

Engine Accessories

- ◆ Medium-duty air cleaner
- ◆ Oil and fuel filters
- ◆ Fuel-lift pump
- ◆ 12 V electric starting system

Alternator Specification

- ◆ Single-bearing, 2 or 4-pole brushless alternator
- ◆ Solid state AVR with ±1.5% as standard
- ◆ Class H insulation on the rotor and stator, with ingress protection rating 23

Optional Items

- ◆ Residential exhaust silencer for open sets (as fitted to acoustic)
- ◆ Basic tool kit

Control Cubicle

All sets have a control cubicle mounted on a vibration-isolated support, which has the following features:

- ◆ Electronic digital control module with monitoring/control facility and warning indicators
- ◆ Automatic shutdown protection
- ◆ Emergency stop button (lock-down type)
- ◆ AC output circuit breaker with over-current protection
- ◆ DC circuit control switch and overload circuit breaker

The control module gives digital readouts of:

- ◆ Generator voltage (phase-to-phase and phase-to-neutral)
- ◆ Generator current (each phase displayed separately)
- ◆ Output frequency
- ◆ Engine speed
- ◆ Engine oil pressure
- ◆ Engine coolant temperature
- ◆ Battery voltage
- ◆ Engine hours run

The control module has indicators for:

- ◆ Overspeed/underspeed
- ◆ Emergency stop
- ◆ Engine oil pressure
- ◆ Engine temperature
- ◆ Failure to start
- ◆ Battery charger failure

Automatic shutdown occurs under:

- ◆ Low engine oil pressure
- ◆ High engine temperature
- ◆ Overspeed/underspeed
- ◆ Failure to start after three attempts

Manual/Remote Start Sets

These sets have the flexibility of either manual or remote automatic operation:

- ◆ Manual operation is by **START** and **STOP** push-buttons on the control module
- ◆ Remote operation is achieved by connecting a 2-wire circuit to the relevant terminals on the control module and is activated by setting the control module to **AUTO**

Automatic Mains Failure Sets (AMF)

In the event of a mains failure, the generating set will automatically operate to supply the electrical load. In addition to the standard features, automatic mains failure sets have:

- ◆ Wall-mounted cubicle governing automatic mains failure operation
- ◆ Control module timer circuits set to delay start, delay transfer back to mains and delay stop to allow for engine cooldown
- ◆ Solid-state automatic battery charger that maintains charge when set is not running

The wall-mounted cubicle features:

- ◆ Mains monitoring unit to control set operation
- ◆ Load-transfer contactors, mechanically and electrically interlocked (rated for set output)
- ◆ Indicator for mains-on-load or plant-on-load

Power Outputs to ISO 8528-1¹

50 Hz, 1500 r/min				
Model	Engine	Rating	Single Phase	Three Phase
			220V 230 V 240 V kVA	380/220 V 400/230 V 415/240 V kVA
W7(A)	LPW2	Prime	5.6	7.0
		Standby	6.1	7.6
W12(A)	LPW3	Prime	8.7	10.9
		Standby	9.5	12.0
W16 (A)	LPW4	Prime	12.2	15.0
		Standby	13.5	16.5
W22 (A)	LPWT4	Prime	-	20.0
		Standby	-	22.0

Approximate Fuel Consumption			
Values refer to litres/hour			50 Hz
Genset	Engine	Load	1500 r/min
W7(A)	LPW2	100%	1.9
		75%	1.5
W12(A)	LPW3	100%	2.8
		75%	2.2
W16(A)	LPW4	100%	3.8
		75%	2.9
W22(A)	LPWT4	100%	4.9
		75%	3.7

Sound Pressure ³		
Acoustic sets, 75% load at 7m		
50 Hz, 1500 r/min		
LPW2/3	LPW4	LPWT4
64 dBA	65 dBA	62 dBA

1. For rating definitions see page 4. Power Factor: single phase, 1.0 pf; three phase, 0.8 pf. Other voltages are available on request. Power outputs are based on standard Lister Petter alternators (but see 2).
 2. LPWT4 single-phase outputs are based on Mecc Alte alternators.
 3. In accordance with European Noise Directive 2001/14/EC.

Approximate Dimensions

		Open sets	
	Length (A)	mm	1442
		in	56.8
	Width (B)	mm	715
		in	28.1
	Height (C)	mm	997
		in	39.25
		Acoustic sets	
	Length (A)	mm	1693
		in	66.6
	Width (B)	mm	743
		in	29.2
	Height (C)	mm	1143
		in	45.0

Rating Definitions to ISO 8528-1

Ratings are in accordance with ISO 8528-1. Power Factor: Single phase, 1.0 pf; three-phase, 0.8 pf. Other voltages are available on request.

Rating Conditions

A standard generating set is designed to operate in environmental reference conditions of 25°C, 100 kPa and 30% humidity.

Prime Power

This rating is for the supply of continuous electrical power (at variable load). There is no limit on the annual hours of operation and 10% overload power can be supplied for 1 hour in 12.

Standby Power

This rating is for the supply of continuous electrical power (at variable load) in the event of a utility power failure. No overload is permitted.

Weight

		Open Sets				Acoustic Sets			
		W7	W12	W16	W22	W7(A)	W12(A)	W16(A)	W22(A)
Dry weight	kg	396	417	456	466	500	540	580	590
	lb	873	919	1005	1027	1102	1190	1279	1301

A comprehensive range of options allows you to select a specification that matches your requirements. Please ask your Hawkpower distributor. (See panel below.)

Distributor's Address

Hawkpower have made efforts to ensure that the information in this data sheet is accurate but reserve the right to amend specifications and information without notice and without obligation or liability.

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ALPHA Series Water-Cooled Gensets



POWERED BY LISTER PETER ENGINES

50 Hz; 1500 r/min; power outputs: 5.6–22.0 kVA

Water-cooled generating sets with electronic control module



Acoustic Set (A)



Open Set

Choice of:

- ✓ Lister Petter ALPHA-Series water-cooled, direct injection diesel engine (2, 3 or 4 cylinders)
- ✓ Naturally aspirated or turbocharged
- ✓ Open set or acoustic set (A)

- ◆ Pusher fan
- ◆ Operators' Handbook
- ◆ Electrical diagrams

Open Sets Only:

- ◆ Engine-mounted exhaust silencer

Standard Features

- ◆ Control system with electronic digital control module (for features see page 3)
- ◆ Single-bearing, 2 or 4-pole brushless alternator
- ◆ 66-litre polypropylene fuel tank with contents gauge
- ◆ Galvanised steel base-plate with forklift pockets and bunding for the fuel tank
- ◆ Anti-vibration mountings
- ◆ 12 V starter battery and leads
- ◆ Mechanical governing
- ◆ Emergency stop button (lock-down type)

Acoustic Sets Only:

- ◆ Acoustic canopy
- ◆ Residential exhaust silencer
- ◆ Central point lifting eye
- ◆ External emergency stop button