

TYPE APPROVAL CERTIFICATE

DNV-GL

This is to certify that the undernoted product(s) has/have been tested in accordance with the relevant requirements of the DNV GL Type Approval System.

Certificate No.	86 379 - 09 HH
Company	E-T-A Elektrotechnische Apparate GmbH Industriestr. 2 - 8 90518 Altdorf, GERMANY
Product Description	PowerPlex
Type	Power Module PP-M-DC024 Panel Module PP-M-PM024
Environmental Category	C, H, EMC1
Technical Data / Range of Application	PowerPlex is a CAN based system for connecting and controlling electrical loads and for monitoring and transmitting sensor data and commands. Operating voltage: 12/24V DC Degree of protection: IP22 Operating temperature range: -40°C to 85°C Firmware: V 10.xx Konfigurationssoftware: V 4.xxx Hardware-Stand: Rev. 3E Software Questionnaire Requirement Class 3 (08.12.2009) Environmental Category "H": Test "Cold" with -40°C / 2h Test "Dry heat" with +85°C / 2h
Test Standard	Guidelines for the Performance of Type Approvals, Chapter 2- Test Requirements for Electrical / Electronic Equipment and Systems (VI-7-2), Edition 2003
Documents	Test reports: E-T-A PP-M-Protokoll_GL-Baumusterprüfung (05.11.09+20.12.11), Testprotokoll Firmware PP-M (30.07.13), ECL-EMC Test Report no. 09-125 (05.11.2009); Data sheets: D_PP_Power_e_160112 and D_PP_Panel_e_160112 ; Documents acc. to submitted files (Dokumentenstand 05.11.09/13.03.12/19.08.13)
Remarks	This certificate is issued on the basis of GL Guidelines for the Performance of Type Approvals, Chapter 1 - Procedure (VI-7-1), Edition 2007.

Valid until **2019-12-10**
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File No. **I.B.08**
Hamburg, 2015-06-18

Type Approval Symbol




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Further Technical Data / Range of Application

Power Module PP-M-DC024

Current consumption (stand by):	typ. 40mA
Max. total current:	102A
Number of analogue inputs:	4
Number of digital inputs:	8
Number of 8A High side switch output:	6 (Short circuit protected, adjustable from 1A to 8A in 1A steps, dimmable)
Number of 25A High side switch output:	2 (Short circuit protected, adjustable from 4A to 25A in 2A steps, dimmable)
Number of 1A High side switch output:	4 (Short circuit protected)
Number of Status outputs for LED:	8

Panel Module PP-M-PM024

Current consumption (stand by):	typ. 40mA
Max. total current:	20A
Number of analogue inputs:	4
Number of digital inputs:	32
Number of 8A High side switch output:	2 (Short circuit protected, adjustable from 1A to 8A in 1A steps, dimmable)
Number of 1A High side switch output:	4 (Short circuit protected)
Number of Status outputs for LED:	32

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