

# 2 CHANNEL FREQUENCY TRANSMITTER Type SILBUS-TX2F

**TECHNICAL DATA SHEET** 

- Two channel frequency input
- Analogue SILBUS input
- Over or under range trip points



#### DESCRIPTION

The Two Channel Frequency Transmitter Type SILBUS-TX2F is part of a family of explosionprotected DIN rail mounting modules that transmit to and receive from an Austdac SILBUS field bus network. The SILBUS-TX2F can transmit up to two channel frequency or pulse signals on two independent valid SILBUS channels.

The two frequency or pulse inputs are designed to work with galvanically isolated voltage-free contacts within the sensing device such as an Austdac Anemometer Type SCGR1. This makes the SILBUS-TX2F particularly suited to monitoring ventilation air flow via the SILBUS network without any requirements for additional power.

Three LED's are provided to show input channel status and SILBUS network status. Each channel input can be independently programmed to any SILBUS channel address. Each channel input can also have its under range, hysteresis, digital fault channels and transmission protocol configured by the user.

## **TYPICAL APPLICATIONS**

When used in conjunction with the Austdac Anemometer (AAV02), the SILBUS-TX2F is ideal for monitoring mine ventilation air flow. It provides data in analogue values and airspeed trips.

#### **CERTIFICATION**

The Two Channel Frequency Transmitter Type SILBUS-TX2F is IECEx certified for use in Groupl hazardous areas as part of the Austdac certification.

IECEx TSA 07.0002X Ex ia I.

The certification requires that the SILBUS-TX2F be mounted within a host enclosure that provides a minimum ingress protection of IP54.

## INTRINSICALLY SAFE INFORMATION

SILBUS	li = 3 A	Ui = 12.6V
	Ci = 0uF	Li = 0uH
2 Channel Frequency	li = 0	Ui = 0
Inputs	Ci = 662nF	Li = 0
	Uo = 12.6V	lo = 12.8mA

**PIN ASSIGNMENT** 



## SPECIFICATIONS

Terminations	Cage clamp 4mm <sup>2</sup> (12 AWG)
Size	45(W) x 75(H) x 110(D) mm
	1.8(W) x 3.0(H) x 4.3(D) inch
Mass	140g (0.3 lb)
Fixing	TS35 DIN rail only
Ingress Protection	IP20
Enclosure material	Polycarbonate
Enclosure colour	RAL 7032 Grey
Terminal material	Polycarbonate
Terminal block colour	Blue
Operating Temperature	0°C - 40°C (32°F - 104°F)
Storage Temperature	-20ºC - 80ºC (68ºF - 176ºF)
Number of channels	2
Frequency range	0.14Hz (0.5m/s) - 33Hz (45m/s)

Pin	Signal	Description
1	SIG	SILBUS NETWORK SIGNAL
2	COM	SILBUS NETWORK COM
8	CH1-HI	HI CONNECTION FOR CONTACT 1
9	CH1-LO	LO CONNECTION FOR CONTACT 1
10	CH1-SCN	CONNECTION FOR OPTIONAL SCREEN
11	CH2-HI	HI CONNECTION FOR CONTACT 2
12	CH2-LO	LO CONNECTION FOR CONTACT 2
13	CH2-SCN	CONNECTION FOR OPTIONAL SCREEN
22	EMC	CONNECTION FOR EARTH

## **CONNECTION DIAGRAM**





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Specifications are subject to change without notice 2015.06

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