

# **Appendix A**

## **General**

### **Specifications**

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#### **In This Appendix**

- H2 Series and H4 Series EBC Specifications
- Serial Port Specifications
- Ethernet Standards

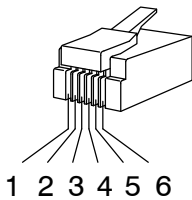
## H2 Series and H4 Series EBC Specifications

Specifications	H2-EBC	H2-EBC100	H2-EBC-F
Communications	10Base-T Ethernet	10/100BaseT Ethernet	10Base-FL Ethernet
Data Transfer Rate	10Mbps max.	100Mbps max.	10Mbps max.
Link Distance	100 meters (328 ft)	100 meters (328 ft)	2,000 meters (6,560 ft)
Ethernet Port	RJ45	RJ45	ST-style fiber optic
Ethernet Protocols	TCP/IP, IPX	TCP/IP, IPX, MODBUS TCP/IP	TCP/IP, IPX
Serial Port (RJ12)	K-sequence, ASCII	K-sequence, ASCII, MODBUS RTU	K-sequence, ASCII
Power Consumption	320mA	350mA	450mA
Manufacturer	Host Automation Prods	Host Automation Prods	Host Automation Prods

Specifications	H4-EBC	H4-EBC-F
Communications	10BaseT Ethernet	10BaseFL Ethernet
Data Transfer Rate	10Mbps	10Mbps
Link Distance	100 meters (328 ft)	2,000 meters (6,560 ft)
Ethernet Port	RJ45	ST-style fiber optic
Ethernet Protocols	TCP/IP, IPX	TCP/IP, IPX
Serial Port (RJ12)	K-sequence, ASCII	K-sequence, ASCII
Power Supplied	3680mA @ 5VDC 400mA @ 24VDC	3550mA @ 5VDC 400mA @ 24VDC
Manufacturer	Host Automation Prods	Host Automation Prods

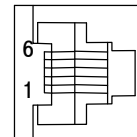
## Serial Port Specifications

Serial Port Pin Descriptions		
1	0V	Power (-) connection (GND)
2	5V	Power (+) connection
3	RXD	Receive Data (RS232C)
4	TXD	Transmit Data (RS232C)
5	RTS	Request to Send
6	0V	Power (-) connection (GND)



6-pin Male (RJ12)  
Modular Plug

6-pin Female (RJ12)  
Modular Jack  
as oriented on EBC



## Ethernet Standards

Various institutes and committees have been involved in establishing Ethernet data communication standards. These specification standards assure Ethernet network compatibility for products from a broad variety of manufacturers.

The EBC module complies with American National Standards Institute (ANSI) and Institute of Electrical and Electronic Engineers standard ANSI/IEEE 802.3, Carrier Sense Multiple Access with Collision Detection (CSMA/CD) Access Methods and Physical Layer Specifications. This standard has been adopted by the International Organization for Standardization (ISO) as document ISO/IEC 8802-3.

The Electronic Industries Association (EIA) and Telecommunications Industries Commercial Building Telecommunications Wiring Standard designated EIA/TIA-568A defines implementation of 10BaseT (twisted pair) and 10BaseF (fiber optics) for Ethernet communications.

The same two organizations produced EIA/TIA TSB40-Additional Transmission Specifications for Unshielded Twisted-Pair Connecting Hardware. The purpose of this document is to specify transmission performance requirements and connecting hardware requirements.