



Water Cooled



50 Hz



Easy  
Maintenance



Three Phase



Diesel



Warning System  
for Fuel Level

## GENERAL FEATURES

## PRIME

## STANDBY

Power	KVA	450	500
Power	KW	410	450
Power	(cos Phi=0,8) A	648	720
Standard Voltage	V	400/230	
Revolutions per minute	r.p.m	1500	
Rated at power factor	Cos Phi	0,8	

Our company has ISO 9001:2015, ISO 14001:2015, ISO 45001:2018, ISO 10002:2018 quality certificates. Fe Power generators comply with the CE marking, which includes the following directives:

- 2006/42/EC, Machinery safety
- 2006/95/EC, Low Voltage (LVD) Directive
- TS EN 60204-1, TS EN 88528-11, TS 12650, TS ISO 8528-1, TS ISO 8528-2, TS ISO 8528-3, TS ISO 8528-4, TS ISO 8528-5, TS ISO 8528 - 6, TS ISO 8528 - 8, TS ISO 8528-12, TS 3033 EN 60529, TS EN 60034-22, TS EN 88528-11, TS HD 60364-5-551

## STANDARD FEATURES

- 4 Stroke, 1500 RPM, water-cooled heavy-duty diesel engine
- Dry type replaceable air filter
- Radiator capable of cooling up to 50 ° C
- Flexible oil pipes and oil draining valve
- Pre-heater
- 4 Poles, synchronize, single bearing, brushless alternator
- Batteries and cables
- Electrostatic paint coated, steel, welded chassis
- Fuel tank housed in the chassis.
- Industrial type silencer
- Electronic battery charger
- Electrical wiring diagram
- User manual and operating manual

## OPTIONAL FEATURES

- Soundproof canopy
- Automatic transfer switch
- Circuit breaker
- Trailer / Land transport
- External fuel tank
- Heating system for fuel tank
- Oil heater
- Fuel filling system
- (Automatic / Manuel)
- Analogue indicators
- 1 - 3 Phase switch plugs
- Alarm system for fuel level
- Remote control monitoring system

## ENGINE SPECIFICATION

Brand		QSTRONG
Model		QST13H516
Standby / Prime	(kW)	450/410
Revolutions Per Minute	(r.p.m.)	1500
Cylinder Displacement	(L)	13
Number of Cylinder		6 IN LINE
Bore x Stroke	(mm x mm)	135x165
Compression Rate		17: 1
Governor Type		ELECTRONIC
Cooling System		TURBO CHARGER INTERCOOLED
Spray Shape		DIRECT
Cooling Shape		WATER COOLED
Electric System	(V)	24
Lubrication Oil Capacity	(L)	35
Engine Coolant Capacity	(L)	75
Fuel Tank	(L)	460
Fuel Consumption 50%	(L/h)	52
Fuel Consumption 75%	(L/h)	78
Fuel Consumption 100%	(L/h)	102.8

\* Replaceable cylinder jacket \* Dry type replaceable oil filter \*Heat –resistant radiator for 50 ° C

## ALTERNATOR SPECIFICATIONS

Output Voltage	(V)	400/230
Frequency	(Hz)	50
Stationary Voltage Regulation	(±)	1 %
Short Circuit Current		> 300 %
Insulation		H
Protection		IP 22
Efficiency	(%)	92.4
Overloading		%110 FOR 1 HOURS
Power Factor	(cos Ph)	0.8
Total Harmonic Distortion Rate		THF < 2 %
Connection Type		STAR
Number of Pole		4
Number of Bearing		SINGLE

\*4 Poles, Self – Excitation and Self-Cooled, Brushless, Synchro type alternator \*Electronic type automatic voltage regulator [ AVR]

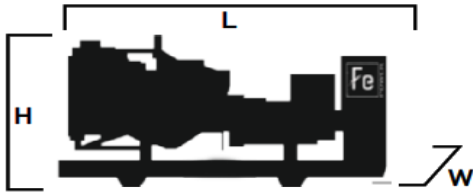
### STANDBY POWER;

It is the limited time operating power under variable load. Used as backup power at mains power failure. Overloads are not allowed.

### PRIME POWER;

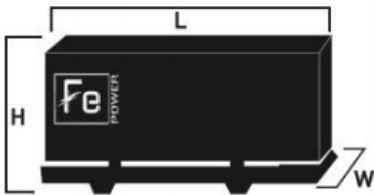
It is the continuous operating power under variable load. According to ISO 3046, 10% overload is allowed for 1 hour per 12 hours.

## SPECIFICATION WITHOUT CABIN



Length (L)	mm	3500
Height (H)	mm	1850
Width (W)	mm	1600
Wet weight	kg	3900
Fuel Tank Capacity	L	460

## SPECIFICATION WITH CABIN



Length (L)	mm	3500
Height (H)	mm	2150
Width (W)	mm	1600
Wet weight	kg	4590
Fuel Tank Capacity	L	460

## GENSET CONTROLLERS



## CONTROL PANEL SPECIFICATION

- Diesel and gas genset support
- 400Hz operation support
- 400 event logs, full snapshot
- All parameters front panel editable
- 3 level configuration password
- 128x64 graphical LCD display
- Downloadable languages
- Waveform display of V & I
- Harmonic analysis of V & I
- 16 Amp / 250V ŞK / JK outputs
- 8 configurable digital inputs
- 8 configurable digital outputs
- 3 configurable analogue inputs
- Both CANBUS-J1939 & MPU
- 3 configurable service alarms
- Outputs expandable to 40
- Inputs expandable to 40
- 4 configurable analog inputs
- Multiple automatic exerciser
- Weekly operation schedule
- Dual mutual standby with equal aging of
- Manual "speed fine adjust" on selected ECUs
- Automatic fuel pump control
- Disable protections feature
- Excess power protection
- Reverse power protection
- Overload IDMT protection
- Load shedding, dummy load
- Multiple load management
- Current unbalance protection
- Voltage unbalance protection
- Fuel filling & fuel theft alarms
- Battery back-up real time clock
- Idle speed control
- Battery charge run enabled
- Combat mode support
- Mains power counters
- Multiple nominal conditions
- Contactor & MCB drive
- 4 quadrant genset power counters
- Mains power counters
- Fuel filling counter
- Fuel consumption counter
- Modem diagnostics display
- Configurable through USB, RS-232 and GPRS
- Free configuration program
- Allows SMS controls
- Ready for central monitoring Ethernet and GPRS
- Mobile genset support
- Automatic GSM geo-location
- GPS connectivity (RS232)
- Dynamic DNS support
- Easy USB firmware upgrade
- IP65 rating with optional gasket