Voltgent®

VC110-5

Industrial Range | Powered by Cummins

General Characteristics

Item	Data
Standby Power (kVA)	110
Standby Power (kW)	88
Prime Power (kVA)	100
Prime Power (kW)	80
Power Factor (Cos Phi)	0.8
Diesel Engine	6BT5.9G2
Frequency (Hz)	50
Rated Speed (rpm)	1500
Phase	3
Standard Voltage (V)	400/230
Available Voltages (V)	380/220 · 415/240

- **Power Definition**

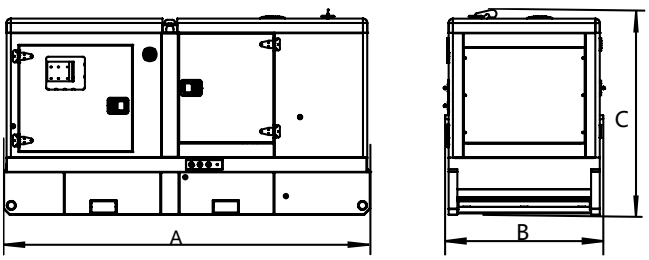
Standby Power(ESP): The standby power rating is applicable for supply emergency power in variable load applications in accordance with ISO8528-1, overload is not allowed.

Prime Power(PRP): The prime power is available for an unlimited number of annual operating hours in variable load applications, in accordance with ISO8528-1.

- **Terms of use**

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

Dimensions & Weights & Fuel Tank



Note: General configuration not to be used for installation. See general dimension drawings for detail.

Model	Constructure	Dim"A"mm	Dim"B"mm	Dim"C"mm	Dry Weight kg	Fuel Tank Capacity L
VC110-5	Open set	2150	1050	1485	1180	230
VC110-5	Silent set	2970	1100	1970	1985	510

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■ Engine Data

General Engine Data	
Engine brand	Cummins
Engine model	6BT5.9G2
Engine type	4-stroke diesel
Governor type	Electronic
Injection type	Direct
Aspiration type	Turbocharged
Number of cylinders and arrangement	6-L
Bore and stroke (mm*mm)	102*120
Displacement (L)	5.9
Cooling system	Water-cooled
Lube oil consumption with full load	0.5%-1% of fuel consumption
Compression Ratio	17.3:1
Air Filter	Dry
Fuel Consumption	
Fuel Consumption @100% load ESP (L/H)	26.5
Fuel Consumption @100% load PRP (L/H)	24.2
Fuel Consumption @75% load PRP (L/H)	18.2
Fuel Consumption @50% load PRP (L/H)	12.5
Air System	
Intake air flow (L/s)	108
Cooling air flow (L/s)	/
Exhaust System	
Maximum exhaust temperature (°C)	564
Exhaust gas flow (L/s)	280
Maximum allowed back pressure (kPa)	10
Starting System	
Starting power(kW)	4.5
Recommended battery (Ah)	60
Number of Batteries	2
Auxiliary voltage (Vdc)	24
Oil System	
Engine oil capacity (L)	16.4
Cooling System	
Total coolant capacity (L)	22.4

Alternator Data

Alternator Data	
Number of phase	3
Power factor (Cos Phi)	0.8
Poles	4
Winding Connections (standard)	Star-serie
Insulation	H class
Enclosure(according IEC-34-5)	IP23
Excitation system	Self-excited, brushless
Voltage regulator	AVR (Electronic)
No. of bearings	Single bearing
Coupling system	Flexible disc
Coating type	Standard (Vacuum impregnation)

Control Module-DSE 6120

Key Features:

- 6 configurable DC outputs-Provides multiple installation options.
- 4 configurable analogue/digital inputs.-Provides multiple installation options.
- 8 configurable digital inputs.-Provides multiple installation options.
- 3-phase generator and mains (utility) sensing.-Provides true generator and mains (utility) sensing.
- Automatic load transfer control.-Ensures the load can be transferred manually/automatically between mains (utility) and generator power.
- Generator & mains current and power monitoring.-Provides convenience of monitoring and protection of the generator or monitoring of the load current.
- Internal PLC editor.-Adds increased flexibility to the product.
- Breaker control buttons on front fascia.-Simple breaker control at the touch of a button.
- Fuel and start outputs configurable when using CAN.-Provides multiple installation options.
- Support for 0-10 V & 4-20mA oil pressure senders – Flexibility for use with multiple sensors and engine types.
- Large back-lit text LCD display – Clear and concise information display.
- Cold weather operation – Ensures display works in extreme cold conditions.
- Generator/load current monitoring & protection – Continuous monitoring for safety and performance.
- Configurable analogue/digital inputs (9) – Multiple installation options.
- Configurable DC, volt-free, and staged loading outputs (6) – Full generator load control.
- CAN, MPU & alternator speed sensing – Selectable based on engine type.
- Tier 4 CAN engine support – Compatibility with modern electronic engine technology.
- Configurable event log (10) – Access to historical alarms and operational status.
- DSE Configuration Suite PC Software – User-friendly configuration, control, and monitoring.
- Fuel and start outputs (configurable on CAN) – Multiple installation options.
- This concise list covers all the key features of the system.