

Compressors XAS 746 Cd

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	6.9	8.6	10.3

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	11.3		
3.a) Maximum ambient temperature at sea level.....	°C	50		
3.b) Max. ambient temperature at sea level..with aftercooler..	°C			
4. Minimum starting temperature	°C	-10		
5. Minimum starting temperature, with coldstart equipment	°C	-25		
6. Altitude capability	m		see curve	

Performance data ¹⁾

1. Engine shaft speed, normal and maximum	r/min	1900	1800	1650
2. Engine shaft speed, compressor unloaded	r/min	1200	1200	1200
3.a) Free air delivery ²⁾	l/s	750	710	650
3.b) Free air delivery ²⁾ ..with aftercooler.....	l/s			
4. Fuel consumption: with fuel Xpert				
- at 100% FAD	kg/h	62.7	63.7	62.1
- at 75% FAD	kg/h	45	46.4	47
- at 50% FAD	kg/h	34.6	36.9	39.6
- at 25% FAD	kg/h	30.3	33.5	36.5
- at unload	kg/h	27.3	30.4	33.2
5.a) Specific fuel consumption .at 100% FAD.....	g/m ³	23.2	24.9	26.5
5.b) Specific fuel consumption at 100% FAD with aftercooler	g/m ³			
6. Typical oil content of compressed air	mg/m ³	<3		
7. Engine oil consumption (maximum)	g/h	160		
8.a) Compressed air temperature at outlet valves	°C	85		
8.b) Compressed air temp. at outlet valves with aftercooler....	°C			
9. Noise level				
- Sound pressure level (LP), measured according to ISO 2151 under free field conditions at 7 m distance	dB(A)	NA		
- Sound power level (LW) complies with 84/533/EEC and 85/406/EEC limits.	dB(A)	104		

Design data

Compressor

1.Number of compression stages

1 (TWIN)

Engine

1.Make

CATERPILLAR

2.Type

C13 ACERT

3.Coolant

Liquid

4.Number of cylinders

6

5.Bore mm

130

6.Stroke mm

157

7.Swept volume l

12.5

8.Output according to SAE J1995 at normal shaft speed kW

354

- Load factor %

46

9.Capacity of oil sump :

- Initial fill

36

- Refill (max.)⁴⁾

34

10.Capacity of cooling system

52

Unit

1.Capacity of compressor oil system

85

2.Net capacity of air receiver

171

3.Capacity of fuel tanks

923

4.Air volume at inlet grating (approx;).....³⁾ m³/s

13.2

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

2)Data measured according Tolerance

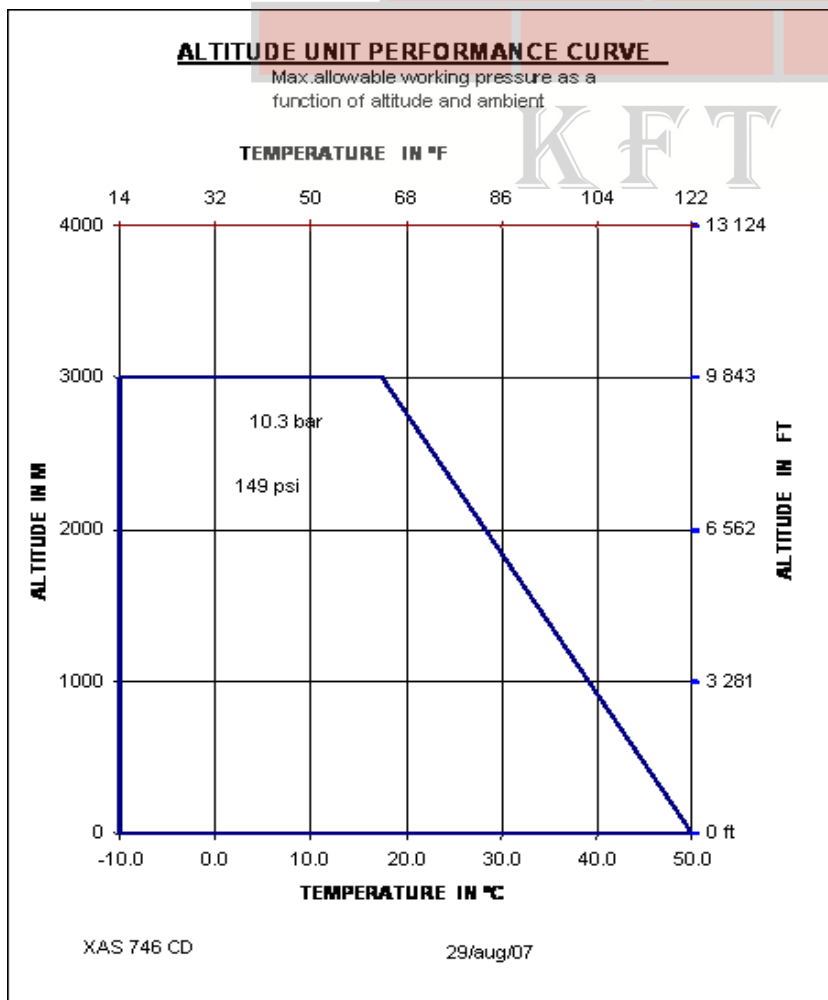
Free air delivery ISO 1217 ed. 3 1996 annex D +/- 5% 25l/s<FAD<250l/s
+/- 4% 250l/s <FAD

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.



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4. Fuel consumption: no fuel Xpert				
- at 100% FAD	kg/h	62.7	63.7	62.1
- at 75% FAD	kg/h	54.1	55.7	54.5
- at 50% FAD	kg/h	43.4	45.4	45.7
- at 25% FAD	kg/h	31.4	34.2	36.3
- at unload	kg/h	27.3	30.4	33.2
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- 3.Coolant
- 4.Number of cylinders
- 5.Bore mm
- 6.Stroke mm
- 7.Swept volume l
- 8.Output according to SAE J1995 at normal shaft speed kW
 - Load factor %
- 9.Capacity of oil sump :
 - Initial fill l
 - Refill (max.)⁴⁾..... l
- 10.Capacity of cooling system l

CATERPILLAR
C13 ACERT
Liquid
6
130
157
12.5
354
46
36
34
52

Unit

- 1.Capacity of compressor oil system l
- 2.Net capacity of air receiver l
- 3.Capacity of fuel tanks l
- 4.Air volume at inlet grating (approx;)³⁾ m³/s

85
171
923
13.2

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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

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