TUS810K02
Compact Product Suite hardware selector

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.

The TUS810K02 Select I/O Modular Termination Unit (MTU), for Intrinsically safe (IS) applications, hosts Generic I/O modules (GIOs) and up to 16 Signal Conditioning Modules (SCMs) which completes a single I/O unit. When using the TUS810K02 for IS applications, the Power Injection Terminal Blocks are removed and replaced with empty slot protectors.

There is self-learning coding on the FTBs that gets set upon the initial insertion of an SCM so that if an SCM is replaced, only the same type of SCM can be inserted. To insert another type of SCM, the coding can be reset manually. The MTU also has coding for the GIO, so that it can only be replaced with the same type of GIO.

TUS810K02 includes the DIN-rail mountable TUS810 MTU, 16 pcs FTB890 IS Field Termination Blocks, 2 pcs of TL820 Empty Slot Protectors and 1 pcs of TUC810 Terminal Cover. Mounting on vertical DIN-rail.

Features and benefits

- Two slots for connection of Generic I/O modules (GIO).
- 16 slots for connection of Signal Conditioning Modules (SCM).
- For intrinsically safe usage, TL820 has to be inserted into the PTB slots (included in TUS810K02)
- Two Modulebus connectors, one in and one out.
- One slot for connection of a grounding bar (GTB).
- DIN rail mounted. 2 locking devices to lock the MTU to the DIN rail.
- Slots for screw lugs (optional, for harsh high vibration environment).
- Can be used in hazardous areas
- Prepared for intrinsically safe usage by the components included in TUS810K02

More info
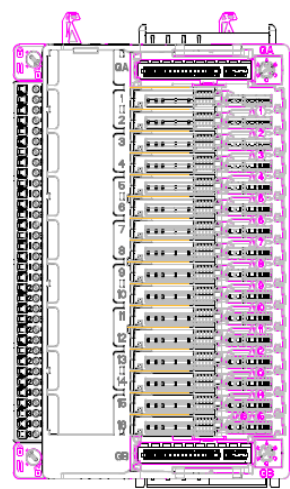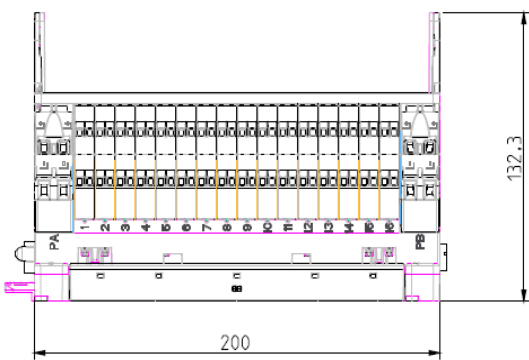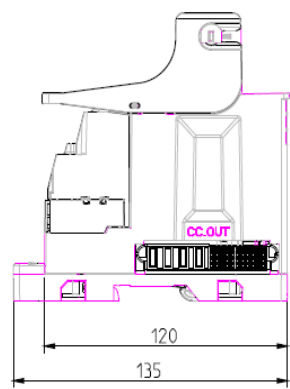
General info

Article number	3BSE093004R1
Type	Module Termination Unit for Select I/O IS
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	136 mm
Depth	131 mm
Height	200 mm
Weight (including base)	1512 g

ABB

—

solutions.abb/compactproductsuite
solutions.abb/controlsystems

—

We reserve the right to make technical changes to the products or modify the contents of this document without prior notice. With regard to purchase orders, the agreed particulars shall prevail. ABB does not assume any responsibility for any errors or incomplete information in this document.