GFS810
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.

The GFS810 provides ground fault detection for signals with field supply sources from external power injection.

Features and benefits

- Ground fault detection for signals with field supply sourced from external power injection.
- Measuring of resistance to ground to provide it as an analog value to the application.
- Can be used with all GIO module types (GIS810 and GIS880).
- Galvanic isolation.

Diagnostics:
- Line break supervision of ground connection.
- Internal self test.
- Test option for ground fault detection function (trough external button).
- LED indicators on the SCM indicate the operational state of the module.

General info	
Article number	3BSE093005R1
Type	Ground Fault Detection SCM, non-SIL
Redundancy	No
Hot swap	Yes
High integrity	No
Intrinsic safety	No
Mechanics	Select I/O

Detailed data

Accuracy	±15 %
Diagnostics	- Hardware error supervision - Communication supervision - Internal Power supervision
Power dissipation	0.4 W maximum
24 V consumption typ.	15 mA
Installation in Hazardous Locations	ATEX – II 3G Ex eC IIC T4 Gc
IS barrier	No
Field Input Robustness	±35 V between all terminals
Input voltage range	19.2...30 V

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	Degree 2, IEC 60664-1
Relative humidity	5 to 95 % no condensation
Altitude	-1000 to 3000 m, (-100 ... 2000 m for Zone 2/Class I Div 2)
Mechanical operating conditions	IEC 61131-2
EMC	IEC/EN 61000-6-4, IEC/EN 61000-6-2
Overvoltage categories	Category II
Protection class	IP20 according to IEC 60529
CE-marking	Yes
Electrical Safety	IEC/EN 61010-1, IEC 61010-2-201, UL 61010-2-201, CSA C22.2 No. 61010-2-201
Hazardous Area	EN 60079-0, EN60079-7
Corrosive atmosphere	G3 (ISA-S71.04)
RoHS compliance	DIRECTIVE/2011/65/EU (EN 50581:2012)
WEEE compliance	DIRECTIVE/2012/19/EU

Dimensions

Width	77.9 mm (3.06 in.)
Depth	108 mm (4.25 in.)
Height	15.8 mm (0.62 in.)
Weight (including base)	76 g (0.17 lbs)

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