

# 2011. The Genset Engine.

12-50 kVA at 1500/1800 min<sup>-1</sup> | rpm



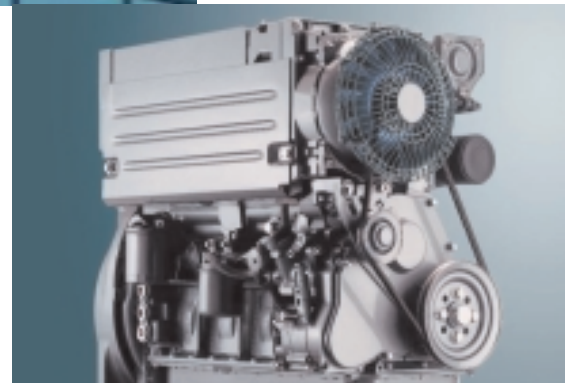
## The engine with integrated oil cooling system.

### These are the characteristics of the 2011 Gen:

- 2, 3 and 4 cylinder naturally aspirated in-line engines.
- 4 cylinder model also with turbocharging.
- Displacement: 0.78 l/cylinder.
- Integrated oil-cooling (engine is delivered complete with cooler).
- Acoustically optimized crankcase.
- All service points on the same engine side.
- Electronic engine governor (option).
- Compact design and low weight.
- Worldwide service network with over 1,000 locations.

### Your benefits:

- ▶ Low noise emission, cost savings as no noise attenuation measures are required.
- ▶ Long service intervals: 1,000-hour oil change intervals and low fuel consumption bring savings in operating costs.
- ▶ Low installation costs.
- ▶ Excellent load takeover characteristics ensure prompt power supply.
- ▶ Combined oil cooling and lubrication prevents corrosion and cavitation. High reliability and durability together with reduced maintenance requirement and wear parts.



#### Dimensions and weights/integrated cooler

##### F2L 2011

Length:	mm	inch	645	25.2
Width:	mm	inch	588	22.9
Height:	mm	inch	707	27.6
Weight:	kg	lb	212	467

##### F3L 2011

Length:	mm	inch	756	29.5
Width:	mm	inch	588	22.9
Height:	mm	inch	701	27.3
Weight:	kg	lb	254	560

##### F4L 2011

Length:	mm	inch	868	33.9
Width:	mm	inch	588	22.9
Height:	mm	inch	722	28.2
Weight:	kg	lb	293	646

##### BF4L 2011

Length:	mm	inch	778	30.3
Width:	mm	inch	531	20.7
Height:	mm	inch	704	27.5
Weight:	kg	lb	295	650

## ► Rating table: 2011. The Genset Engine. 50 Hz

Engine type		F2L 2011	F3L 2011	F4L 2011	BF4L 2011
Speed	min <sup>-1</sup>   rpm	1500	1500	1500	1500
Frequency	Hz	50	50	50	50
<b>Engine/genset ratings<sup>1)</sup></b>					
Continuous power, ICN (COP) <sup>2)</sup>	kW   hp	11,4   15.5	18,1   24.6	26,2   35.6	34,6   47.1
Prime power, ICN (PRP) <sup>3)</sup>	kW   hp	12,0   16.3	19,0   25.8	27,6   37.5	36,4   49.5
Limited-time running power, IFN (LTP) <sup>4)</sup>	kW   hp	12,6   17.1	20,0   27.2	29,0   39.4	38,2   52.0
<b>Typical generator power output</b>					
Typical generator power output (COP) <sup>5)</sup>	kVA	11,8	19,0	28,5	38,0
Typical generator power output (PRP) <sup>5)</sup>	kVA	12,5	20,0	30,0	40,0
Typical generator power output (LTP) <sup>5)</sup>	kVA	13,1	20,9	31,5	42,0
<b>Spec. fuel consumption PRP (LTP)<sup>6)</sup></b>					
100 % load	g/kWh   lb/hp-hr	235   0.381	225   0.365	215   0.348	220   0.356
75 % load	g/kWh   lb/hp-hr	245   0.397	230   0.373	220   0.356	225   0.365
50 % load	g/kWh   lb/hp-hr	270   0.437	260   0.421	235   0.381	235   0.381
25 % load	g/kWh   lb/hp-hr	400   0.648	450   0.729	350   0.567	320   0.518

## ► Rating table: 2011. The Genset Engine. 60 Hz

Engine type		F2L 2011	F3L 2011	F4L 2011	BF4L 2011
Speed	min <sup>-1</sup>   rpm	1800	1800	1800	1800
Frequency	Hz	60	60	60	60
<b>Engine/genset ratings<sup>1)</sup></b>					
Continuous power, ICN (COP) <sup>2)</sup>	kW   hp	13,6   18.5	21,4   29.1	31,1   42.3	41,0   55.8
Prime power, ICN (PRP) <sup>3)</sup>	kW   hp	14,3   19.4	22,6   30.7	32,8   44.6	43,2   58.8
Limited-time running power, IFN (LTP) <sup>4)</sup>	kW   hp	15,1   20.5	23,8   32.4	34,5   46.9	45,5   61.9
<b>Typical generator power output</b>					
Typical generator power output (COP) <sup>5)</sup>	kVA/kWe	14,3/11.3	22,5/18.0	33,8/27.0	45,0/36.0
Typical generator power output (PRP) <sup>5)</sup>	kVA/kWe	14,9/11.9	23,8/19.0	35,6/28.5	47,4/38.0
Typical generator power output (LTP) <sup>5)</sup>	kVA/kWe	15,7/12.5	25,0/20.0	37,4/30.0	49,9/40.0
<b>Spec. fuel consumption PRP (LTP)<sup>6)</sup></b>					
100 % load	g/kWh   lb/hp-hr	235   0.381	225   0.365	220   0.356	220   0.356
75 % load	g/kWh   lb/hp-hr	245   0.397	230   0.373	220   0.356	220   0.356
50 % load	g/kWh   lb/hp-hr	270   0.437	260   0.421	240   0.389	235   0.381
25 % load	g/kWh   lb/hp-hr	400   0.648	400   0.648	350   0.567	350   0.567

1) Possibly power reduction depending on altitude and temperature. Please contact DEUTZ.

2) Continuous power 100 %, available at flywheel, no time limitation, plus 10 % extra power for governing purposes.

3) Prime power 100 %, mean power output 60 %, no time limitation, plus 5 % extra power for governing purposes.

4) Limited-time running power 100 %, which must be available during 500 running hrs/year, thereof max. 300 running hrs/year continuously, no overload permissible; the required extra power for governing purposes must be taken into account, however.

5) Taking into account typical generator efficiency of 83 % to 88 % and power factor cos (φ) = 0.8.

6) For fuel specification see operation manual.

The values given in this data sheet are for information purposes only and not binding. The information given in the offer is decisive.

### Standard specification

**Standard engine:** Flywheel housing SAE 4 (5 for n = 3000 min<sup>-1</sup> | rpm); flywheel with 6.5" connection.

**Cooling system:** Integrated cooling system, V-belt guard.

**Filter:** Dry air cleaner with mechanical restriction indicator, fuel filter.

**Engine electrics:** Alternator 14 V, 60 A; starter motor with 12 V, 2.2 kW.

**Governor:** Mechanical (Bosch).

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The engine company.

