

Description

The **PowerPlex®** Touch Panel 7.0" allows ease of operation of a **PowerPlex®** installation. The high-resolution, resistive 7.0" colour touch display has been designed for use under harsh conditions. Operation is effected by pressure on the surface.

PowerPlex® is a decentralised power distribution and control system. All **PowerPlex®** modules ensure reliable control and monitoring of the electrical installations on board, either alone or in combination with other **PowerPlex®** components. Besides the protection against overcurrent they allow readout of data of the connected level sensors and temperature sensors as well as of shunts.

All modules of a system communicate and interact via an SAE-J1939-compliant CAN bus. **PowerPlex®** is configured by using the **PowerPlex®** Configuration Software and the configuration is transferred to the modules by means of USB/CAN converters.

Typical applications

- Buses, special vehicles, mobile homes etc.
- Watercraft, e.g. leisure boats, workboats

Features and benefits

- Compact and light-weight design
- Visualisation and intuitive operation
- High speed of response
- High touch resolution for maximum precision
- Freely configurable control of electrical loads
- System status control and monitoring
- Integration and display of sensor units (tank, battery, temperature)
- Combination with or replacement of panels and pointer elements

Part number

PP-M-TP070-000-0-Z-00

Approvals

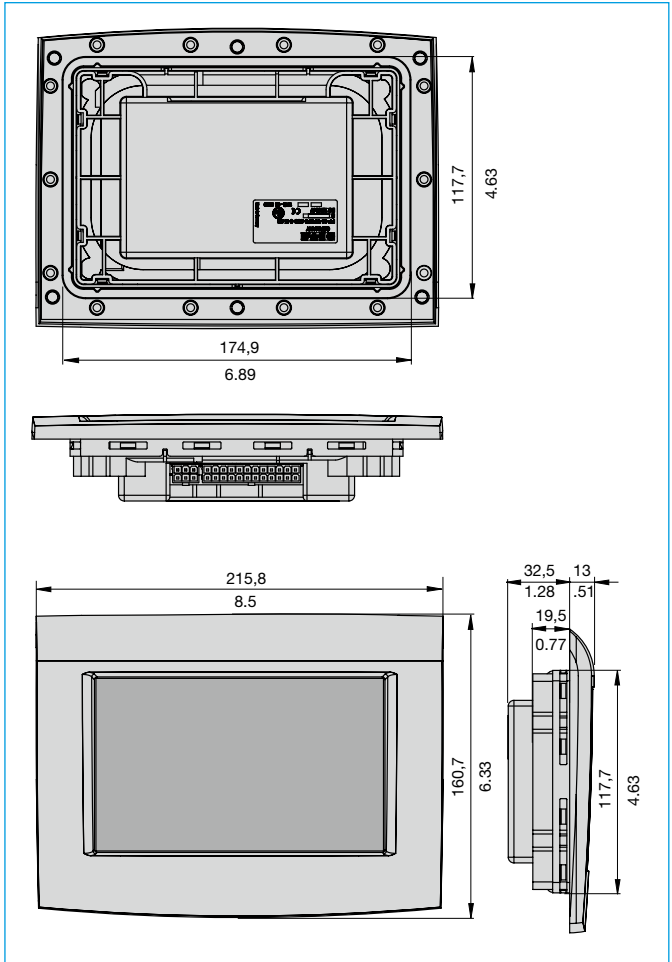
| Authority | Standard | Rated voltage |
|-----------|---------------------------|---------------|
| KBA | ECE regulation No 10 (E1) | DC 12 V |
| | | DC 24 V |



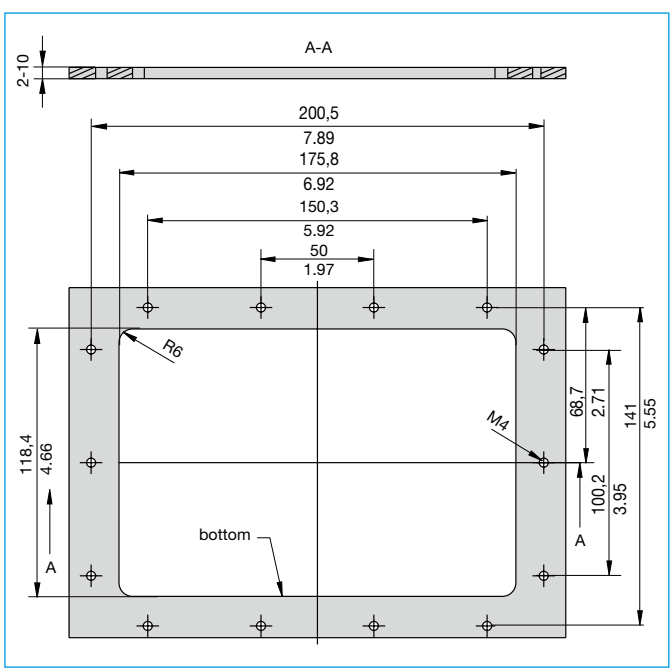
Technical data

| | |
|--|--|
| Display size | 7.0" |
| Resolution | 800 x 480 pixels |
| Touch sensor | resistive touch |
| Brightness | typically 400 cd/m ² |
| Rated voltage | DC 12 V / DC 24 V |
| Operating voltage | 9 ... 32 V DC |
| Max. current consumption | 370 mA (brightness of display: 100%) 160 mA (brightness of display: 5%) |
| Protection class | IP20 (mounting method A, front area) IP65 (mounting method B, front area) |
| Operating temperature range | -20...+70 °C (-4...+158 °F) |
| Storage temperature range | -30...+80 °C (-22...+176 °F) |
| Humid heat (IEC 60068-2-30, Db) | 40 °C 95% RH, 240 hrs |
| Vibration IEC 60068-2-6, Fc | 10 Hz to 58 Hz: ± 0.76 mm 58 Hz to 200 Hz: acceleration approx. 10 g |
| IEC 60068-2-64, Fh | 10 Hz to 2000 Hz: acceleration approx. 2 g _{RMS} |
| Shock (IEC 60068-2-27, Ea) | 2.5 g (11 ms) |
| EMC | CE marking to EN 61000-6-2, EN 61000-6-4 |
| Mass | approx. 550 g |
| Interfaces: | |
| CAN to | SAE J1939 250kBits/s |
| The CAN terminals at each end of the bus have to be connected with a 120 Ω resistor. | |
| USB | USB 2.0 service interface |

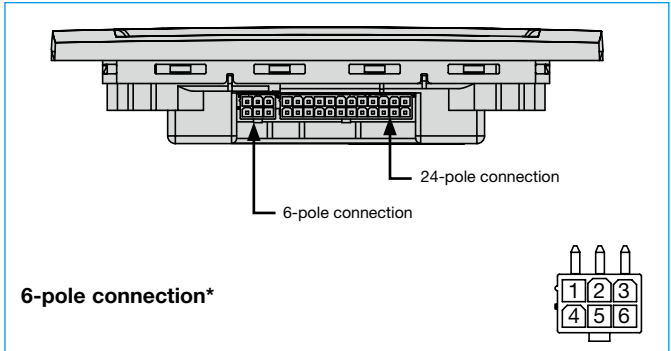
Dimensions



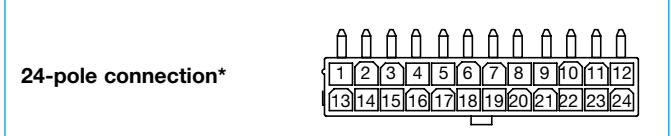
Mounting dimensions



Pin assignment



| interface | assignment | pin |
|---------------|------------|-----|
| CAN interface | CAN-H | 1 |
| | CAN-L | 2 |
| | SHLD | 3 |
| | CAN-H | 4 |
| | CAN-L | 5 |
| | SHLD | 6 |



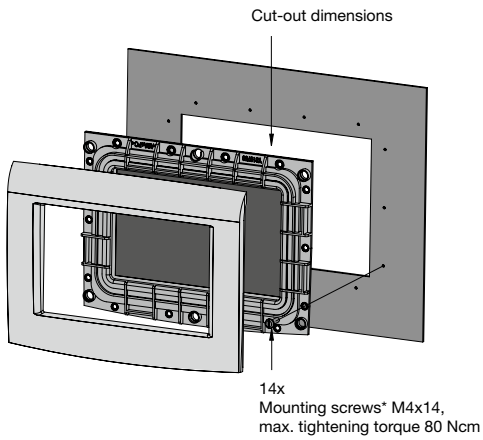
| interface | assignment | pin |
|---|-----------------------|-----|
| voltage supply (DC 12 V / 24 V, DC 9 ... 32 V) | U _{Batt} + | 1 |
| | U _{Batt} - | 2 |
| cont. plus (DC 12 V / 24 V, max. 36 V) | D + | 3 |
| USB 2.0 service interface | Data _{USB} + | 5 |
| | GND _{USB} | 6 |
| | Data _{USB} - | 17 |
| | +5 V _{USB} | 18 |

| interface, upon request | assignment | pin |
|---------------------------|----------------------|-----|
| LIN interface (CIB) | LIN | 4 |
| audio interface | L 0 | 13 |
| | GND _{AUDIO} | 14 |
| multipurpose load outputs | L 1 | 15 |
| | GND _L | 16 |
| | L 2 | 9 |
| | L 3 | 10 |
| | L 4 | 11 |
| | L 5 | 12 |
| | GND _L | 8 |
| | Ethernet | TX+ |
| | TX- | 20 |
| | RX+ | 21 |
| | RX- | 22 |
| RS 485 | A _{RS485} | 23 |
| | B _{RS485} | 24 |

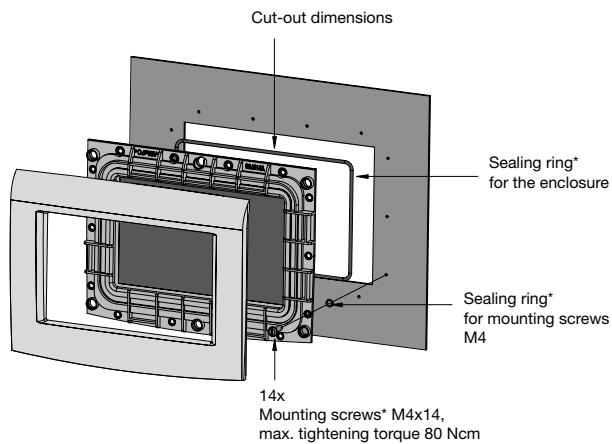
*) Mating connectors are not included in delivery (see accessories)

Mounting

Mounting method A – IP20, front area



Mounting method B – IP65, front area

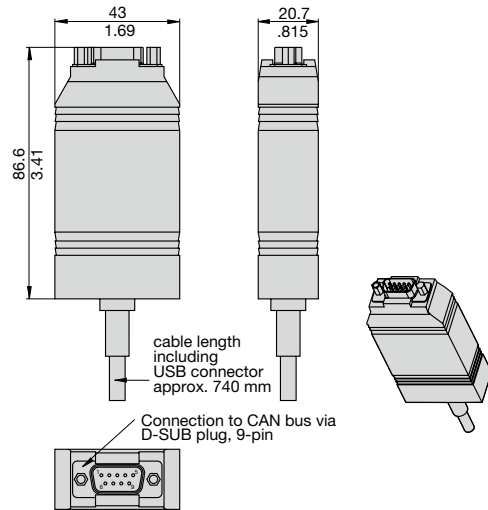


Note: Tapping screws 3.9 x 14 may be used for the installation of both mounting versions

*) Mounting screws and sealing rings are not included in delivery.

Accessories

USB/CAN converter: X PP-USBCO
X PP-USBC1 (opto-decoupled)



Pin assignment D-SUB output plug

| PIN | assignment |
|-----|------------|
| 2 | CAN-L |
| 7 | CAN-H |

This is a metric design and millimeter dimensions take precedence. Applicable for nominal dimensions without direct tolerance indication: DIN ISO 286 ± IT 13. Refer to product datasheet for installation and safety instructions.

PowerPlex® Configuration Software

Sealing pack for mounting method B:
(includes sealing ring for enclosure and sealing rings for screws)

XPP-SP-100

Connector pack:

(includes 6- and 24 pole connector casing, 30 x female crimp terminals 16 AWG (1.31mm²))

XPP-CP-100

All dimensions without tolerances are for reference only. E-T-A reserves the right change specifications at any time in the interest of improved design, performance and cost effectiveness, the right to make changes in these specifications without notice is reserved. Product markings may not be exactly as the ordering codes. Errors and omissions excepted.