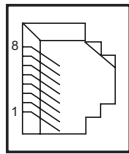


### MODULE SPECIFICATION

#### LAN INTERFACE

**Transmission medium** ..... 100BaseTX or 10BaseT Ethernet™  
**Transmission protocol** ..... Modbus™ over high-speed Ethernet™  
**Transmission rates** ..... 10 - 100 Mbits/s  
**LAN connector type (x2)** ..... RJ 45 (8-pin)

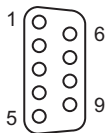


Pin #	Function
1	Tx (+)
2	Tx (-)
3	Rx (+)
4	BP
5	BN
6	Rx (-)
7	AP
8	AN

**LAN isolation (dielectric withstand)** ..... 1500 V  
**Action on software malfunction** ..... Halt CPU / Reset CPU

#### SERIAL INTERFACES (COM 1 & COM 2)

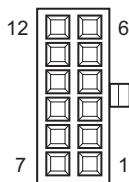
**Transmission rates** ..... 1.2 – 115.2 kbits/s (async.)  
**Transmission standard** ..... RS485 half-duplex  
**COM 1 connector (on carrier)** ..... 9-pin D-type connector (F)  
**COM 2 connector (on controller)** ..... 9-pin D-type connector (M)



Pin #	Function
1	OV
2	NC
3	Tx/Rx (+)
4	Tx/Rx (+)
5	Tx/Rx (-)
6	Tx/Rx (-)
7	NC
8	NC
9	OV

#### POWER SUPPLIES

**Voltage** ..... 10.9 – 12.6 V dc  
**Current** ..... 0.4 A (typ.)  
 ..... 0.5 A (max.)



Pin #	Function
1 & 7	+12V
2 & 8	OV
3 & 9	OV (PF)
4 & 10	N.C.
5 & 11	N.C.
6 & 12	Signal (PF)

Rear connector

PF = Power fail

**Railbus (12 V) via carrier** ..... 15 mA (max.)

Ethernet™ is a trademark of Xerox Corporation  
 Modbus™ is a trademark of Schneider Automation Inc  
 HART® is a registered trademark of the HART Communication Foundation

#### LED INDICATORS

##### Power (green)

ON	OFF	Flashing
Power OK	No power	–

##### Master (yellow)

ON	OFF	Flashing
Master	Standby	–

##### Healthy (yellow)

ON	OFF	Flashing
Healthy	Not healthy	Refreshing

##### Fault (red)

ON	OFF	Flashing
Failed	OK	Starting

##### Failsafe (red)

ON	OFF	Flashing
Module failsafe	OK	No control

##### LAN A (yellow)

ON	OFF	Flashing
OK	Not in use	Active

##### LAN B (yellow)

ON	OFF	Flashing
OK	Not in use	Active

##### COM 1 (yellow)

ON	OFF	Flashing
OK	Not in use	Fault

##### COM 2 (yellow)

ON	OFF	Flashing
OK	Not in use	Fault

##### A-B Link (yellow)

ON	OFF	Flashing
OK	Not in use	Fault

##### I/O COM (yellow)

ON	OFF	Flashing
OK	Not in use	Fault

#### HAZARDOUS AREA APPROVALS

**Location of equipment** ..... Zone 2, IIC T4 hazardous area  
 .....or Class 1, Div 2, Groups A, B, C, D T4 hazardous location

##### Applicable standards:

- ◆ Factory Mutual Research Co., Class No. 3611 for Class I, Division 2, Groups A, B, C, D hazardous locations
- ◆ CSA Std C22.2 No.213 for Class I, Division 2, Groups A, B, C, D hazardous locations
- ◆ ATEX Category 3 (for Zone 2 installation) to EN50021:1999 protection type n.

**See System Specification Guide for other parameters**

#### MECHANICAL

**Module dimensions** ..... 69 (w) x 232 (l) x 138 (h) mm

**Weight (approx.)** ..... 1.35 kg