

| Prime Ratings Range |          |
|---------------------|----------|
|                     | GGP40EKL |
|                     | 50Hz     |
| kVA                 | 45       |



## The GGP-Escorts Kubota Advantage

- One-stop solution for the generating system and accessories
- Manufactured in India with global expertise
- Compact design with ease of maintenance
- Max winding provides excellent motor starting capability
- Flexible & creative customized solutions to meet customer needs
- Fast response time
- Two-years or 5000 hours as per standard warranty terms from date of initial startup

## Special Features

Natural aspirated industrial diesel engine with superior efficiency and operating economy

- Integral vibration isolation eliminates the need for under-unit vibration spring isolators
- Advanced Digital Controller (ADC) with 3 auto crank cycles and inbuilt AMF logic
- Alternator features:
  - Alternator meets Indian and international standards
  - Self-ventilated and drip proof of IP23 construction
  - Superior voltage waveform by 2/3 pitch wound stator
  - Sustained short circuit current of up to 300% of the rated current
- Silencer located inside canopy

## Standard Features

- Engine mounted battery charging alternator
- Single - bearing alternator with insulation Class H
- Unit mounted radiator with 50°C ambient temperature
- Base frame mounted fuel tank with minimum 8 hrs running capacity
- Dry type air filter with restriction indicator
- DG circuit breaker
- Electric start with battery
- Conveniently located fuel level indicator
- Exhaust tail pipe as standard scope of supply
- Weather proof enclosures to withstand harsh climate
- Ease of accessibility for all routine service points
- Riser blocks for lifting and handling

## Conformance Standards

- ISO 9001-2015
- BS 5514
- ISO 14001

## Generator Set Ratings

| Genset   | Engine | Alternator        | Voltage | Phase | Hz | Prime Rating |     | Amps |
|----------|--------|-------------------|---------|-------|----|--------------|-----|------|
|          |        |                   |         |       |    | kWe          | kVA |      |
| GGP40EKL | G40-IV | Stamford/Meccalte | 415     | 3     | 50 | 32           | 45  | 62.5 |

PRIME POWER RATINGS: Prime power ratings apply to installations where utility power is unavailable or unreliable. At varying load, the number of generator set operating hours is unlimited. A 10% overload capacity is available for one hour in twelve. Ratings are in accordance with ISO-8528/1, overload power in accordance with ISO-3046/1 and BS 5514. For limited running time and base load ratings, consult the factory. Obtain the technical information bulletin (TIB-101) on ratings guidelines for the complete ratings definitions.

## Engine Specifications

| Specifications                                     | 45 KVA                                                                            |
|----------------------------------------------------|-----------------------------------------------------------------------------------|
| Engine model                                       | G40-IV                                                                            |
| Engine aspiration                                  | Turbo Charged Inter Cooled                                                        |
| No. of cylinders & arrangement                     | 3, Inline                                                                         |
| Displacement, L (cc)                               | 2760                                                                              |
| Bore and stroke, mm                                | 91x110                                                                            |
| Compression ratio                                  | 17.5:1                                                                            |
| Governor: type                                     | Electronic                                                                        |
| Frequency regulation, steady state                 | IS 8528 P2                                                                        |
| Air cleaner type, Qty                              | Dry, 1                                                                            |
| Unit-mounted radiator ambient temperature °C (°F)  | 50 (122)                                                                          |
| Max. power kWm (BHP) @ rated speed (rpm)           | 40.8(54.7) @ 1500                                                                 |
| <b>Diesel Fuel Consumption</b>                     |                                                                                   |
| 100% Load (Lph)                                    | 9.50                                                                              |
| 75% Load (Lph)                                     | 7.12                                                                              |
| <b>Lube Oil Consumption</b>                        |                                                                                   |
| 100% load                                          | 0.1 % of SFC                                                                      |
| <b>Fuel System</b>                                 |                                                                                   |
| Fuel priming                                       | Manual                                                                            |
| Fuel filter : Type, Qty                            | Combo fuel filter, 1                                                              |
| Recommended fuel                                   | HSD-ASTM D2                                                                       |
| Fuel tank capacity, L                              | 130                                                                               |
| Fuel filter change period                          | Initial - 100 hrs / 3 months, Subsequent 500 hrs / 12 months whichever is earlier |
| <b>Lubrication System</b>                          |                                                                                   |
| System type                                        | Forced lubrication                                                                |
| Lube oil type                                      | 15W40                                                                             |
| Oil pan capacity with filter, L                    | 6.5                                                                               |
| Oil filter: Quantity, Type                         | 2, spin on & by-pass                                                              |
| Oil and oil filter change period                   | Initial - 100 hrs / 3 months, Subsequent 500 hrs / 12 months whichever is earlier |
| <b>Exhaust System</b>                              |                                                                                   |
| Max. allowable back pressure, KPa                  | 9.2                                                                               |
| Exhaust outlet size at engine hookup, mm (in)      | 75 (2.25)                                                                         |
| Silencer Type, Quantity                            | Residential, 1                                                                    |
| Exh. temperature at rated kW, dry exhaust, °C (°F) | 600 (1112)                                                                        |
| <b>Cooling Syst</b>                                |                                                                                   |
| Ambient temperature, °C (°F)                       | 50 (122)                                                                          |
| Coolant capacity including engine, L (gal)         | 18.5 (4.89)                                                                       |
| Water pump type                                    | Impeller                                                                          |
| Fan diameter, including blades, mm (in.)           | 406.5 (16)                                                                        |
| <b>Engine Electrical System</b>                    |                                                                                   |
| Starter Motor rated voltage VDC                    | 12 V                                                                              |
| Battery charging alternator                        | 12 V , 35 Amp                                                                     |
| Ground (negative/positive)                         | Negative                                                                          |
| Battery type-                                      | Lead acid                                                                         |
| Amp/hour                                           | 100                                                                               |
| Quantity                                           | 1                                                                                 |
| Battery voltage, VDC                               | 12                                                                                |

## Alternator Specifications

| Specifications                                        | 40 KVA            |
|-------------------------------------------------------|-------------------|
| Type                                                  | 4 Pole            |
| Exciter type                                          | Brushless         |
| Voltage regulator                                     | AVR               |
| Insulation<br>- Material<br>- Temperature rise, Prime | Class H<br>125° C |
| Bearing: Quantity, Type                               | 1, Sealed         |
| Coupling                                              | Close coupled     |
| Voltage regulation                                    | +/-1%             |
| Excitation                                            | Self-excitation   |
| Frequency, Fixed, Hz                                  | 50                |
| Full load current - 3 phase                           | 55.6              |
| Prime at 125° C, kVA                                  | 45                |

## Advanced Digital Controller (ADC3003)

### Standard Features

- Master switch: Control On/Off
- Event Log
- Remote two-wire start/stop capability
- One-source responsibility for generating system & accessories
- Automatic start with programmed cranking cycle
- Field software upgrade possibility
- Operating temperature: -20° C to 70° C (-4° F to 158° F)
- Storage temperature: -60° C to 70° C (-76° F to 158° F)
- Humidity: 0-95% condensing
- Control Panel
  - Alternator to control panel connection with copper cable only
  - MCCB/MCB details : with short circuit and overload protection
  - Inbuilt AMF controller

|                                                   |        |
|---------------------------------------------------|--------|
| Up to 200 meter cable length                      | 45 KVA |
| Output copper cable size (Sq. mm) : 3 Ph. (1 run) | 14     |



### Optional Features

- Microprocessor based AMF change over panel
- Remote monitoring system

## Controller Information

| LCD Display          | LCD Display Faults           | Display Warnings     | Optional Accessories      | Power Requirements                |
|----------------------|------------------------------|----------------------|---------------------------|-----------------------------------|
| Runtime hours        | High engine temperature      | Low battery voltage  | Battery charger 12 V      | 8 to 35 V DC with fuse protection |
| Engine speed         | Low oil pressure             | High battery voltage | Earth leakage protection  | 85 mA @ 12 VDC                    |
| Power factor KVA     | Over speed / under speed     | Low fuel level       | VAF meter (multifunction) | 96 mA @ 24 VDC                    |
| Current              | Over and under voltage       | Maintenance alarm    | kWh meter                 |                                   |
| Voltage              | Over and under frequency     |                      | Remote monitoring system  |                                   |
| Frequency            | E-stop                       |                      |                           |                                   |
| Engine temperature   | Auxiliary fault              |                      |                           |                                   |
| Engine oil pressure  | Low fuel level               |                      |                           |                                   |
| Battery voltage      | Over load current            |                      |                           |                                   |
| Kilowatt & kVA       | Phase reversal - for 3 phase |                      |                           |                                   |
| Fuel level (in %age) |                              |                      |                           |                                   |

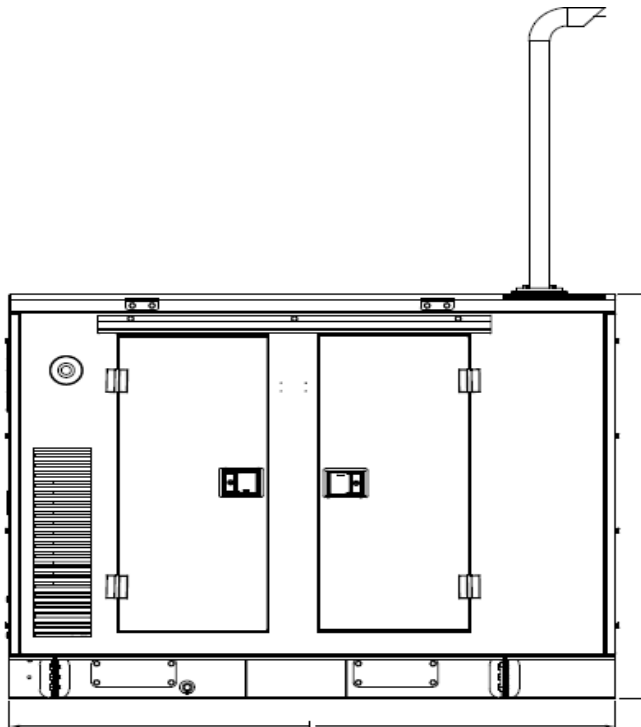
## Regulatory Compliance

| Specifications                                 | 45KVA             |
|------------------------------------------------|-------------------|
| As per ISO 8178-5 mode cycle (Engine emission) | CPCB-IV compliant |
| Noise level measured at 1 meter distance       | < 75 dB (A)       |

## Dimensions and weight

| Specifications               | 45KVA          |
|------------------------------|----------------|
| Overall Size, L x W x H (mm) | 2250x1030x1470 |
| Weight, dry, max (kg)        | 1080           |

NOTE : Drawing provided is for reference only and should not be used for planning installation. Please contact the Company for latest updated details.



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\* All the data is as per respective manufacturers' specification. Please refer O & M manual for maintenance and preservation guidelines.

\* Fuel consumption data is based on HS Diesel having specific gravity of 0.85 and conforming to IS:1460 Standard. Fuel consumption tolerance is +5%.

GGP reserves the right to change the design or specifications without notice and without any obligation or liability whatsoever.

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Authorized Channel Partner:

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