

Features:

- Perkins engine
- MECC Alternator, Class
- Genset Canopy IP44 protection, Control panel IP56 protection
- Control module PLC-920
- Breaker: SCHNEIDER 16A
- Speed governor: Mech governor
- Excitation system:
- A.V.R model:
- 50°C radiator
- Fire extinguisher
- Oil pump on the engine
- ATS receptacle
- Lockable battery isolator switch
- Powder coated canopy
- Vibration isolators between the engine/Alternator and base frame
- Integrated wiring design
- High water temperature protection
- Steel base frame with forklift slots
- Big daily fuel tank



Output Ratings

Generator Set Model	Prime Power		Standby Power	
	kVA	kW	kVA	kW
EP18	18	14	20	16

Dimensions and Weights

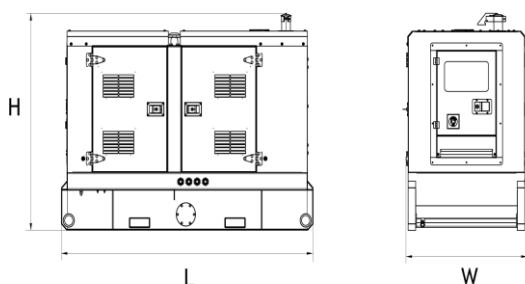
Model	L x W x H-mm	Dry Weight- kg
EP18	2150x 900x 1200	855

Notes:

***Prime Power** Continuous duty operation, under variable load 24/24h-10% over load permissible 1 hour/12 hours;

****Standby Power** Standby duty, operation under variable load, without over load;

Standard Reference Conditions Note: Standard reference conditions 25°C (77°F) Air Inlet Temp, 100m(328 ft) A.S.L. 30% relative humidity.



Ratings and Performance Data

Engine Brand	Perkins
Engine Model	403D-11G
Alternator Brand	MECC
Alternator Model	ECP3-2L/2
Control System	PLC-920
Circuit Breaker Type	SCHNEIDER 16A
Frequency / Phase	50Hz/3Phase
Engine Speed (RPM)	1500
Fuel Tank Capacity (L)	100
Fuel Consumption (L/h) (100%load)	2.6
Oil Consumption (L/h)	0.0052
Volatage (V)	380/400/415/440
Silencer Noise Reduction (dBA)	10-20

Engine Model:403D-11G

Engine Technical Data

Engine Model	403D-11G
Engine Brand	Perkins
Number of Cylinders	3
Cylinders Arrangement	In-line
Bore/Stroke (mm)	77/81
Speed (RPM)	1500
Displacement (L)	1.1
Compression Ratio	23
Air Intake system	Naturally aspirated
Cooling Method	Water cooled
Coolant Capacity (L)	5.2
Prime Power (kWm)	8.4
Standby Power (kWm)	9.3
Governing Type	Mech
Back Pressure (mmhg)	10.2
Battery (V)	12

Fuel System

Fuel Tank	steel			
Fuel Tank Capacity (L)	100			
Fuel tank type	Double-layer			
Recommended Fuel Type	0# or ASTM2			
Injection System	Direct injection			
Fuel Consumption:				
EP18	100% Load	75% Load	50% Load	25% Load
L/h	2.6	2	1.5	0.69

(Based on diesel fuel with a specific gravity of 0.85 and conforming to BS2869, Class A2)

Lubrication System

Lube oil label	
Maximum Oil Temp. (°C)	125
Oil capacity (L)	4.9

Exhaust and silencer System

Exhaust Air Flow (m³/hr)	108
Exhaust Air Temp. (°C)	420
Maximum Allowable Back Pressure (mmhg)	10.2
NOx (mg/Nm³)	
Silencer Quantity	1
Silencer Type	Industrial silencer

Cooling System

Radiator	50
Coolant Capacity (L)	5.2
Coolant Change Time (Year/h)	2/10000
Coolant Intake Temp. (°C)	40
Coolant Output Temp. (°C)	110

Designed to operate in ambient conditions up to 50°C (122°F).

Air Intake system

Air Filter Type	Dry type
Intake Air Flow (m³/h)	42
Intake System	Naturally aspirated
Intake Air Temp. (°C)	25

Conditions

Altitude (m)	
Ambient Temp. (°C)	-5°C-50°C
Barometric Pressure (kpa)	100
Relative Humidity	< 80%

Alternator Model:ECP3-2L/2

Alternator Physical Data

AVR Model	
Alternator Brand	MECC
Alternator Model	ECP3-2L/2
Excitation System	
Housing Protection	
Power Factor	
Rated Stator Temp. rise (°C)	
Rotor Insulation Class	
Voltage Fluctuation(no load to full load)	
Winding Pitch	
Wiring Connection	

Performance Data

Time constants/400V (Ms)	
T'd	
T''d	
T'do	
Ta	
Short-circuit current (3 IN / 10 s)	
SHORT CIRCUIT RATIO	
Reactances (Per Unit)	
Xd	
X'd	
X''d	

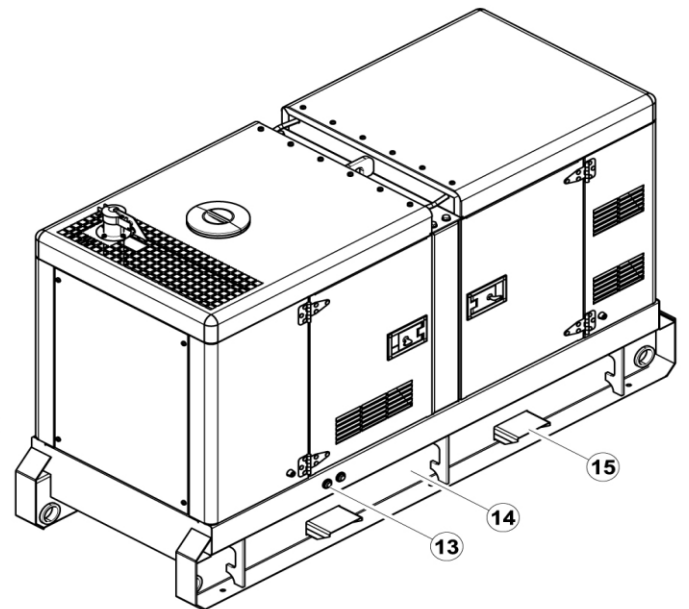
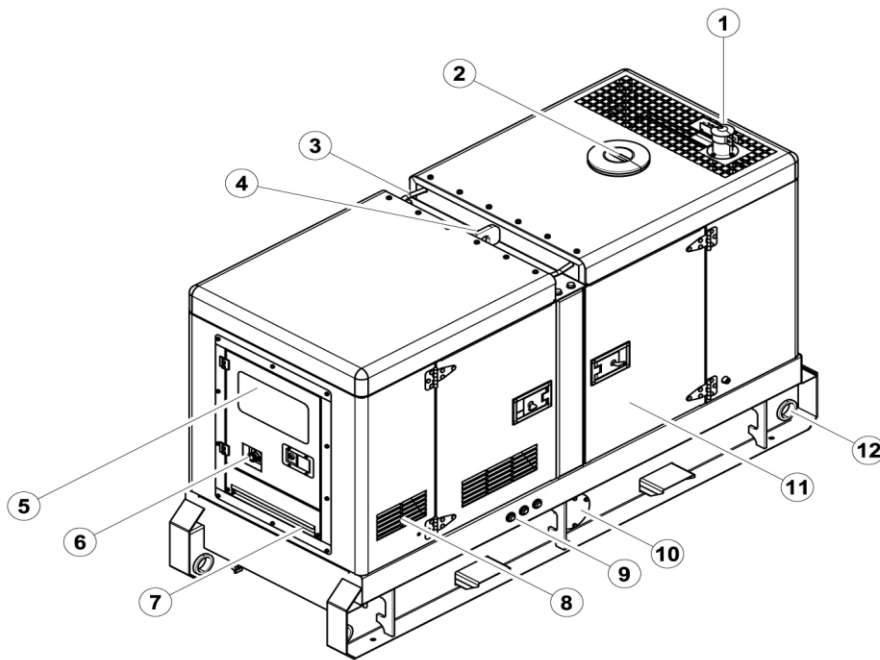
Alternator Operating Data

Overspeed (rpm)	
Voltage Regulation(Steady state)	
THF(BS EN60034-1)	
TIF(NEMA MG 1-22)	
Air Flow (m³/s) -Alternator	
50Hz/60Hz	
Altitude-Alternator (m)	

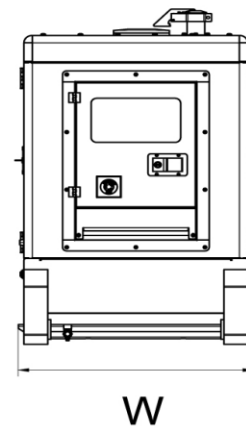
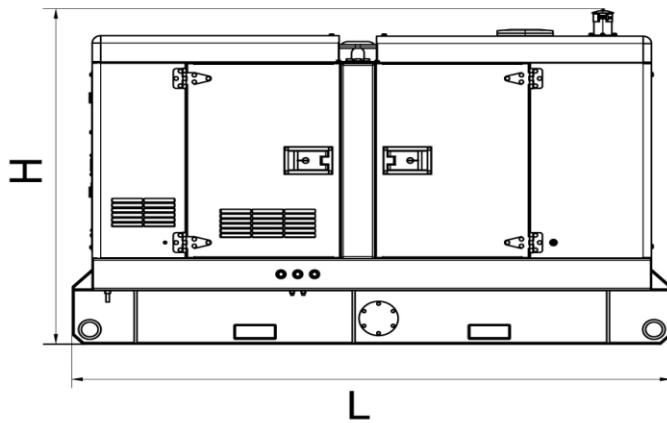
Voltage Technical Data

Voltage	Prime		Standby	
	kVA	kW	kVA	kW
380V@50Hz			0.0	0.0
400V@50Hz			0.0	0.0
415V@50Hz			0.0	0.0
415V@60Hz			0.0	0.0
440V@60Hz			0.0	0.0
480V@60Hz			0.0	0.0

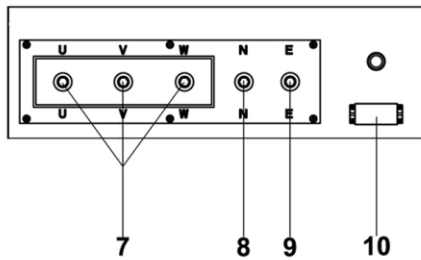
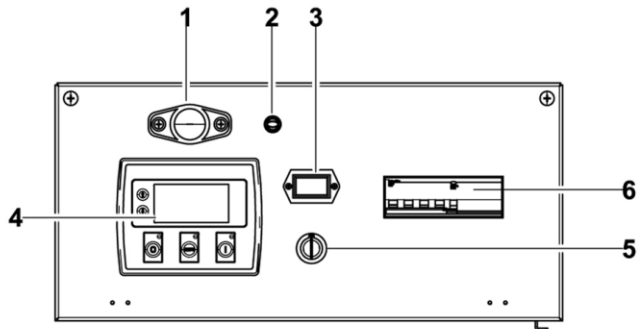
Overall Dimensions



- 8 Air inlet
- 7 Cable trench
- 6 Emergency stop switch
- 5 Control cabinet
- 4 Lifting lug
- 3 Roping lug
- 2 Coolant inlet
- 1 Exhaust gas outlet
- 15 Fork lift channel
- 14 Base frame
- 13 External fuel inlet/return hose fitting
- 12 Tie down
- 11 Access door
- 10 Fuel drain
- 9 Oil / coolant drain hose fitting

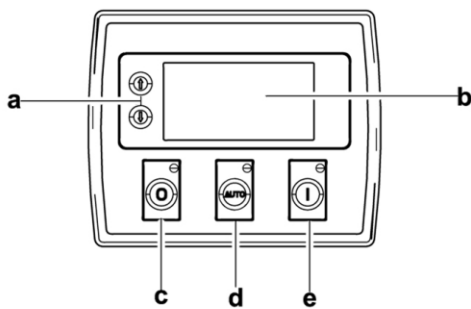


Control System



Control & field wiring cabinet

Ref.	Description
1	Control cabinet lamp
2	Control cabinet lamp switch
3	Time counter
4	Control module
5	Key switch
6	Main circuit breaker
7	Live wire terminal
8	Neutral wire terminal
9	Ground wire terminal
10	Remote control/Mains input



Control module

Ref.	Description
a	Navigation button; Accept (Configuration mode only)
b	Main status display
c	Stop/reset button; Next page (Configuration mode only)
d	Auto start button; Decrease value/next item (Configuration mode only)
e	Start button; Increase value/next item (Configuration mode only)