

### POWER DEFINITION

PRP: Prime Power is required for continuous operation under variable load and infinite operating hours per year.

ESP: Standby power refers to the ability of the generator to operate at varying loads in the event of power outage, with an annual operating time of up to 200h.

### STANDARD USAGE CONDITIONS:

1. Altitude: below 1000 meters;

2. Environmental temperature: 25 °C

3. Relative humidity: 30%

#### ABOUT NOISE:

The noise level of the generator largely depends on the installation conditions and usage environment, so it is not possible to specify the noise value in manual. The noise value we provide is based on laboratory testing and is for reference.

### QUALIFICATION STANDARD

IGNT POWER generator set complies with ISO and CE standards, which also include the following certification standards:

ISO 1400:2015 Environmental System;

ISO 45001:2018 Safty System; ISO 9001:2015 Quality System

| SERVICE           |        | PRP     | ESP     |
|-------------------|--------|---------|---------|
| Power             | KVA    | 20      | 22      |
| Power             | KW     | 16      | 18      |
| Standard Voltage  | V      | 400     | /230    |
| Available Voltage | V      | 380/220 | 415/240 |
| Rated Current     | A      | 2       | 9       |
| Frequency/Speed   | HZ/RPM | 50/     | 1500    |

## Weight and Dimension

|           | Dimension | ı  | 0pen | Silent |
|-----------|-----------|----|------|--------|
| Length    | (L)       | mm | 1500 | 2010   |
| Width     | ( W)      | mm | 750  | 900    |
| Height    | (H)       | mm | 1050 | 1130   |
| Net Weigh | t         | KG |      |        |
| Fuel Tank |           | L  |      | 80     |

# IG22P

# INDUSTRIAL RANGE POWER BY PERKINS



# Engine Specifications

| General Engine       | Date PERKINS        |
|----------------------|---------------------|
| Engine Model         | 404A-22G1           |
| Governer             | M                   |
| Aspiration           | Naturally Aspirated |
| No. of Cylinders     | 4                   |
| Displacement (L)     | 2.2                 |
| Bore* Stroke (mm)    | 84*100              |
| Compression Ratio    | 23.3                |
| Rated Net Power (KW) | 16                  |
| Cooling system       | Water-cooled        |

| Fuel System                 |     |             |
|-----------------------------|-----|-------------|
| Fuel Consumption @110% ESP  | L/h | 6. 1        |
| Fuel Consumption @100% PRP  | L/h | <b>5.</b> 3 |
| Fuel Consumption @75% PRP   | L/h | 4           |
| Fuel Consumption @50% PRP   | L/h | 2.9         |
| Fuel Tank Capacity (Open)   | L   |             |
| Fuel Tank Capacity (Silent) | L   | 80          |
|                             |     |             |

| Starter System      |   |    |
|---------------------|---|----|
| Start Motor Voltage | V | 12 |
| No. of Batteries    | 1 |    |

| Air intake system |     |    |
|-------------------|-----|----|
| Intake air flow   | L/s | 24 |
|                   |     |    |

| Cooling System                   |            |       |
|----------------------------------|------------|-------|
| Engine Coolant Capacity          | L          | 3.6   |
| Thermostat adjusting temperature | $^{\circ}$ | 82-95 |
| Minimum Pressure of Radiator Cap | kPA        | 90    |

| Lubrication System                        |                      |     |
|---|----------------------|-----|
| Engine Oil Capcity                        | L                    | 8.9 |
| Max. oil temperature permitted in oil pan | $^{\circ}\mathbb{C}$ | 125 |

| Exhaust system            |     |      |
|---------------------------|-----|------|
| Exhaust gas flow          | L/s | 60   |
| Max.allowed back pressure | kPa | 10.2 |

## Alternator Specifications

| Alternator Date        | - IGNT      |           |
|------------------------|-------------|-----------|
| Alternator Model       |             | IG184E    |
| Phase                  |             | 3         |
| Voltage (V)            |             | 400       |
| Prime Power (KW)       |             | 18        |
| Pole                   |             | 4         |
| Excitation System      | lf-excited, | Brushless |
| No. of Bearing         |             | 1         |
| Power Factor           |             | 0.8       |
| Wiring Connection      | 3 Phases,   | 4 Wires   |
| Insulation Grade       |             | H/H       |
| Protection Grade       |             | IP23      |
| Voltage Regulation (%) |             | $\pm 0.5$ |

| Alternator Date    | Stamford |                       |
|--------------------|----------|-----------------------|
| Alternator Model   |          | SOL2-M1               |
| Phase              |          | 3                     |
| Voltage            | V        | 400                   |
| Prime Power        | KW       | 18                    |
| Pole               |          | 4                     |
| Excitation System  |          | elf-excited, Brushles |
| No. of Bearing     |          | 3                     |
| Power Factor       |          | 0.8                   |
| Wiring Connection  |          | 3 Phases, 4 Wires     |
| Insulation Grade   |          | Н/Н                   |
| Protection Grade   |          | IP23                  |
| Voltage Regulation | %        | $\pm 0.5$             |

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## Controller Specifications

| Control Panel Date Deepsea DSE6120                   |  |
|--|--|
| ● Built in PLC logic programming                     | • Generator/load current monitoring and protection       |
| • Generator voltage detection                        | <ul><li>Fuel pump control function</li></ul>             |
| <ul><li>Mains voltage detection</li></ul>            | <ul> <li>Can connect to all expansion modules</li> </ul> |
| • Generator/load power detection (kW, kVA, kVAr, pf) | <ul> <li>Capable of graded loading</li> </ul>            |
| • Generator overload protection (kW)                 | <ul><li>Engine speed protection</li></ul>                |
| • Equipped with manual closing and opening functions | Engine preheating  |
| • Start gen-set when the battery voltage is low      | • Engine starts rapidly&stops rapidly                    |
| ● LCD and LED alarm indication                       | O Custom remote start signal                             |

## Generator Specifications

| Standard Configuration                  | Optional Configuration                      |
|---|---|
| ● 50°C radiator for belt driven fan     | Battery charger                             |
| • 12/24V charging alternator            | ● Engine pre-heater                         |
| • One set of air/fuel/oil fiters        | <ul><li>Alternator pre-heater</li></ul>     |
| • Chassis with integrated fuel tank     | ● PMG/ AREP/ MAUX                           |
| <ul><li>Emergency stop button</li></ul> | ● Water-oil seperator                       |
| • Anti-vibration shock absorbers        | ● Inside automatic transfer switch/ ATS box |
| ● Main circuit breaker/ MCCB            | • Grounding cooper rod                      |
| • Auto control system                   | Remote control system                       |
| • User manual                           | <ul><li>Switch box</li></ul>                |

### Warranty of Generator Set

Cummins Engine

One year or 1000 running hours whichever comes first

Generator

One year or 1000 running hours whichever comes first

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