

Power supply

PINTSCH BAMAG GMC-E

Battery charging device for uninterruptible power supply

Use

The power supply unit ensures that the level crossing system remains in operation both under normal conditions, and also in case of power failure by using battery standby for a certain period of time.

Function

The modular battery charging device GMC-E feeds the complete level crossing installation and charges the lead acid storage batteries. All the electrical consumers are protected or combined in appropriate groups and safeguarded via automatic circuit-breakers which are centrally located on the circuit-breaker board. The power is centrally fed directly from the battery. The supply delivered by the public power supply network is limited by surge arresters and distributed to the individual consumers in the switch box via earth-leakage circuit-breakers and automatic circuit-breakers.

Design

The devices essentially comprise a power section with mains filter, power factor correction, mains transformer, a half-controlled asymmetric bridge-connected actuator, a smoothing reactor and control electronics. The latter is accommodated on a circuit board with its own power supply, control block, pulse generator, current regulator, voltage regulator, high-rate charge changeover and temperature compensation. All the electrical components are arranged on a base plate. All adjustment components are located on the face of the plug-in control board. The rectifiers are designed for charging currents between 6A and 36A.

Features

The GMC-E can be programmed by an 8 button control unit on the front side. It is equipped with a 2x20 display to control the functions. Moreover it is possible to download the data by using the RS232 interface. Various parameters can be programmed like charging threshold, power charging, charging remote indication, etc. The output current can be set in 1A steps. Three digital inputs and two relay outputs are available to control the GMC-E. Dependent on the batteries temperature the charging voltage can be adjusted automatically (option).

Specification

Dimensions	: 400mm x 300mm x 140mm
Weight	: ca 9.4kg
Operating temperature	: -20°C to +70°C
Supply voltage	: 230V AC -15%/+10% 50/60Hz; 75Hz
Current consumption	: max. 5.2A (worst case)
Output voltage/current	: 18V/36A; 36V/18A; 30V/20A
(versions)	24V/27A; 60V/10A



GMC-E