

Y-C40/S

Prime Power: 32KW/40KVA Standby Power: 35KW/44KVA Voltage: 400VAC

Powered by Cummins 4BT3.9-G1 Engine

Genset Performance

- 230/400VAC, 50Hz, 0.8PF, 3 Phases 4 wires
- Frequency drop $\leq 3\%$
- Voltage regulation $\leq 0.3\%$
- The steady state frequency $\leq 0.5\%$
- The steady state voltage deviation $\leq \pm 1\%$
- The transient frequency deviation $\leq +10\% \leq -15\%$
- The transient voltage deviation $\leq +20\% \leq -15\%$
- Frequency recovery time $\leq 3S$
- Voltage recovery time $\leq 1S(\text{Voltage} \pm 3\%)$
- THF (Telephone Harmonic Factor) < 3
- TIF (Telephone Influence Factor) < 50
Comply to Standard NEMA MG1-22.43
- Built-in vibration isolator with high performance on shock absorption.

Standard Configuration

- Cummins Engine
- Brushless synchronous alternator
- Intelligent controller
- 40°C standard ambient temperature
(50°C Optional)
- Molded case circuit breaker (3P)
- Float battery charger
- Battery connect wire
- Steel base frame
- Silencer, bellows, exhaust bend
- Manual book and files

Optional Items

- Starting batteries
- Fuel tank
- Oil-water separator
- Sensor for low coolant level, low fuel/oil level
- Automatically monitoring & controlling system of city power
- Coolant heater
- Oil heater
- Heat exchanger--Water cooled tower system
- Soundproof canopy
- Trailer
- S230 soundproof canopy
- Design and construction of environmental protection
- Engineering for the Genset room



Equipment Instruction

Diesel Engine

- Model: 4BT3.9-G1
- Construction: Adopt forged steel camshaft and crankshaft, High strength cylinder block design, plenty parts cast on the Cylinders, stiffness strong, high pressure resistant capacity, longer service life.
- Advanced design and superior manufacture: Adapt to harsh severe work condition, high strength and has heavy loading work capacity.
- Fuel system: Rotator high pressure fuel pump, lower fuel consumption, and reduce noise effectively.
- Environment: The engine can work normally under the following conditions without de-rating:
 - A. 1800r/min engine--altitude less than 1500m (5000ft), ambient temperature less than 40 °C(104°F).
 - B. 1500r/min engine--altitude less than 1310m (4300ft), ambient temperature less than 40 °C(104°F)

But engine working environment conditions exceed above, the engine output power will de-rate 4% as altitude increase each 300m(1000ft) at the altitude is higher than 1500m (5000ft), Also it will de-rate 2% as temperature increase every 11 °C(1% de-rating ,when temperature increase each 10°F). in the ambient temperature is higher than 40°C(104°F).



Alternator

- Optional brands: **Stamford / Leroy Somer / Copy Stamford**
- Brushless, 4 pole rotating magnetic field, single bearing with protective cover.
- Insulation: H Class.
- IP Class: IP23
- Cooling system
- AC exciter, rotate rectifying
- Rotor and exciter made with high temperature insulating resin, to satisfy tough environment.
- Optional Models: PI 144J / TAL-A 42F/ ZFLY 184J
- Sealed with advanced lubricating grease to prolong life of bearing.



Intelligent Control System

Standard Meters

- 3 phases voltage: U_a, U_b, U_c
- Frequency F1
- Apparent power PR
- Power factor PF
- Coolant temperature WT
- Temperature °C display
- Oil pressure OP
- Engine speed
- 3 phases current: I_a, I_b, I_c
- Active power PA
- Power factor PF
- Temperature °C display
- KPa/Psi/Bar display
- Battery voltage V
- Running Hour
- Starting timer:(999999)



Standard Protection Function

Genset Protection

- Programmable I/O signal
- Emergency stop

Engine Protection

- Stop for over speed
- Low oil pressure
- High Coolant temperature
- Sensor fail
- Alarm for low/high battery voltage
- Low battery voltage
- Fail to start/Cranking fail

Alternator Protection

- Over Voltage
- Over current
- Voltage signal lost
- Over Voltage
- Over frequency
- Under frequency

Control System Components

- Manual/auto/stop/start
- Setting button
- Fault status indicators
- Screen menu selection button
- Emergency stop button
- Digital displayer



Communication Interface (Option)

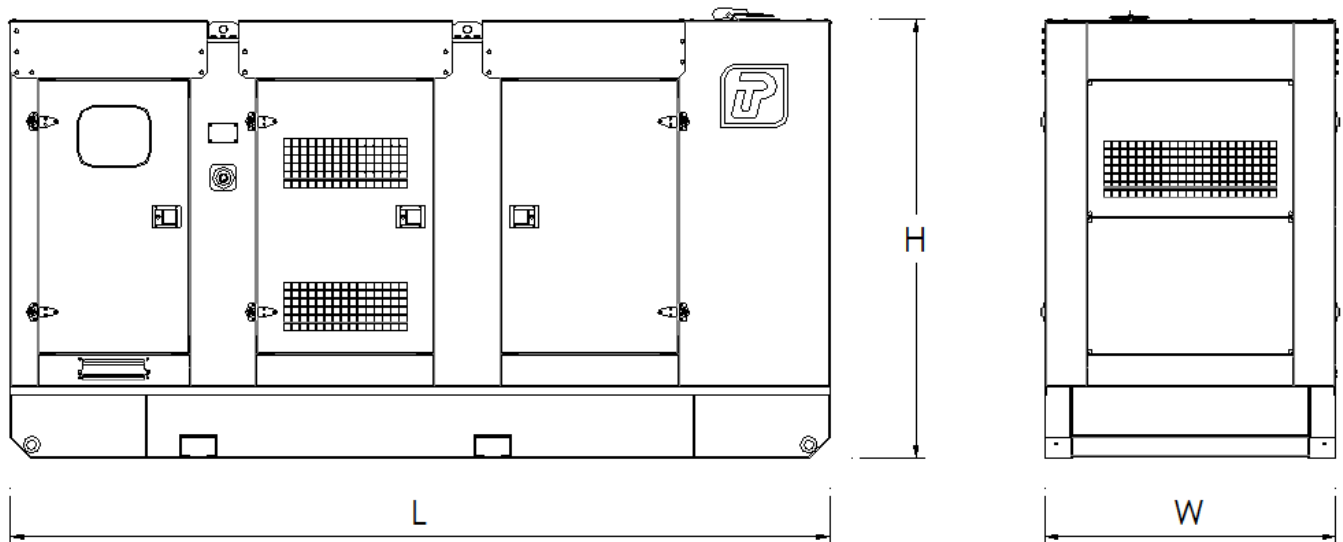
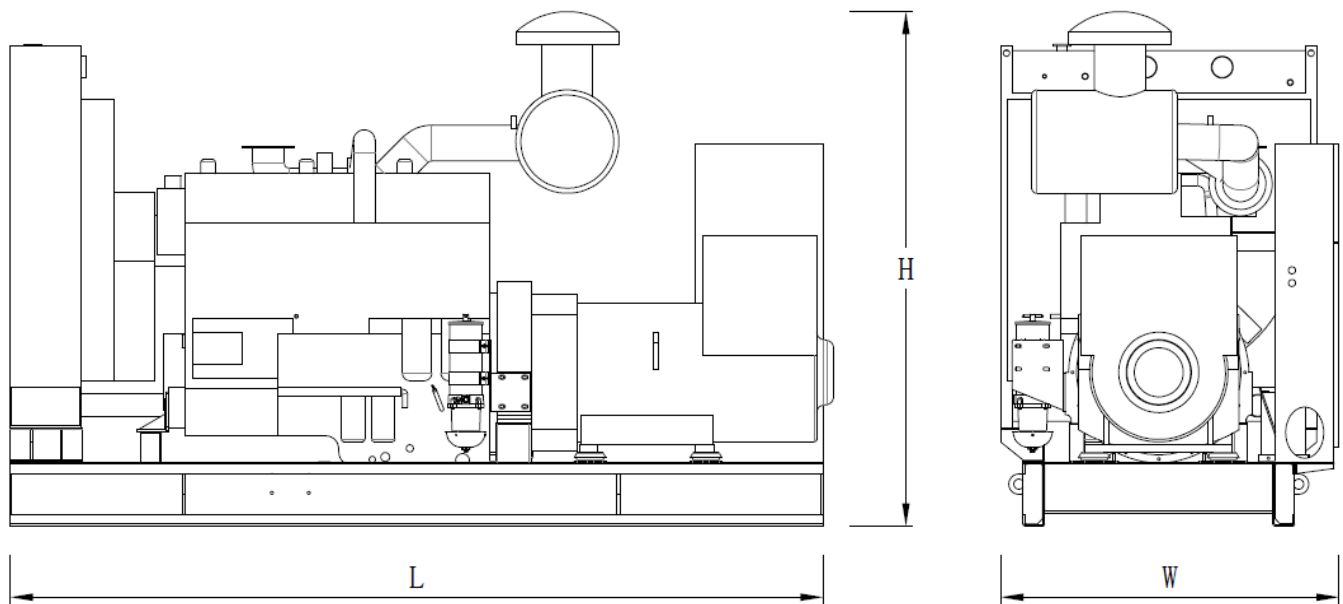
- International standard MODBUS communication protocol RS232/ RS485 is suitable for remote control and monitor; It is easy integrated with SCADA;

Notes: Above data of controller comes from Y-C 40/S. Customized solutions is available as required

Data sheet of Genset

Genset	
Model	Y-C 40/S
Prime Rating (kw)	32
Standby Rating (kw)	35
Rate voltage(V)	400
Rate current(A)	58
Power factor	0.8
Frequency(Hz)	50
Engine	
Engine Model	4BT3.9-G1
Gross Engine output-Prime (kw)	36
Gross Engine output-Standby (kw)	40
Bore * stroke (mm)	102*120
Cylinders and structure	4 In line
Displacement(Liter)	3.9
Compression Ratio	18:1
Intake way	Turbo Charge
Max intake resistance (KPa)	6.23
Air intake (m3/h)	158
Max exhaust back pressure (KPa)	10
Exhaust gas flow (m3/h)	364
Exhaust temp (°C)	487
Cooling way	Water Radiator & Fan
Fan exhaust flow (m3/min)	146
Coolant capacity (L)	19
Highest water temperature(°C)	104
Minimum air opening to room (m2)	0.9/0.5
Thermostat range (°C)	82-95
Max oil temperature (°C)	121
Lubrication system oil capacity (L)	11
Rate load fuel consumption(L/H)	10
Standard Governor/Class	Mechanical
Alternator	
Rated Voltage(V)	400/230
Output Way	3 Phases, 4 wires
Rated power factor	0.8
Exciter	Brushless, Self-exciter
Max voltage regulation	±1%
Model	PI 144J / TAL-A 42F/ ZFLY 184J
Protection class	IP21-23
Insulation class	H
Controller	
Brand	DEEPSEA or MEBAY

Dimension and Weight



Type	Dimension (mm) (L*W*H)	Weight (kg)	Fuel Tank Capacity (L)
Open Type	2100*835*1385	786	110
Silent Type	2300*900*1550	1336	250

Contact Us

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