

KAIAO

STANDARD FEATURES:

GENERATING SET

- System is built with ISO9001 certified Facility
- Factory tested to design specifications at full load

ENGINE

- Industrial water cooled diesel engine
- Electrical starting system 12 / 24V DC
- Cartridge type fuel, oil filters and Air filter
- Lead Acid Batteries, Isolator and Cables

GENERATOR

- Self-excited brushless generator
- Insulation system, class H
- Drip proof generator air intake (IP23)
- IEC60034-1, VDE0530, UTE51100, BS5000

MOUNTING ARRANGEMENT

- Heavy-duty fabricated steel base with lifting points
- Anti-vibration pads to ensure vibration isolation
- Engine coupled to generator with SAE coupling
- Base frame intergrade heavy-duty fuel tank

EXHAUST SYSTEM

- Heavy duty industrial capacity exhaust silencer

COOLING SYSTEM

- Standard ambient temperatures, Max 50° C
- Fan, fan driven and charging alternator fully guarded

CIRCUIT BREAKER

- 3-poles circuit breaker (CB)
- AUTOMATIC VOLTAGE REGULATOR
- Voltage regulation $\pm 1.0\%$
- Provides fast recovery from transient load changes

QUALITY STANDARDS

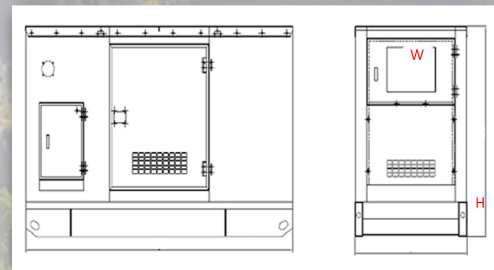
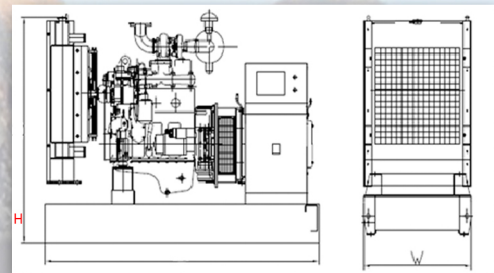
- ISO8528-1995, GB/T2820-1997, CE

DOCUMENTATION

- Operation and maintenance manuals provided
- Wiring diagrams included

WARRANTY

- All equipment carries full manufacturer's warranty



Control System

DESCRIPTION

- TC-610 Control system
- Auto Start Smartgen 6110U control module
- 132*64 LCD Display with backlight
- Configurable PC Software
- RS 485 Remote Communication
- 6 Configurable inputs and 4 configurable outputs



RATING & PERFORMANCE							
Model	KC24E/24T	KC36E/36T	KC55E/55T	KC60E/60T	KC80E/80T	KC100E/100T	KC135E/T
Standby Power(LTP)	33KVA/26KW	50KVA/40KW	68KVA/55KW	83KVA/66KW	110KVA/88KW	138KVA/110KW	185KVA/148KW
Prime Power(PRP)	30KVA/24KW	45KVA/36KW	75KVA/60KW	75KVA/60KW	100KVA/80KW	125KVA/100KW	168KVA/135KW
Frequency	60HZ						
Voltage	480/277						
Power Factor	0.8						
Phase & Wires	3P 4W						
Rated Speed	1800 RPM						
Available Voltage:	220/127V; 380/220V; 440/254V						

OPTIONAL EQUIPMENT

- FUEL SYSTEM**
- Daily Fuel Tank
 - 24 Hours Fuel Tank
 - Low Fuel Level Alarm
 - Fuel- Water Separator
 - Auto Fuel Feed Pump

- LUB SYSTEM**
- Lube Oil Drain Pump
 - Auto Lube Oil Feeder

- COOLING SYSTEM**
- Jacket water heaters
 - Remote Mounted Radiator

- AC GENERATOR**
- Anti- Condensation Heater
 - Permanent Magnet Generator (PMG)

- CIRCUIT BREAKER**
- 4 poles circuit Breaker
 - Earth leakage circuit breaker

- CONTROL SYSTEM**
- Remote control module
 - Auto Transfer Switch
 - Auto Synchronization System

- ENCLOSURES**
- Sound Attenuated Canopy
 - Two/Four Wheels Trailer

- OTHERS**
- Lead Acid Battery Charger
 - Lube & Diesel Heater
 - Exhaust kits
 - Spare Parts


ENGINE DATA							
Engine Manufacturer/Brand	CUMMINS						
Engine Model	4B3.9-G2	4BT3.9-G2	4BTA3.9-G2	4BTA3.9-G11	6BT5.9-G2	6BTA5.9-G2	6BTA5.9-G12
Type	4 Cycle; In line; 4 Cylinder Diesel, Water Cooled						
Aspiration	Natural	Turbo	Turbo & After-cooled	Turbo & Air to Water	Turbo	Turbo & Air to Water	Turbo & Air to Air
Bore * Stroke	102*120(mm*mm)						
Displacement	3.9 Liter		3.9 Liter		5.9 Liter		
Compression Ratio	16.5: 1		17.3: 1		16.5: 1		17.3: 1
Governor Type	Electronic						
Engine Power Rated Output	30KW @ 1800rpm	44KW @ 1800rpm	60KW @ 1800rpm	90KW @ 1800rpm	110KW @ 1800rpm	132KW @ 1800rpm	165KW @ 1800rpm
Fuel Type	No.2-D (ASTMD975)						
Fuel Consumption							
- 100% Load	7.3 L/h	10.5 L/h	14.9 L/h	20.1 L/h	26.0 L/h	31.0 L/h	38.0 L/h
- 75% Load	5.7 L/h	8.2 L/h	11.4 L/h	15.3L/h	20.3L/h	24.2L/h	28.0L/h
Total Coolant Capacity	21 L		24 L		27 L		29 L
Coolant type	Glycol Mixture						
Total Oil Capacity	11L		16.4L		16.3L		16.4L
Lub Oil Type	API CD Class						
Lub oil Consumption							
Starting System	24V DC						
ALTERNATOR DATA							
Alternator Model	Stamford Technology						
Make & Model	DG144E	DG144H	DG224E	DG224E	DG224G	DG274C	DG274E
Insulation Class	H						
Connection Type	3Phase and 4Wires						
Number of Bearing	1						
Power Factor	0.8						
Protection	IP23						
Winding/ Pitch	100% Copper 2/3 Pitch						
Exciter Type	Brushless, Self-Exciting						
Maximum Over speed	2250Rev/min						
Wave form NEMA (TIF)	<50						
Wave from IEC (THF)	<2%						
Voltage Regulation, Steady State	≤±1%						
Sustained Short-Circuit Current	300%(3 in):10s						
DIMENSIONS & WEIGHT							
Open Skid Length (mm)	1760		1860		2300		2420
Open Skid Width (mm)	820		830		820		860
Open Skid Height(mm)	1380		1300		1380		1700
Open Skid Gross Weight (kg)	730	900	980	1080	1310	1340	1240
Sound-Attenuated Length (mm)	2290	2290	2290	2400	2800	3200	3200
Sound-Attenuated Width (mm)	1010				1100	1120	
Sound-Attenuated Height(mm)	1500				1650	1700	
Sound-Attenuated Gross Weight (kg)	1250	1350	1350	1580	1800	2050	2020

MEASURE & DISPLAY	
Engine	Generator and Mains
Oil Pressure	Generator Line Voltage
Coolant Temperature	Generator Phase Voltage
Battery Voltage	Generator Frequency
Fuel Level(Opt)	Generator current
Charger Voltage	Generator Power factor PF
Engine Speed	Generator Reactive Power (kvar)
	Generator Active Power (KW)
	Generator Apparent Power (kva)
	Generator accumulate Energy (KWh)

PROTECTION	
Engine	Generator and Mains
Loss of speed signal warning& Shutdown	Over current warning & shutdown
Under /over speed warning & shutdown	Over /under Voltage warning & shutdown
Fail to stop warning & shutdown	Under Frequency warning & shutdown
Coolant Temp sensor open circuit warning & shutdown	
High coolant temperature warning & shutdown	
Low coolant level warning & Shutdown (Opt)	
Oil pressure sensor open circuit warning & shutdown	
Low Oil pressure warning & Shutdown	
Low fuel level warning & Shutdown(Opt)	
Charge failure warning	
Battery under /over voltage warning	
Maintenance time out warning & shutdown (Opt)	

Note: All data subject to alteration without notice.
EXCLUSIVE DISTRIBUTOR:

ALL CERTIFIED EQUIPMENT TRADING CORPORATION

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