Installation Instructions

FCS-BPCx-yy

FCS-BPC Series

1010.1 Equipment Information

Equipment Class III, Pollution Degree 1, Installation Category I

Maximum Altitude: 2000m

Humidity: 0 to 90% (non-condensing)

Operating Temperature: -40°C to 70°C

For Indoor Use Only (IP 54 minimum enclosure)

Electrical Ratings (see Drawing for connection information and certified devices)

Area Classification	Ratings	Drawing	Agency
Class I, Div 2 ABCD T4 Class I, Zone 2 IIC T4 Ex nA IIC T4 AEx nA IIC T4	30VDC, 364mA	502-114	CSA

Installation

Refer to the drawing that is appropriate for the area in which the FCS series device will be installed. These drawings represent typical installations and are intended to address the safety aspects of the area for which they are drawn. Actual segment connections may vary depending on factors such as the required number of Fieldbus devices to be connected to the segment (determines the specific models and quantities of components used).

IMPORTANT: For SpurGuards to work properly, the Fieldbus Segment MUST be isolated from ground.

WARNING: Input Power to the FCS-BPCx-yy MUST be isolated from ground.

Mounting

The FCS connection blocks are designed to be mounted on 35 mm DIN rail using the integrated clip mechanisms at the bottom of each unit. Mounting can be vertical or horizontal. Use of DIN rail end stops is highly recommended. The FCS connection blocks must be installed inside of an enclosure with a minimum rating of IP 54.

Wiring connections

There are three different terminals available on these connection blocks. This is indicated by the last two characters of the part number – generically indicated by "yy" above. CC is Cage Clamp style connectors which are spring loaded. We supply 3 levers with each block to use to open the connector. Push on the lever to open the connector then slide the wire in the connector opening. Release the lever to cause the connector to grip the wire. ST is the Screw Terminal style. Use a screwdriver to open the connector, insert the wire, then tighten to grip the wire. PL is for the Pluggable Screw Terminal connectors. Use the same procedure as with the ST connectors. The PL version allows you to remove a 3 wire connection to the block without using a tool. They are also the only connector style which supports the discrete SpurGuards™ (FCS-SG-xx).

Testing/Troubleshooting

Once DC power has been connected to the FCS-BPC, the green power LED should be lit, indicating that DC power is present. **If the green LED is not lit**, verify the integrity and polarity of the input DC connections to the FCS-BPC, that the voltage measured at the input connection is high enough, that there are no shorts in the cables, and that the power supply is operating properly.

Operation

During normal operation, the green power LED should be lit. If the green LED is not lit, follow the instructions in the testing/troubleshooting section above.

Maintenance Requirements

The FCS-BPC blocks contain no user serviceable parts. Non-functioning units should be returned to the manufacturer for replacement or repair. No regular cleaning is required. Visible dirt may be removed with a damp cloth.

For Further Information

Contact your local MTL representative or Relcom Inc. as listed at the bottom of this page.

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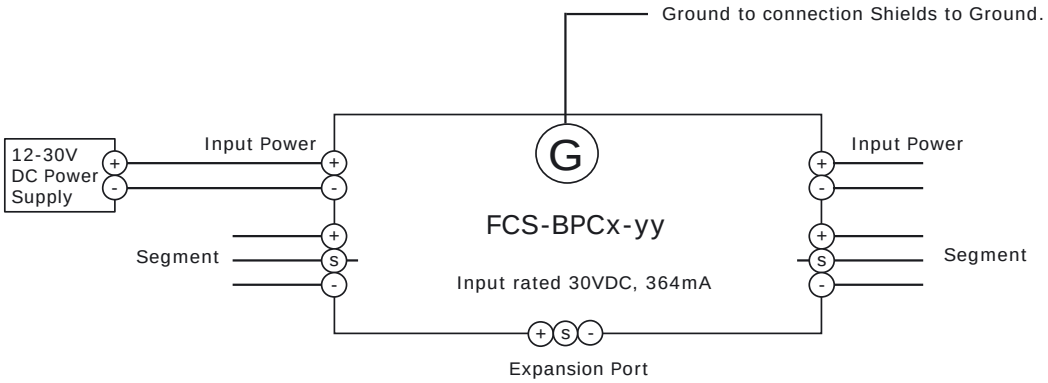
501-418 Rev. B

502-114: Div2/Zone2 Installation – (CSA and US)

HAZARDOUS (CLASSIFIED) LOCATION

Class I, Division 2, Groups A, B, C, D, T4
Class I, Zone 2 IIC
Ex nA IIC T4 AEx nA IIC T4
-40 C <= Tamb <= 70 C
TO BE INSTALLED IN AN IP 54 OR BETTER ENCLOSURE

WARNING:
EXPLOSION HAZARD - DO NOT DISCONNECT
EQUIPMENT UNLESS POWER HAS BEEN SWITCHED
OFF OR THE AREA IS KNOWN TO BE NON-HAZARDOUS.



The Expansion Port allows an FCS-E-yy to add 4 more Segment connections to the Fieldbus Segment. When using an FCS-E-yy with a FCS-BPCx-yy, make sure to use DIN Rail End Stops to prevent port disengagement.

The Segment connections may connect to a Fieldbus Host, Fieldbus Device, or a connection block that feeds other Fieldbus Devices.

The second "Input Power" connection may feed power to other BPC units.

The 24VDC Power Supplies may be installed in the Non-hazardous area.

Power Supplied must be fused for 500mA circuitry.

Part Numbers:

FCS-BPC-CC	FCS-BPCT-CC	FCS-BPCT2-CC
FCS-BPC-ST	FCS-BPCT-ST	FCS-BPCT2-ST
FCS-BPC-PL	FCS-BPCT-PL	FCS-BPCT2-PL

Installation must be in accordance with the National Electrical Code (NFPA 70, Article 504), ANSI/ISA-RP12.6, CEC Part 1, and any other applicable local codes.

C US

Relcom Inc.
INDUSTRIAL LAN | WIRING COMPONENTS AND TESTERS
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Title:
CONTROL DRAWING FOR BPC
CLASS I, DIV 2 (ZONE 2)
HAZARDOUS LOCATIONS

Approved By: Mike Strauser	Date: 1/08/06
Drawing Number: 502-114	Rev.: A

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