

## Compressors XAS 97 Dd AML: Principal Data

### 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, compressor unloaded	bar	9
3. Maximum ambient temperature at sea level .....	°C	45 <sup>6) 7)</sup>
4. Minimum starting temperature .....	°C	-10
5. Minimum starting temperature, with coldstart equipment .....	°C	-20 <sup>5)</sup>
6. Altitude capability .....	m	See Curve Below

### Performance data <sup>1)</sup>

1. Engine shaft speed, normal and maximum .....	r/min	2750
2. Engine shaft speed, compressor unloaded .....	r/min	1850
3. Free air delivery <sup>2)</sup> .....	l/s	89 <sup>7)</sup>
4. Fuel consumption:		
- at 100% FAD .....	kg/h	8.1
- at 75% FAD .....	kg/h	6.4
- at 50% FAD .....	kg/h	5
- at 25% FAD .....	kg/h	4
- at unload .....	kg/h	3.6
5. Specific fuel consumption at 100% FAD .....	g/m <sup>3</sup>	25.3
6. Typical oil content of compressed air .....	mg/m <sup>3</sup>	<5
7. Engine oil consumption (maximum) .....	g/h	37
8. Compressed air temperature at outlet valves .....	°C	90 <sup>7)</sup>
9. Noise level		
- Sound pressure level (Lp), measured according to		ISO 2151
under free field conditions at 7 m distance .....	dB(A)	72
- Sound power level (Lw) complies with		
2000/14/EC	dB(A)	98

**Design data**

**Compressor**

1.Number of compression stages ..... 1

**Engine**

1.Make ..... Deutz  
 2.Type ..... D2011L03  
 3.Coolant ..... Oil  
 4.Number of cylinders ..... 3  
 5.Bore ..... mm 94  
 6.Stroke ..... mm 112  
 7.Swept volume ..... l 2.332  
 8.Output according to ISO 9249 G at normal shaft speed ..... kW 36  
 - Load factor ..... % 50  
 9.Capacity of oil sump :  
 - Initial fill ..... l 8.5  
 - Refill (max.) .....<sup>(4)</sup> l 6  
 10.Capacity of cooling system ..... l 0

**Unit**

1.Capacity of compressor oil system ..... l 8  
 2.Net capacity of air receiver ..... l 16.7  
 3.Capacity of fuel tanks ..... l 80  
 4.Air volume at inlet grating (approx.)<sup>3)</sup> ..... m<sup>3</sup>/s 1.2

1) At reference conditions, if applicable, and at normal shaft speed unless otherwise stated

2)Data	measured according	Tolerance
Free air delivery	ISO 1217 ed. 3 1996 annex D	+/- 5% 25l/s<FAD<250l/s +/- 4% 250l/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

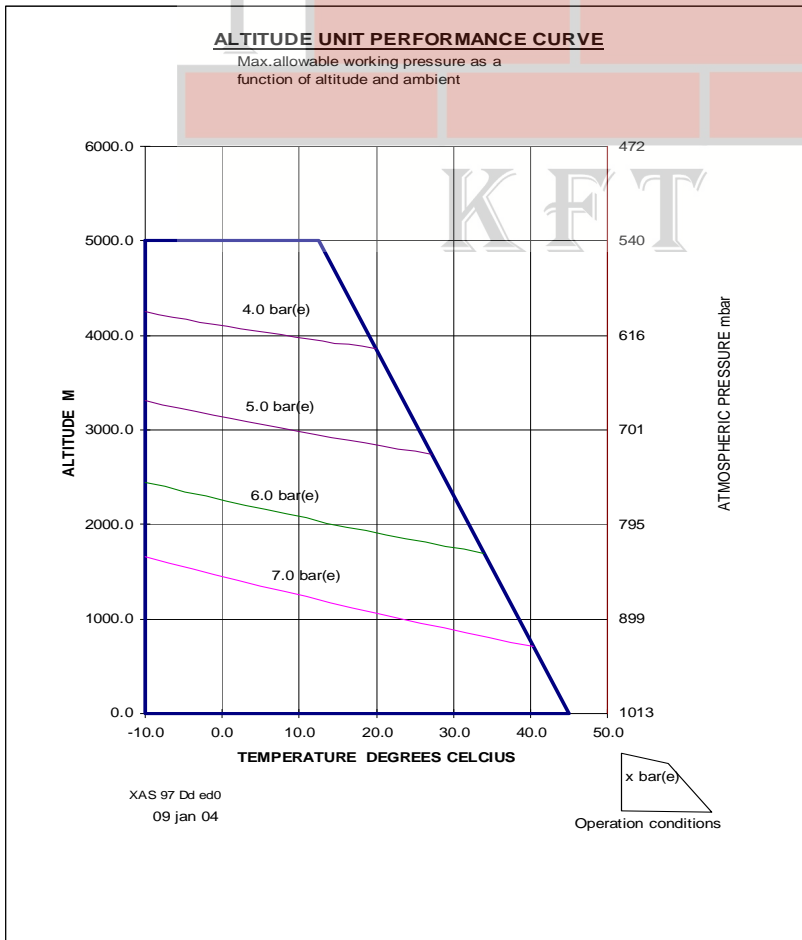
3) Air required for engine and compressor cooling, combustion and for compression

4) with filter change.

5) Coldstart: compressor oil PAROIL S instead of PAROIL M; engine oil PAROIL 5W40 instead of 15W40

6) For Hose Reel application: maximum ambient temperature 30°C

7)with aftercooler: max.ambient 40°C, FAD: 84 l/s, compr. air temp. at outlet valve 30°C



# Compressors XAS 185 DD7

## AML: Principal Data

**Reference conditions**

1. Absolute inlet pressure .....	psi	14.5
2. Relative air humidity .....	%	0
3. Air inlet temperature .....	°F	68
4. Normal effective working pressure .....	psi	102

The inlet conditions are specified at the air inlet grating outside the canopy

**Limitations**

1. Minimum effective receiver pressure .....	psi	58
2. Maximum effective receiver pressure, compressor unloaded	psi	131
3. Maximum ambient temperature at sea level .....	°F	113 <sup>6) 7)</sup>
4. Minimum starting temperature .....	°F	14
5. Minimum starting temperature, with coldstart equipment .....	°F	-4 <sup>5)</sup>
6. Altitude capability .....	ft	See Curve Below

**Performance data<sup>1)</sup>**

1. Engine shaft speed, normal and maximum .....	r/min	2750
2. Engine shaft speed, compressor unloaded .....	r/min	1850
3. Free air delivery <sup>2)</sup> .....	cfm	189 <sup>7)</sup>
4. Fuel consumption:		
- at 100% FAD .....	lb/h	17.9
- at 75% FAD .....	lb/h	14.1
- at 50% FAD .....	lb/h	11.0
- at 25% FAD .....	lb/h	8.8
- at unload .....	lb/h	7.9
5. Specific fuel consumption at 100% FAD .....	lb/1000cu ft	1.58
6. Typical oil content of compressed air .....	oz/1000cu ft	<0.005
7. Engine oil consumption (maximum) .....	oz/h	1.30
8. Compressed air temperature at outlet valves .....	°F	194 <sup>7)</sup>
9. Noise level		
- Sound pressure level (Lp), measured according to		ISO 2151
under free field conditions at 23 ft distance .....	dB(A)	72
- Sound power level (Lw) complies with		
2000/14/EC .....	dB(A)	98

**Design data**

**Compressor**

1.Number of compression stages ..... 1

**Engine**

1.Make ..... Deutz  
 2.Type ..... D2011L03  
 3.Coolant ..... Oil  
 4.Number of cylinders ..... 3  
 5.Bore ..... in 3.70  
 6.Stroke ..... in 4.41  
 7.Swept volume ..... cu in 142.29864  
 8.Output according to ISO 9249 G at normal shaft speed ..... BHP 48  
 - Load factor ..... % 50  
 9.Capacity of oil sump :  
 - Initial fill ..... us gallon 2.25  
 - Refill (max.) .....<sup>(4)</sup> us gallon 1.59  
 10.Capacity of cooling system ..... us gallon 0.00

**Unit**

1.Capacity of compressor oil system ..... us gallon 2.11  
 2.Net capacity of air receiver ..... us gallon 4.41  
 3.Capacity of fuel tanks ..... us gallon 21  
 4.Air volume at inlet grating (approx.)<sup>3)</sup> ..... cu ft/s 42

1) At reference conditions, if applicable, and at normal shaft speed unless otherwise stated

2)Data	measured according	Tolerance
Free air delivery	ISO 1217 ed. 3 1996 annex D	+/- 5% 53cfm<FAD<530 cfm +/- 4% 530cfm <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

3) Air required for engine and compressor cooling, combustion and for compression

4) with filter change.

5) Coldstart: compressor oil PAROIL S instead of PAROIL M; engine oil PAROIL 5W40 instead of 15W40

6) For Hose Reel application: maximum ambient temperature 86°F

7)with aftercooler: max.ambient 104°F, FAD: 178 cfm, compr. air temp. at outlet valve 86°F

