

The BA484DF-F Fieldbus Display is an intrinsically safe instrument that can display up to eight fieldbus process variables. Eleven selectable standard screen formats contain one, two, three, four or eight variables, with units of measurement, tag descriptions and bargraphs on some screens.

**Selectable function blocks** allow the BA484DF-F fieldbus display to be used with all common system hosts. Configuration files may be downloaded from the Fieldbus Foundation or the BEKA websites

**Powered by the fieldbus** the BA484DF-F only requires a 2-wire connection, no additional power supply Zener barriers or galvanic isolators are required. The high contrast 86 x 45mm liquid crystal display incorporates a green backlight enabling the display to be read in all lighting conditions from full sunlight to total darkness.

**Simple commissioning** results from the use of standard display formats. Apart from loading the BA484DF-F configuration files onto the system host and selecting the fieldbus variables to be displayed, no programming is required. Configuration of the BA484DF-F Fieldbus Display is performed via the fieldbus and the instrument front panel push buttons.

**Comprehensive documentation** includes a FOUNDATION™ fieldbus Interface Guide.

**International intrinsic safety certification** allows the BA484DF-F to be installed in gas and dust hazardous areas worldwide. The two fieldbus terminals comply with the Fieldbus Intrinsic Safety Concept (FISCO) simplifying system design and documentation, although connection to non-FISCO intrinsically safe systems is possible using the entity concept.

This allows a BA484DF-F display to be directly connected to almost any hazardous fieldbus segment, provided that the segment can supply the 25mA consumed by the display.

**Six optional local alarm outputs** may be linked to any of the displayed variables. Each isolated single pole solid state output may be conditioned as a combined high and low alarm, or as just a high or low alarm. All the outputs comply with the requirements for *simple apparatus* allowing them to switch any certified intrinsically safe load such as a sounder, lamp or solenoid valve. Alarm configuration and the alarm set point adjustment is performed via the BA484DF-F front panel push buttons, as the local alarms are not accessible from the fieldbus system host.

**For panel mounting applications** see the BA488CF-F datasheet. This instrument has a similar electrical specification but is housed in a 144 x 72 panel mounting enclosure.

# BA484DF-F FOUNDATION™ fieldbus Fieldbus display 8 variables

*Intrinsically safe for use  
in gas and dust  
hazardous areas*

- ◆ FOUNDATION™ fieldbus protocol, ITK 6.3 compliant.
- ◆ Compatible with most system hosts.
- ◆ High contrast display with backlight.
- ◆ Intrinsically safe
- ◆ FISCO compliant
- ◆ Six optional local alarm outputs.
- ◆ IP66 field mounting GRP enclosure.
- ◆ 3 year guarantee

[www.beka.co.uk/ba484df-f](http://www.beka.co.uk/ba484df-f)



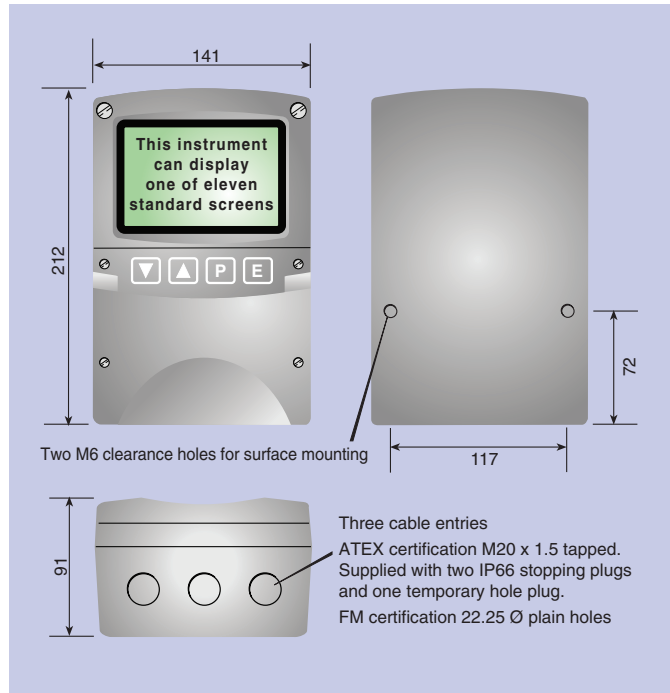
# BEKA associates

BEKA associates Ltd. Old Charlton Rd.  
Hitchin, Hertfordshire, SG5 2DA, U.K.  
Tel. (01462) 438301 e-mail [sales@beka.co.uk](mailto:sales@beka.co.uk)  
website: [www.beka.co.uk](http://www.beka.co.uk)

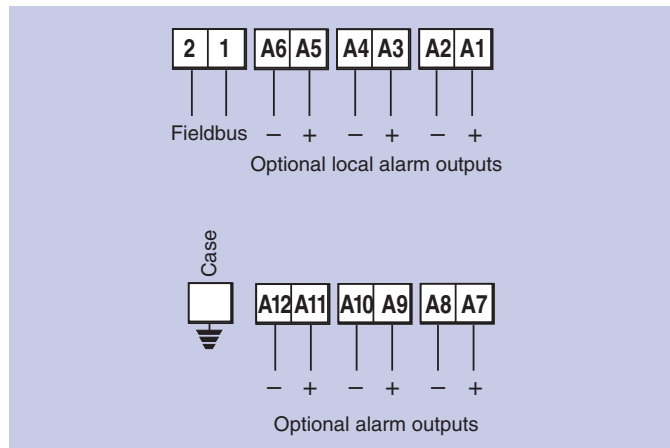
## SPECIFICATION

<b>Display</b>					
Type	120 x 64 pixel liquid crystal				
Size	86.5mm x 45mm				
Backlight	Powered from fieldbus				
Screens					
Standard format	1, 2, 3, 4 or 8 variables plus bargraph can include: units of measurement tag information				
<b>Controls</b>					
Front panel	Four push buttons scroll the indicator display between screens when the BA484DF-F is configured to display more variables than fit onto a single screen. Also used to configure optional local alarms.				
<b>Fieldbus communication</b>					
Voltage	9 to 32V (Limited by intrinsic safety parameters)				
Current	25mA				
Compliant with	IEC61158-2 31.25kbits/s Voltage Mode				
Protocol	FOUNDATION™ fieldbus, ITK 6.3 compliant				
Function blocks					
FOUNDATION™ fieldbus	1 x MAO (Multiple Analogue Output)				
or	2 x IS (Input Selector)				
	} <i>Selectable on-site</i>				
<b>Intrinsic safety</b>					
<b>International IECEx</b>					
Code	Ex ia IIC T5 Ga				
	(Tamb = -40 to 60°C)				
or	Ex ia IIIC T80°C Db				
	(Tamb = -40 to 60°C) IP66				
	} <i>Dust option, see How to order</i>				
Cert. No	<a href="#">IECEX.ITS.05.0006</a>				
<b>Europe ATEX and UKEX</b>					
Code	Group II Category 1G Ex ia IIC T5 Ga				
	(Tamb = -40 to 60°C)				
or	Group II Category 2D Ex ia IIIC T80°C Db				
	(Tamb = -40 to 60°C) IP66				
	} <i>Dust option, see How to order</i>				
Cert. Nos.	<a href="#">ITS04ATEX22778</a> & <a href="#">ITS21UKEX0082</a>				
Intrinsic safety parameters	<table border="0"> <tr> <td>Ui = 17.5V</td> <td rowspan="3">} FISCO compliant</td> </tr> <tr> <td>Ii = 380mA</td> </tr> <tr> <td>Pi = 5.32W</td> </tr> </table>	Ui = 17.5V	} FISCO compliant	Ii = 380mA	Pi = 5.32W
Ui = 17.5V	} FISCO compliant				
Ii = 380mA					
Pi = 5.32W					
Location	Gas Zone 0, 1 or 2: Dust Zone 21 or 22				
<b>USA FM</b>					
Standard	<i>Option, see How to order</i>				
Code	3610 Entity				
	CL I, II, III: Div 1: GP A, B, C, D, E, F & G				
	T4 @ 60°C				
File	<a href="#">3022546</a>				
Standard	3611 Nonincendive				
Code	CL I: Div 2: GP A, B, C & D, T4 @ 60°C				
	CL II, III: Div 2: GP F & G, T4 @ 60°C				
File	<a href="#">3022546</a>				
<b>Environmental</b>					
Operating temp	-20 to 60°C (ATEX gas certification -40 to 60°C)				
Storage temp	-40 to 85°C				
Humidity	To 95% @ 40°C				
Enclosure	IP66				
EMC	Complies with EU and UK Directives				
<b>Mechanical</b>					
Terminals	Screw clamp for 0.5 to 1.5mm <sup>2</sup> cable.				
Weight	1.6kg				
<b>Accessories</b>					
Alarms	<p>Six galvanically isolated outputs which may be linked to displayed variables.</p> <p>Each alarm is configurable from instrument push buttons as:</p> <ul style="list-style-type: none"> <li>combined high and low alarm</li> <li>high or low alarm</li> </ul> <p><b>Note:</b> Alarms are not accessible from the fieldbus system host</p>				

## DIMENSIONS (mm)



## TERMINAL CONNECTIONS



Contacts	Isolated single pole solid state switch certified as simple apparatus. Ron less than 5Ω + 0.7V Roff greater than 1MΩ
Intrinsic safety parameters	Ui = 28Vdc Ii = 200mA Pi = 0.84W
Tag strip	Printed legend behind the display window
Tag plate	Engraved stainless steel plate attached to the side of the instrument.
Pipe mounting kit	BA392D or BA393
Interface guide	<a href="#">May be downloaded from www.beka.co.uk</a>

## HOW TO ORDER

Model number	BA484DF-F	} <i>All models have IECEx certification. Note: Cable entries differ for FM &amp; ATEX models</i>
Certification	ATEX & UKEX gas	
or	ATEX & UKEX gas & dust	
or	ATEX, UKEX & FM gas	
<b>Accessories</b>		
Six alarms	} <b>Please specify if required</b>	
Tag strip	Alarms	
Tag plate	Tag strip legend	
Pipe mounting kit	Tag plate legend	
	BA392D or BA393	