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 values	
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

Note:
Secure the tankcap and drain cock of the fuel tank handtight.

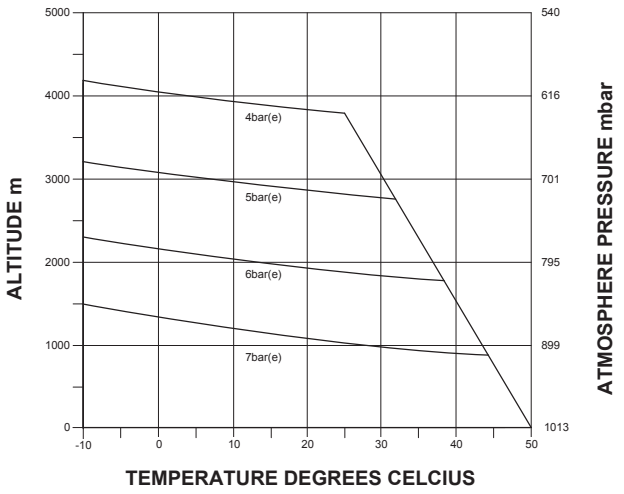
9.2 SETTINGS OF SHUT-DOWN SWITCHES AND SAFETY VALVES

Designation	Unit	
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 SPECIFICATIONS

Compressor type		XAS96 Dd
Reference conditions		
1. Absolute inlet pressure	bar	1
2. Relative air humidity	%	0
3. Air inlet temperature	°C	20
4. Normal effective working pressure	bar	7
The inlet conditions are specified at the air inlet grating outside the canopy		
Limitations		
1. Minimum effective receiver pressure	bar	4
2. Maximum effective receiver pressure	bar	8.5-9
3. Maximum ambient temperature	°C	50
4. Minimum starting temperature	°C	-10
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. Engine shaft speed, normal and maximum	r/min	2900
2. Engine shaft speed, compressor unloaded	r/min	2000
3. Free air delivery	l/s	88
4. Compressed air temperature at outlet valves	°C	90
5. Noise level		
– Sound pressure level (LP), measured according to ISO 2151 with a tolerance of +/- 3 dB(A) under free field conditions at 7 m distance	dB(A)	72
– Sound power level (LW) complie with 84/533/EEC limits	dB(A)	100

Design data

Compressor

1.	Number of compression	stages	1

Engine

1.	Make		Deutz
2.	Type		F3M1011F
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	35.4
9.	Capacity of oil sump:		
	– Initial fill	l	8.5
	– Refill (max.)	l	6
10.	Capacity of cooling system	l	1.2

Unit

1.	Capacity of compressor oil system	l	8
2.	Nett capacity of air receiver	l	16.4
3.	Capacity of fuel tank	l	73
4.	Air volume at inlet grating (approx.) (Air required for engine, compression and for engine- and compressor cooling)	m^3/s	1.2

Unit dimensions

without brakes		**fixed towbar**
Length	mm	3025
Width	mm	1350
Height	mm	1273
Weight (ready-to-operate)	kg	880

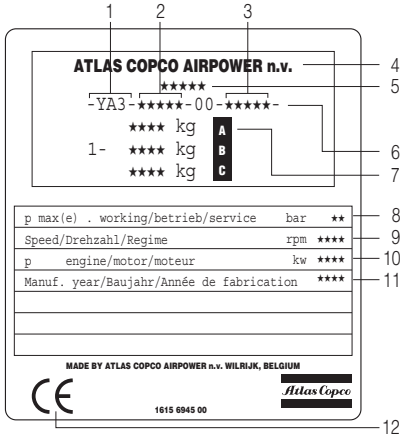
with brakes		**towbar**	
		fixed	**adjustable**
Length	mm	3078	3497
Width	mm	1350	1350
Height	mm	1273	1273
Weight (ready-to-operate)	kg	910	930

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 m^3/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. DATAPLATE



1. Company code
2. Product code
3. Unit serial number
4. Name of manufacturer
5. EEC or national type approval number
6. Vehicle identification number
7. A Maximum permitted laden weight of the vehicle
   B Maximum permitted road weight of the vehicle
   C Maximum permitted laden weight of the towing eye
8. Working pressure
9. Speed
10. Engine power
11. Manufacturing year
12. EC mark in accordance with Machine Directive 89/392 EEC