ABB ABB Series Service Manual

PTB810K01

1. Description

ABB PTB810K01 3BSE088182R1

3. Product Information

ABB PTB810K01 3BSE088182R1 | Power Injection Terminal Block

Select I/O is an Ethernet networked, single channel granular I/O system for the ABB Ability™ System 800xA automation platform. Select I/O helps decouple project tasks, minimizes the impact of late changes and supports standardization of I/O cabinetry ensuring automation projects are delivered on-time and under budget. A Signal Conditioning Module (SCM) performs the necessary signal conditioning and powering of the connected field device for one I/O channel.

The PTB810K01 Power Injection Terminal Block Kit is used for the Select I/O Module Termination Unit (TUS810). Two PTB810s are needed per MTU. Digital output SCMs (DOS810, DOS880, DOS885) and high amp SCMs (DOS885, AIS885) require power injection. (10 pieces per package).

Features and benefits

Injects 24 V field power to high power SCMs on the MTU

Can provide up to 20 A.

Can be used in hazardous areas.

Hole for each terminal for connecting test probes (for measurements

Four screws for daisy chain option of the power supply

General info

Article number 3BSE088182R1

Type Power Injection Terminal Block

Mechanics Select I/O

Detailed data

Installation in Hazardous Area/Locations Yes/Yes

Environment and certification

Temperature, Operating -40°C (-40°F) to +70°C (158°F)

Temperature, Storage -40°C (-40°F) to +85°C (185°F)

Pollution degree Pollution Degree 2 acc. to IEC 60664-1

Relative humidity 5 to 95 %, non-condensation

Altitude -1000 to 5000 m (restrictions apply)

Mechanical operating conditions IEC 61131-2

EMC IEC/EN 61000-6-4, IEC/EN 61000-6-2

Overvoltage categories Category II acc. to IEC 60664-1

Protection class IP20 acc. to IEC 60529

CE-marking Yes

UKCA Yes

Electrical Safety IEC/EN 61010-1

UL 61010-1

CSA-C22.2 No. 61010-1-12

IEC/EN 61010-2-201

UL 61010-2-201

CSA C22.2 No. 61010-2-201

Marine certification DNV, ABS

Corrosive atmosphere G3

RoHS compliance EU RoHS, UAE RoHS, CN RoHS

WEEE compliance EU

Hazardous Area ATEX II 3G Ex nA IIC T4 Gc

II 3G Ex ec IIC T4 Gc

II 3G Ex ic nA IIC T4 Gc

II 3G Ex ic ec IIC T4 Gc

Hazardous Area IECEx Available on IPA:

II 3G Ex nA IIC T4 Gc

II 3G Ex ec IIC T4 Gc

II 3G Ex ic nA IIC T4 Gc

II 3G Ex ic ec IIC T4 Gc

Hazardous Location US/CAN cULus

CL I, ZN 2, AEx ec IIC T4 Gc, Ex ec IIC T4 Gc X

CL I, ZN 2, AEx nA IIC T4 Gc, Ex nA IIC T4 Gc X

CL I, DIV 2, Groups A-D T4

Hazardous Area CCC Ex ec IIC T4 Gc

Ex ec ic IIC T4 Gc

Dimensions

Width 41.4 mm (1.63 in.)

Depth 72.6 mm (2.86 in.)

Height 19.2 mm (0.75 in.)

Weight (including base)	38 g (0.08 lbs)