

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