



Vacuum Solutions Division

Principal Data

*** For internal use only***

Preliminary AML 9820 7262 49

QSV 205 standard

REFERENCE CONDITIONS

Relative humidity (%)	0
Air inlet temperature (°C)	20
Cooling medium inlet air temperature (°C)	20
Exhaust back pressure (bar(g))	0
Motor shaft speed (rpm)	3500
Setpoint thermostatic valve (°C)	83
Oil type	mineral

LIMITATIONS

Minimum ambient temperature (°C)	0
Maximum ambient temperature (°C)	46
Minimum allowable gas inlet temperature (°C)	-10
Maximum allowable gas inlet temperature (°C)	70
Maximum inlet pressure (mbar(a))	1050
Maximum oil separator pressure (mbar(g))	500
Maximum exhaust back pressure (mbar(g))	100
Maximum altitude (m) - refers to the Product Manager at higher altitudes	1000
Minimum motor shaft speed (rpm)	600
Maximum motor shaft speed (rpm)	3500
Minimum inlet pressure for water vapour with open gas ballast (mbar(a))	0.35
Maximum inlet pressure for water vapour with open gas ballast (mbar(a))	43
Maximum water vapour pumping rate with open gas ballast (kg/h) (1)	12.8

PERFORMANCE DATA

Ultimate pressure (mbar(a)) (2)	0.5
Maximum displacement (m ³ /h) (1)	483

rpm	Volumetric flowrate at the canopy (Am ³ /h) (2)								
	Pressure mbar(a)								
	400	300	200	100	75	50	20	5	1
600	74	74	73	73	72	71	68		
1000	123	123	122	122	121	119	113	80	
2000	247	246	245	244	242	237	226	160	83
2250	265	277	275	274	272	267	254	180	93
2550		317	314	313	310	306	290	225	105
2950			367	365	362	358	339	285	122
3000				372	368	364	345	293	124
3400				414	411	410	388	333	140
3500					422	421	399	343	144

Total electrical power input (kW)	Pressure mbar(a)								
rpm	400	300	200	100	75	50	20	5	1
600	2.1	1.9	1.6	1.3	1.2	1.2	1.1		
1000	3.5	3.1	2.6	2.2	2.1	1.9	1.8	2.2	
2000	7.1	6.2	5.2	4.4	4.1	3.9	3.6	4.0	3.7
2250	8.0	6.9	5.9	4.9	4.6	4.3	4.0	4.5	4.1
2550		7.9	6.8	5.6	5.3	4.9	4.6	4.8	4.7
2950			7.9	6.5	6.2	5.8	5.4	5.2	5.5
3000				6.6	6.3	5.9	5.5	5.3	5.6
3400				7.7	7.3	6.9	6.5	6.3	6.5
3500					7.5	7.2	6.8	6.5	6.7

Main shaft power (kW)	Pressure mbar(a)								
rpm	400	300	200	100	75	50	20	5	1
600	1.6	1.4	1.1	0.9	0.8	0.8	0.7		
1000	2.9	2.5	2.0	1.7	1.6	1.4	1.3	1.7	
2000	6.0	5.2	4.4	3.6	3.4	3.2	2.9	3.3	3.0
2250	6.8	5.9	5.0	4.1	3.8	3.6	3.3	3.8	3.4
2550		6.8	5.8	4.7	4.4	4.2	3.9	4.1	3.9
2950			6.8	5.6	5.2	4.9	4.6	4.5	4.6
3000				5.7	5.3	5.0	4.7	4.5	4.7
3400				6.6	6.3	6.0	5.6	5.3	5.5
3500					6.5	6.2	5.8	5.5	5.7

Maximum oil consumption (L/100hrs)	0.10
Gas exhaust temperature (°C)	ambience + 63
Minimum Sound pressure level with tolerance dB(A) (3)	51 / 3
Maximum Sound pressure level with tolerance dB(A) (3)	65 / 3
Fan electrical power input (kW)	0.3
Maximum oil content of exhaust air (mg/m ³)	2.5

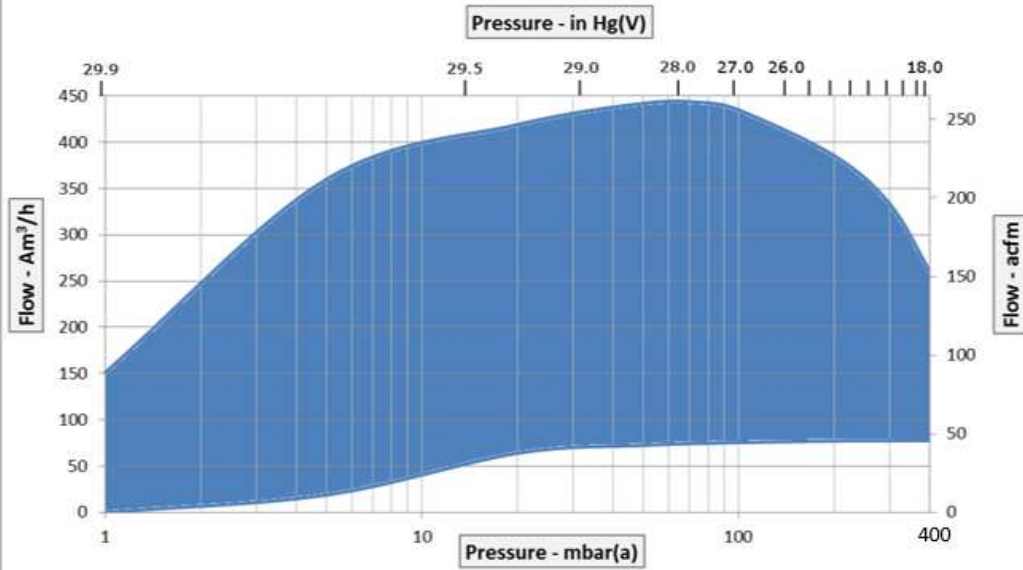
DESIGN DATA

Canopy length (m)	1.266
Canopy width (m)	0.934
Canopy height (m)	1.083
Shipping length (m)	1.40
Shipping width (m)	1.04
Shipping height (m)	1.34
Net mass (kg)	500
Shipping mass Europe (kg)	505
Shipping mass overseas (kg)	555
Number of compression stages	1
Maximum male rotor speed (rpm)	3500
Oil capacity (approx.) (l)	16
Drive motor efficiency at full load (%)	89.1
Fan motor efficiency (%)	73
Electrical cable passage ((M))	40
Cooling air flow referred to air inlet grating vacuum pump (m ³ /s)	0.5
Inlet connection	PN6 DN80 flange
Outlet connection	Non std DN60

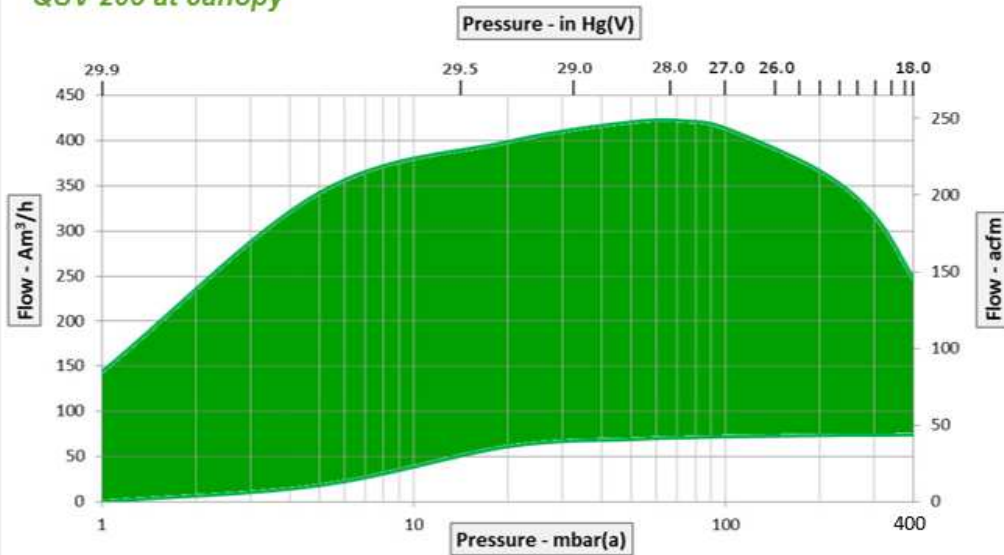
REMARKS

- (1) Measured according ISO 21360-2:2012(E)
- (2) Volumetric flowrate measured according ISO 21360-2:2012(E). Tolerance: 0,20 mbar(a)
- (3) Measured according to ISO 2151:2004 using ISO 9614/2 (sound intensity method)

QSV 205 simulated at the element inlet



QSV 205 at canopy



Pump down curve QSV 205

