

## Description

The **PowerPlex®** AC Module is a 14 channel power distribution unit equipped with either E-T-A single pole or double pole 8345 circuit breakers with full remote operation. With the remote circuit protection device installed, all AC loads are protected for short circuit and overload conditions sized per the load breakdown provided while completely remote control through the PowerPlex software to allow easy on/off operation. This remote capability allows the OEM to place the AC modules in reduced access locations and closer to the load set for more economical wire runs. The circuit breakers are bolted into the unit for a secure connection, but allow for easy changes on the fly if a load needs to be added or replaced suddenly keeping the system flexible. Each circuit breaker allows for a manual reset in the event of a failure on the bus increasing the reliability of the system. All modules of a PowerPlex system are communicating via CAN bus using a SAE J1939 based protocol. PowerPlex can be configured directly by the vehicle manufacturer using the PowerPlex Configuration Software on a standard PC. The configuration is transferred to the modules via the CAN bus using a USB/CAN adapter.

## Typical Applications

- Watercraft, e.g. recreational and workboats, special vehicles

## Features and Benefits

- Well-proven CAN technology
- Simple configuration
- Windows based configuration software
- Fourteen load outputs
- Field Serviceable
- Bottom/Side access cabling
- Bolted/Pluggable breakers
- Removable panel cover
- LED Status Indicators

## Ordering information

X8345R-S00-0649 **PowerPlex®** AC Module

## Approvals

GL (pending), CE-Logo

## Status Indications

There are four LEDs on the top side of each module indicating module and system status.

Name	Indication	Meaning
L1	red, solid	Line 1 AC Voltage
L2	red, solid	Line 2 AC Voltage
Bus	yellow, flashing quickly	CAN bus activity
Status	green, long flashing interval (approx. 1 sec)	Status of whole module (i.e. normal, bootloader mode, no module address, defective module)

The status LED has a different flashing frequency depending the state of the module.



**X8345R-S00-0649**

## Technical Data

Voltage rating	AC 120 V / AC 230 V
Operating voltage	100...240 V AC
Max. total current per module	100 A
Degree of protection	IP44 when mounted vertically with the load outputs pointing downwards
Operating temperature range	-40...+85 °C (-40...+185 °F)
Storage temperature range	-40...+85 °C (-40...+185 °F)
Humid heat (IEC 60068-2-30, Db)	55 °C / 95 % RH, 24 hours
Vibration (IEC 60068-2-6, Fc)	2 Hz to 13.2 Hz: ± 1 mm 13.2 Hz to 100 Hz: acceleration 0.7 g
(IEC 60068-2-64, Fh)	10 Hz to 2000 Hz: acceleration approx. 21.5 grms
Shock (IEC 60068-2-27, Ea)	25 g (11ms)
EMC (EMC directive, CE logo)	emission: EN 61000-6-4
Mass	approx. 6350 g
<b>Interfaces:</b>	
CAN according to	SAE J1939 250kBits/s, up to 30 modules per system
Inputs L1, L2, N, G	M5 Stud Max Terminal Width: 13.70mm Max Cable O.D for IP Rating: 32.00 mm (1.26")
CANbus:	(1) 5-Pin M12 A-Code
Outputs L1, L2, N, G	M5 Stud Max Terminal Width: 13.70 mm (14) Single or (10) Double Pole Loads