# **TECHNICAL SPECIFICATION**



## 4 input 4 output expander with Modbus

# AMB-4I-40



### Features

- 4×30V DC digital inputs
- 4×NO relay outputs
- Baud rate: 9600 128000
- Modbus addresses: 8 bit
- RX/TX and activity indicators
- Powered 8-36V DC or AC
- DIN rail mounting
- Compact size

The AMB-4I-4O input/output expander with Modbus RTU interface. It has 4 isolated digital inputs with voltage range up to 30VDC and 4 relay output with 5A 230V range and NO contacts. The power supply range is 8 to

36V and accept DC or AC voltage. The use of DC / DC technology for supplying relays enables a wide range of supply voltages.

| Description      | Parameter                                  | Description           | Parameter                             |
|------------------|--|-----------------------|---------------------------------------|
| Serial Interface |  | Digital Inputs        |                                       |
| Interface Type   | RS485                                      | VIN <sub>max</sub>    | 30V DC                                |
| Data Rate        | 2400, 4800, 9600, 14400, 19200,            | Logic 1 Voltage range | 3V to VIN <sub>max</sub>              |
|                  | 28800, 38400, 57600, 115200,<br>128000 bps | Connector             | Screw connector, 28÷12AWG /<br>2.52mm |
| Signals          | A, B and GND                               | Digital outputs       |                                       |
| Data Length      | 8 bits                                     | Output number         | ×4                                    |
| Parity           | None                                       | Configuration         | Potential free, relay NO              |
| Stop Bits        | 1  | Voltage and Load      | 5A 230V AC and 5A 30V DC              |
| Baudrate setting | 4 way DIP switch                           | Connector type        | Screw connector, 28÷12AWG /           |
| Address setting  | 8 way DIP switch                           |                       | 2.52mm                                |
| Connector        | Screw connector, 28÷12AWG /<br>2.52mm      | Indicators            |                                       |
|                  |  | Inputs indicators     | × 4 ø3mm LED green                    |
| Digital Inputs   |  | Outputs indicators    | × 4 ø3mm LED yellow                   |
| Input number     | × 4  | RX/TX                 | × 2 ø3mm LED yellow/green             |
| Input type       | Opto-isolated 1.5kV                        | Power                 | ×1ø3mm LED red                        |
| Configuration    | Every input separate                       | Activity              | ×1ø3mm LED blue                       |

| Description              | Parameter                             | Description                        | Parameter                 |
|--------------------------|---------------------------------------|------------------------------------|---------------------------|
| Power supply             |                                       | Housing                            | PVC                       |
| Supply voltage           | 8-30V DC or 8-24V AC                  | Dimensions (L×W×H)                 | 80mm × 90mm × 50mm        |
| Power consumption        | 1.3W (all relay ON) 0.3W (relays off) | Weight                             | 110g                      |
|                          |                                       | <b>Environmental Specification</b> |                           |
| Connector type           | Screw connector, 28÷12AWG /<br>2.52mm | Operating temp.                    | -10 ~ 75°C (-14 ~ 167°F)  |
|                          |                                       | Storage temp.                      | -40 ~ 85°C (-40 ~ 185°F)  |
| Physical Characteristics |                                       | Ambient RH                         | 5% ~ 95% (non-condensing) |
| Installation             | DIN-Rail mounting                     |                                    |                           |

### Expander



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