

# Flameproof CPFG-4000



**ATEX** 







The CPFG-4000 is a PLC based Combined Pressurisation Fire & Gas control panel used in conjunction with other JCE supplied products such as gas /smoke detectors & pressure switches. A complete pressurisation control system can be constructed to monitor the conditions within pressurised modules used in areas which are potentially hazardous by the presence of flammable liquids, gases, or vapours.

The CPFG-4000 is capable of monitoring signals from a single fire channel and three gas channels simultaneously.

The unit is suitable for use with either Pellistor type or Infrared gas detectors, as standard.

Its simple operation by only two external switches, and easy to read 3 line backlit HMI display module make it very user friendly. The various configuration settings and process variable set points are set through the HMI in an easy to follow step by step process in association with the user manual.

The units flexibility in mains voltage means that any voltage from 400 to 500Vac, can be applied without the need for selection as this function is automatic. It provides the required volt free signals, these are changeover type as standard to enhance flexibility.

The I.S. protection of relevant field devices is by Galvanic Isolation which eliminates the requirements for I.S. high integrity earth connection.

#### **Materials and Finish**

Body & Cover - Copper free aluminium alloy LM25

EN1706 with less than 0.2% copper

content.

Cover Bolts - Stainless steel 18/8

Finish - Chromate primed and polyester powder

coated. Textured black as standard Other finishes available on request

#### **Earthing**

All enclosures are supplied with a 6mm stainless steel (18/8) internal and external earth stud as standard. Larger internal earths can be fitted on request.

### **Entries and Thread Standards**

Standard thread forms are ISO Metric to ISO 965, NPT or GAS can be supplied on request.

## **Protection Grade**

Enclosure lid incorporates a gasket providing Ingress Protection to IP66. Application of a non hardening grease to flamepaths and entries is recommended.

## Certification

TRAC12ATEX020X IECEx TRC 12.0008X

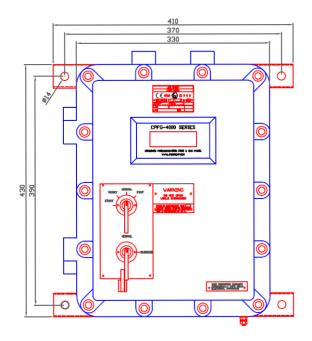
#### Codes

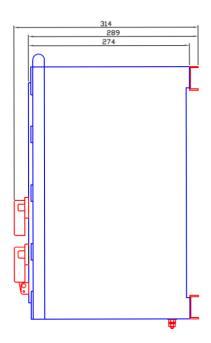
Ex d [ia IIC Ga] IIB + H2 T6 Gb Ex tb [ia] IIIC T85°C Db

## **Categories**

II 2 (1) G II 2 (1) D

## **Dimensions**





## **Specifications**

**Ex Protection** Ex d [ia IIC Ga] IIB + H<sub>2</sub> T6 Gb

Ex tb [ia] IIIC T85°C Db

**Supply voltage** 400V 3ph 50/60Hz

440V 3ph 50/60Hz 460V 3ph 50/60Hz 480V 3ph 50/60Hz

**Pressurisation fan supply** Minimum 1.4A

Maximum 2.5A

**Main contactor rating** AC-1 : 60A

AC-3 : 37A 3ph Transformer@440V : 28kVA

**Fire channels** 1 x fire channels suitable for up to

12 x Ex i ionisation smoke detectors

& 1 x manual call point

**Flammable gas channels** 3 flammable gas channels, voting.

**EMC** Emissions below EN55022 level B

Immunity to fast transients

IEC 801-4 2kV

## **Typical features**

- Light weight aluminium alloy Exd flameproof enclosure.
- Three line backlit HMI controller/display.
- DOL motor starter for pressurisation fan.
- Lockable purge override switch.
- Compatible with 4-20mA gas detector transmitters or infra red detector types.
- Interface for intrinsically safe ionisation smoke detectors, heat detectors, flame detectors and manual call points.
- Continuous pressurisation and airflow monitoring via 2 channel intrinsically safe galvanic isolation interface.
- Various C/O type alarm outputs for interfacing with external system.
- Compliant with DNV 2.7.2 2013.

## **Ordering information**

CPFG-4000

Customised variations available on request.



JCE Group (UK) Ltd., Blackburn Business Park, Aberdeen, AB21 OPS Tel: +44 (0) 1224 798600 Fax: +44 (0) 1224 798601 E-Mail: info.abdn@jcegroup.com

JCE (Europe) Ltd., East Way, Lee Mill Industrial Estate, Ivybridge, Devon, PL21 9LL, England Tel. +44 (0) 1752 690530 Fax +44 (0) 1752 690531 E-Mail:info.euro@jcegroup.com

- All products sold subject to our terms and conditions of business.
- Details of certification and conformity available on request.
- Health and Safety at Work Ack 1974. In the UK all equipment must be installed and disposed of (as required) within the legislative requirements of the Health & Safety at Work Act 1974.
- We reserve the right to make alterations to the technical data, dimensions, weights, designs and product available without notice.
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