

Data sheet CAHS D-TORNADO (OF)

General Data \ model	07/2780	8,5/2540	10/2370
Thermal output 70/103 °C	568 kW	581 kW	583 kW
Thermal output 30/60 °C	96 kW	90 kW	85 kW
Recoverable thermal output ¹	664 kW	671 kW	668 kW
Fuel cosumption (Hu=10,0 kW/Nm³)	74,3 Nm³/h	73,3 Nm³/h	72,7 Nm³/h
Power requirement (kW)	7,9 kW		
BUS-System	Modbus TCP		
Remote maintenanceTCP/IP	Yes		
Engine			
Type	V12		
Engine displacement	25,78 L		
Engine Type	Naturally aspirated		
Brennstoffeinsatz ²	776 kW		
RPM, min ⁻¹	1800		
ISO standard power (mech.) ²	300 kW		
Engine cooling water heat quantity	239 kW		
Exhaust gas heat capacity 110 °C	187 kW		
Efficiency Thermal ²	54,9 %		
Efficiency Combined (el. + th.) ²	93,6 %		
Engine oil	semi-synthetic		
Lubrication oil consumption	120 g/Bh		
Filling capacity lubricant (max.)	90 + 150 L		
Compressor			
Manufacturer	Atlas Copco		
Heat recovery compressor	232 kW	232 kW	231 kW
outlet pressure, barg ³	7	8,5	10
Free air delivery (FAD), m³/min ³	46,3	42,3	39,5
Modulation / power control	60 - 100 %		
compressed air connection	DN 125 PN 16		

Gas supply		
Gas train	nach DIN	
Interface Gas	DN 50 (2")	
Gas flow pressure	22 - 100 mbar	
Air supply		
Combustion air mass flow	952 kg/h	
Air temperature	25 °C	
Exhaust		
Interface Exhaust	DN 200	
TA-Luft	yes	
Exhaust temperature	639 °C	
Condensate mass flow	108 kg/h	
Max. permissible back pressure	< 15 mbar	
flow rate, dry	817 Nm³/h	
mass flow, wet	1008 kg/h	
Hydraulic integration	30/60	70/103 ⁴
Interface inlet/outlet	DN 80 PN 16	DN 80 PN 16
Norm in-/outlet temperatur	30 / 60 °C	70 / 100 °C ⁴
Standard flow rate	4,3 m³/h	17,4 m³/h
heating water pressure	2,5 bar (ü)	4 bar (ü)
Dimensions / Weight		
Dimensions (lxwxh), mm	4650x1950x2200	
Weight Module (w/o operating fluids)	7700 kg	
Dimensions housing (LxBxH), mm	4900x2200x2300	
Weight housing	850 kg	
Dimensions cabinet (LxBxH), mm	1200x1200x400	
Weight cabinet	130 kg	
Recommended concrete strength	C20/25	
Payload, qk	3,5 kN/m²	

¹ with a tolerance of ±7%; ² acc. to ISO 3046-1; ³ acc. to ISO 1217, Anh. D.

⁴ max. possible temperature up to 108 °C

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Noise emissions (incl. standard silencer)	
- Unit 1 m / 10 m	75 / 65 dB(A)
- Exhaust gas stack 10 m	67 dB(A)
Exh. emissions with catalytic converter	
NO _x	≤ 250 mg/Nm ³
CO	≤ 250 mg/Nm ³
HCHO	≤ 5 mg/Nm ³
Protection class	
- Unit	IP 23
- Unit with housing	IP 53
- Control cabinet	IP 55
Options	
Housing	yes
Additional silencer	yes
Emergency cooler	yes
Gas warning system	yes
Knock control	yes
Gross calorific value	yes
additional lubrication oil tank	yes
LTE / UMTS-modul	yes
BUS-converter	yes
heat meter (calibrated)	yes
Neutralisation plant	yes
Compressed air flow meter	yes
Containerised solution	yes
Remote control	yes
Directly heated adsorption dryers	yes
Master Control readynes	yes
Contribution, installation, commisioning	yes

Subject to technical changes