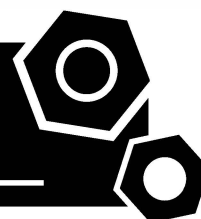


**Generator set**  
**Sound-proof type**  
**T500XS**

**SPECIFICATIONS**



# T3 series T500XS



50 Hz @ 1500rpm, 3-phase/4-wiring

## 1 Standards & Conditions

### Design Standards

The designs and the productions are in conformity with:

- Conformance Européenne (CE)
- ISO8528-5:2005
- GB/T2820.5-2009

### Environmental Operating Conditions

- Installation place: Outdoors or indoors (well ventilated).
- Ambient temperature: -25°C to 50°C. The coolant heater is needed when the temperature is below 5°C
- Humidity: Less than 80%.
- Altitude: Below one thousand (1000) meters.

### Factory Inspection

- Inspection items.
- Protection devices working test.
- Starting ability in normal temperature.
- 50% rated power load moment capability.
- Voltage deviation and speed variation: 0%, 25%, 50%, 75%, 100%, 110% Load.

### Painting Process

- Painting process specifications and colors are based on the manufacturer's standard.
- The customer could also choose the color which the manufacturer offers.

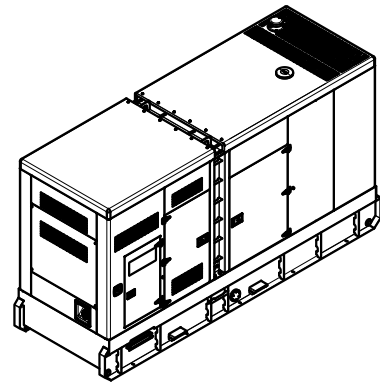
## 2 General Features

- Powerlink engine QSE16-G2
- Close coupled to LSA alternator LSA47.2M7
- Microprocessor control module XC762
- Main circuit breaker: 800A
- Speed governor: ECU
- Excitation System: Self excited
- A.V.R. Model: R250
- Key switch
- Emergency stop switch
- ATS (automatic transfer switch) receptacle
- 2x12V/150AH sealed for life maintenance free battery

- Lockable battery isolator switch
- Powder coated canopy
- 50°C radiator
- Oil pump on the engine
- Steel base frame with forklifts
- Vibration isolators between the engine/alternator and base frame
- Dry type air filter
- Base fuel tank for 10 hours running
- Drain points for fuel tank
- Operation Manual / Specifications

## 3 Equipment Specification

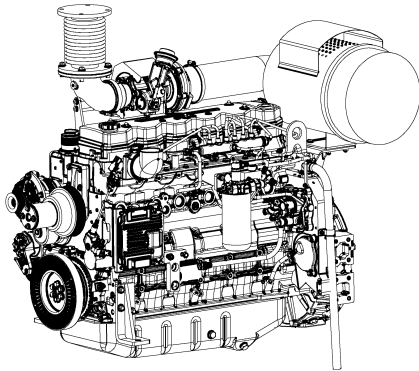
### General technical data



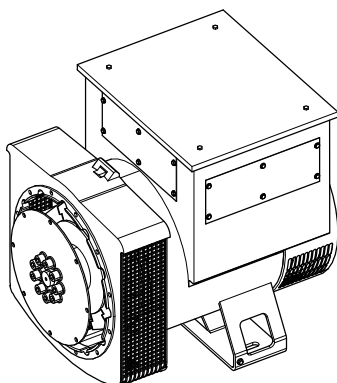
Model..... T500XS  
 Structure type ..... R  
 Tank capacity..... 1020L  
 Dry weight..... 5265kg  
 Sound pressure level @7m ..... 74.9dB(A)  
 Emissions compliance ..... CHINA STAGE III  
 Dimensions L×W×H..... 4592x1535x2555mm  
 Standby Power ..... 550kVA/440kW  
 Prime Power ..... 500kVA/400kW

| Voltage                 | 380V   | 400V   | 415V   | 440V   |       |
|-------------------------|--------|--------|--------|--------|-------|
| Ampere                  | 759.7A | 721.7A | 695.6A | 656.1A |       |
| Genset Fuel Consumption |        |        |        |        |       |
| Frequency/Load          | 25%    | 50%    | 75%    | 100%   | 110%  |
| 50Hz (L/h)              | N/A    | 52.1   | 75.9   | 103.8  | 115.9 |

## Dck Yf GrghYa

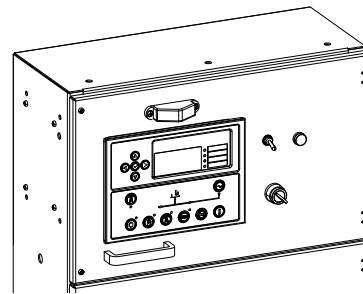


|                                  |   |
|----------------------------------|---|
| Engine Manufacturer/Brand .....  | Powerlink                               |
| Engine Model .....               | QSE16-G2                                |
| Dimensions L×W×H.....            | 2488×1240×1688mm                        |
| Dry Weigh (approx.) .....        | 1980kg                                  |
| Number of Cylinders.....         | 6                                       |
| Bore.....                        | 145mm                                   |
| Stroke .....                     | 165mm                                   |
| Displacement.....                | 16.35L                                  |
| Compression Ratio .....          | 15                                      |
| Type of Injection.....           | High pressure common rail               |
| Intake System.....               | Turbocharged                            |
| Intake Resistance .....          | ≤8kPa                                   |
| Cooling System .....             | Water cooled                            |
| Fan .....                        | Pusher                                  |
| Battery Voltage .....            | 24V                                     |
| Type of Fuel.....                | RF75-T-96 / DIN EN590 / BS2869 class A2 |
| Type of Oil .....                | API-CG4/ CH4                            |
| Oil Capacity .....               | 52.0L                                   |
| Type of Coolant .....            | Glycol mixture                          |
| Coolant Capacity .....           | 88.0L                                   |
| Back Pressure .....              | ≤10kPa                                  |
| Standby Power .....              | 485kW                                   |
| Prime Power .....                | 441kW                                   |
| Fuel Consumption(100%load) ..... | 103.8L/h                                |



|   |                                 |
|---|---------------------------------|
| Alternator Manufacturer/Brand .....                       | Leroy Somer                     |
| Alternator Model .....                                    | LSA47.2M7                       |
| Exciter.....  | Brushless                       |
| Cooling Fan .....   | Cast alloy aluminum             |
| Windings.....   | 100% copper                     |
| Insulation Class .....                                    | H                               |
| Winding Pitch.....  | 2/3                             |
| Terminals .....   | 12                              |
| Drip Proof .....  | IP23                            |
| Altitude.....   | ≤1000m                          |
| Overspeed .....   | 2250 rpm                        |
| Air Flow.....   | 0.216m³/s(50HZ),0.281m³/s(60HZ) |
| Voltage Regulation .....                                  | ±1.0%                           |
| Total harmonic TGH / THCat no load < 1.5 % - on load < 5% |                                 |
| Telephone Interference.....                               | THF<2%;TIF<50                   |

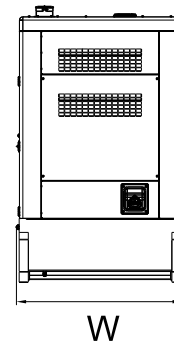
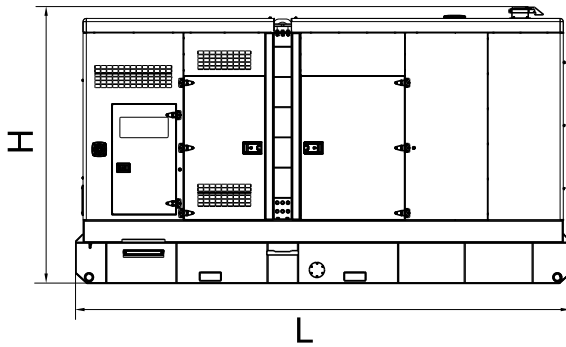
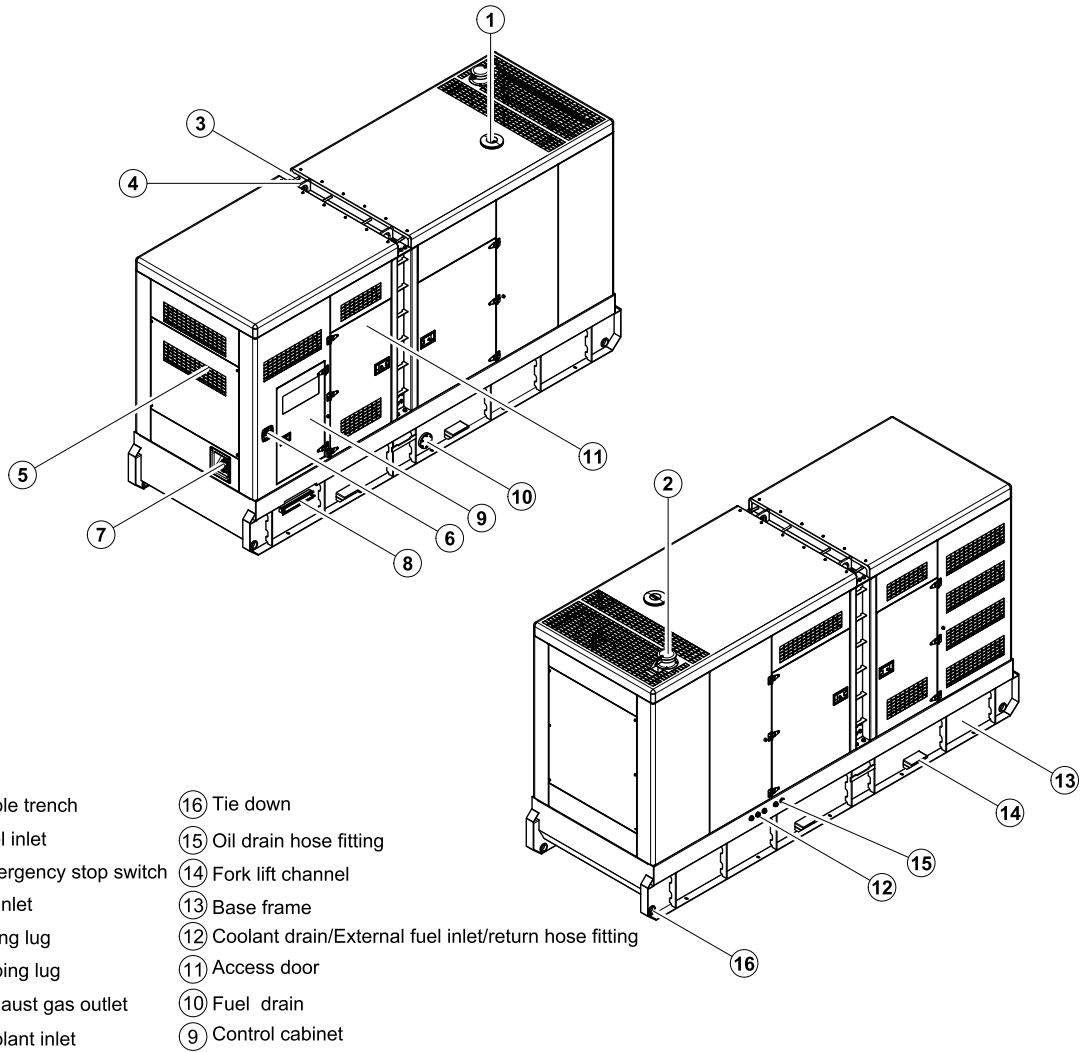
## XC762 Control System



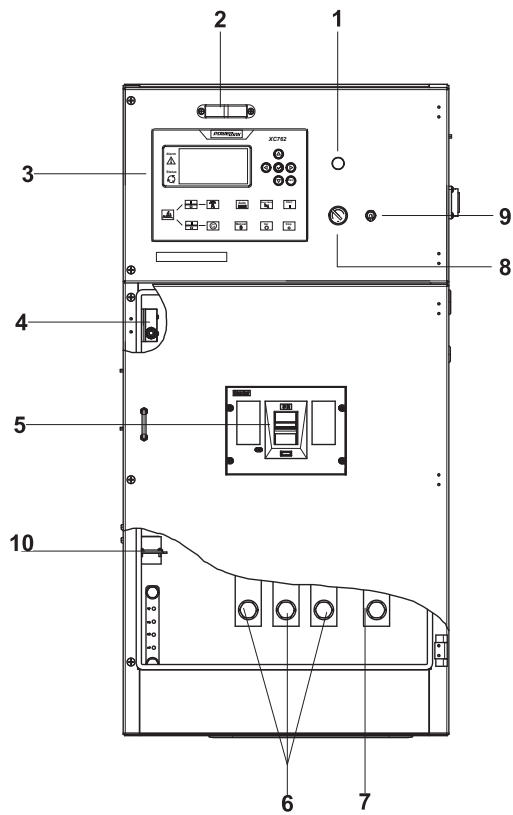
XC762 is an advanced control module based on micro-processor, containing all necessary functions for protection of the genset and the breaker control. It can monitor the mains supply, and automatically start the engine when the mains is abnormal. Accurately measure various operational parameters and display all values and alarms information on the LCD. In addition, the control module can automatically shut down the engine and indicate the engine failure.

- Microprocessor control, with high stability and credibility
- Monitoring and measuring operational parameters of the mains supply and genset
- Indicating operation status, fault conditions, all parameters and alarms
- Multiple protections; multiple parameters display, like pressure, temp. etc.
- Manual, automatic and remote work mode selectable
- Real time clock for time and date display, overall runtime display, 250 log entries
- Overall power output display
- Integral speed/frequency detecting, telling status of start, rated operation, overspeed etc.
- Communication with PC via RS485 OR RS232 interface, using MODBUS protocol

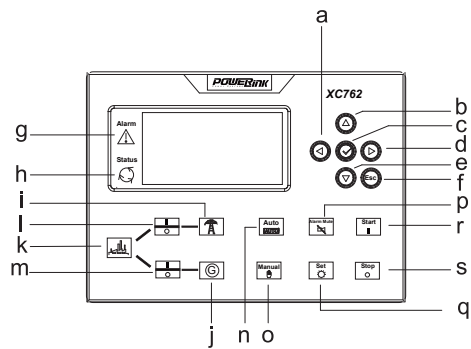
## 4 Overall Dimensions



## 5 Control System



**Control & field wiring cabinet**



**Control module**

| Ref. | Description                                    |
|------|--|
| 1    | Charge indicator                               |
| 2    | Control cabinet lamp                           |
| 3    | XC762 control module                           |
| 4    | Limit switch                                   |
| 5    | Main circuit breaker                           |
| 6    | Live wire terminals                            |
| 7    | Neutral wire terminal                          |
| 8    | Key switch                                     |
| 9    | Control cabinet lamp switch                    |
| 10   | Mains input/remote/AMF communication connector |

|   |   |
|---|---|
| a | Button (next page)                      |
| b | Button (increase value / previous item) |
| c | Button (accept)                         |
| d | Button (previous page)                  |
| e | Button (decrease value / next item)     |
| f | Button (ESC)                            |
| g | Indicator (alarm)                       |
| h | Indicator (running)                     |
| i | Indicator (mains available)             |
| j | Indicator (genset available)            |
| k | Indicator (mains / genset ON)           |
| l | Button (breaker ON / OFF)               |
| m | Button (breaker ON / OFF)               |
| n | Button (Auto mode)                      |
| o | Button (Manual mode)                    |
| p | Button (reset alarm)                    |
| q | Button (set parameters)                 |
| r | Button (start)                          |
| s | Button (stop)                           |

|               |
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<http://www.powerlinkworld.com>

*Specification may change without prior notice. For more info.,  
contact Power Link or your local distributors please.*