DATA SHEET

TC810

ABB Ability™ System 800xA® 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. A Signal Conditioning Module (SCM) performs the necessary signal conditioning and powering of the connected field device for one I/O channel.

TC810 is an Ethernet Adapter for copper media with a built-in 2 port (RJ45) switch. For redundant configurations, two Ethernet Adapters TC810s are required to be installed in the TU860 or TU865 Ethernet Field Communications Interface MTUs.

Features and benefits

- Can be used as single or redundant
- Supports both Select I/O and S800 on Ethernet
- Hosts two RJ45 ports
- Built-in switch
- Built-in diagnostics
- Supports hot swap
- Can be used in hazardous area
- Mechanical locking slider which turns off power before removal
- Mechanical keying
- LED indicators

General info	
Article number	3BSE076220R1
Communication protocol	Ethernet
Type	Ethernet Adapter for copper media
HART	N/A
SOE	N/A
Redundancy	Yes
Hot swap	Yes
High integrity	N/A
Intrinsic safety	N/A
Mechanics	Select I/O
Type of external output	100 Base-TX with RJ 45 (8P8C) connector
Number of external ports	2
Type of connecting cable	CAT 5, WG 22 or better
Maximum length of cable	100 m

Detailed data	
Isolation	Galvanic isolation between Ethernet/power supply and I/O modules
Power dissipation	0.8 W
24 V consumption typ.	60 mA
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	25 mm
Depth	76.3 mm
Height	110 mm
Weight (including base)	105 g

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