



Intrinsically Safe Isolator **CD-CGI ADDR**

Part no. 5600965-00

G021263

System: CS3000, CS4000, NSAC-1, Salwico Cargo, Salwico Cruise, Salwico LNG, Salwico Offshore, Salwico Ro/Pax, Salwico Workboat, Salwico Yacht, Salwico Navy, OEM Extinguish



NOTE

Unless anything else is specified, voltages are always specified as DC in this datasheet.

General Description

CD-CGI ADDR is an IS isolator intended for use together with Salwico intrinsically safe addressable detectors and manual call points.

CD-CGI ADDR is located in a non-hazardous (safe area), forming the interface to IS detectors and other IS line units.

To each addressable detector loop, a maximum of five CD-CGI ADDR units can be connected, each of them accommodating up to 20 IS line units.

The number of IS units can vary depending on the length of the cable in the hazardous area. The number must be verified by an Ex-calculation.

CD-CGI ADDR does not need a separate power supply. It is powered directly from the fire alarm panel via the loop cable, eliminating the need for additional cables.

The earth connector must be connected when a screen is used. Refer to connection drawings in section [Connections \(page 3\)](#).

The cable glands are mounted according to the dimension drawing in section [Dimensions \(mm\) \(page 4\)](#). This guarantees the minimum required distance (50mm) between the intrinsic safe and the non-intrinsic safe conductors. The conductors shall be as short as possible between the entrance and the terminals and shall not cross from one side to another.

Spare parts

Part No.	Type
5600963-00	C-GI ADDR Ex H

Data, CD-CGI ADDR

Operating voltage	27–38 VDC
Nominal voltage	36 VDC
Operating temperature	–40 °C to +60 °C
Storage temperature	–40 °C to +70 °C
Cable terminals	2.5 mm ²
Ambient humidity	0-100% RH
Ingress protection	IP55
Cable glands (cable size)	M20 (ø 6-13mm)
Base unit material	Polycarbonate
Cover material	Polycarbonate, glass-fibre reinforced
Sealing material	Polyurethane
Cover screw material	Polyamide, glass-fibre reinforced
Colour	Grey
Weight	850 g ± 5% (incl. internal components)
Dimensions	Width 110 mm Height 235 mm (including cable gland) Depth 95 mm For details, see Dimensions (mm) (page 4)

**NOTE**

Refer to [Safety Data, Isolator C-GI ADDR Ex H \(page 2\)](#) and [Data, Isolator C-GI ADDR Ex H \(page 2\)](#) for data regarding the isolator inside the unit.

The capacitance and either the inductance or inductance to resistance ratio (L/R) of the load connected to the output terminals of the apparatus must not exceed the following values:

Group	Capacitance [nF]	Inductance [mH] or L/R Ratio [μH/Ω]	
IIC	77	4.3	55
IIB	640**	17	199

** To avoid loss of communication signals, the capacitance on the intrinsically safe side shall not exceed 300 nF.

**NOTE**

The above load parameters apply where:

1. The external circuit contains no combined lumped inductance L_i and capacitance C_i greater than 1% of the above values.
or
2. The inductance and capacitance are distributed as in a cable.
or
3. The external circuit contains either only lumped inductance or lumped capacitance in combination with a cable.

In all other situations e.g. the external circuit contains combined lumped inductance or lumped capacitance, up to 50% of each of the L and C values is allowed.

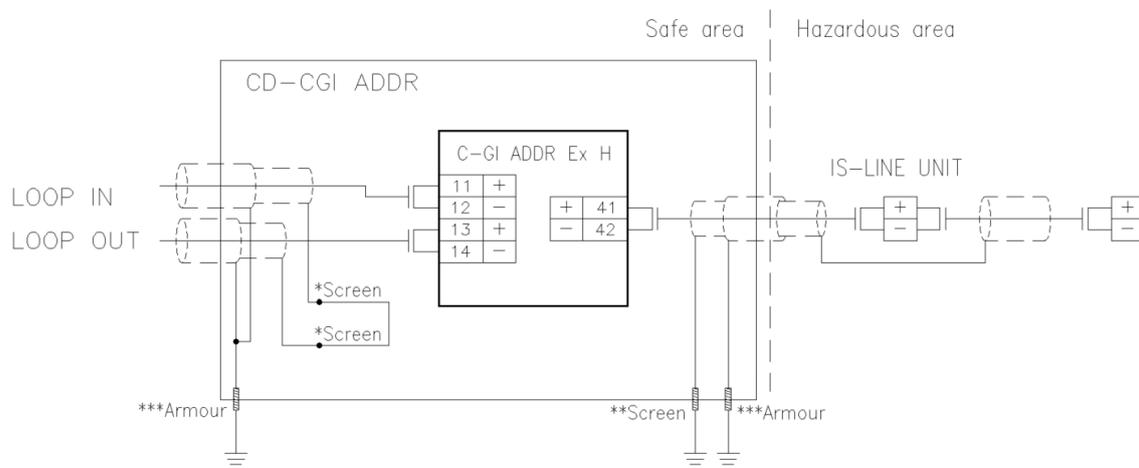
Safety Data, Isolator C-GI ADDR Ex H

Max output voltage (U_o)	28 V
Max output current (I_o)	92.8 mA
Max output power (P_o)	649.8 mW
Max internal capacitance (C_i)	5.14 nF
Max internal inductance (L_i)	Negligible

Data, Isolator C-GI ADDR Ex H

Working voltage	27-38 V
Nominal working voltage	36 V
Isolator approval	II 1G [Ex ia Ga] IIC
Certificate according to	CE 0051

Connections

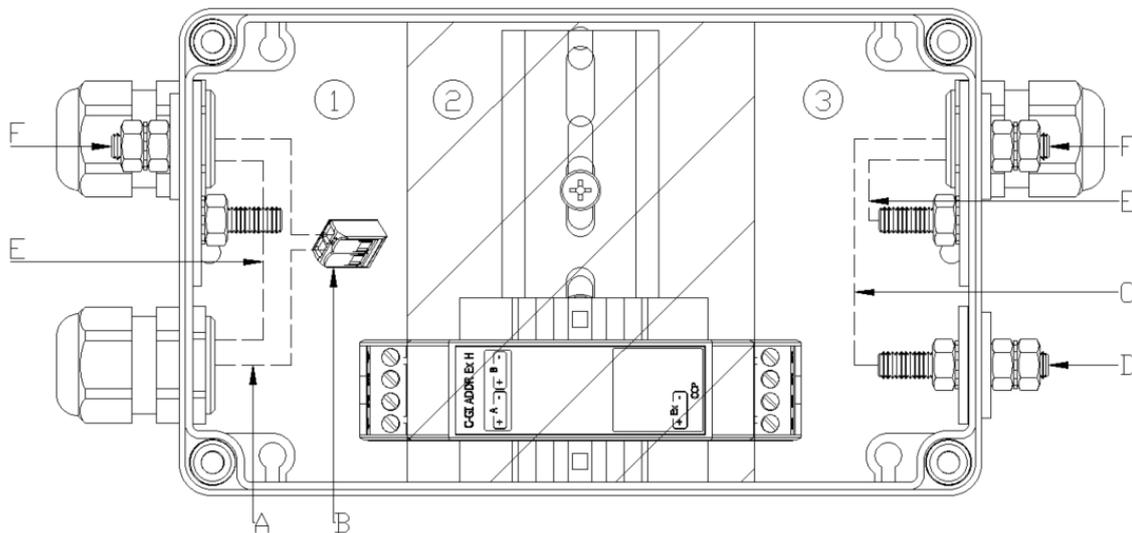


NOTE

* If the loop-in/out cable has a screen, it shall be connected to the loop cable screen connector (included in delivery).

** If the hazardous area cable has a screen, it shall be connected to the earth bolt inside the CD-CGI ADDR. The screen shall be left open circuit (not connected to earth) at the last IS unit, as shown above.

*** The armour of all armoured cables shall be connected to the appropriate earth points inside the CD-CGI ADDR (both sides) to ensure EMC performance and compliance with intrinsic safety requirements.



- 1) A safe area where only cables to the fire detection system are allowed
 - 2) The area where no cables are allowed
 - 3) Hazardous area where only the cable to IS units is allowed
- A) Loop cable screen (must not be connected to the earth bolt inside CD-CGI ADDR)
 B) Loop cable screen connector (included in delivery for screen termination)
 C) Hazardous area cable screen (max length 10 cm inside enclosure)

- D) Connect to the closest Intrinsically Safe Earth point.
- E) If the cable has a screen, it shall be connected to the dedicated earth bolt inside the enclosure.
- F) Connect to the closest earth point.

Dimensions (mm)

