Emerson EPRO Series Service Manual

A6824

1. Description

Emerson A6824 ModBus and Rack Interface Module ModBus and Rack

3. Product Information

www.autronexa.com

Emerson A6824 ModBus and Rack Interface Module ModBus and Rack Interface Specifications

The ModBus and Rack Interface Module is designed for high reliability for the plant’s most critical rotating machinery. It reads parameters from all AMS 6500 modules and outputs these parameters via ModBus TCP/IP and/or ModBus RTU (serial). This 1-slot monitor is used together with other AMS 6500 monitors to build a complete API 670 machinery protection monitor. Applications include steam, gas, compressors and hydro turbo machinery.

Operators are provided machinery health parameters in the control environment for seamless integration. The module powers local graphical displays at the protection rack for machine and instrumentation readout. Either ModBus TCP/IP or ModBus RTU can be configured, or for redundant paths, can be used simultaneously.

The AMS 6500 is an integral part of PlantWeb® and AMS software. PlantWeb provides operations integrated machinery health combined with the Ovation® and DeltaV™ process control system. AMS software provides maintenance personnel advanced predictive and performance diagnostic tools to confidently and accurately determine machine malfunctions early.

Data Output

ModBus RTU (Serial) 19.2 kbaud

Data bits: 8

Parity: Even

Stop bit: 1

Default Address IP address: 192.168.255.1

Subnet mask: 255.255.255.0

ModBus Ethernet RJ 45 socket, 10BaseT

Green LED Power supply OK

Handle Easily remove card and provide plate for module and sensor identification

Example Data Types Speed, vibration (1/2x, 1x, etc.), gap value, alarm state, channel OK, phase

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Environmental, General

Module IP 00, DIN 40050

Front Plate IP 21, DIN 40050

Climate DIN 40040 class KTF

Operating Temperature 0° - 65°C (32° - 149°F)

Storage Temperature -30° - 85°C (-22° - 185°F)

Relative Humidity 5 - 95%, non-condensing

Vibration IEC 68-2, part 6

 0.15 mm, 10 - 55 Hz

 19.6 mm/s2, 55 - 150 Hz

Shock IEC 68-2, part 29

 98 m/s2 peak, 16 ms

EMC Resistance EN50081-1 / EN50082-2

Power Consumption Max. 5 W

A6824 Dimensions:

PCB/EURO card format according to DIN 41494, 100 x 160mm (3.937 x 6.300in)

Width: 30mm (1.181in) (6 TE)

Height: 128.4mm (5.055in) (3 HE)

Length: 160mm (6.300in)

Net Weight: app 320g (0.705lbs)

Gross Weight: app 450g (0.992lbs) includes standard packing

Packing Volume: app 2.5dm3 (0.08ft3)

Space Requirements: 1 slot

14 modules fit into each 19” rack

Ordering Information

Model Number Product Description

A6824 ModBus and Rack Interface Module for use with IMR 6000/10, IMR 6000/20 and IMR 6000/30

A6824-R ModBus and Rack Interface Module with redundancy mode for use with AMS 6500 systems

3U size, 1-slot plug-in module decreases cabinet space requirements in half from traditional 6U size cards

 API 670 compliant, hot swappable module

 Password protected user configuration

 Self-checking facilities include monitoring hardware, power input, and hardware temperature

 A6824 module can serve multiple 19” racks

 A6824 is a 6TE wide module, no redundant option, for use in the IMR6000 series, 19” rack

A6824

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