Standard display formats: 1, 2, 3, 4 or 8 variables some with bargraphs

BA688CF-P

PROFIBUS PA Fieldbus display 8 variables

General purpose

- ◆ **PROFIBUS PA protocol**

- ◆ **Compatible with most system hosts**

- ◆ **High contrast display with backlight**

- ◆ **Six operator push buttons & six optional local alarm outputs**

- ◆ **IP66 front panel**

- ◆ **3 year guarantee**

The BA688CF-P Fieldbus Display is a general purpose 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.

Powered by the fieldbus the BA688CF-P only requires a 2-wire connection, no additional power supply is required. The high contrast 86 x 45mm liquid crystal display incorporates a green backlight that is also powered from the fieldbus 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 BA688CF-P configuration files onto the system host and selecting the fieldbus variables to be displayed, no programming is required. Configuration of the BA688CF-P Fieldbus Display is performed via the fieldbus and the instrument front panel push buttons; simple menus enable the required standard display format to be selected and the units of measurement and tag information for each variable to be entered.

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. Each output can switch any low power load such as a sounder, lamp or solenoid valve. Alarm

configuration and the alarm set point adjustment is performed via the BA688CF-P front panel push buttons, as the local alarms are not accessible from the fieldbus system host.

BA688CF-P applications vary from a simple single variable display using a standard format, to providing an operator interface with a custom display and control inputs via external buttons.

The six push buttons on the front of the instrument may be used for returning operator acknowledgments or controls to the fieldbus host. If larger industrial switches are required for these operator controls, up to six external push buttons may be connected to the BA688CF-P. When the external switches are activated, the front panel push buttons may be disabled or operated in parallel with the external switches.

Comprehensive documentation includes a PROFIBUS Interface Guide.

For field mounting applications see the BA684DF-P datasheet. This instrument has a similar electrical specification but is housed in a robust IP66 GRP enclosure suitable for external mounting.

If flammable atmospheres are present, the intrinsically safe BA488CF-P fieldbus display should be used.

For FOUNDATION™ fieldbus systems, please see the datasheet for the equivalent BA688CF-F fieldbus display.

Display

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

Controls

Front panel	Six push buttons scroll the indicator display between screens when the BA688CF-P is configured to display more variables than fit onto a single screen. Also used to configure optional local alarms and may be used to return operator inputs to the system host.
External switches	Control may be transferred to six external switches; front panel buttons may be inhibited or operated in parallel.
Switch cable	5m max length.

Fieldbus communication

Voltage	9 to 32V
Current	25mA
Compliant with	IEC61158—2 Clauses 11 and 22
Protocol	PROFIBUS PA
Function blocks	
PROFIBUS PA	8 x AO (Analogue Output) 6 x DI (digitl Input)

Environmental

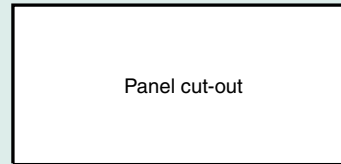|	
Operating temp	-20 to +60˚C
Storage temp	-40 to +85˚C
Humidity	To 95% @ 40˚C
Enclosure	Front IP65, rear IP20
EMC	In accordance with EU Directive 89/336/EEC
Immunity	BS EN 61326:1998 Operates normally with conducted 3Vrms interference between 0.15kHz and 80MHz, or radiated 10V/m interference between 80MHz and 1GHz.
Emissions	CISPR 16-1/2 Class A

Mechanical

Terminals	Removable with screw clamp for 0.5 to 1.5mm^2 cable.
Weight	0.7kg

Accessories

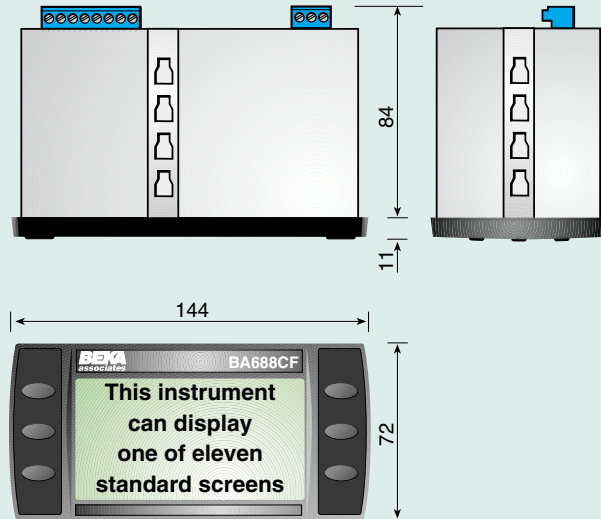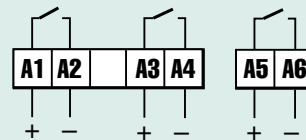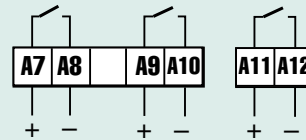|	
Alarms	Six galvanically isolated outputs which may be linked to displayed variables. Each alarm is configurable from instrument push buttons as: combined high and low alarm high or low alarm ***Note:** Alarms are not accessible from the fieldbus system host*
Contacts	Isolated single pole solid state switch. Ron less than 5Ω + 0.7V Roff greater than 1MΩ Vmax = 30V dc Imax = 200mA
Tag number	Thermally printed strip on rear of instrument.
PROFIBUS PA interface guide	May be downloaded from *www.beka.co.uk*

DIMENSIONS (mm)

Panel cut-out

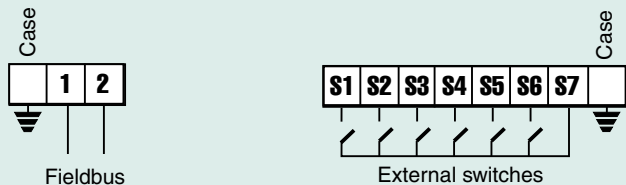**Recommended panel cut-out**

DIN 43 700
138.0 +1.0/ -0.0 x 68.0 +0.7/ -0.0

To achieve an IP65 seal between the instrument and the panel
136.0 +0.5/-0.0 x 66.2 +0.5/-0.0
Four panel mounting clips must be used

84

11

144

72

BEKA associates   BA688CF

This instrument can display one of eleven standard screens

TERMINAL CONNECTIONS

A7	A8		A9	A10		A11	A12
+	−		+	−		+	−

A1	A2		A3	A4		A5	A6
+	−		+	−		+	−

Optional alarm outputs

Case

1	2

Fieldbus

Case

S1	S2	S3	S4	S5	S6	S7

External switches

HOW TO ORDER

	Please specify
Model number	BA688CF-P

Accessories	**Please specify if required**
Six alarms	Alarms
Tag strip	Legend

TR automatyka