

WDG INSITU-CENELEC

FLUE GAS OXYGEN ANALYZER FOR ATEX II 2 G HAZARDOUS AREA

Direct-sensing insitu probe suitable for applications where the flue gas temperature does not exceed 1472°F (800°C). Completely field serviceable.



SENSOR

Principle of Operation: Direct-sensing insitu probe using zirconium oxide for net oxygen measurement.

Enclosure: Approved for CE 0081, Ex II 2 G, EEx d II C T3 (IP 65)

Output Range: From 0-1% to 0-100% O₂

Accuracy: $\pm 1\%$ of measured value or $\pm 0.05\%$ oxygen absolute, whichever is greater

Response Time:

Calibration Gas: 90% of step change in < 15 s

Process Gas: 63% of step change in < 400 s at 20 m/s (44 mph) duct velocity

Drift: < 0.1% of cell output per month (< 0.005% O₂ per month with 2% O₂ applied)

Max. Flue Gas Temp.: 800°C (1472°F)

Ambient Temp.: -20°C to 70°C (-50°F to 160°F)

Power Requirement: 230 VAC $\pm 10\%$, 47 - 63 Hz. (115 VAC optional); 150 VA max.

Calibration Gas: Use all calibration gases @ 0.7 kg/cm², 1.5 to 3 L/min.

O₂ Span Gas: Air or from 1.0 to 100% O₂, balance N₂

O₂ Zero Gas: 2% or from 0.1% to 10% O₂, balance N₂

SERIES 2000 CONTROL UNIT

Display: Four-line x 20-character vacuum fluorescent.

Displays combinations of oxygen, time and date, cell temperature, user programmable text, thermocouple mV or cell mV. Password protection, programmable pressure compensation and context-sensitive help are also provided.

Analog Output: Two isolated linear current outputs. Select oxygen, cell temperature, thermocouple mV or cell mV. Each output can be 4-20 mA, 0-20 mA, 20-4 mA or 20-0 mA and is fully scalable. Hold or track during calibration and select degree of damping. Maximum load 1200 ohms.

Alarms: Two independent oxygen alarms, each high or low selectable. One alarm can be allocated to oxygen, calibrate or verify. Set relays to energize or de-energize on alarm.

Contact Rating: 0.5A, 30V, 10VA max. noninductive load, AC or DC

Diagnostics: Watchdog timer and service alarms. System test for A/D, RAM, EEPROM and keypad. Display line 4 reserved for full text error and diagnostic messages. Twenty entry event log.

Communications: RS-485 2-way addressable

Environment:

Ambient Temp.: -14°F to 122°F (-10°C to 50°C)

Relative Humidity: 0% to 80%, non-condensing

Enclosure: Approved for CE 0081, Ex II 2 G, EEx d II C T6 (IP65). For non-hazardous area, optional weatherproof NEMA 4 (IP56) wall/panel mount, GP (General Purpose) wall mount, GP 19" rack mount, GP panel mount, or stainless steel weatherproof NEMA 4X (IP56) wall/panel mount. All are UL Listed for NEC Class I, Division 2 areas.

Calibration: Oxygen cell lifetime extender. Calibrate or verify calibration. Store last calibration and verification data. Selectable calibration gas run time and process recovery time. Timed automatic calibration with optional Remote Calibration Unit.

Power Requirements: Nominal 115-230 VAC $\pm 10\%$, 47-63 Hz; 75 VA max.

SYSTEM COMPLIANCE:

ATEX Directive 94/9/EC

LCIE03 ATEX 6276X (Sensor)

LCIE01 ATEX 6028 (Controller)

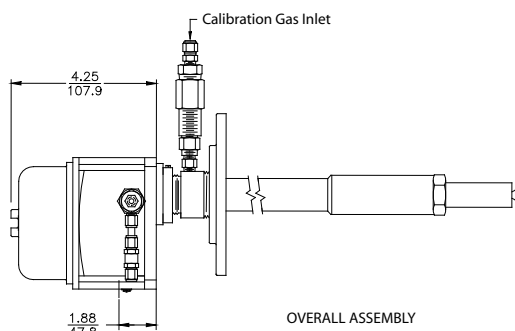
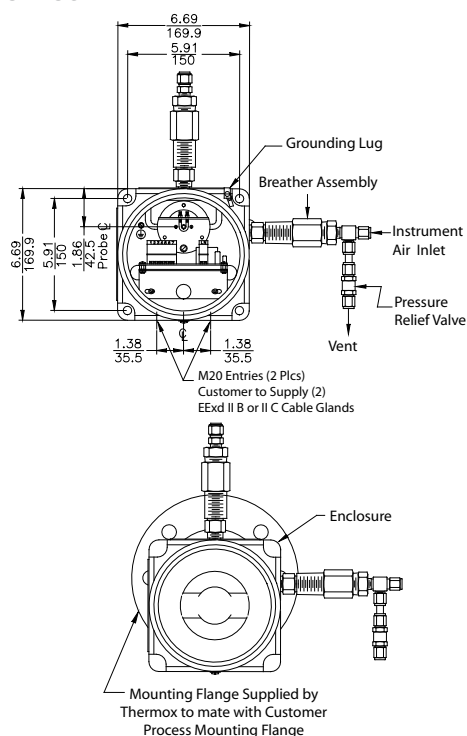
EN50014 and EN50018

EMC Directive 2004/108/EC

Low Voltage Directive 2006/95/EC

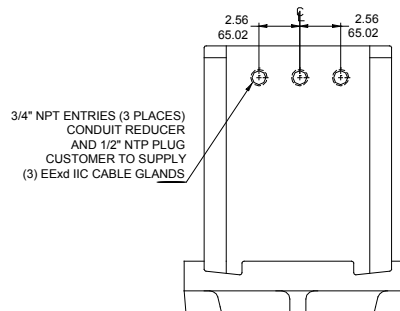
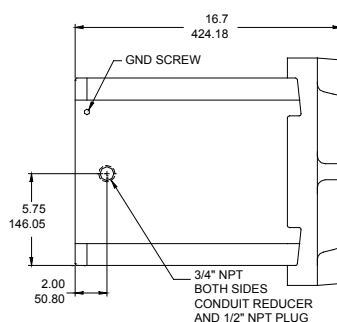
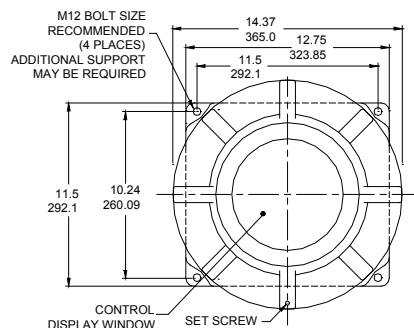
WDG INSITU-CENELEC ANALYZER

SENSOR



PROBE	INSERTION LENGTH
.5 m	.53 m (20.88 in)
1 m	1.06 m (41.88 in)
2 m	1.99 m (77.88 in)

CONTROL UNIT



NOTES:

1. All static performance characteristics are with operating variables constant.
2. System accuracy referenced to 0.1 to 10% calibrated range.
3. Response is to calibration gas except where stated.

AMETEK®
PROCESS INSTRUMENTS

150 Freeport Road, Pittsburgh, PA 15238
Ph. +1-412-828-9040, Fax +1-412-826-0399
www.ametekpi.com



© 2014, by AMETEK, Inc.
All rights reserved. Printed in the U.S.A.
F-0194 Rev. 5 (0514)

One of a family of innovative process analyzer solutions from AMETEK Process Instruments.
Specifications subject to change without notice.

SALES, SERVICE AND MANUFACTURING:

USA - Pennsylvania
150 Freeport Road, Pittsburgh PA 15238 • Tel: +1-412-828-9040, Fax: +1-412-826-0399

USA - Delaware
455 Corporate Blvd., Newark DE 19702 • Tel: +1-302-456-4400, Fax: +1-302-456-4444

Canada - Alberta
2876 Sunridge Way N.E., Calgary AB T1Y 7H2 • Tel: +1-403-235-8400, Fax: +1-403-248-3550

WORLDWIDE SALES AND SERVICE LOCATIONS:

USA - Houston, Texas
Tel: +1-713-466-4900, Fax: +1-713-849-1924

BRAZIL
Tel: +55 19 2107 4100

CHINA
Beijing / Tel: +86 10 8526 2111, Fax: +86 10 8526 2141
Chengdu / Tel: +86 28 8675 8111, Fax: +86 28-8675 8141
Shanghai / Tel: +86 21 6426 8111, Fax: +86 21 6426 7818

USA - Austin, Texas
Tel: +1-512-252-2440, Fax: +1-515-252-2430

FRANCE
Tel: +33 1 30 68 89 20, Fax: +33 1 30 68 89 99

GERMANY
Tel: +49 21 59 91 36 0, Fax: +49 21 59 91 3639

INDIA
Tel: +91 80 6782 3200, Fax: +91 80 6782 3232

SINGAPORE
Tel: +65 6484 2388, Fax: +65 6481 6588

THE[®] THERMOX