

**Standard Specification****MPS65-1**

General Features:

- ☒ Composed of Perkins (UK) diesel engine and Stamford alternator
- ☒ Engine Charge alternator 12V
- ☒ Single bearing alternator IP23, insulation class H
- ☒ 40☒ radiator as standard, 45☒ is optional, water-cooled
- ☒ Skid and vibration isolators
- ☒ Dry type air filter, Main line circuit breaker
- ☒ Microprocessor control panel, Key start panel be optional
- ☒ 4 pole MCB, 12 V battery, rack and cable.
- ☒ 8-hour operation base tank
- ☒ Special integrated steel base tank and sprayed overall in gloss enamel paint.
- ☒ Optional soundproof or weatherproof canopy, industrial or residential silencer be optional



Genset Main Technical Data

Genset, 50HZ at 1500RPM, 3 phase, 400/230V							Perkins Engine, 1500RPM				
Model	Tank (L)	Noise level dB(A)7m	KVA		KW		Model	Bore/stroke	Cyl.	Asp	Gov.
			ESP	PRP	ESP	PRP					
MPS65-1	260	98	72	65	57	52	1104A-44TG1	105/127	4L	TC	M
MPS65S-1	100	73									

(1) Ambient reference conditions: 1,000 m bar, 27☒ , 30% relative humidity. Rating according to ISO 3046 and 8528

(2) Available in the following voltages: 440/254V-415/240V-400/230V-380/220V-220/127V-200-115V.

(3) ESP: Standby Power standby duty, operation under variable load, without overload.

PRP: Prime Power-Continuous duty operation, under variable load for 24h-10% overload permissible 1 hour/12 hours.

(4) M: Mechanical speed governor, E: Electronic speed governor.

(5) NA: Naturally aspirated, TC: Turbocharged, TCA: Turbocharged and air-air aftercooled. TW: water-cooled Turbocharged

Reliable Performance**Voltage Regulation**

Voltage regulation maintained within±0.5% as follow:

- ☒ Between 0.8 and 1.0 lagging and unity
- ☒ From no load to full load

- At speed droop variation up to 4.5%

Frequency Adjustable Ratio

- Change load from 0-100%,within 1.0%(electric speed regulator),within 4.5 (mechanical speed regulator)

Frequency Undulation

- Load from 0-100%,Frequency undulation within 0.25%
- No load wire volts max undulation ratio within 1.8%
- Three phrase balanced load in the order of 5%

Effect factor of telecom

- TIF better than 50
- THF to BS4999 Part 40 better than 2%

Electromagnetism

- In compliance with BS800 and VDE levels G and N

Criterion

- ISO3046, ISO8528, BS4999, BS5514, BS5000PT99, AS1359, IEC34, UTE5100,VDE0530, ISO9001:2000, ISO14001

Engine Specification

UK Perkins-EU Diesel Engine	Technical Data		
<p>Building upon Perkins proven reputation within the power generation industry, the newly introduced 1100 Series range of Elect Ropak engines now fit even closer to the needs of their customers'.</p> <p>Compact and Efficient Power The Perkins 1100 Series family was developed following an intensive period of customer research. The 3.3 and 4.4 liter engines feature new cylinder blocks which ensure bore roundness is maintained under the pressures of operation, as well as significantly reducing mechanical and combustion noise.</p> <p>Cleaner and Quieter Power The refined structure of the 1100C range leads to an exceptionally low noise signature. To meet environmental needs swirl conditioned air is delivered through the new cross-flow cylinder head, and burns cleanly with the high pressure fuel from an advanced technology rotary pump.</p> <p>Quality by Design Class A manufacturing improvement ensures that product reliability meets the high standards demanded by customers. Product design is focused on maintaining Perkins legendary reputation for durability.</p>	Engine Model	1104A-44TG1	
	Engine manufacturer/brand	Perkins(UK)	
	Type and Cylinder	4L, 4 cycle	
	Induction system	NA	
	Compression ratio	17.25:1	
	Cubic capacity	L	4.4
	Bore x stroke	mm	105 X127
	Test condition air temperature	<input checked="" type="checkbox"/>	25
	Cross engine power	Kw	59.6
	Mean piston speed	m/s	6.35
	Engine Coolant flow	L/m	142
	Combustion air flow	m3/min	4
	Exhaust gas flow	m3/min	10.5
	Exhaust gas temperature	<input checked="" type="checkbox"/>	515
	Starting system		12v
	Battery voltage /capacity		12V DC/125A/200
	Fuel Consumption 100%	L/hr	18.6
	Fuel Consumption 75%	L/hr	/
Fuel Consumption 50%	L/hr	/	
Governor Type		M	

Alternator Specification

STAMFORD NEWAGE GENERATOR	Alternator Technical Data	
<p>STAMFORD NEWAGE has a long history of producing high-quality reliable products for the power generation Generator market. Their portfolio of high quality generator ends is recognized as an industry standard.</p> <p>Stamford AC alternator</p> <p>Brushless, self exciting</p> <p>Class 'H' insulation</p> <p>Standard degree of protection is IP23</p> <p>Self regulating</p> <p>With fan cooling</p> <p>Resist humid grease</p> <p>AC excitation, rotating rectification tube</p> <p>Stator grease insulation covered</p> <p>Rotator and excitation high polymer</p> <p>Resist the corruption of oil and acid.</p> <p>Rotator balance is in accordance with BS5625 standard 12.5</p> <p>High-quality lubrication sealed long-time bearing</p>	Generator Model	UCI224F
	Exciter	Brushless
	Cooling Fan	Cast alloy aluminum
	Bearing	Single,double shielded
	Windings	100%copper
	Connection Type	Reconnectable
	Insulation Type	Class H
	Pitch	2/3
	Amortisseur Winding	Full
	A.V.R. Model	SX460
	Voltage Regulation NL-FL	±0.5%
	Underspeed Protection	Standard
	Overexcitation Protection	IP23
	Standards	NEMA, IEC, IEEE, CSA, BS
	Phase Sequence	A(U), B(V), C(W)
	TIF (1960 Weightings)	<50
Excitation System	Self-exciting, PMG optional	

Control System

PLC-1F CONTROL SYSTEM

--Controlled by Module GC-1F +B3

The Generator Control er GC-1F is a microprocessor- based control unit containing al necessary functions for protection and control of a diesel engine. Furthermore, it contains a three-phase AC voltage measuring circuit. The unit is equipped with an LCD display presenting all values and alarms. GC-1F is a compact al -in-one unit designed for the following applications:

1. Automatic engine start/stop
2. Engine protection
3. Breaker control
4. Generator protection
5. Automatic Mains Failure

Optional applications:

6. CANbus J1939 engine communication



Description For Module GC-1F +B3:

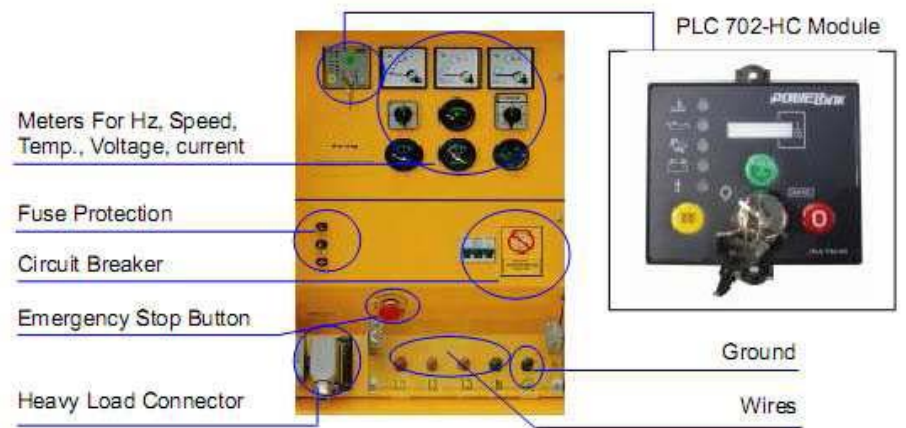


Standard functions	Shutdown	Warning
Engine Control Generator Monitoring Generator Protection Engine Monitoring Clear Text Display	Loss of Speed Signal Alternator Under / Over Voltage Alternator Under/ Over Frequency Mains Under / Over Voltage Mains Under/ Over Frequency Under / Over Speed Low Oil Pressure High Engine Temperature Phase Sequence Electrical (Option) Earth Fault (Option)	Alternator Under / Over Voltage Alternator Under/ Over Frequency Mains Under / Over Voltage Mains Under/ Over Frequency Under / Over Speed Low Oil Pressure Pre-Alarm High Engine Temperature Pre-Alarm High/Low Battery Voltage Over-current Periodic maintenance

PLC-702HC CONTROL SYSTEM

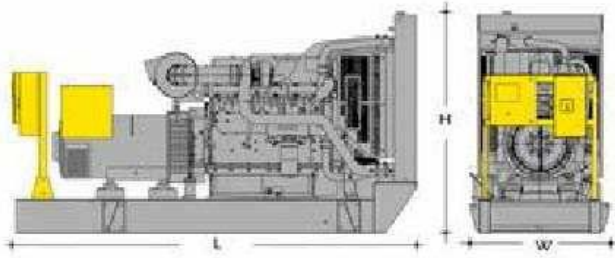
Standard Control Function

- ▶ Manual Engine Control Module
- ▶ Low Oil Pressure
- ▶ High Engine Temperature
- ▶ Auxiliary Shutdown
- ▶ Overspeed Protection
- ▶ Protection hold-off timer
- ▶ Charge Failure warning





Dimension & Weight

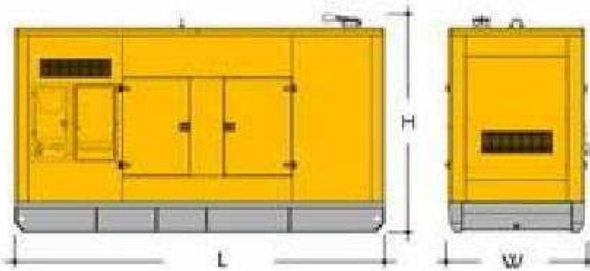


MPS65-1 open set

Overall size (L*W*H), m

2.21 X 0.85X 1.38

Weight (kg):930



MPS62S-1 soundproof set

Overall size (L*W*H), m

2.70 X 1.10 X 1.51

Weight (kg):1566

☒ The Weights are approximate.

Optional Features

Fuel System Options

- Low fuel level shutdown
- Engine Oil Heater
- Manual Sump Oil Drain Pump

Exhaust Options

- Exhaust Silencer-industrial(9dB),In-Line
- Exhaust Silencer-Residential (25dB),In-line
- Flexible and fixing kit for industrial silencer
- Flexible and fixing kit for Residential silence

Control Panels

- Earth Fault Relay
- Remote Monitor Interface
- Protection for Alarm Module & Auxiliary Relay
- Parallel control panels

Switchgear

- Circuit Breaker MCCB & ACB
- Mains auto-charger
- Auto Transfer Switch

Canopy

- Mobile Sets /Trailer
- Weatherproof/Acoustic Enclosures

Voltage Connections

- 277/480V,3 Phase
- 254/440V,3 Phase
- 240/416V,3 Phase
- 230/400V,3 Phase
- 220/380V,3 Phase
- 127/220V,3 Phase
- 115/200V,3 Phase
- 110/190V,3 Phase

Miscellaneous Options

- Coolant heater-240/120V
- Battery Charger 110-277V,3A
- PCC2100 with barograph
- Earth Fault Relay
- Packing-Export Box



Air Switch



BGC Paralleling Control system



ATS



Trailer set