

RPL5x, RPL61



safety, installation, use and maintenance instructions

Warning: This document is an integral part of the user manual 825B112_and must be read and understood in conjunction with it

Pulsed radar for level measurement

European directive: 2014/34/EU

CEI EN 60079-0: 2013 ; CEI EN 60079-11:2012

Nominal characteristics, marking

Model: RPL5x, RPL61

ATEX code: II 1G/D

Protection mode: Ex ia IIC Ga / Ex ia IIIC Da

Ambient temperature: T6: $-20^{\circ}\text{C} \leq T_a \leq +60^{\circ}\text{C}$

T5: $-20^{\circ}\text{C} \leq T_a \leq +70^{\circ}\text{C}$

T4, T3: $-20^{\circ}\text{C} \leq T_a \leq +85^{\circ}\text{C}$

Protection degree: IP67 (IP68 for RPL61only)

Process temperature: See as below

Temp class	Max. process temperature			
	T6	T5	T4	T3-T1
Ta(max)				
60°C	60°C	95°C	130°C	180°C
65°C	-----	70°C	130°C	180°C
70°C	-----	70°C	130°C	180°C
85°C	-----	-----	130°C	180°C

1 - CERTIFIED ATEX VERSION IDENTIFICATION

SGM-LEKTRA S.r.l.
 Equipment: Pulse Radar Level Instrument
 Type: RPL
 Serial: fffmmyyxxxx
 Ex Marking: II 1G Ex ia IIC T6... T3 Ga
 II 1D Ex ia IIIC T76°C... T146°C Da
 Explosion certificate: TUV 17 ATEX 8033 X
 Ui=26.4V li=114mA Pi=0.752W Ci=0 Li=51uH
 Output: (4...20) mA HART two-wire
 Ambient Temperature: See manual and instructions
 WARNING-POTENTIAL ELECTROSTATIC CHARGING HAZARD-SEE INSTRUCTIONS
 0051
 Address: Via Papa Giovanni XXIII, 49
 20090, Rodano (MI) Italy
 www.sgm-lektra.com

1. Product code
2. Power supply limits
3. Certifying body identification code
4. Certificate number
5. Serial number
6. Marking

2 - SAFETY INSTRUCTIONS

This pulsed radar is designed to be installed in potentially explosive atmosphere for the combustible gas and dust presence.

Make sure that the device marking is in compliance with the area classification.

Verify that the probe installation does not affect to the degree of protection.

Device improper use may cause damage to people, to the product and connected equipment.

Always observe the nameplate data for the power supply and the electrical connections.

3 - INSTALLATION AND COMMISSIONING

The installation must be performed only by qualified and properly trained personnel in accordance with current regulations EN 60079-14.

The equipment must be used only after having correctly understood the instructions in this document, together with the user manual (latest revision).

The device must be mounted so as to minimize the risk of shock to the housing and to the sensitive part.

Use only the threaded connection or flange to insert the sensor in the process; do not use the housing to manually screw the sensor to the process.

Properly tighten the cable glands and the cover.

This product is an intrinsic safety explosion proof version with stainless steel housing and plastic enclosure (RPL61).

All electric circuits are fully encapsulated in the internal enclosure, where no conductive parts will contact with flammable gas.

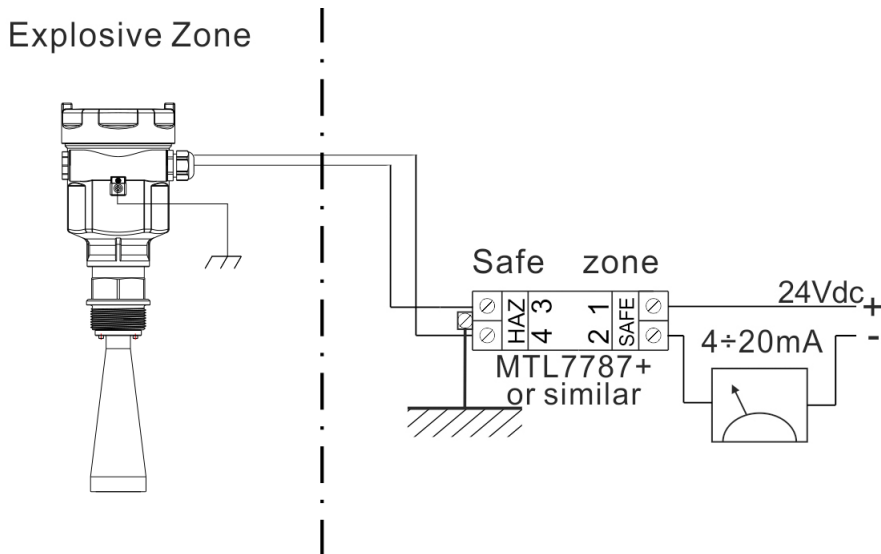
The total energy, in a correct installation, is limited by the safety barrier with the following limits:

$U_i=26.4$, $I_i=114\text{mA}$, $P_i=0.752\text{W}$, $C_i=0$, $L_i=51\mu\text{H}$.

A safety barrier should be placed between power supply and instrument for intrinsically safe version.

All connection cables must be screened with max. length of 500m. Stray capacitor $\leq 0.1\mu\text{F/Km}$, stray Inductance $\leq 1\text{mH/Km}$.

The level measurement instrument must be connected to ground potential and unapproved supplementary devices are not allowed to use.



Protection against static electricity

The versions with electrostatically chargeable plastic parts, such as e.g. Plastic housing or plastic antenna, have a caution label pointing out the safety measures that must be taken with regard to electrostatic charges during operation.

**WARNING
POTENTIAL
ELECTROSTATIC
CHARGING
HAZARD -
SEE
INSTRUCTIONS**

