

DATA SHEET

PM862K01

ABB Ability™ System 800xA® hardware selector



The CPU board contains the microprocessor and RAM memory, a real-time clock, LED indicators, INIT push button, and a CompactFlash interface.

The base plate of the PM862 controller has two RJ45 Ethernet ports (CN1, CN2) for connection to the Control Network, and two RJ45 serial ports (COM3, COM4). One of the serial ports (COM3) is an RS-232C port with modem control signals, whereas the other port (COM4) is isolated and used for the connection of a configuration tool. The controller supports CPU redundancy for higher availability (CPU, CEX-Bus, communication interfaces and S800 I/O).

Simple DIN rail attachment / detachment procedures, using the unique slide & lock mechanism. All base plates are provided with a unique Ethernet address which provides every CPU with a hardware identity. The address can be found on the Ethernet address label attached to the TP830 base plate.

(Only compatible with System 800xA 6.0.2, Compact Control Builder 6.0.0-1 and onwards. Please see Product Update for more information.)

Features and benefits

- ISA Secure certified Read more
- · Reliability and simple fault diagnosis procedures
- Modularity, allowing for step-by-step expansion
- IP20 Class protection without the requirement for enclosures
- The controller can be configured with 800xA control builder
- The controller has full EMC certification
- Sectioned CEX-Bus using a pair of BC810 / BC820
- Hardware based on standards for optimum communication connectivity (Ethernet, PROFIBUS DP, etc.)
- Built-in redundant Ethernet Communication ports

General info		
Article number	3BSE076940R1 (PM862K01)	
Redundancy	No	
High Integrity	No	
Clock Frequency	67 Mhz	
Performance, 1000 boolean operations	0.18 ms	
Performance	0.18 ms	
Memory	32 MB	
RAM available for application	23.521 MB	
Flash memory for storage	Yes	

Processor type MPCB66 Switch over time in red. conf. max 10 ms No. of applications per controller 32 No. of papilications per controller 32 No. of diagrams per application 44 No. of diagrams per application 128 Number of different cycle times 32 Number of different cycle times 32 Cycle time per application programs Down to 1 ms Flash PROM for firmware storage 4 MB Power supply 24 V DC (19.2-30 V DC) Power consumption +24 V typ/max 210 / 360 mA Power supply 210 / 360 mA Power supply 4 Na	B. a. N. al data		
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Cycle time per application programs Down to 1 ms	No. of tasks per controller	32	
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Communication) Recommended Control Network backbone 100 Mbit/s switched Ethernet 100 ppm (approx. 1 h/year) RS-232C interface 2 (one general, 1 for service tool) RS-232C interface (COM3) (non red. only) RS-232C, 75-19 200 baud, RJ-45 female (8-pole), not opto isolated, full RTS-CTS	Ethernet interface	Ethernet (IEEE 802.3), 10 Mbit/s, RJ-45, female (8-pole)	
Real-time clock stability 100 ppm (approx. 1 h/year) 2 (one general, 1 for service tool) RS-232C interface (COM3) (non red. only) RS-232C, 75-19 200 baud, RJ-45 female (8-pole), not opto isolated, full RTS-CTS	Control Network protocol		
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RS-232C interface (COM3) (non red. only) RS-232C interface (COM3) (non red. only)	Real-time clock stability	100 ppm (approx. 1 h/year)	
RS-232C Interface (COM3) (non red. only)	RS-232C interface	2 (one general, 1 for service tool)	
	RS-232C interface (COM3) (non red. only)		
RS-232C interface (COM4) (non red. only) RS-232C, 9 600 baud, RJ-45 female (8-pole), opto isolated, no RTS-CTS support	RS-232C interface (COM4) (non red. only)	RS-232C, 9 600 baud, RJ-45 female (8-pole), opto isolated, no RTS-CTS support	

For the control of the state of		
Environment and certification		
Temperature, Operating	+5 to +55 °C (+41 to +131 °F)	
Temperature, Storage	-40 to +70 °C (-40 to +158 °F)	
Temperature changes	3 °C/minutes according to IEC/EN 61131-2	
Pollution degree	Degree 2 according to IEC/EN 61131-2	
Corrosion protection	G3 compliant to ISA 71.04	
Relative humidity	5 to 95 %, non-condensing	
Emitted noise	< 55 dB (A)	
Vibration	10 < f < 50 Hz: 0.0375 mm amplitude, $50 < f < 150$ Hz: 0.5 g acceleration, $5 < f < 500$ Hz: 0.2 g acceleration	
Rated Isolation Voltage	500 V a.c.	
Dielectric test voltage	50 V	
Protection class	IP20 according to EN 60529, IEC 529	
Altitude	2000 m according to IEC/EN 61131-2	
Emission & Immunity	EN 61000-6-4, EN 61000-6-2	
Environmental conditions	Industrial	
CE Mark	Yes	
Electrical Safety	EN 50178, IEC 61131-2, UL 61010-1, UL 61010-2-201	
Hazardous location	cULus Class 1, Zone 2, AEx nA IIC T4, ExnA IIC T4Gc X	
ISA Secure certified	Yes	
Marine certificates	DNV-GL	
TUV Approval	No	
RoHS compliance	EN 50581:2012	
WEEE compliance	DIRECTIVE/2012/19/EU	

Dimensions		
Width	119 mm (4.7 in.)	
Height	186 mm (7.3 in.)	
Depth	135 mm (5.3 in.)	
Weight (including base)	1200 g (2.6 lbs)	



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