

Data

	Air	
q0 per revolution	<input type="text" value="9.08"/>	dm3/rev
qv 100	<input type="text" value="0.89"/>	m3/min/100 mbar
No load power at nominal rpm	<input type="text" value="1"/>	kW
RPM nominal	<input type="text" value="1440"/>	-/min
RPM actual	<input type="text" value="1440"/>	-/min
Number of pumps	<input type="text" value="1"/>	-
Ambient temperature	<input type="text" value="25"/>	degrC
Ambient pressure	<input type="text" value="1000"/>	mbar
Pressure	<input type="text" value="7000"/>	mmWC
Pump displacement (Q0)	<input type="text" value="0.217"/>	m3/sec
Air displacement (Q1)	<input type="text" value="0.176"/>	m3/sec
	<input type="text" value="10.61"/>	m3/min
Power	<input type="text" value="81.1"/>	%
Volumetric efficiency	<input type="text" value="16.2"/>	kW

Table calculation

Pressure	Q1 m3/sec	Q1 m3/min	Vol.Eff %	Outlet temp degr.C	Power kW
0	0.217	13.075	100	25	1
1000	0.202	12.145	92.8	34	3.1
2000	0.196	11.76	89.9	43	5.3
3000	0.191	11.464	87.6	53	7.5
4000	0.186	11.215	85.7	64	9.7
5000	0.183	10.995	84	74	11.8
6000	0.179	10.797	82.5	86	14
7000	0.176	10.615	81.1	97	16.2
8000	0.174	10.445	79.8	109	18.4
9000	0.171	10.285	78.6	121	20.6
10000	0.168	10.134	77.5	133	22.7