PowerSources

Robert-Bosch-Str. 7 D - 40668 Meerbusch
Tel.: +49 - 2150 - 91 28 00
Fax.: +49 - 2150 - 91 28 09
http: www.powersources.de
E-mail: wvs@powersources.de

SCOPE OF SUPPLY

PAD 1011 SERIES

Generating set with Deutz 1011 Series **Diesel engine**, air cooled at 1.500 rpm, with mechanical governor and protection of hot and moving parts, directly coupled by means of a flexible disk, with Zanardi **alternator** at 50 Hz, 400/230 V, power factor 0,8, H class insulation, IP 21 protection, compound voltage regulator and with brushes, forming a monoblock mounted on base frame made of pressure bent steel with antivibration mountings. The open set version includes industrial type silencer which is supplied loose. Stop solenoid and batteries included. The gensets are delivered ready for starting.

- **Manual Control Panel (MAN.EST.1) for open set version:** Control panel for measure and protection, mounted on the base frame with antivibration mountings, equipped with:
  - CMM 10 control unit which includes the following functions and components:
    - Measure and visualisation of the following parameters (instant values) by means of a display: Three-phase voltage, three-phase current, frequency.
    - Mechanical hour counter.
    - LED indicators: Activated system, battery charger failure, low fuel level, low oil pressure, high engine temperature, overspeed and belt failure.
    - Alarms: Low oil pressure, high engine temperature, overspeed, generator failure.
    - Start key, stop button.
    - Sound alarm.
  - Fuel level gauge
  - Emergency push button
  - Four pole circuit breaker
  - One single-phase socket
  - One three-phase socket
- **Manual Control Panel (MAN.INS.1) for soundproof version:** Mounted on a cabinet inside the soundproof canopy. All control panel indications can be seen through a transparent door and the access to the controls is possible through this door.
- **Automatic control panel (AUT.STD.1):** Metal cabinet to be mounted on the wall, separate from the generating set, with following components:
  - CGEA-10 control unit for control and protection of the generating set which includes:
    - The condition of the generating set, measurements, alarm messages, etc are shown on the LCD display. All messages can be deleted with the reset button.
    - Phase detector and a 2 A battery charger included.
    - Measurements: Generator frequency, voltage and current of set lines, voltages of mains lines, working hour counter, battery voltage.
    - Alarms: Low oil pressure, high engine temperature, low fuel level, belt failure, overspeed, generator voltage out of margin, overcurrent of the generator, frequency out of margin, start failure.
    - Adjusting parameters (adjustable through an access code): Voltage margins, maximum current, relationship of current transformers, frequency margins, maximum duration of the start attempts, cooling time, time for switching off the generating set after mains recovery, maximum delay for stopping order.
    - Functioning mode: Automatic, manual, test and disconnected.
  - Fuel level gauge.
  - Emergency push button.
  - Sound alarm.
  - Contactors included.
  - Sockets and connecting cables from control panel to genset.
- **Supersoundproof cabin:** Modular structure, made by pressure bent profiles and sound attenuating elements with a rock - wool layer which complies with the prevailing regulations. Includes hot air extraction fan for the engine and alternator cooling. Residential type silencer included. Sound pressure level of 68 dB(A) at 7m.
- **Weatherproof cabin:** Modular structure, made by pressure bent. Includes hot air extraction fan for the engine and alternator cooling. Residential type silencer included.