



piCAN-Charge-Controller



CANopen

Features

- Compact controller for the electric charging stations
- Standard-compliant charging components according to IEC 61851
- DIN-rail mounting
- DC wide input range (14V to 55V)
- CAN communication interface
- S0, RS485, USB interfaces

Overview

The piCAN-Charge-Controller allows charging of electric vehicles in the charging mode 2 and 3 according to the IEC standard.

It controls and monitors the switching device and the connector lock, communicates with the electric vehicle and identifies the charging cable. The charge controller provides so a maximum safety level during the charging.

The charge controller can use either single-phase or three-phase AC current (up to 63A) and is therefore suitable for the private, as well as for the public sector. The double integrated CAN interface allows the communication to a higher-level control system, or a host computer (e.g. piA-AM3505) and enables so to control, monitor and account the charging from a distance. The necessary adjustment of the CAN-Node-IDs is established using a hex encoding switch.

The integrated S0 and RS485 interfaces allow the connection of external energy meter, so the consumption data can be recorded. The USB interface is available for simple parameterization of the charging component.

The piCAN-Charge-Controller can switch the connected equipment (e.g. electronic door opener) and/or analyze signals. External switches can be connected to the 12V inputs. Through the internal piezo buzzer audible feedback is possible.

The custom-programmable microcontroller and an integrated EEPROM enable the programming according to the future use and customer requirements.

Details

piCAN-Charge-Controller

Controller	32-Bit PIC (Microchip Technology) 80Mhz, 512 KB Flash-ROM, 128KB RAM, RTC
EEPROM	2 KB EEPROM for configuration parameters and unique ID
LEDs	1 x RGB status LED
Power Supply	14V – 55V DC ± 5%
Interfaces	2 x CAN 1 x S0 1 x RS485 PP, CP, 230V- 3-phase sense
Door Opener	1 x door opener with - High Side Switch for current limiting - Input for reading the door contact - 12V Power Supply protected by 750mA polyfuse
LED-Outputs	2 x Open Drain Output for LEDs - with 12V Power Supply - protected by 750mA polyfuse
Inputs	2 x 12V input signal for push-button - with power supply protected by 750mA polyfuse
Enclosure	DIN-rail housing, light gray/anthracite; Polycarbonate UL94V-0
Enclosure Dimension	X:107mm; Y:90mm; Z:58mm;
Temperature Range	-25°C - +85°C