



Standards : 2006/42/EC Machinery safety, 2006/95/EC Low voltage, EN 60204-1 : 2006+A1 : 2009, EN ISO 12100 : 2010, EN ISO 8528-13: 2016, ENISO 13849-1: 2015, EN 60204-1 : 2018

PRP: Prime power is available for an unlimited number of annual operating hours in variable load applications , in accordance with ISO 8528-1.

ESP : The standby power rating is applicable for supplying emergency power in variable load applications in accordance with ISO 8528-1. overload is not allowed.

Conditions : According to the standard, the nominal power assigned by the genset is given for 25. C air inlet temperature, of a barometric pressure of 100 kPa (100 m.A.S.L), and 30 % relative humidity.

GENERATOR SPECIFICATION

ITEMS	PRP	EPS
Power	75kVA	83kVA
Power	60kW	66kW
Frequency/ Phase/ Power factor	60Hz / 3P / PF0.8	
Standard voltage	220/127V	
Available voltage	TBA	



Water-cooled



Three Phase



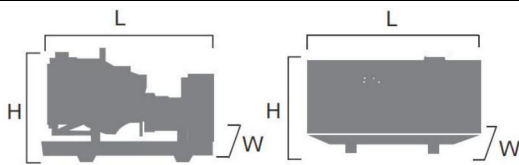
60Hz



Diesel

GENERAL INSTALLATION

ITEMS	OPEN	SILENT
Dimension(L*W*H)(mm)	TBA	2400*1000*1560
Weight(kg)	TBA	1190
Fuel tank(L)	TBA	280
Sound pressure level @75%load&1m dB(A) @75%load&7m dB(A)		TBA TBA



NOTE: Weights and dimensions based on standard products. According to 2000/14/CE , sound data is provided at 7m for 75% prime power. For actual installation, please contact the manufacturer.

PERFORMANCE DATA		
Engine brand	CUMMINS	
Engine model	4BTA3.9-G11	
Fuel	Diesel	
Aspiration	Turbocharger & Aftercooler	
Cooling	Water-cooled	
Governor	Electronic	
Cyl arrangement	4L	
Application	Prime & Standby	
Fuel consumption	100% ESP(L/H)	22.5
	100% PRP(L/H)	20.1
	75% PRP(L/H)	15.3
	50% PRP(L/H)	10.8

ENGINE SPECIFICATION

BASIC DATA	
Engine brand	CUMMINS
Engine model	4BTA3.9-G11
Displacement	3.9L
No. of cyl / arrangement	4L
Bore x stroke	102x120mm
Compression ratio	17.3 : 1
Engine speed	1800rpm
Engine type	4-stroke diesel
EXHAUST SYSTEM	
Exhaust stack gas temperature (max.)	405 °C
Exhaust gas flow rate (max.)	210 L/S
Exhaust system backpressure (maximum allowable)	10 kPa
FUEL SYSTEM	
Maximum restriction at lift pump	13.6 kPa
Max. fuel flow	30 L/H

COOLING SYSTEM	
Radiator air flow	186 m³/min
Total oil capacity	10.9L
Total coolant capacity	21.9 L

ELECTRICAL SYSTEM	
Starter motor rated voltage	DC24V
Start battery	2x60Ah(580CCA)
Battery charging alternator	DC24V/40A

INLET AIR	
Air filter	Dry type
Max. combustion air Intake restriction	6.2kPa
Combustion air inlet flow rate	101 L/S
Max. allowable combustion air inlet temp	50°C

ALTERNATOR SPECIFICATION

BASIC DATA		BASIC DATA	
Insulation & temperature rise	Class H/H	Type	Brushless
Excitation type	Self-excited	No. of bearings	Single bearing
Winding leads	12	Coupling system	Flexible disc
Winding connections (standard)	Star	Maximum over speed	2250 RPM
Winding pitch	Two thirds	Coating type	Vacuum impregnation
Number of phase	Three phase	IP rating	IP23

CONTROL PANEL

Configuration

- Emergency stop button
- Protection MCB
- Battery charger
- Integrated aviation plug
- ATS connection
- Digital control module

Features

- 3 phase generator set monitoring
- Support of engines equipped with electronic control unit
- Comprehensive diagnostic message
- Automatic or manual start/stop of the gensets
- Push buttons for simple control, lamp test
- Graphic back-lit LCD display
- Parameters adjustable via keyboard or PC
- Mains measurements (50HZ/60HZ)
- Generator measurements (50HZ/60HZ)
- Comprehensive shutdown or warning on fault condition
- 3 phase Generator protections
 - Over-/under voltage
 - Over-/under frequency
 - Current/voltage asymmetry
 - Over current/overload
- 3 phase AMF function
 - Over-/under frequency
 - Over-/under voltage
 - Voltage asymmetry
- Configurable analog inputs
- Battery voltage, engine speed (pick-up) measurement
- Configurable programmable binary inputs and outputs
- Warm-up and cooling functions
- Generator C.B. and Mains C.B. control with feedback and return timer
- RS232 interface
- Modem communication support
- Hours counter
- Sealed to Ip65
- Event log

Benefits

- Less wiring and components
- Integrated solution
- Less engineering and programming
- User friendly set-up and button layout
- Module can be configured to suit individual applications
- PC software for simplified configuration
- Wide range of communication capabilities

Operation conditions

- Operation temp: -20 °C to + 70 °C
- Storage temp: -30 °C to + 80 °C
- Operating humidity: 95% w/o condensation
- Vibration : 5-25Hz, ± 1.6 mm
5-100Hz, $a=4g$
- Shocks: $a= 500m/s^2$

Options

- Ethernet interface (Remote monitoring and control)
- GSM modem/wireless internet (Remote monitoring and control)
- RS232-RS485 Dual port interface
- Synchronizing control panel
- Distribution board with sockets kit and power busbar
- Battery trickle charge ammeter
- Earth leakage protection
- Earth fault protection
- Low fuel level alarm
- Low fuel level shutdown
- High fuel level alarm
- Fuel transfer system control
- Low coolant level shutdown
- High lube oil temp shutdown
- Overload via alarm switch on breaker
- Engine coolant heater controls
- Control panel heater
- Speed adjust switch
- Oil temp displayed on LCD screen
- Additional 8 inputs and outputs

GENSET VERSION

STANDARD FEATURES

- ♦ Diesel engine, 50 degrees radiator, brushless alternator
- ♦ Intelligent controller
- ♦ Output circuit breaker (up to 1250A)
- ♦ Maintenance-free start battery, battery charge, battery switch
- ♦ Steel industrial silencer, exhaust bellows and elbows
- ♦ Steel chasis and anti-vibration shock absorbers
- ♦ Lifting and moving structure, expansion of oil and coolant discharge
- ♦ Moving parts protection, hot parts protection
- ♦ Special toolbox, delivery attached documentation



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OPTIONAL FEATURES

ENGINE

- ♦ Water jacket preheater
- ♦ Oil Preheater, oil level maintainer, oil manual pump
- ♦ Heavy air filtration
- ♦ Residential silencer
- ♦ Remote radiator, heat exchanger

ALTERNATOR

- ♦ PMG/AREP excitation system
- ♦ Anti-condensation heater
- ♦ Winding/bearing RTD
- ♦ Double bearing structure
- ♦ IP44 protection class

CONTROL SYSTEM

- ♦ Synchronizing panel, remote control panel
- ♦ RS232/485, 4G & GPS wireless, ethernet communication card
- ♦ Additional digital/analog input/output
- ♦ Monitoring software, mobile APP
- ♦ Ni-Cad batteries

GENERATING SET

- ♦ External fuel tank, automatic fuel feeding
- ♦ ATS/output /combining/distribution cabinet
- ♦ Load test cabinet
- ♦ Mobile trailer
- ♦ Customized design