

Power Generator

FD 42 B-Q

Article: 36410

Code: F.0042.4.BZ-Q2170T190-02



Picture for reference only

Main Features

- Electronic voltage regulation +/-1 %
- One phase voltage control
- Low disturbance level THD < 3%
- Alternator short circuit capacity 300% 10s In
- Class H insulation
- Protection index IP23

- Performance class G3 (acc. ISO 8528-5)
- Ready to load just after start
- AMF and MRS functionality and protection
- Autonomy 24,4 h with 75 % load
- Compact design
- Forklift manouvable from the front and side wall

General Data

Maximum power ESP 44,0 kVA / 35,0 kW **Nominal power PRP** 40,0 kVA / 32,0 kW

Nominal Current PRP 58 O A

> Frequency 50 Hz

Voltage 400 V

Emission standard non-emission

> Fuel Diesel (EN 590)

Fuel tank capacity

Fuel consumption @

4,7/7/9,5/10,8 l/h 50% / 75% / 100% / 110% PRP

Autonomy @ 75% / 100% load 24,4 / 18,0 h

> Weight without fuel ~850 kg

Dimensions L x W x H 2170 x 1020 x 1300 mm

92 dBA Guaranteed noise power Lwa Acoustic pressure @7mLpa ~62 dBA

Main Components & Equipment

- Baudouin 4M06G8D0/S engine
- Linz PRO18M E/4 alternator
- Brushless alternator
- Electronic AVR HVR-11
- ComAp IL-AMF25 Controller
- Schneider Z63/4 type generator circuit breaker
- GCB shunt release coil
- Linear automatic battery charger
- Engine heater
- Electronic speed governor
- Fuel system direct injection
- Welded frame with 190 I fuel tank, spill containment and noise insulation
- Two fuel inlets
- Four lifting eyes
- Extended forklift skids for easy attachment to the ground

For details see page 3

Definitions

Nominal Power PRP:

Prime power available in variable load application in accordance with ISO 8528, 10% overload capacity is available for a period of 1 hour within a 12-hour period of operation. Average power consumption should not exceed 70% PRP for each 24h of operation.

Maximum power ESP:

Standby power rating is applicable for supplying emergency power for the duration of a utility power interruption. No overload allowed, average power consumption should not exceed 70% ESP. Limited to 500h of operation per year including 25 hours with ESP

Norms and Directives

- Machinery directive 2006/42/EC
- Low voltage directive 2014/35/EU
- EMC directive 2014/30/EU
- Noise directive 2000/14/EC
- ISO 8528-1/2018, ISO 8528-5/2022
- ISO 8528-13:2016
- IEC 60204-1

Contact data

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Engine

Manufacturer Baudouin

Type 4M06G8D0/S

Made in China

Engine power 35,7 kW

Emission standard non-emission

Rotation per minute 1500 rpm

Engine governor electronic

Governor class G3 (ISO 8528-5)

Displacement 2,3 | No of cylinder 4

Fuel system direct injection

Electrical system 12 V

Cooling system capacity 16,0 I

Oil pan capacity 9,5 I

Fuel type Diesel (EN 590)

Alternator

Manufacturer Linz

Type PRO18M E/4

Made in Italy

Nominal Voltage 400 V

Nominal power factor ($\cos \varphi$) 0,8

Ambient temperature, altitude 40 °C, 1000 m a.s.l.

Nominal Power 42,0 kVA

Protection index IP 23

No of bearing Single bearing

Coupling Direct

Technology Brushless

Short circuit maintaining capacity 300% 10s

Efficiency 89,3 %

Insulation class H

Total harmonic content THD <3 %

Reactance Xd" 7.4 %

Voltage regulator type AVR HVR-11

Voltage measurement 1 phase

Voltage accuracy +/-1%

AVR supply system Auxiliary winding

Controller

- Controller type: ComAp InteliLite AMF 25
- Support of Dual AMF/MRS applications
- Direct communication with EFI engines
- Total remote monitoring and control
- Intuitive operator interface, adjustable Main Screen
- Real time clock
- Comprehensive history log with up to 350 events
- 3 phase true RMS current and voltage measurement
- Both mains and generator voltage detection
- Active/Reactive Power and Power Factor per phase measurement
- Run Hours counter with source selector
- 3 maintenance timers (counting even under zero)
- Multipurpose flexible timers (also for rental)
- Battery voltage measurement
- Complete engine and alternator protection
- CAN modules support
- USB port on-board
- 2 slots for plug-in modules
- Plug-in module concept for more capabilities (RS232, RS485, Ethernet, GPRS, 4G/LTE, Modbus, SNMP, emails, SMS, I/Os)
- Cloud-based monitoring and control via WebSupervisor) (optional module required)
- Geofencing and tracking via WebSupervisor (optional module required)
- Control and monitoring over SMS (GSM module required)
- 3 levels of password protection
- In-built PLC, complemented with a monitoring/debugging tool, for additional functionality, if required
- Spare inputs and outputs available by default: binary input 1, binary output 1, analogue input 1,
- A version for low temperature is also available



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Standard equipment

- Baudouin 4M06G8D0/S engine
- Electronic engine speed governor
- Oil low pressure switch
- Oil pressure sensor
- Engine high temperature switch
- Engine high temperature sensor
- Engine preheating with thermostat
- Engine oil Titan Cargo 15W40
- Fuel filter with water separator
- Coolant Fuchs Maintain Fricofin DP
- Coolant inlet outside, on the top of the canopy
- Starting batteries 100 Ah
- Linear automatic battery charger
- Linz PRO18M E/4 alternator
- Electronic AVR HVR-11
- GCB Schneider Z63/4
- GCB shunt release coil
- ComAp IL3-AMF25 controller
- Acoustic alarm
- Emergency stop button
- Silenced canopy, RAL 7024
- Fuel tank integrated with a frame and spill containment 1
- Two fuel inlets inside the canopy
- Fuel level indicator
- Engine and alternator anti vibration mounts
- Exhaust silencer with compensator
- Forklift supports and lifting eyes

Optional equipment

- Oil draining hand pump
- Battery disconnector
- Power Lock type power output
- Power sockets box SOM 205
- Transfer switch controlled by generator controller
- Transfer switch with ATS controller
- ATS accessories for outdoor application
- GPRS communication card
- Ethernet card
- RS 485, RS 232 card
- Remote display
- Fuel inlet outside of the canopy with lock
- Generator spill containment level detector
- External, double wall fuel tank 1 000 10 000 l
- Fuel tank filling pump and shut-off valve

Maintenance guidelines

Fuel filters replacement 500 h / 1 year

Oil replacement After first 100h, then every 500 h / 1 year
Oil filters replacement After first 100h, then every 500 h / 1 year

Coolant replacement 4000 h / 2 years

Air filter replacement 1000 h

Battery replacement 2 years

Electrical installation According to local requirements, at least once per year

Installation guidelines

Power terminal

GCB terminal

Recommended cable for up to 30m power cable way
Recommended cable for do 30m generator heater supply

Exhaust pine min diameter (may 7 m 4 heads)

Flexible 5x16 mm² Flexible 3x2,5 mm²

Exhaust pipe min diameter (max. 7 m, 4 bends) Exhaust pipe min diameter (max. 15 m, 4 bends) 60,3 mm 60,3 mm

*For additional cable connection with FOGO ATS see ATS wiring diagram

Warranty

Continuous operation generators

12 months up to 1000 working hours

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