

## Diesel Genset Specification

# PL75X3

### General technical data

|                                |         |                 |                      |
|--------------------------------|---------|-----------------|----------------------|
| Model                          | PL75X3  | Rated voltage V | Current A            |
| Structure                      | PT      | 380             | 114.0                |
| Prime power (PRP) : kVA / kW   | 75 / 60 | 400             | 108.3                |
| Standby power (ESP) : kVA / kW | 82 / 66 | 415             | 104.3                |
| Frequency: Hz                  | 50      |                 |                      |
| Rotate speed: RPM              | 1500    | Load            | Fuel consumption L/h |
| Phase: P                       | 3       | 25%             | 5.6                  |
| Power factor: cosφ             | 0.8     | 50%             | 10.2                 |
| Protection class               | IP54    | 75%             | 14.4                 |
| Noise level: dB@7m             | 67      | 100%            | 19.6                 |
| Tank capacity: L               | 420     | 110%            | 22.5                 |

### Main Features

| Design Standards                                                                                                                                     | Environmental Operating Conditions                                                                                                                                                                                                                                                                               | Factory Inspection                                                                                                                                                                                                                   |
|------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> <li>•Conformite Europeenne (CE)</li> <li>•ISO8528-5:2005</li> <li>•AS 3000-2018</li> <li>•AS 3010-2017</li> </ul> | <ul style="list-style-type: none"> <li>•Installation place: outdoor / indoor (well ventilated).</li> <li>•Ambient temperature: -25°C to 45°C (the coolant heater is needed when the temperature is below 5°C)</li> <li>•Humidity: Less than 80%</li> <li>•Altitude: Below one thousand (1000) meters.</li> </ul> | <ul style="list-style-type: none"> <li>•Protection devices working test</li> <li>•Starting ability in normal temperature</li> <li>•50% rated power load moment capacity</li> <li>•Load test :0, 25%, 50%, 75%, 100%, 110%</li> </ul> |

### Power Class Definition

- Prime Power (PRP): the unit runs continuously with variable load, the number of operating hours is not limited, and 1h overload 10% operation is allowed per 12h, and the average load factor is less than 70% per 24h.
- Standby Power (ESP): operating time does not exceed 500h per year, continuous operating time does not exceed 300h, the average load factor is less than 80% per 24h. Overload operation is not allowed.

### Product Statement

- The data of specifications is based on the following standard environmental test conditions.
  - Ambient temperature 25°C
  - Altitude 100m
  - Relative humidity 30%

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### Power System

#### Engine

|                        |            |                            |              |
|------------------------|------------|----------------------------|--------------|
| Manufacturer / brand   | XINCHAI    | Intake system              | Turbocharger |
| Model                  | AK41LD31   | Intake resistance: kPa     | ≤5.5         |
| Cylinders              | 4L         | Exhaust back pressure: kPa | ≤10.0        |
| Bore: mm               | 105        | Oil capacity: L            | 7.5          |
| Stroke: mm             | 118        | Coolant capacity: L        | N/A          |
| Displacement: L        | 4.1        | Battery voltage: V         | 12           |
| Compression ratio      | 18.0       | Dimensions: mm             | N/A          |
| Rotate speed: RPM      | 1500       | Dry weight: kg             | 270          |
| Prime power: kWm       | 74.0       |                            |              |
| Standby power: kWm     | 81.0       |                            |              |
| Rotate speed governor  | Mechanical |                            |              |
| Type of fuel Injection | Direct     |                            |              |

#### Alternator

|                      |                                 |                                   |       |
|----------------------|---------------------------------|-----------------------------------|-------|
| Manufacturer / brand | OEM                             | Insulation class                  | H     |
| Model                | PL2D-3                          | Temperature rising class          | H     |
| Exciter              | Standard self-excitation, SHUNT | Protection class                  | IP23  |
| Windings             | 100% copper                     | Voltage regulation                | ±0.5% |
| Winding pitch        | 2/3                             | Telephone harmonic factor THF     | <2%   |
| Number of poles      | 4                               | Telephone interference factor TIF | <50   |
| Terminals            | 12                              |                                   |       |

### Control System

|       |       |
|-------|-------|
| Brand | COMAP |
| Model | AMF5  |

#### General Functions

- Automatic start / stop control
- Manual/remote start control
- Real time monitoring and display of multiple parameters
- CAN and Modbus communication
- Provide complete control solutions

#### Monitoring and protection

|                   |                 |
|-------------------|-----------------|
| Oil pressure      | Over load       |
| Water temperature | Over current    |
| Rotate speed      | Over voltage    |
| Start             | Under voltage   |
| Running time      | Over frequency  |
| Battery voltage   | Under frequency |
| .....             | .....           |

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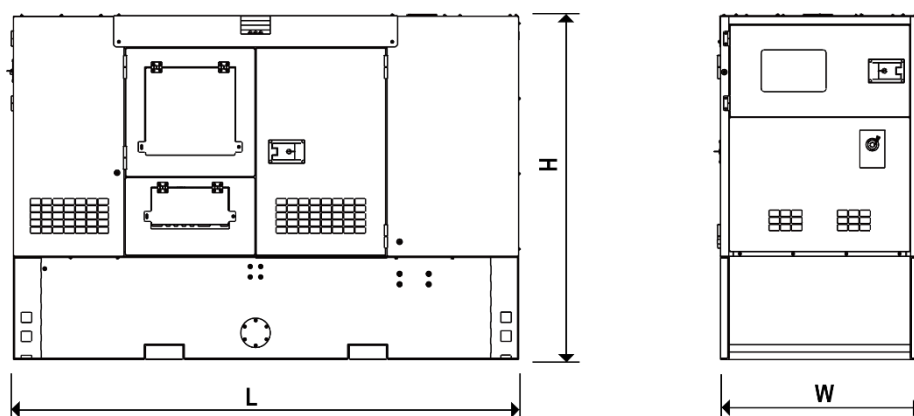
#### Product Configuration

| Engine                   | Generator             | Control switchgear     | Canopy (sound-proof)         | Base Frame          |
|--------------------------|-----------------------|------------------------|------------------------------|---------------------|
| Electrical start motor   | Alternator            | PLC control system     | SECC Electrogalvanized sheet | Steel base frame    |
| Battery system           | H class insulation    | Main circuit breaker   | Corrosion-resistant coating  | Engine bracket      |
| Speed control system     | H class temp. rising  | Breaker cabinet        | Access door                  | Alternator bracket  |
| Lockable isolator switch | IP23 protection       | ATS connector          | Stainless steel hinge        | Radiator bracket    |
| Battery charger          | AVR voltage regulator | Mains floating charger | Sound absorbing cotton       | Vibration isolators |

| Fuel system              | Lubrication system     | Cooling system     | Intake / exhaust system            | Service documents                 |
|--------------------------|------------------------|--------------------|------------------------------------|-----------------------------------|
| Base frame fuel tank     | Oil pressure sensor    | Radiator           | Air filter                         | Installation and operation manual |
| Fuel level sensor        | Oil temperature sensor | Water level sensor | Exhaust muffler                    | Test report                       |
| Flexible connection pipe | Oil filter             | Water pipe         | Exhaust bellow                     | Wiring diagram                    |
| Fuel filter              | Manual oil drain pump  |                    | Exhaust pipe and flange            | Warranty manual                   |
|                          | Oil drain ball valve   |                    | High temperature protective sleeve | Engine manual                     |

#### Weight and Dimension



**Dimension: L x W x H (mm)**

**2420x980x1647**

**Dry Weight (kg)**

**1580**

Note: Dimensions, weight and other parameters are for reference only, which shall be subject to the final design drawing.