

# 2011. The Genset Engine.

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



## The engine with external 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.

Fully oil-cooled (engine with conventional cooling system).

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/without cooler

##### F2M 2011 F

Length:	mm	inch	845	33.0
Width:	mm	inch	643	25.1
Height:	mm	inch	762	29.7
Weight:	kg	lb	206	454

##### F3M 2011 F

Length:	mm	inch	956	37.3
Width:	mm	inch	616	24.0
Height:	mm	inch	761	29.7
Weight	kg	lb	247	545

##### F4M 2011 F

Length:	mm	inch	1067	41.6
Width:	mm	inch	616	24.0
Height:	mm	inch	778	30.3
Gewicht:	kg	lb	285	628

##### BF4M 2011 F

Length:	mm	inch	1080	42.1
Width:	mm	inch	649	25.3
Height:	mm	inch	787	30.7
Weight	kg	lb	286	631

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

Engine type		F2M 2011	F3M 2011	F4M 2011	BF4M 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	11,8   16.0	18,5   25.2	26,6   36.2	35,6   48.4
Prime power, ICN (PRP) <sup>3)</sup>	kW   hp	12,4   16.9	19,4   26.4	28,0   38.1	37,4   50.9
Limited-time running power, IFN (LTP) <sup>4)</sup>	kW   hp	13,0   17.7	20,4   27.7	29,4   40.0	39,2   53.3
<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	220   0.356	215   0.348
75 % load	g/kWh   lb/hp-hr	245   0.397	230   0.373	215   0.348	210   0.340
50 % load	g/kWh   lb/hp-hr	270   0.437	245   0.397	230   0.373	225   0.365
25 % load	g/kWh   lb/hp-hr	400   0.648	400   0.648	320   0.518	270   0.437

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

Engine type		F2M 2011	F3M 2011	F4M 2011	BF4M 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	14,3   19.4	22,1   30.1	31,8   43.2	42,8   58.2
Prime power, ICN (PRP) <sup>3)</sup>	kW   hp	15,0   20.4	23,3   31.7	33,5   45.6	45,0   61.2
Limited-time running power, IFN (LTP) <sup>4)</sup>	kW   hp	15,8   21.5	24,5   33.3	35,2   47.9	47,3   64.3
<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	230   0.373	225   0.365	230   0.373	210   0.340
75 % load	g/kWh   lb/hp-hr	240   0.389	225   0.365	220   0.356	210   0.340
50 % load	g/kWh   lb/hp-hr	270   0.437	250   0.405	230   0.373	220   0.356
25 % load	g/kWh   lb/hp-hr	400   0.648	400   0.648	320   0.518	260   0.421

- 1) Possibly power reduction depending on altitude and temperature, without deduction of fan power requirement. 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 3; flywheel with 11.5" connection.  
**Cooling system:** Cooling unit, V-belt guard, pusher-type fan.  
**Filter:** Dry air cleaner with mechanical restriction indicator, fuel filter.  
**Engine electrics:** Alternator 14 V, 55 A; starter motor with 12 V, 3.1 kW.  
**Governor:** Mechanical (Bosch).



We move your world.

**DEUTZ AG**  
**DEUTZ MOTOR**

Deutz-Mülheimer Str. 147-149  
 D-51063 Köln  
 Phone: + 49 (0) 2 21-8 22-0  
 Fax: + 49 (0) 2 21-8 22-25 68  
 Internet: www.deutz.de  
 eMail: info@deutz.de