

INDUSTRY Range

Network Interface Card

BETF80 2

www.balogh-rfid.com

DESCRIPTION

BETF80 2 is a slave interface managing 2 independent read/write channels.

BETF80 2 has multiple messaging protocols :

- EtherNet®/IP (Allen Bradley)
- MODBUS®/TCP to read (resp. write) 125 (resp.120) words per request
- TCP/IP + Balogh Protocol to read/write 8 Kbyte requests on both channels

Product configuration services are made from an internal Web server or "Balogh Ethernet Setup" software

Maintenance is carried out with the Web server



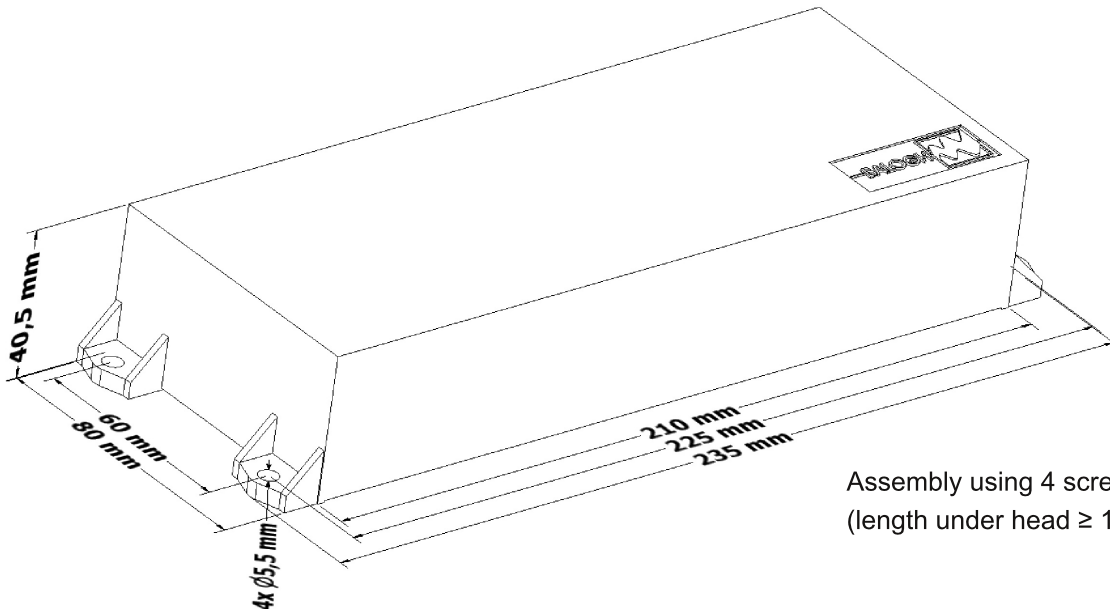
COMMUNICATION

The BETF80 2 is associated with the TCF type transceivers and with Balogh 13.56MHz tags and all ISO15693 standard tags.

The BETF80 2 associated with TCF... 1346 enables to read/write TAM tags byte/byte in BALOGH 52K mode.

Communication with the supervisor is provided by the Ethernet link (10/100Mb) following EtherNet/IP, MODBUS/TCP or Balogh TCP/IP protocols.

ASSEMBLY DATA



Assembly using 4 screws Ø 5.5 mm
(length under head \geq 10 mm)

CHARACTERISTICS

| | min | nominal | max | Unit |
|--|-----|---------|-----|------|
|--|-----|---------|-----|------|

General

| | | | | |
|-----------------------|-----|--------|----|----|
| Operating temperature | -25 | | 70 | °C |
| Protection rating | | IP65 | | - |
| Casing | | Rilsan | | - |
| Weight | | 1200 | | g |

Power

| | | | | |
|--------------------------------------------|----|-----|-----|----|
| Supply direct voltage | 21 | 24 | 29 | V |
| Protection against short circuits | | yes | | - |
| Supply current add that of R/W heads @ 24V | | 132 | 150 | mA |

Network

| | | | | |
|----------|----|--|-----|--------|
| Bit rate | 10 | | 100 | Mbauds |
|----------|----|--|-----|--------|

CONNECTION



| Pin | Ethernet (M12 4pins female D coded) |
|-----|-------------------------------------|
| 1 | Tx+ |
| 2 | Rx+ |
| 3 | Tx- |
| 4 | Rx- |

| Pin | Channel (M12 5pins female) |
|-----|----------------------------|
| 1 | 24V (OUT) |
| 2 | S |
| 3 | E |
| 4 | 0V |
| 5 | NC |

| Pin | Power (M12 5pins male) |
|-----|------------------------|
| 1 | 24V (IN) |
| 2 | NC |
| 3 | NC |
| 4 | 0V |
| 5 | NC |

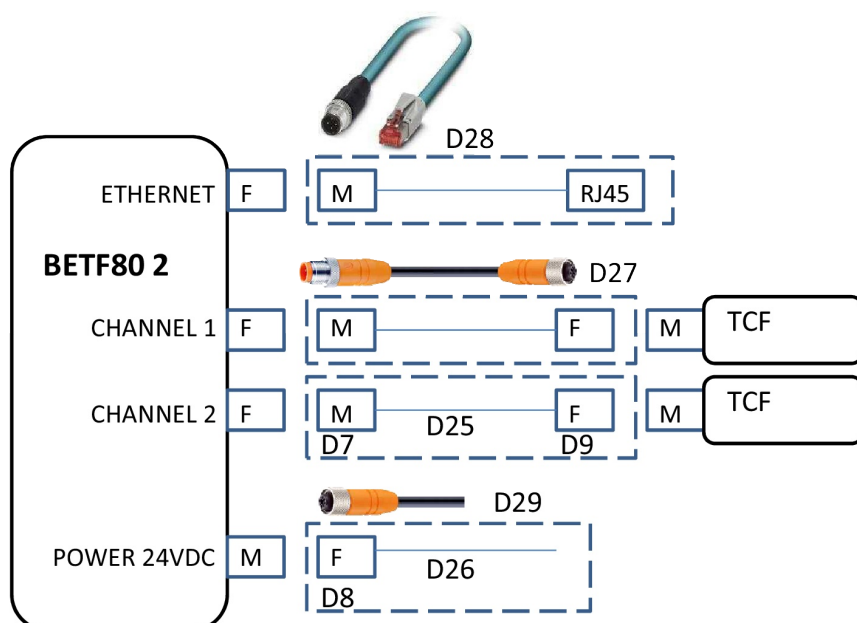
- Shield connection for cables connected to the sockets :

- Power supply 24V : no shielding.
- Network : cable 10/100Mbps, the overall shield must be in contact with 360° of the metallic cable connector housing.
- R/W heads (TCF) : cables with overall shielding, the overall shielding must be in contact with 360° of the metallic cable connector housing.

INDICATOR LEDS

| Led | State | Functional |
|----------|------------------------------------|--------------------------------------------------------|
| Mode | Start Phase 1: green then orange | Start phase of bootloader start-up |
| | Start Phase 2: flashing orange | System initialization |
| | Start Phase 3: fast flashing green | Start Services |
| | Start Phase 4: slow flashing green | Initialize Ethernet stack |
| | Green | Nominal operation |
| | Green then flashing red | Control execution error on one of the radio channels |
| Ethernet | Flashing green | The connection to the network |
| Id | Off | Industrial Ethernet not initialized |
| | Flashing green | Start Industrial Ethernet : waiting for the connection |
| | Green fixed | One or more "customers" connected |
| RF | Flashing orange | TCF absence |
| | Orange fixed low intensity | TCF presence, no tag in the radio field |
| | Orange fixed high intensity | TCF presence, tag present in the radio field |

ACCESSORIES



| Rep | Nature | Description | Cable | Designation |
|-----|-------------------------|------------------------------------------------------------------------------|-------|-------------------|
| D7 | Connector M12 male | 5 pins, PG9 output for Ø 9 max, shieldable | | 202237 |
| D8 | Connector M12 female | 4 pins, PG9 output for Ø 9 max | | 202239 |
| D9 | Connector M12 female | 5 pins, PG9 output for Ø 9 max, shieldable | | 202274 |
| D25 | TCF cable | 4x0,5 ² , braid shield | PVC | 201282 |
| D26 | Power cable | 2x1 ² | PVC | 202240 |
| D27 | Channel M12 male/female | 5x0,34 ² , braid shield, two M12 overmolded, A coded, 5M | PUR | Cordon blindé M/F |
| D28 | Ethernet M12 male/RJ45 | 2x2x0,23 ² , CAT5E, S/FTP, direct, hi-flex, M12 D coded, RJ45, 5M | PVC | BM12D-RJ45-5M |
| D29 | Power M12 female | 5x0,34 ² , shieldable, M12 overmolded, A coded, 5M | PUR | CBLM12F5P 5M |