

7. Set-up

7.1 Setting of fieldbus address

The FieldBus Plug Accessory doesn't include any means for setting of the fieldbus address, a separate device (CAS21) shall be used for setting the correct address of the FieldBus Plug. The address is permanently stored in the FieldBus Plug and remains when it's connected to the FieldBus Plug Accessory.

7.2 PLC software

Set-up files for PLC to different fieldbuses is provided at www.abb.com/lowvoltage

Protocol	Engineering Package	File Name
DeviceNet	1SAJ923091R01 **	General.eds
PROFIBUS DPV0	1SAJ924091R01 **	Abb0a09.gsd
PROFIBUS DPV1	1SAJ924091R01 **	Abb0a09.gsd

8. Digital inputs and outputs

The FieldBus Plug Accessory has 2 inputs and 1 output (from PLC view).

8.1 Digital inputs

Bit 0 Trip, Shows status of external overload or short circuit release, Input is asserted when a switch is closed between terminals X3.1 and X3.2.

Bit 1 Run, Shows status of Run signal in PSR softstarter, the signal follows the Run relay, for exact function please see softstarter instruction.

8.2 Digital Outputs

Bit 0 Start/Stop_N, Control signal to softstarter, when the signal is asserted the softstarter gets a start command. When the signal is reset the softstarter will perform a stop.

ABB

ABB AB
Cewe-Control
Automation Products

SE-721 61 Västerås Sweden
Tel: +46 21 32 07 00
Fax: +46 21 12 60 01

PSR-FBPA

FieldBus Plug Accessory for PSR Softstarters

1. Overview

PSR-FBPA is used for connecting PSR softstarters with an ABB FieldBus Plug. It's possible to control the softstarter and achieve some status information. The accessory is primarily intended for use with starter combinations e.g. Manual Motor Starter + Softstarter or Contactor + Thermal Overload + Softstarter. The accessory has one digital output for start command and two digital inputs for Run and Trip indications from the starter combination.

2. Following fieldbus protocols are available

- AS-I
- DeviceNet
- Modbus
- Profibus DPV0
- Profibus DPV1

3. Required parts

To connect a PSR softstarter to a fieldbus system the following parts are required.

- FieldBus Plug Accessory for PSR Softstarters
- FieldBus Plug for presenting fieldbus protocol (check that the cable length is sufficient).
- Connectors for bus connection.
- End plug (some protocols).
- Software for PLC set-up.
- Device for setting of FieldBus Plug Address (CAS21)

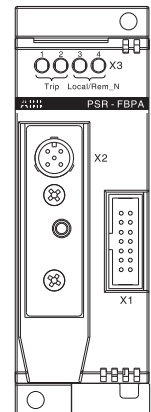
4. Device description

Terminals

- X1 Connection with PSR Softstarter via connection cable below.
- X2 Connection with ABB FieldBus Plug.
- X3 Wiring connectors for the following signals

Trip, terminals 1 and 2, used for picking up a trip signal from an external device e.g. Manual Motor Starter or Thermal Overload. The signal is forwarded to the fieldbus as digital input bit 0.

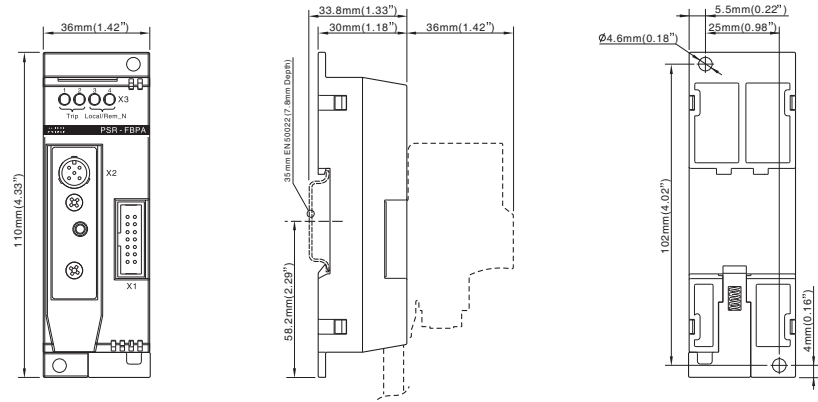
Local/Rem_N, terminals 3 and 4, used for selecting local or remote control by an external switch. When the switch is closed the softstarter ignores the fieldbus signals and uses the softstarters own terminals for control (local control), when the switch is open the fieldbus controls the softstarter.



1SFC132033M0201

ABB

5. Dimensions



6. Connections

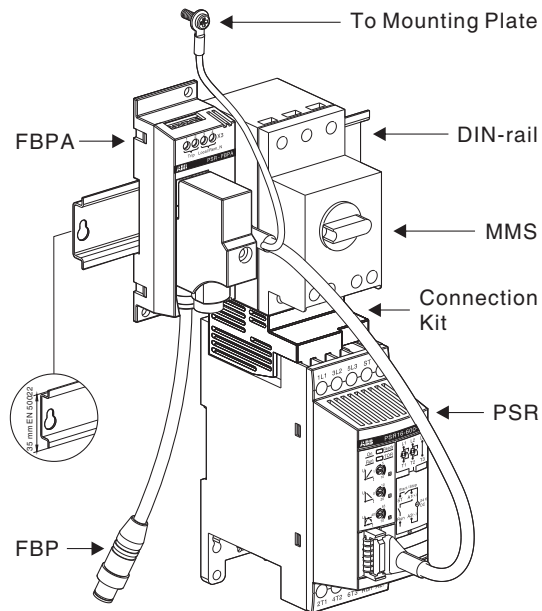
1. Remove the small cover from the softstarter front.
2. Connect the by packed cable to the connector that was hidden by the cover and to the FieldBus Plug Accessory at X1.
3. Connect the cable shield to the mounting plate. This is a function ground and it shall be kept as short as possible.

Note: this is not a protective ground and it shall be connected to the mounting plate.

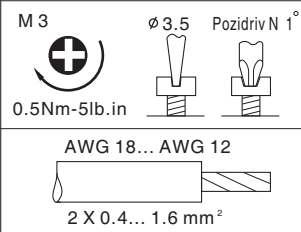
The FieldBus Plug Accessory is designed for control of a complete starter combination. There are lots of possible combinations and the following diagrams show two combinations.

Warning

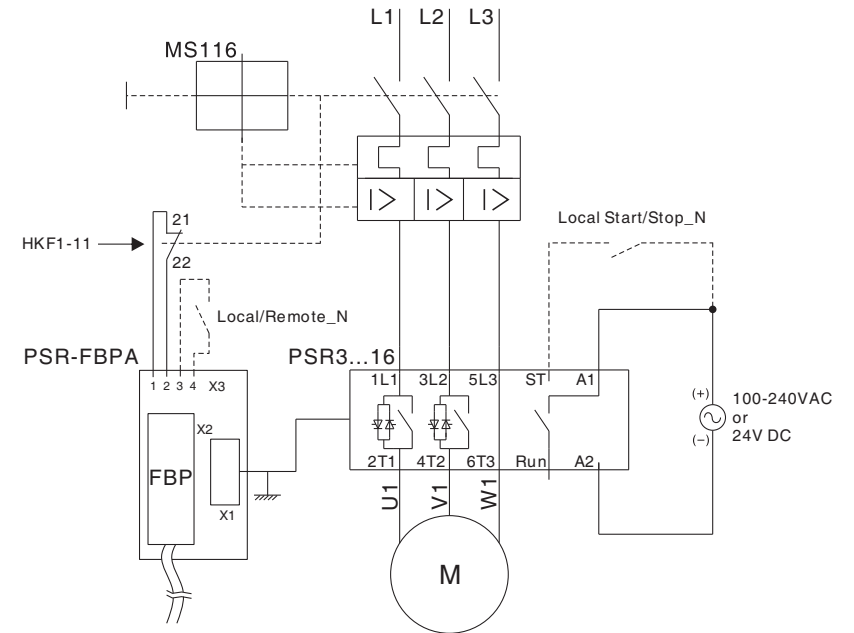
The device function does not include any interlocking means for preventing an automatic restart after reset of overload or short circuit releases. This has to be handled separately by the PLC program i.e. setting the start-signal to "0" after a possible trip.



X3 Terminals



Connection with Manual Motor Starter



Connection with Contactor + Thermal Overload

