



ANALOG INPUT REPEATER

OS Ex-CR-1-ST(LP) is a BV (ATEX) Approved transformer isolated unit used to power a 2 wire transmitter, repeating the 4-20mA current signal into the non hazardous area.

The 4-20mA can be measured in the loop of 24V power supply.

FEATURES :

- * Manufactured according to European Standard EN 60079- 0:12 and EN 60079-11:12.
- * Intrinsically Safe galvanically isolated from both main input and output control circuitry - **1500V, 50Hz.**
- * Convenient plug in terminals enable a zero time error-free maintenance and pre-wiring of the control panel.

OPERATION :

A power supply (located in the non-hazardous area.), 22 to 40 VDC power supply connected to terminals 9(+) & 12(-) of the current repeater OS Ex-CR-1-ST(LP), shall power the 2 wire transmitter. The 4...20 mA transmitter current is repeated very accurately via loop.

Low loss, precision transformers between the hazardous area and non-hazardous area circuits ensure a minimum loss in energy. Supply is also galvanically isolated between the hazardous and non hazardous circuits. As the system is truly floating there is no need to connect any intrinsic safe earth. Both the field mounted device (transmitter etc.) and also the controller in the non-hazardous area could be separately earthed if required without any adverse results on the accuracy of measurement.

TECHNICAL DETAILS

ART. NO. : [ODA006W]

Power Supply Section	Terminals 9(+), 12(-)
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Supply Voltage (nominal)	22 - 40V DC
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Hazardous Area Section	2 wire transmitter
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Input	4-20mA
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Voltage available for transmitter	Max. 17.5VDC at 20mA.
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Parameters

Voltage U_o	DC 29,4V
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Current I_o	90mA (2-Wire)
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Intrinsically Safety Parameters

Explosion Group	II (1)G [Ex ia Ga] IIB/IIC
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Maximum External Capacitance	70nF 400nF
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Maximum External inductance	0.2mH 0,5mH
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Fail Safe maximum Voltage U_m

Power Supply	250Vr.m.s.
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Safe Area Section

Output (non-intrinsic) I	4...20mA via Loop
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Load/Ohms	(Vs-22)/0.02Amp.
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Calibrated accuracy at 20°C	< ± 20 mA
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Max. Ambient Temperature	-20 to 60°C
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Weight	ca. 150g
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FEATURE:

- * 1 Channel
- * 2 point Galvanic Isolation
- * Input 4-20mA
- * Output 4-20mA via loop
- * Smart Transmitter Compatible
- * 22.5mm Width
- * Clip onto 35mm rail as per DIN 46277

APPROVALS:

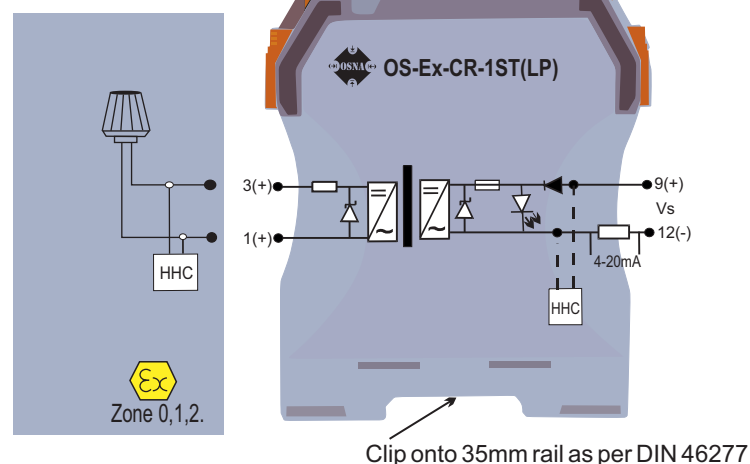
Confirming to EN 60079-0:2012 and EN 60079-11:2012.
ZONE & GAS GROUP: ZONE1 & 2 Gas Group:IIC

BUREAU VERITAS Certificate No. EPS 16 ATEX 1 019.

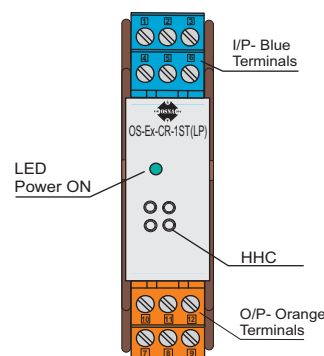
CIMFR Approval No.CIMFR/TC/P/2294

PESO Approval No.A/P/HQ/DL/104/5576(P410684)

CONNECTION



ASSEMBLY



DIMENSIONS

