



SIGMA Series

SIGMA 60 G-Build

SWT4 6015*, SWT4 6018*, SWT4 6030, SWT4 6036*

Power range: 26—50 kW

Full-load speed range: 1500—3600 r/min

A compact 4-cylinder emission-compliant G-Build diesel engine

Suitable for:

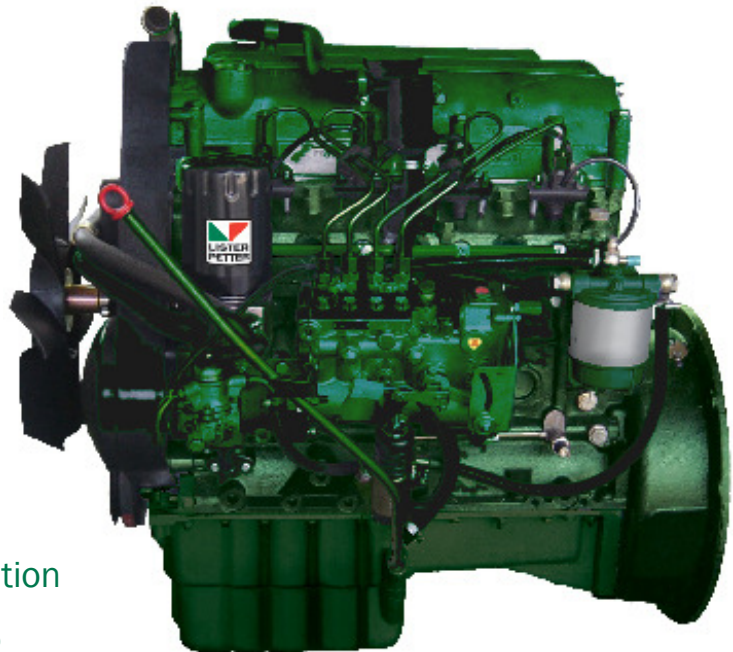
- ✓ gensets

Special Attributes

- ✓ compact
- ✓ versatile
- ✓ emission compliant
- ✓ designed for continuous operation in ambient temperatures up to 52°C (122°F)
- ✓ starting capabilities down to -23°C (-9.5°F)
- ✓ 250-hour service intervals

Characteristics and Features

- four cylinders
- indirect injection
- turbocharged



- water-cooled
- diesel-fuelled
- anticlockwise rotation, looking on the flywheel end
- standard oil and fuel filters
- 12V electric start
- SAE 4 flywheel housing
- overhead camshaft
- inline fuel injection pump
- cast-iron crankcase

SIGMA 60 G-Build Technical Data Sheet

Standard Equipment

- flywheel with ring gear
- low oil-pressure switch
- fuel filter/agglomerator
- inlet and exhaust manifolds
- spin-on lubricating-oil filter
- mechanical fuel-lift pump
- internal crankcase breather system
- self-vent fuel system
- crankshaft-driven lubricating-oil pump
- combustion chamber glow plugs
- Operators' Handbook

Emissions Compliance

- EU Stage 2
- USA (in preparation)

Warranty

- standard: two years from delivery
- optional: five years from delivery (conditions apply)

Technical Data		
Type of fuel injection		Indirect
Number of cylinders		4
Firing order (number 1 cylinder is at the camshaft belt end)		1 - 3 - 4 - 2
Aspiration		Turbocharged
Direction of rotation, looking on the flywheel end		Anticlockwise
Nominal cylinder bore	mm	90.0
	in	3.54
Stroke	mm	95.0
	in	3.74
Total cylinder capacity	litre	2.417
	in ³	147.5
Compression ratio		1 : 20.6
Maximum full-load speed		3600
Mean piston speed at 3600 r/min	m/sec	11.4
	f/sec	37.3
Oil consumption	g/kW h	0.7
	lb/kW h	0.0015

Power Outputs and Fuel Consumption					
		SWT4 6015	SWT4 6018	SWT4 6030	SWT4 6036
r/min		1500	1800	3000	3600
Fixed Speed Continuous Power	kW	26.0	32.0	50.0	50.0
	bhp	34.9	42.9	67.0	67.0
Fixed Speed Overload Power	kW	28.6	35.2	55.0	55.0
	bhp	38.5	47.2	73.7	73.7
Fuel Consumption (Fixed Speed, Continuous Power)	g/kW h	269	269	290	295

Notes:

- 1 The overload capability applies to a fully run-in engine. This is normally attained after a running period of about 50 hours .
- 2 Power ratings measured at the flywheel and fuel consumptions, apply to a fully run-in, non derated engine without a radiator and fan fitted, and without power-absorbing accessories or transmission equipment.

Available July 2007

Rating Definitions (ISO 3046)

1. Fixed Speed Power - continuous speed (ICN)

The power in kW which the engine is capable of delivering continuously at the stated crankshaft speed, under conditions of 100 kPa barometric pressure, 30% relative humidity and 25°C air inlet temperature, provided that the engine is overhauled and maintained in good operating condition and that fuel to BS EN 590 Class A1 or A2, and lubricating oils to the correct performance specification and viscosity classification as recommended by Lister Petter Limited, are used.

2. Fixed Speed Powers - overload power (ICXN)

The maximum power in kW which the engine is capable of delivering intermittently at the stated crankshaft speed for a period not exceeding one hour in any period of twelve hours continuous running, immediately after working at the continuous power, under the conditions specified in (1) above.

3. Variable Speed - fuel stop power, continuous power (IFN)

The maximum power in kW which an engine is capable of delivering continuously at stated crankshaft speed, under the conditions as specified in item 1, with the fuel limited so that the fuel stop power cannot be exceeded.

4. Variable Speed - fuel stop power, intermittent (IOFN)

The maximum power in kW which an engine is capable of delivering intermittently at the stated crankshaft speed, for a period not exceeding 1 hour in any period of 12 hours continuous running immediately after running at the Continuous Fuel Stop Power rating.

5. De-rating

For non-standard site conditions, reference should be made to relevant BS, ISO and DIN standards.

SIGMA 60 G-Build Technical Data Sheet

Approximate Dimensions and Weight			
<p>Length, Height and Width</p>	Dry Weight	kg	277
		lb	610
	Length (A)	mm	957
		in	37.7
	Height (B)	mm	793
		in	31.2
Width (C)	mm	800	
	in	31.5	

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

Distributor's Address	UK
	 <p>Lister Petter Limited, Dursley, Gloucestershire GL11 4HS England; Tel: +44 (0)1453 544141; Fax: +44 (0)1453 546732; E-mail: sales@lister-petter.co.uk http://www.lister-petter.co.uk</p>
	<p>USA</p> <p>Lister Petter Americas Inc. 815 E. 56 Highway, Olathe, Kansas 66061 USA Tel: +1 913 764-3512; Fax: +1 913 764-5493; E-mail: info@lister-petter.com; http://www.lister-petter.com</p>
	<p>France</p> <p>Lister Petter France, 17 Avenue de L'escouvrier, Zone d'Activites, 95842 Sarcelles, Cedex France; Tel: +33 (0)1 39330420; Fax: +33 (0)1 34195760; E-mail: com- mercial@lister-petter-france.fr</p>
	<p>India</p> <p>Lister Petter Private Limited, 102 Beaver Gradeur, Baner, Pune 411045 India Tel: +91 20 729 3284; Fax: +91 20 729 3287</p>
	<p>China</p> <p>Lister Petter China, Jinan Fuqiang Power Co. Ltd, Shandong Zhangqiu Industrial Area, Jinan 250220, P.R. China</p>

Lister Petter 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.