



INFRARED GAS SENSOR/ TRANSMITTER



CARBON DIOXIDE

METHANE

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METHANE

**PLANT SAFETY
PROTECTION for
methane & carbon dioxide
in hazardous areas**



ATEX
M1
GROUP I & II
INTRINSICALLY
SAFE

BREWING INDUSTRY

•
**PETROCHEMICAL
PROCESSING**

•
**MINING &
TUNNELLING**

•
**OFFSHORE
PLATFORMS**

**MANUFACTURING &
PROCESS PLANTS**

•
**STORAGE AREAS &
WAREHOUSING**

•
**WATER
MANAGEMENT &
SEWAGE TREATMENT**

POWERGENERATION

•
**GAS STORAGE &
DISTRIBUTION**

**MARINE & SHIPPING
APPLICATIONS**

•
**MARINE & CARGO
HANDLING**

•
TELECOMS



**pre-calibrated, plug-in
gas sensing modules**

*with standardised output signal
for convenient replacement
and servicing.*

- Fixed gas monitoring for point source hazards and perimeter protection in arduous duty and exposed locations.
- Safety protection for gas risks occurring in hazardous areas and general industrial applications.
- Infrared gas sensing element with long term stability.
- Choice of analogue output signal:-
4...20mA • 0.4...2V • 5...15Hz.

- Special versions with weatherproof plug and socket connectors available.



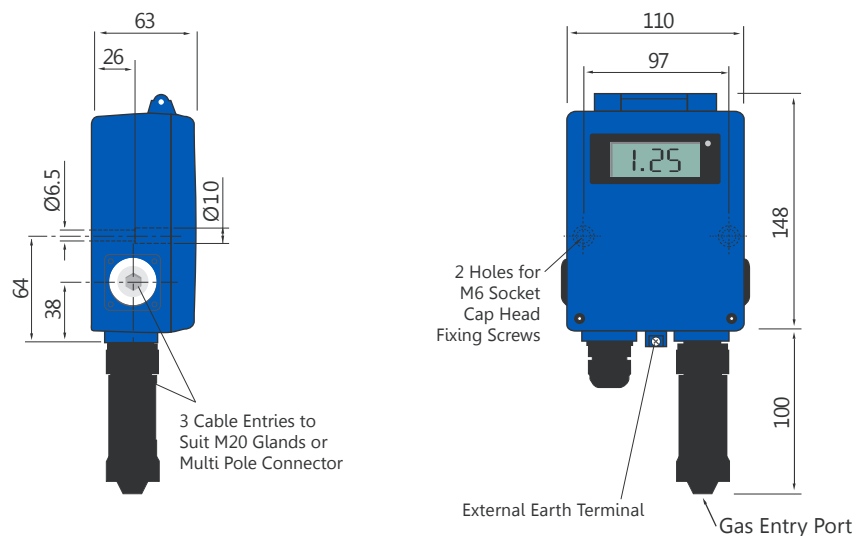


A T E X
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technical details...

Ambient Temperature Limits:	-10°C...44°C.	
Storage Temperature Limits:	-20°C...60°C.	
Ambient Pressure Limits:	1 bar ± 100 mbar absolute.	
Humidity:	95% RH non-condensing.	
Protection Classification:	Dust and waterproof to IP66. Gas inlet port to IP52.	
Housing Material:	Stainless steel filled Polyamide 6.	
Nett Weight:	450g.	
Cable Entries:	M20 x 1.5.	
Electrical Connections:	4mm Barrier/clamp terminals.	
Information Display:	3 1/2 Digit LCD.	
Vibration Limits:	10...100Hz, 0.25mm pk. (BS2011)	
Impact Limits:	20 joules (Housing).	
Measuring Range:	Methane:	0...5% v/v (0...100% LEL).
	Methane:	0...100% v/v.
	Carbon Dioxide:	0...2% v/v.
	Carbon Dioxide:	0...5% v/v.
Linearity:	±2.5% FSD.	0...5% v/v.
Maximum Drift:	Methane:	±0.05% /month.
	Carbon Dioxide:	±100ppm
/month. Repeatability:	Methane:	±0.1%.
	Carbon Dioxide:	±0.05%.
Response Time(T90):	20 secs.	
Sensing Element Life:	>2 years.	
Warm Up Time:	<20 secs.	

Dimensions:

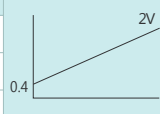


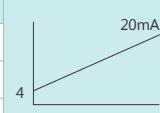
ALL DIMENSIONS IN MM

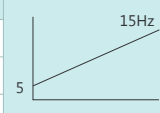


electrical details...

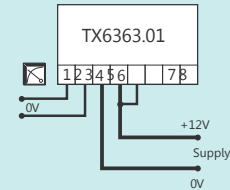
TX6363.01 GROUP I APPLICATIONS (12V dc) 


Output:	0.4...2V	
Min Load @ 12V dc	1K ohms	
Supply	9...16.5V dc	
Nominal Supply Current	100mA	

Output:	4...20mA	
Max Load @ 12V dc	160 ohms	
Supply	9...16.5V dc	
Nominal Supply Current	120mA	

Output:	5...15Hz	
Max Load	Opto isolated. 2mA max	
Supply	9...16.5V dc	
Max Supply Current	100mA	

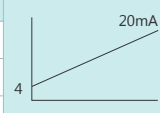
Connections:



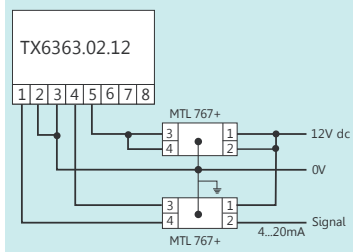
 Gas sensors located in a Group I hazardous area must be powered from an approved intrinsically safe source. Please see Trolex Installation and Operating Data for recommendations.



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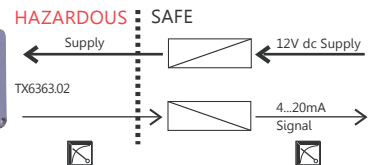
TX6363.02 GROUP II APPLICATIONS (12V dc) 

Output:	4...20mA	
Max Load @ 12V dc	160 ohms	
Supply	10.5...13.5V	
Nominal Supply Current	120mA	

Connections:




 Gas sensors located in Group II hazardous area must be used in conjunction with approved safety barriers. Zener barriers or isolation barriers may be used. Please see Trolex Installation and Operating Data for recommendations.

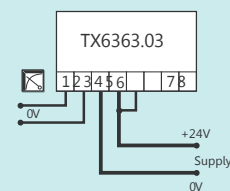


TX6363.03 GENERAL PURPOSE APPLICATIONS (24V dc)

NOT FOR USE IN CLASSIFIED HAZARDOUS AREAS.

Output:	4...20mA	
Max Load @ 24V dc	160 ohms	
Supply	20...30V dc	
Nominal Supply Current	100mA	

Connections:





order reference...

TX6363.01	INFRARED GAS SENSOR/TRANSMITTER	Group I	
TX6363.02	INFRARED GAS SENSOR/TRANSMITTER	Group II	
TX6363.03	INFRARED GAS SENSOR/TRANSMITTER	General Purpose	CO₂ ONLY

Please specify: OUTPUT

• 0.4...2V output	(11)
• 4...20mA output	(12)
• 5...15Hz output	(13)

TYPE OF GAS

• CH ₄ 0...100% v/v	(242)	GROUP I & GROUP II ONLY
• CH ₄ 0...5% v/v	(243)	
• CH ₄ 0...100% LEL	(245)	
• CO ₂ 0...2% v/v	(253)	
• CO ₂ 0...5% v/v	(278)	



ATEX
M1
GROUP I&II
INTRINSICALLY
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certification & approval...



Group I TX6363 INFRA RED GAS SENSOR/TRANSMITTER: I M1 EEx ia I SIR A 02 ATEX 2167X
Group II TX6363 INFRA RED GAS SENSOR/TRANSMITTER: II 2G EEx iad IIB T4 SIR A 00 ATEX 2061X



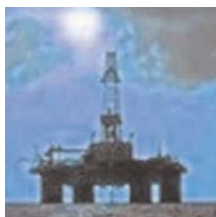
Designed to comply with the requirements of the EC directive: • ATEX directive 94/9/EEC
 • EMC directive 89/336/EEC



trouble-free servicing...

Our 24 hour replacement and exchange service for gas sensing modules simplifies periodic plant maintenance.

Trox service contracts for gas sensors have been specifically structured to encompass complete after-care responsibility of installed sensors ensuring peace-of-mind and operational security.



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