

Engines (Volvo)

- ◆ Heavy duty air cleaner
- ◆ Oil and fuel filters
- ◆ Fuel-lift pump
- ◆ 24 V electric starting
- ◆ Residential exhaust silencer
- ◆ Electronic management system

Alternator Specification

- ◆ Single-bearing, 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

- ◆ Acoustic canopy (64 dBA at 10 metres)
- ◆ GPRS generating set module system

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
- ◆ 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
- ◆ 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:

- ◆ Generator-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 Generator-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

Sound Pressure ³						
Acoustic sets, 75% load at 10m						
50 Hz, 1500 r/min						
W390(A)	W420(A)	W440 (A)	W500 (A)	W550 (A)	W620 (A)	W690 (A)
64 dBA	64 dBA	64 dBA	64 dBA	64 dBA	64 dBA	64 dBA

50 Hz, 1500 r/min			
Model	Engine	Rating	Three Phase
			kVA
W390(A)	TD 520 GE	Prime	350.0
		Standby	385
W420(A)	TD 520 GE	Prime	375.0
		Standby	412.5
W440 (A)	TAD 531 GE	Prime	400.0
		Standby	440
W500 (A)	TAD 532 GE	Prime	450.0
		Standby	495
W550 (A)	TAD 731 GE	Prime	500.0
		Standby	550
W620 (A)	TAD 732 GE	Prime	560.0
		Standby	616
W690 (A)	TAD 733 GE	Prime	625.0
		Standby	687.5

Approximate Fuel Consumption 1500 r/min				
Values refer to litres/hour			g/kw/hr	Aprox consumption litres/hr
Genset	Engine	Load		
W390(A)	TD 520 GE	100%	196	71.1
		75%	197	53.6
W420(A)	TD 520 GE	100%	195	75.9
		75%	198	57.8
W440(A)	TAD 531 GE	100%	195	82.7
		75%	198	63.0
W500(A)	TAD 532 GE	100%	198	93.5
		75%	200	70.8
W550 (A)	TAD 731 GE	100%	196	101.5
		75%	199	77.3
W620 (A)	TAD 732 GE	100%	197	115.1
		75%	201	88.1
W690 (A)	TAD 733 GE	100%	196	126.6
		75%	199	96.4

Fuel Tank Size	
Model	Fuel Tank Size litres
W390(A)	650
W420(A)	650
W440 (A)	650
W500 (A)	990
W550 (A)	990
W620 (A)	990
W690 (A)	990

Approximate Dimensions

		Acoustic sets							
		W390(A)	W420(A)	W440 (A)	W500 (A)	W550 (A)	W620 (A)	W690 (A)	
<p>PLEASE NOTE: EXHAUST IS SUPPLIED LOOSE</p>	Length (A)	mm	4500	4500	5000	5000	5000	5000	
	Width (B)	mm	2000	2000	2000	2000	2500	2500	
	Height (C)	mm	2700	2700	2700	2700	3000	3000	

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% over-load 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

		Acoustic Sets						
		W390(A)	W420(A)	W440 (A)	W500 (A)	W550 (A)	W620 (A)	W690 (A)
Dry weight	kg	4000	4500	4500	5500	5500	6000	6000

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.

	<p>HAWKPOWER (Pty) Ltd. Directech Industrial Park, Corner Homestead & Orleans Roads, Kya-Sand, Randburg, South Africa T: +27 11 708 2202 F: +27 11 708 2217 W: www.hawkpowergenerators.com For sales enquiries please email: sales@hawkpowergenerators.com For technical enquiries please email: technical@hawkpowergenerators.com</p>
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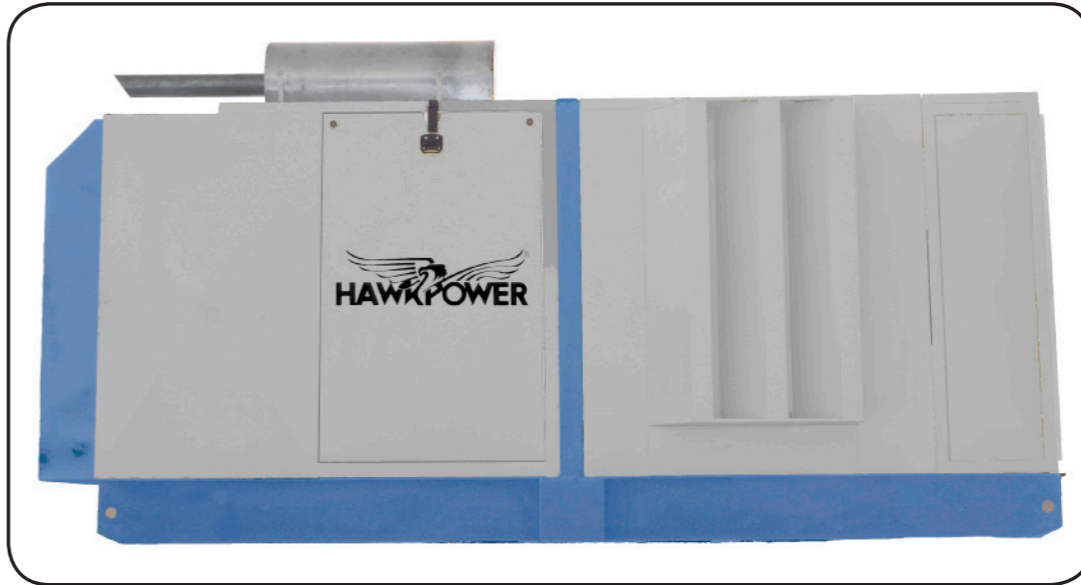


Water-Cooled Gensets

VOLVO PENTA POWERED BY VOLVO ENGINES

50 Hz; 1500 r/min; power outputs: 350.0—625.0 kVA (Prime)

Water-cooled generating sets with electronic control module



Acoustic Set

Features:

- ◆ 350.0 - 625.0 kVA
- ◆ 50 Hz at 1500 r/min
- ◆ Volvo 6 cylinder engines
- ◆ Open or acoustic options
- ◆ Base mounted fuel tank
- ◆ Lifting frame
- ◆ Anti-vibration mounts
- ◆ 4-pole, single bearing alternators
- ◆ Crank case heating
- ◆ Digital control module