Data Sheet

Symphony Plus
S+ Turbine: Auto Synchronizer Module AS800

Highlights

The Auto Synchronizer AS800 provides automatic breaker closure during generator to line synchronization or during peer to peer bus synchronization in switchyard applications. The AS800 is also capable of detecting a dead bus to initiate safe breaker closure from a live bus to a de-energized bus. The AS800 may be installed in centralized or remote locations. The AS800 integrates into DCS systems or operates standalone. Communication to the module is accomplished through the on-board Profibus interface for DCS operation or through a serial interface for standalone configuration. Monitoring and configuration are available via either of these communication ports.

Auto Synchronizer Module AS800

Specifications

Property	Characteristic/Value
Electrical	
Supply voltage	+24VDC +/-5%
Operating Current	264 mA Typical
Power consumption	6.4 W Typical
Field I/O	+24VDC (fused @ ¼ amp)
ROM810v2 (no field I/O)	+24VDC +/-5% @ 0.02 A typical de-energized (both coils) +24VDC +/-5% @ 0.17 A typical energized (both coils)
Operating	
Low Voltage (LV1-6)	Up to 48 V
High Voltage (HV1-2)	Up to 150 VAC/VDC
Digital Inputs (DI1-2)	Up to 150 VAC/VDC
Digital Outputs (DO1-6)	Dry Relay Contact (2-Form C), 3 A @ 150 VDC / 5 A @ 120 VAC
Performance	
Analog Input Voltage	1 % of full scale
Analog Input Frequency	+/- 0.01 Hz
Phase Difference	+/- 0.1 degrees

S+ Turbine: Auto Synchronizer Module AS800

Specifications

Property	Characteristic/Value
Environmental	
	CE Mark (when installed in a cabinet)
	EMC96 Directive (89/336/EEC)
	Low Voltage Directive (73/23/EEC)
	EN50082-2 Part 2
	EN61010-1 Part 1
	CSA certification (non-hazardous location)
Ambient Temperature	0° to 55° C (32° to 131° F)
Humidity	5 % to 90 % RH (±5 %) up to 55°C (non condensing) 5 % to 40 % RH (±5 %) up to 70°C (non-condensing)
Atmospheric Pressure	Sea level to 3 km (1.86 miles)
Air Quality	Non-corrosive
Installation Category	Category II per ANSI/ISA-S82.01-1994
General	
Dimensions	123 mm width, 186 mm height, 122 mm depth 4.84 in. width, 7.32 in. height, 4.8 in. depth
Microprocessors	MCF5272 with 16 MB Flash, 25 MHz, 16 MB DRAM ATmega8535 @ 8 MHz, with 8 KB Flash, 512 Bytes SRAM, 512 Bytes EEPROM
System Communications	Profibus DP
Module Mounting	Each module occupies one slot in a Termination Base Unit (TBU810)
I/O Termination	Termination Base Unit (TBU810)
TBU810 Cabinet Mounting	Standard 35 mm DIN Rail
TU Terminal Blocks 24 A / 250 V Compression	 0.2–4 mm^2 [solid] / 0.2–2.5 mm^2 [stranded] / 24–12 AWG

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