



Standard features:

Engine:

12V electric starting with battery Radiator designed to work up to 50°C ambient temperature without power deration

Low oil pressure and high coolant temperature sensors Fuel filter

Lube oil filter

Dry air filter

Protection grids for rotating parts

Electronic speed governor Industrial muffler

Alternator:

4P, three phase, single bearing, brushless, self excited Automatic voltage regulator, digital type

Structural steel base:

Vibration dampers between engine/alternator monoblock and the base Fuel tank <u>Set mounted control panel</u>

Available on request:

Engine:

- 24V electric starting
- Electronic speed governor
- Oil suction pump [soundproof sets only]
- Fuel transfer pump
- Water pre-heating [sets in standby to the mains only]

Silencer:

- Residential silencer for open sets designed to reduce noise level by ≤ 28 / 30 dB(A)
- Residential silencer for open sets designed to reduce noise level by ≤ 18 / 20 dB(A)

Generating set model 15BA/33TNE

Documentation:

- Generating set use and maintenance manual
- Engine use and maintenance manual
- Alternator use and maintenance manual
- Generating set controller instruction manual
- Wiring diagram
- EC Declaration

Regulations and Standards:

Generating set is designed in compliance with the following regulations and standards:

- ISO 8528
- 2006/42/EC (Machinery) and subsequent amendments
- 2014/30/EU (Electromagnetic Compatibility) and subsequent amendments
- 2014/35/EU (Low Voltage) and subsequent amendments
- 2000/14/EC (Noise Emission in the Environment) and subsequent amendment 2005/88/EC
- EN 61439-1

Control panel:

- Remote ATS system for set mounted automatic control panel
- AMF+ATS control panel
- Differential protection
- Coolant temperature reading
- Oil pressure reading

Enclosure:

- Soundproof canopy designed to achieve 70±3 dB(A) @ 7m
- Soundproof canopy designed to achieve 75±3 dB(A) @ 7m

Low speed trailer

Generating set designed and manufactured in facilities certified to ISO 9001



bertoli POWER UNITS

Generating set

Prime power output (PRP)	30 / 24 (KVA / kW)
Standby output (STP)	33 / 26,4 (KVA / kW)
Power factor	0.8
Voltage	400 (V)
Frequency	50 (Hz)
Rated speed	1500 (RPM)
Current @ PRP	43,35 (A)

Fuel consumption	
Fuel	Diesel EN590
Fuel tank capacity	100 I
Autonomy @ 75% of PRP	approx 14 h
Consumption @ full load	9,5 l/h
Consumption @ 75% of PRP	7,0 l/h
Consumption @ 50% of PRP	4,7 l/h

General features	
Battery capacity	1 x 100 Ah
Voltage	12 Vdc
Cooling fan air flow	1,8 m³/sec
Air consumption @ PRP	170 m³/h
Exhaust gas flow (max)	211 Kg/h
Exhaust gas temperature (max)	504 °C

Approx overall dims and weight

L	(W)	H	Weight
(cm)	(cm)	(cm)	(Kg)
112	62	78	280

Standard operating environmental conditions

Temperature	25°C
Barometric pressure	100 kPA
Relative humidity	30%

Engine Manufacturer BAUDOUIN Model 4M06G35/5 Emissions Stage 0 Cooling Water Aspiration Turbocharged Direct injection Combustion system Compression ratio 17,5 : 1 Electronic Governor Cycle Diesel, 4 strokes Cylinders (number/configuration) 4L Bore x Stroke 89x92 (mm) Displacement 2,31 Standby mechanical power 28 kWm 35A / 12V Alternator Starter motor 3,7 kW / 12V Recommended lube oil ACEA E3-E5 MAX oil capacity 11,5 I Coolant capacity (engine + radiator) 9,4 I Oil consumption (% of fuel) ≤ 0,4

Alternator Manufacturer

Model	ECP28 VL/4 C
Rated power	30 kVA
Insulation class	Н
Mechanical protection	IP23
Regulator	DSR, digital
Accuracy	±1 %
Execution	Brushless
Efficiency at full load	88,3 %
Short circuit current	>300 %
Overload per 20 sec	300 %
Waveform Distortion (THD) at full load (LL/LN)	1,8 / 1,9 %
MAX Overspeed	2250 RPM
Air flow	15,7 m³/min

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Rating definitions

Prime Power (PRP)	Prime power is the maximum power available with varying loads for an unlimited of hours. The average power output during a 24h period of operation, must not exceed 80% of the declared primo power between the prescribed maintenance intervals at standard environmental conditions. A 10% overload is available for 1h every 12h of operation.
Standby Power (STP)	Stand-by power is the maximum power available for a period of 500h/y with a mean load of 90% of the declared stand-by power. No overload is permissible for this use.



Manual control panel

- Set mounted
- 4P magneto-thermal circuit breaker
- BE24A Plus digital controller
- Fuel level gauge
- Emergency stop push button

Autostart control panel

- Set mounted
- 4P magneto-thermal circuit breaker
- BE24A Plus digital controller
- Fuel level gauge
- Automatic battery charger
- Emergency stop push button
- Arranged for remote transfer switch

BE24A

• Digital controller for manual and automatic management of generators.

Front Panel features:

- 2 LEDs
- three position key selector (ON / OFF / START)
- 6 push-buttons
- indication of the main engine alarms
- 4 digit display showing engine
- generator alarms and parameters

Parameters displayed:

- ✤ <u>Generator</u>:
- Voltage
- Frequency
- current
- Engine:
- battery voltage
- charger alternator voltage
- running hours
- engine speed (RPM)
- Automatic shutdown on low oil pressure, high engine temperature, charge failure, low fuel level
- In addition to above alarms, the display can show following faults:
- external emergency stop
- belt break
- over-/under frequency
- over-under voltage
- failed start
- over-under speed
- overload
- memory failure.



Picture may not show the actual product due to presence or absence of optional items



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Soundproof canopy

Noise level achieved : $75 \pm 3 \, dB(A) @ 7 \, m$ measured in open space

- Sturdy unit construction in electrowelded steel sheet
- Sound absorbing lining of unalterable and a

dequately thick materials

- Ventilation silencers made up of sound-absorbing baffles
- Recessed knobs with lock
- Sealing strip on the door shutters ensure an

excellent acoustic and water proofing;

- Hinges fastened with screws •
- Hinged window for electric board, made up of safety
- glass, internal glass holding frame, outer boarder seal
- Appropriate paintings for indoor and outdoor ٠
- installation and finishing with RAL epoxy painting
- Rainproof gratings on the ventilation openings
- Exhaust silencers

Approx overall dimensions and weight

L	W	H	Weight
(cm)	(cm)	(cm)	(Kg)
250	100	175	1020

Trailer for slow towing

SINGLE AXLE TRAILER with 2 wheels positioned at the sides. Fix rigid DRAW BAR complete with towing eye suitable for standard balls (Ø = 50 mm)

Front STABILIZER, adjustable in height

Approx overall dimensions and weight

(cm) (cm) (Kg)



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