# JABBOUR POWER SARL

جـــبـــور بـــاور ش.م.م.

## Electric Packaged Generatorsets – Perkins Powered

**Bernini-Design**

BE24

BE22

BE2000

Huegli Tech AG. Switzerland

Digital Controllers

**Electric packaged generator set with BE24 panel**

**ComAp**

InteLite

InteliGen

InteliSys

Huegli Tech AG. Switzerland

LCD Controllers

Watercooled, 400V-0.8PF-3ph 50Hz 1500rpm/ 440V-0.8PF-3ph 60Hz 1800rpm

| Model | Type | KVA(50Hz) | | KVA(60Hz) | | Fuel Cons. | Set Dimensions | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Set | Engine | Prime | Stdby | Prime | Stdby | l/hr(av.50Hz) | L(cm) | W(cm) | H(cm) | Weight(kg) |
| JP10 | 403C-11G | 9 | 10 | 11 | 12 | 2.2 | 143 | 69 | 96 | 314 |
| JP15 | 403C-15G | 13.5 | 14.5 | 16.1 | 17.5 | 3.2 | 154 | 69 | 96 | 402 |
| JP22 | 404C-22G | 20.3 | 22.7 | 23 | 26.1 | 4.5 | 165 | 69 | 99 | 485 |
| JP34 | 1103A-33G | 30.8 | 33.7 | 36.2 | 39.7 | 5.95 | 160 | 76 | 116 | 772 |
| JP50 | 1103A-33TG1 | 45 | 49.6 | 53.9 | 59.4 | 8.99 | 190 | 76 | 116 | 841 |
| JP66 | 1103A-33TG2 | 60 | 66 | 68.7 | 75.4 | 11.65 | 190 | 76 | 116 | 882 |
| JP90 | 1104C-44TAG1 | 78.7 | 90.9 | 85.1 | 100 | 12.20 | 190 | 76 | 130 | 960 |
| JP100 | 1006TG1A | 93 | 103 | 11.5 | 122.5 | 18.30 | 240 | 75 | 130 | 1150 |
| JP110 | 1104C-44TAG2 | 100 | 114 | 110 | 128 | 20.40 | 240 | 76 | 140 | 1220 |
| JP150 | 1006TAG | 136 | 150 | 162.5 | 179 | 26.46 | 250 | 76 | 140 | 1250 |
| JP175 | 1006TAG2 | 150 | 175 | NA | NA | 27.75 | 260 | 76 | 140 | 1400 |
| JP180 | 1306-E87TG2 | 163 | 178 | NA | NA | 32.5 | 270 | 100 | 172 | 2000 |
| JP230 | 1306C-E87TAG3 | 208 | 229 | 232.9 | 254.1 | 34.9 | 270 | 100 | 172 | 210 |
| JP275 | 1306C-E87TAG6 | 250 | 275 | NA | NA | 42 | 270 | 100 | 172 | 2200 |
| JP350 | 2306C-E14TAG1 | 300 | 350 | 350 | 408 | 46.6 | 330 | 101 | 185 | 2900 |
| JP400 | 2306C-E14TAG2 | 354.5 | 400 | 409.3 | 440.8 | 52.5 | 330 | 101 | 185 | 3150 |
| JP450 | 2306C-E14TAG3 | 404.6 | 450 | 442.3 | 504.2 | 60.9 | 330 | 101 | 185 | 3280 |
| JP500 | 2506A-E15TAG1 | 455 | 500 | 563 | 625 | 72 | 375 | 120 | 215 | 375 |
| JP550 | 2506A-E15TAG2 | 500 | 550 | 625 | 687 | 76 | 375 | 120 | 215 | 3760 |
| JP650 | 2506C-E18TAG1 | 561.1 | 651.8 | 636.1 | 697.3 | 81 | 394 | 155 | 220 | 4760 |
| JP700 | 2806C-E18TAG2 | 636.1 | 701.5 | 632.8 | 693.6 | 92 | 394 | 155 | 212 | 4840 |
| JP800 | 4006C-23TAG2A | 730 | 800 | 750 | 844 | 121 | 4250 | 192 | 229 | 6100 |
| JP900 | 4006C-23TAG3A | 800 | 900 | 844 | 938 | 130 | 425 | 192 | 229 | 6300 |
| JP1125 | 4008TAG2(A) | 1022 | 1125 | 995 | 1098 | 189.84 | 490 | 200 | 226 | 7510 |
| JP1375 | 4012TWG2 | 1250 | 1375 | 1250 | 1375 | 223 | 494 | 200 | 230 | 9000 |
| JP1650 | 4012TAG2(A) | 1508 | 1658 | 1512 | 1663 | 257 | 520 | 220 | 230 | 10300 |
| JP2270 | 4016TAG2 | 2058 | 2264 | NA | NA | 366 | 600 | 232 | 320 | 15100 |

# SPECIFACTION OF STANDARD FEATURES OF GENERATORSETS

## 1. OUTPUT RATINGS

Output ratings are listed in the above table. The genset is normally supplied connected for 380/415V, 3 Phase, 50Hz, 0.8PF, but alternative voltages/frequencies are available at request.

## 2. ENGINES

Perkins, water-cooled, 4 stroke, diesel engine.

**Governor**

Mechanical, compliant with BS5514, or Electronic depending on engine type and model.

**Electrical System**

12 Volt up to P140, 24 Volt on all larger models. Oil pressure and water temperature switches are included.

**Cooling Radiator**

Tropical capacity radiator with engine driven fan complete with protection guards, designed to cool engine at specified output in ambient temperatures up to 52°C.

**Engine Filtration System**

Heavy duty dry type air filters (suitable for use in dusty conditions), fuel and lubricating oil filters with replaceable elements.

**Exhaust System**

Heavy duty industrial silencer (Supplied loose).

**Electric System**

12/24 volt system with battery charging alternator and starter motor. High capacity maintenance free lead acid starting batteries, battery rack mounted on base frame, and heavy duty interconnecting cables with terminations.

## 3. ALTERNATOR

Screen protected and drip-proof, self exciting, self regulating brushless alternator with fully interconnected damper windings and sealed for-life bearings.

**Insulation System**

Class H insulation. All windings are impregnated in either a triple dip thermo-setting moisture, oil and acid resisting polyester varnish or vacuum pressure impregnated with a special polyester resin. Heavy coat of anti-tracking varnish for additional protection against moisture or condensation.

**Electrical Characteristics**

Electrical design in accordance with BS5000 part99, IEC34-1, VDE030, UTE51100, NEMANG-122

**Automatic Voltage Regulator**

The sealed automatic voltage regulator maintains the voltage within the limits of +/-1% from no load to full load including cold to hot variations at any power factor between 0.8 lagging and unity. Normal adjustment is by means of a trimmer incorporated in the AVR.

**Waveform Distortion, THF and TIF Factors**

The total distortion of the voltage waveform with open circuit between phases or phase and neutral is in the order of 2. On a 3 phase balanced harmonic-free load the total distortion is in the order of 3.5%. Machines are designed to have a THF better than 2% and a TIF better than 50. A 2/3 pitch factor is standard on all stator windings.

**Radio Interference**

Suppression is in line with the provisions of BS800 and VDE Class G and N

**Motor Starting**

An overload capacity equivalent to between 160% and 300% (depending on alternator frame size) of full load impedance at zero power factor can be sustained for 10 seconds.

## 4. MOUNTING ARRANGEMENT-SAFETY FEATURES

**Baseframe**

The complete genset is mounted, as a whole, on a heavy duty fabricated and welded steel baseframe, with specially designed crane lifting devices.

**Coupling**

The engine and alternator are directly coupled by means of an SAE flange so that there is no possibility of misalignment after prolonged use. The engine flywheel is flexibly coupled to the alternator rotor and a full torsional analysis has been carried out to guarantee no harmful vibration will occur in the assembly.

**Anti-vibration Mountings**

Anti –vibration pads are affixed between the engine /alternator feet and the baseframe.

NB: On some models, the anti-vibration mounts are supplied loose for installation between the baseframe and mounting surface

**Safety Guards**

The fan, fan drive and battery charging alternator drive are fully guarded for personal protection.

## 5. FUEL SYSTEM

On major sets, the base frame includes a daily fuel tank (8 hrs approx.). The tank is supplied complete with contents indicator, fuel fill cap, breather fuel feed and return lines to engine and drain plug.

## 6. CONTROL SYSTEM

**Keystart control Panel**

Set mounted keystart panel equipped with:

a. **Instruments**

Voltmeter
Ammeter
Frequency Meter
Hours Run Meter
Coolant Temperature Gauge
Oil Pressure Gauge
Battery Charger Ammeter

b. **Controls**

Start/Stop Keyswitch
Voltmeter Phase Sel Switch, 7pos
Ammeter Phase Sel Switch, 4 pos

c. **Shutdown Protection Devices With Indicators for:**

High Coolant Temperature
Low Oil Pressure

**Circuit Breaker**

3 pole miniature or molded case circuit breaker will be mounted on the set in a separate isolated sheet steel box with adequate access for incoming and outgoing cables.

## 7. DOCUMENTATION

Standard engine and alternator user's manual.

## 8. FACTORY TESTS

The generator set is tested before dispatch.

## 9. EQUIPMENT FINISH

Each part of the set is painted with anti-rust coat and finished with high gloss polyurethane paint.

ST. MICHEL STREET, NAHR ROAD, MDAWAR AREA, JABBOUR BLDG. POSTAL CODE 20757620, BEIRUT- LEBANON
TEL: +961 (0)1 580758 / (0)1 564640 / (0)3 201959 / (0) 3 250181 FAX: +961 (0)1 585115
Website: www.jabbourpower.com or www.jabbourdatakom.com e-mail: ledcpo@cyberia.net.lb ; info@jabbourpower.com