

The BA418CF-F Fieldbus Indicator is a cost-effective intrinsically safe panel mounting instrument that displays a single fieldbus process variable in a hazardous area. Housed in a robust panel mounting enclosure with an IP66 front, the instrument has a large, high contrast five digit display and a horizontal bargraph. The BA418CF-F indicator uses the same technology and compliments the well established BEKA eight variable fieldbus displays that are now in worldwide use.

Powered by the fieldbus the BA418CF-F only requires a 2-wire connection to the intrinsically safe fieldbus segment, no additional power supply is required. Compatibility with most Foundation™ fieldbus hosts is ensured by the use of a single *Input Selector* function block, which is supported by nearly all systems. Please contact the BEKA sales office for the latest compatibility information. The instrument has ITK 6.3 Fieldbus Foundation registration and device description files may be downloaded from their website or from www.beka.co.uk

The liquid crystal display has large characters and is designed to provide maximum contrast and a wide viewing angle, thus enabling the BA418CF-F indicator to be easily read in most lighting conditions. Five digits, with four decimal points and a negative sign, may be configured to display any value between -99999 and 99999. The 31 segment horizontal bargraph, which provides a bold analogue indication of the fieldbus variable, may be conditioned to any starting and finishing values within the range of the fieldbus variable.

The instrument front panel provides IP66 protection and a neoprene gasket seals the joint between the fieldbus indicator and the panel, making it suitable for use in areas that will be cleaned with

a hose. To simplify installation and maintenance, the indicator has a removable terminal block that allows panel wiring to be completed before the BA418CF-F indicator is installed.

ATEX intrinsic safety certification allows the BA418CF-F to be installed in all gas hazardous areas. The two fieldbus terminals comply with the Fieldbus Intrinsic Safety Concept (FISCO) simplifying system design and documentation. Separate Ex ia and Ex ic entity input safety parameters also allow connection to most non-FISCO intrinsically safe systems. A BA418CF-F indicator may therefore be connected to almost any intrinsically safe fieldbus segment, provided the segment can supply 13mA to power the instrument.

FM, cFM and IECEx approvals allow installation in the USA, Canada, plus the growing number of countries accepting IECEx certificates. All approvals incorporate FISCO certification.

The FOUNDATION™ fieldbus Interface Guide contains commissioning information for the BA418CF-F indicator. A copy may be requested from the BEKA sales office or from the BEKA web site at www.beka.co.uk

Units of measurement, tag or application information specified by the customer can be printed onto the instrument escutcheon that surrounds the display for no additional charge. Tag information can also be thermally printed onto the rear panel adjacent to the terminals.

For field mounting applications see the BA414DF-F datasheet. This instrument has a similar electrical specification but is housed in an IP66 field mounting enclosure.

BA418CF-F FOUNDATION™ fieldbus Fieldbus indicator Single variable

Intrinsically safe for use in all gas hazardous areas

- 20mm high easy to read 5 digit display.
- ♦ 31 segment bargraph
- ► FOUNDATIONTM fieldbus protocol, ITK 6.3 compliant.
- Compatible with most system hosts.
- Intrinsically safe ATEX, FM, cFM & IECEx certification.
- Entity Ex ia & Ex ic parameters, FISCO compliant.
- 144 x 72mm
 DIN enclosure.
- IP66 front
- 3 year guarantee

www.beka.co.uk/ba418cf-f



BEKA associates Ltd. Old Charlton Rd. Hitchin, Hertfordshire, SG5 2DA, U.K. Tel. (01462) 438301 Fax (01462) 453971 e-mail sales@beka.co.uk www.beka.co.uk

SPECIFICATION

Display

Type Liquid crystal

5 digit 20mm high (-99999 to 99999)

31 segment bargraph

Variables Single

Fieldbus communication

Voltage 9 to 32V (Limited by intrinsic safety

parameters)

Current 13mA

Compliant with IEC61158-2 31.25kbits/s Voltage Mode Protocol FOUNDATIONTM fieldbus, ITK 6.3 compliant.

Function block 1 x IS (input selector)

Intrinsic safety
Europe ATEX

Code Group II Category 1G Ex ia IIC T4 Ga

FISCO field device Ex ia IIC T4 Ga Group II Category 3G Ex ic IIC T4 Gc

 $Ta = -40^{\circ}C \text{ to } 70^{\circ}C$

Input parameters FISCO Ex ia entity Ex ic entity

Ui 17.5V 22.0V 32V Ii 380mA 250mA 125mA Pi 5.32W 1.2W 1W

Location Zone 0, 1 or 2

Cert. No. ITS06ATEX25314X

USA FM

Standard 3610 Entity
Code CL I: Div 1

GP A, B, C & D T4 @ 70°C

Standard 3611 Nonincendive

Code CL I: Div 2

GP A, B, C & D T4 @ 70°C

File 3027031

Canada cFM

File 3027031C

International IECEx

Code As ATEX code shown above

Cert. No IECEx ITS 06 0013X

Environmental

Operating temp -20 to 70°C

(ATEX, FM & IECEx

certification -40°C to 70°C)

Storage temp -40 to 85°C Humidity To 95% @ 40°C Enclosure Front IP66, rear IP20

EMC Complies with EMC Directive 2014/30/EU

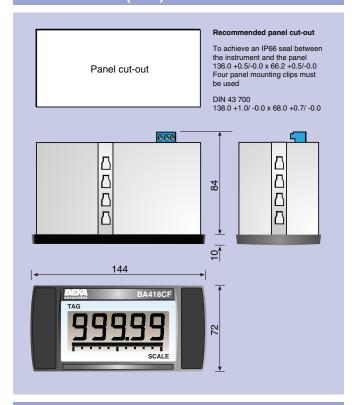
Mechanical

Terminals Removable with screw clamp for 0.5 to

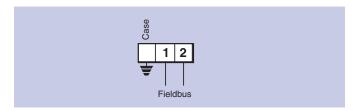
1.5mm² cable.

Weight 0.7kg

DIMENSIONS (mm)



TERMINAL CONNECTIONS



Accessories

Scale legend Units of measurement marked onto

display escutcheon.

Tag legend Tag number or application marked

onto display escutcheon

Tag strip Tag number or application thermally

printed onto rear of instrument

FOUNDATION ™

Fieldbus interface

guide.

May be downloaded from www.beka.co.uk

HOW TO ORDER

Please specify
Model number BA418CF-F

Accessories
Escutcheon markings

Scale

Tag

Please specify if required

Legend Legend

Tag strip Legend