E-T-A *PowerPlex*® Gateway PP-M-CG300

Description

The ***PowerPlex***® Gateway is a multiprotocol module to connect ***PowerPlex***® systems with other networks. It allows the combination of a ***PowerPlex***® CAN bus with various other bus systems: CAN (e.g. NMEA2000, SAE J1939), Modbus. Configuration of the devices is by means of software via the ***PowerPlex***® CAN.

PowerPlex® is a modular, CAN bus based control system allowing the realisation of intelligent on-board electrical systems on boats and recreational vehicles. A ***PowerPlex***® system connects and controls a wide range of tasks and electrical components in complex on-board electrical systems. All ***PowerPlex***® control modules ensure reliable and efficient power supply of all functionally relevant components. The wide range of ***PowerPlex***® products offers various possibilities to run processes automatically or to link them with conditions.

By means of the ***PowerPlex***® configuration software, the application-specific logics for power distribution, power control and power monitoring will be defined, stored or adjusted. Communication is via the ***PowerPlex***® CAN, following SAE J1939.

Typical applications

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

Features

- Two high-speed CAN channels
- Galvanical isolation of the CAN interfaces
- Flexible gateway to other bus systems:
  CAN (e.g. NMEA2000, SAE J1939), Modbus
- Filtering of data traffic
- User-friendly configuration and parameter selection

Part number

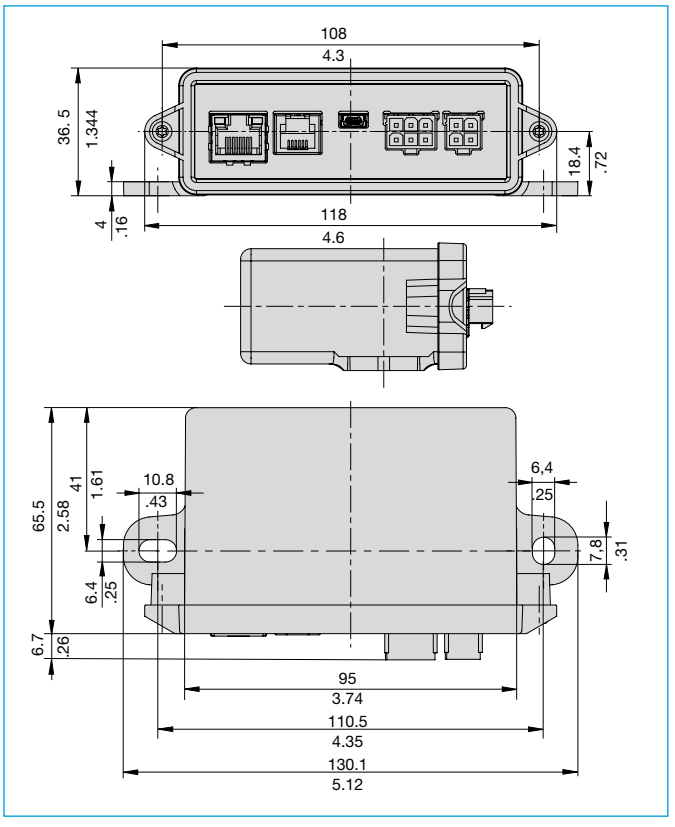
PP-M-CG300-000-0-Z-00

Technical data

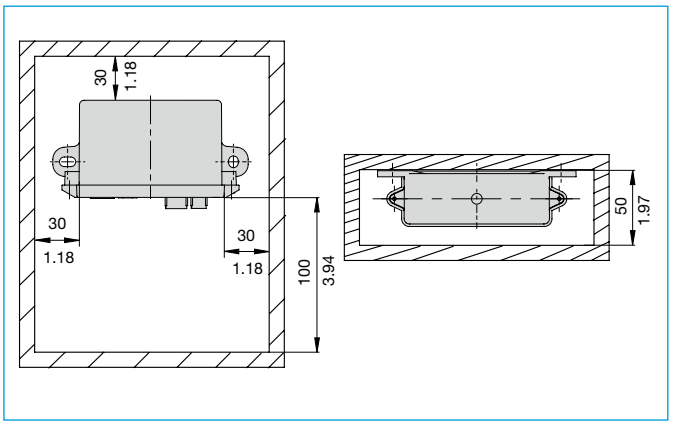
Rated voltage	DC 12 V/24 V
Operating voltage	DC 9 ... 32 V
Current consumption	typically 72 mA at DC 12 V typically 44 mA at DC 24 V
Degree of protection	IP22 when mounted vertically with terminals pointing downwards
Operating temperature range	-40 ... +70 °C (-40 … +158 °F)
Storage temperature range	-40 ... +85 °C (-40 … +185 °F)
Humidity (IEC 60068-2-30, Db)	95 % RH, 144 hrs
Vibration IEC 60068-2-6, Fc IEC 60068-2-64, Fh	10 Hz to 57 Hz: ± 0,38 mm 57 Hz to 200 Hz: acceleration 5 g 10 Hz to 2000 Hz: acceleration approx. 2 g_{RMS}
Shock (IEC 60068-2-27, Ea)	25 g (11 ms)
EMC	CE logo to EN 61000-6-2, EN 61000-6-4
Mass	approx. 105 g
Interfaces:	
CAN I	***PowerPlex***® CAN, 250 kbit/s
CAN II	galvanically isolated
	configurable to: 100 kbit/s, 125 kbit/s, 250 kbit/s, 500 kbit/s or 1 Mbit/s
The CAN terminals at each end of the bus have to be terminated with a 120 Ω resistor.	
Modbus	RS485 connector

7

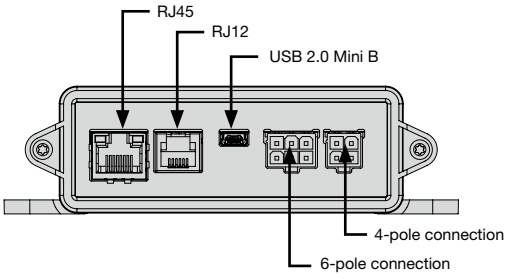
Dimensions



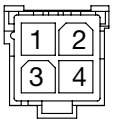
Mounting dimensions



Pin assignment:

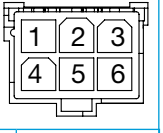


4-pole connection*



interface	assignment	pin
voltage supply (DC 12 V/24 V, DC 9 ... 32 V)	U_{Batt} +	1
	U_{Batt} -	2
RS485: Modbus	A_{RS485}	3
	B_{RS485}	4

6-pole connection*



interface	assignment	pin
CAN II: galvanically isolated CAN	CAN-H	1
	CAN-L	2
	SHLD	3
CAN I: ***PowerPlex®*** CAN	CAN-H	4
	CAN-L	5
	SHLD	6

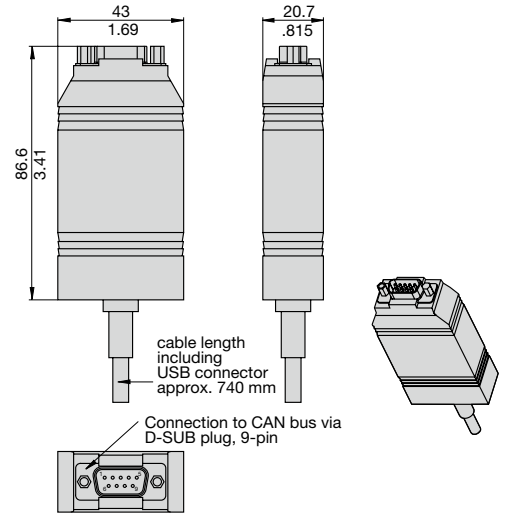
interfaces upon request	bushing
Ethernet interface	RJ45
LIN interface	RJ12
USB 2.0 service interface	USB 2.0 Mini B

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

7

Accessories

USB/CAN converter: XPP-USBC0
XPP-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**

Connection package:
(holding a 4-pole and 6-pole connector casing,
10 x crimp terminal 16 AWG (1.31 mm²)) XPP-CP-110

7