

9. TECHNICAL SPECIFICATIONS

9.1 TORQUE VALUES

9.1.1 FOR GENERAL APPLICATIONS

The following tables list the recommended torques applied for general applications at assembly of the compressor.

For hexagon screws and nuts with strength grade 8.8

Thread size	M6	M8	M10	M12	M14	M16
Nm	9	23	46	80	125	205

For hexagon screws and nuts with strength grade 12.9

Thread size	M6	M8	M10	M12	M14	M16
Nm	15	39	78	135	210	345

9.1.2 FOR IMPORTANT ASSEMBLIES

Assemblies	Unit	Torque value	
Wheel nuts	Nm	80	+10/-0
Bolts, axle/beams	Nm	80	+/- 10
Bolts, towbar/axle	Nm	80	+/- 10
Bolts, towbar/bottom	Nm	80	+/- 10
Bolts, towing eye/towbar	Nm	80	+/- 10
Bolts, lifting eye/flywheel housing	Nm	205	+ 20
Bolts, engine/drive housing (M12)	Nm	80	+/- 10
Bolts, engine/drive housing (M14)	Nm	125	+/- 10
Bolts, compressor element/drive housing	Nm	80	+/- 5
Safety switches	Nm	35	+/- 5
Joints adjustable towbar (M24)	Nm	275	+/- 25
(M32)	Nm	375	+/- 25

Note:

Secure the tank cap and drain cock of the fuel tank handtight.

9.2 SETTINGS OF SHUTDOWN SWITCHES AND SAFETY VALVES

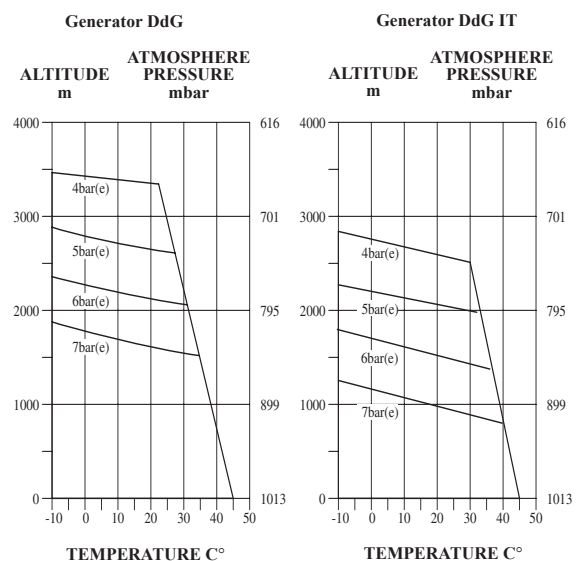
Designation	Unit	Value
Engine oil pressure	bar(e)	1.2
Engine oil temperature	°C	127 - 133
Compressor temperature	°C	116 - 120
Safety valve opening pressure		
EC type	bar(e)	10.5
ASME type	psi	135

9.3 COMPRESSOR/ENGINE/GENERATOR SPECIFICATIONS

Compressor type		XAS66
Designation	Unit	DdG / DdG IT
Reference conditions		
1. Absolute inlet pressure	bar(e)	1
2. Relative air humidity	%	0
3. Air inlet temperature	°C	20
4. Nominal effective working pressure	bar(e)	7
The inlet conditions are specified at the air inlet grating outside the canopy.		
Limitations		
1. Minimum effective receiver pressure	bar(e)	2.9
2. Maximum effective receiver pressure	bar(e)	8.5
3. Maximum ambient temperature	°C	45
4. Minimum starting temperature	°C	-15
5. Altitude capability (see separate curve below)	m	

Altitude unit performance curve

Max. allowable working pressure as a function of altitude and ambient temperature.



Performance data ¹⁾

1. Engine shaft speed, normal and maximum	r/min	2700
2. Engine shaft speed, compressor unloaded	r/min	1600
3. Engine shaft speed, generator at maximum load	r/min	2700
4. Free air delivery ²⁾	l/s	56
5. Compressed air temperature at outlet valves	°C	94
6. Noise level		
- Sound pressure level (LP), measured according to EPA with a tolerance of +/- 3 dB(A) under free field conditions at 7 m distance	dB(A)	72
- Sound power level (LW) complies with 84/532//533/EEC and 85/406/EEC limits	dB(A)	100

Design data

Compressor

1. Number of compression stages 1

Engine

1. Make Deutz
 2. Type F3M1011
 3. Coolant OIL
 4. Number of cylinders 3
 5. Bore mm 91
 6. Stroke mm 112
 7. Swept volume l 2.184
 8. Output according to DIN ISO 3046 IFN at normal shaft speed kW 33.2
 9. Capacity of oil sump:
 - Initial fill l 8.5
 - Refill (max.) l 6
 10. Capacity of cooling system l 1.2

Generator DdG

1. Electric power 110V/50Hz³⁾ kVA 4.4
 2. Rated current A 40
 3. Power factor 1
 4. Sockets A 1x32
 A 2x16

Generator DdG IT

1. Electric power 230/400V/50Hz⁴⁾ 1 phase / 3 phases kVA 4/6.5
 2. Power factor 0.8
 3. Sockets A 3x16

Unit

1. Capacity of compressor oil system l 6.5
 2. Net capacity of air receiver l 14
 3. Capacity of fuel tank l 58
 4. Air volume at inlet grating (approx.) m³/s 0.93
 (Air required for engine, compression and for engine- and compressor cooling)

Unit dimensions

		towbar	
		fixed	adjustable
Length	mm	2987	3406
Width	mm	1353	1353
Height	mm	1273	1273
Weight (ready to operate)			
XAS66 DdG	kg	822	832
XAS66 DdG IT	kg	829	839

with brakes

		towbar	
		fixed	adjustable
Length	mm	3065	3484
Width	mm	1353	1353
Height	mm	1273	1273
Weight (ready to operate)			
XAS66 DdG	kg	854	870
XAS66 DdG IT	kg	861	877

1) At reference conditions, if applicable, and at normal shaft speed, unless otherwise stated.
 2) Data Measured according to Tolerance
 Free air delivery ISO 1217 ed.3 +/- 5% 25 l/s <FAD>250 l/s
 1996 annex D +/- 4% 250 l/s <FAD>

The international standard ISO 1217 corresponds to following national standards:

- British BSI 1571 part 1
- German DIN 1945 Part 1
- Swedish SS-ISO 1217
- American ANSI PTC9

Free air delivery = volume flow rate

- 3) complying with British Gas Spec. TIN 12
- 4) complying with ISO 8528/8 - DIN 6280/10

9.4 CONVERSION LIST OF SI UNITS INTO BRITISH UNITS

1 bar = 14.504 psi
 1 g = 0.035 oz
 1 kg = 2.205 lb
 1 km/h = 0.621 mile/h
 1 kW = 1.341 hp (UK and US)
 1 l = 0.264 US gal
 1 l = 0.220 Imp gal (UK)
 1 l = 0.035 cu.ft
 1 m = 3.281 ft
 1 mm = 0.039 in
 1 m³/min = 35.315 cfm
 1 mbar = 0.401 in wc
 1 N = 0.225 lbf
 1 Nm = 0.738 lbf.ft
 t °F = 32 + (1.8 x t °C)
 t °C = (t °F - 32)/1.8

- A temperature difference of 1 °C = a temperature difference of 1.8 °F.

10. DATA PLATE

