

**Mounting Arrangement:** Set of engine and alternator coupled directly by means of a flexible disk and mounted on a reinforced steel base frame including anti-vibration isolators ensuring a vibration free standing of the generating set.

**Deutz Engine:** Four stroke, direct injection, water-cooled Diesel engine of the 1012, 1013 and 1015 series at 1500 rpm manufactured with the latest technology.

Engine power: Continuous power according to ISO 3046 (ICN2) at variable load measured at 300 m a.s.l. and 25°C ambient temperature.

**Alternator:** Mecc Alte alternator, brushless, self-excited, self regulated with electronic voltage regulation (AVR), four poles, IP 21 protection and class H insulation.

**Manual control (C):** The generating set is supplied with a manual control panel, mounted on the genset.

**BE23** manual control unit with possibility for automatic start and stop by external signal, which includes following functions and components:

**Digital display:**

- generator three phases voltage
- generator three phases amperage
- generator frequency
- battery charger
- working hours
- fuel level
- oil pressure (depending on models)
- power (kVA, kW, kVAr, cos phi)

**LED indicators:**

- alarm menu displayed
- program menu displayed
- power menu displayed
- V/A/Hz/h menu displayed
- engine menu displayed
- low oil pressure
- high engine temperature
- battery voltage out of limits
- low fuel level
- external stop
- automatic mode (disable)

**Warnings and shutdowns:**

- oil pressure warning and shutdown
- engine temperature warning and shutdown
- fail to start shutdown
- external stop shutdown
- over and under speed shutdown
- under and over frequency shutdown
- low level fuel warning and shutdown
- over load kVA shutdown
- over and under voltage shut down
- alternator failure shutdown
- auxiliary input shutdown
- obstruction on the air filter

**Frontal push buttons for:**

- MENU SELECT (UP/DOWN) – CURSORS (LEFT/RIGHT) – AUTO/MANUAL (disabled) – START – STOP – RESET positions
- ON/OFF selector switch
- Emergency stop button. Error message on display.
- Selector switch for measurement of three amperage phases
- For 50 Hz, main circuit breaker with differential protection 4-p (up to 63A) / 3-p (over 100A). For 60 Hz available with circuit breaker and differential protection.

**Automatic control panel (D)** mounted on the genset.

**GC-M02** control unit for measurement, control and protection of the genset.

**For descriptions please see: control panels.**

**Optionals:**

- Extended fuel tank in the base frame
- Automatic fuel transfer pump
- Up to GSW160 trailer (road / site)
- Preheating system
- Flexible exhaust compensator
- Base frame for soundproof model (std. in soundproof versions)
- Different colour (base frame / canopy)
- Leak proof tray
- Engine electronic governor (standard for gensets powered by Deutz of the 1015 series)
- Manual oil drain pump
- Battery switch
- Alternator:
  - tropicalized, anti-condensation heaters, paralleling kit.



# POWERI

Genset model	GSW 60TDM*D	GSW 75TDM*D
Prime power (kVA)	56,4	69,7
Continuous power (kVA)	55,2	66,4
Emergency power (kVA)	59,8	73,0
Frequency (Hz)	50	50
Voltage (V)	Three phases 400/230	Three phases 400/230
Engine	<b>Deutz</b> BF4M 1012 E	<b>Deutz</b> BF4M 1012 EC
Cylinders	4	4
Displacement cm <sup>3</sup>	3192	3192
Compression ratio	17,5:1	17,5:1
Intake	Turbo	Turbo Intercooler
R.P.M.	1500	1500
Engine output (kW)	50,9	62,8
Cooling	Water	Water
Fuel consumption		
100% load (l/h)	13,1	15,2
75% load (l/h)	9,8	11,4
50% load (l/h)	6,6	7,8
25% load (l/h)	3,8	4,8
Exhaust Temp. (°C)	530	515
Exhaust gases flow (m <sup>3</sup> /h)	481	575
Cooling air flow (m <sup>3</sup> /h)	7560	6840
Combustion air flow (m <sup>3</sup> /h)	177	213

Other voltages available under request.

Continuous power: At variable load according to ISO 3046 (ICN2).

Emergency power: No overload capacity according to ISO 3046 (IFN3).

	GSW 60TDM*D	GSW 75TDM*D
<b>OPEN SET VERSIONS (B)</b>		
Fuel tank capacity (l)	95	95
Dimensions (mm)		
- Length	2000	2000
- Width	750	750
- Height	1154	1203
Weight (kg)	890	945
<b>SOUNDPROOF VERSIONS (S)</b>		
Noise level dB(A)	72	73
Fuel tank capacity (l)	220	150
Dimensions (mm)		
- Length	2700	2700
- Width	1075	1000
- Height	1030	1450
Weight (kg)	1300	1470
Weight including coolant and lubricant.		

\*) C=manual control panel D=automatic control panel

# POWERI

Genset model	GSW 105TDM*D	GSW 135TDM*D	GSW 160TDM*D
Prime power (kVA)	102,2	135,8	157,0
Continuous power (kVA)	96,5	128,7	148,8
Emergency power (kVA)	107,8	142,8	164,9
Frequency (Hz)	50	50	50
Voltage (V)	Three phases 400/230	Three phases 400/230	Three phases 400/230
Engine	<b>Deutz</b> BF4M 1013 EC	<b>Deutz</b> BF6M 1013 E	<b>Deutz</b> BF6M 1013 EC
Cylinders	4	6	6
Displacement cm <sup>3</sup>	4764	7146	7146
Compression ratio	17,5:1	17,5:1	17,5:1
Intake	Turbo Intercooler	Turbo	Turbo Intercooler
R.P.M.	1500	1500	1500
Engine output (kW)	90,6	117,8	137,8
Cooling	Water	Water	Water
Fuel consumption			
100% load (l/h)	21,6	28,6	32,3
75% load (l/h)	16,3	21,3	24,3
50% load (l/h)	11,3	14,7	17,0
25% load (l/h)	6,5	8,5	9,8
Exhaust Temp. (°C)	560	537	463
Exhaust gases flow (m <sup>3</sup> /h)	946	1242	1655
Cooling air flow (m <sup>3</sup> /h)	7920	10080	14400
Combustion air flow (m <sup>3</sup> /h)	351	460	614

Other voltages available under request.

Continuous power: At variable load according to ISO 3046 (ICN2).

Emergency power: No overload capacity according to ISO 3046 (IFN3).

	GSW 105TDM*D	GSW 135TDM*D	GSW 160TDM*D
<b>OPEN SET VERSIONS (B)</b>			
Fuel tank capacity (l)	125	205	205
Dimensions (mm)			
- Length	2000	2500	2500
- Width	750	1000	1000
- Height	1336	1336	1458
Weight (kg)	1100	1200	1590
<b>SOUNDPROOF VERSIONS (S)</b>			
Noise level dB(A)	74	74	74
Fuel tank capacity (l)	165	220	220
Dimensions (mm)			
- Length	2970	3500	3500
- Width	1100	1100	1100
- Height	1450	1450	1450
Weight (kg)	1800	2120	2300
Weight including coolant and lubricant.			

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Genset model	GSW 315TDM*D	GSW 430TDM*D	GSW 505TDM*D
Prime power (kVA)	313,0	427,0	500,0
Continuous power (kVA)	273,0	373,0	448,0
Emergency power (kVA)	347,0	471,0	525,0
Frequency (Hz)	50	50	50
Voltage (V)	Three phases 400/230	Three phases 400/230	Three phases 400/230
Engine	<b>Deutz</b> BF6M 1015 C	<b>Deutz</b> BF8M 1015 C	<b>Deutz</b> BF6M 1015 CP
Cylinders	V-6	V-8	V-8
Displacement cm <sup>3</sup>	11906	15874	15874
Compression ratio	17:1	17:1	17:1
Intake	Turbo Intercooler	Turbo Intercooler	Turbo Intercooler
R.P.M.	1500	1500	1500
Engine output (kW)	271,2	369,3	437,3
Cooling	Water	Water	Water
Fuel consumption			
100% load (l/h)	68,6	91,9	111,1
75% load (l/h)	50,4	67,2	80,5
50% load (l/h)	33,6	44,8	53,7
25% load (l/h)	19,0	25,0	
Exhaust Temp. (°C)	450	455	505
Exhaust gases flow (m <sup>3</sup> /h)	3465	4642	5079
Cooling air flow (m <sup>3</sup> /h)	20952	24120	32940
Combustion air flow (m <sup>3</sup> /h)	1360	1822	1958

Other voltages available under request.

Continuous power: At variable load according to ISO 3046 (ICN2).

Emergency power: No overload capacity according to ISO 3046 (IFN3).

	GSW 315TDM*D	GSW 430TDM*D	GSW 505TDM*D
<b>OPEN SET VERSIONS (B)</b>			
Fuel tank capacity (l)	500	775	775
Dimensions (mm)			
- Length	3000	3200	3200
- Width	1400	1600	1600
- Height	1950	2205	2205
Weight (kg)	2600	3400	3500
<b>SOUNDPROOF VERSIONS (S)</b>			
Noise level dB(A)	74	75	75
Fuel tank capacity (l)	680	850	850
Dimensions (mm)			
- Length	4000	4000	4000
- Width	1800	2000	2000
- Height	2150	2150	2150
Weight (kg)	3800	5400	5500

Weight including coolant and lubricant.

\*) C=manual control panel D=automatic control panel