

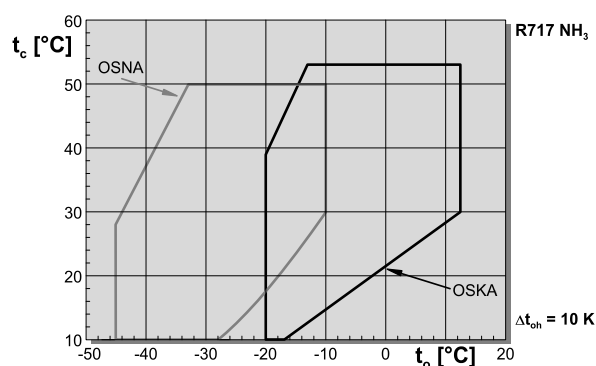


**Performance table: Open Screw Compressors**

Compressor model	<b>OSNA7471-K</b>	Suct. gas superheat	5K
Refrigerant	R717 [NH3]	Useful superheat	100%
Reference temperature	Dew point temp.	Speed	2900 /min
Operating mode	ECO	Capacity Control	100%
Liquid temperature	Auto		

tc [°C]	to [°C]	-10	-15	-20	-25	-30	-35	-40
30	Qo[W]	185014	152845	124888	100803	80249	62889	48394
	P [kW]	53.1	48.0	43.6	39.8	36.3	33.2	30.4
	COP	3.48	3.18	2.86	2.53	2.21	1.89	1.59
	mLP [kg/h]	531	433	349	279	219	170.1	129.7
	mHP [kg/h]	593	492	404	328	263	208	160.8
	Qac [kW]	26.9	25.4	24.3	23.5	22.8	22.1	21.3
	tcu [°C]	1.30	-3.69	-8.63	-13.50	-18.30	-23.00	-27.56
	pm [bar]	4.51	3.74	3.08	2.52	2.05	1.67	1.35
	Qsc [kW]	19.74	18.85	17.42	15.62	13.64	11.59	9.58
	40	Qo[W]	180632	148541	120663	96659	76188	58916
P [kW]		61.4	56.3	51.5	47.2	43.1	39.3	--
COP		2.94	2.64	2.34	2.05	1.77	1.50	--
mLP [kg/h]		519	421	338	267	208	159.5	--
mHP [kg/h]		604	499	408	329	261	203	--
Qac [kW]		37.6	35.7	34.0	32.4	30.8	29.3	--
tcu [°C]		1.69	-3.32	-8.29	-13.20	-18.03	-22.77	--
pm [bar]		4.58	3.79	3.12	2.55	2.08	1.68	--
Qsc [kW]		25.9	23.7	21.2	18.44	15.65	12.94	--
50		Qo[W]	173180	141334	113653	89803	69452	--
	P [kW]	71.8	66.2	60.9	55.8	50.9	--	--
	COP	2.41	2.13	1.87	1.61	1.37	--	--
	mLP [kg/h]	498	401	319	249	190.1	--	--
	mHP [kg/h]	606	497	402	320	249	--	--
	Qac [kW]	51.6	48.7	46.0	43.3	40.6	--	--
	tcu [°C]	2.09	-2.96	-7.97	-12.93	-17.83	--	--
	pm [bar]	4.65	3.85	3.16	2.58	2.10	--	--
	Qsc [kW]	31.4	27.9	24.2	20.4	16.80	--	--

**Application Limits (Standard)**



**Legend**

to [°C]	Evaporating SST
tc [°C]	Condensing SDT
Qo[W]	Cooling capacity
P [kW]	Power input
COP	COP/EER
mLP [kg/h]	Mass flow LP
mHP [kg/h]	Mass flow HP
Qac [kW]	Additional cooling
tcu [°C]	Liquid temp.
pm [bar]	ECO pressure
Qsc [kW]	sub cooler capacity (ECO)

-- No calculation possible (see message in single point selection)

\*According to EN12900 (5K suction gas superheat, with open flash)



Bitzer OSNA 7471-K-ECO

Version 5.2.1

19-6-2015 / All data subject to change.

## Technical Data: OSNA7471-K

### Dimensions and Connections



### Technical Data

Displacement (2900 RPM 50 Hz)	250 m <sup>3</sup> /h
Displacement (3500 RPM 60 Hz)	302 m <sup>3</sup> /h
Allowed speed range	1450 .. 4000 min <sup>-1</sup>
Sens of rotation (compressor)	links / counter-clockwise
Weight	188 kg
Max. pressure (LP/HP)	19 / 28 bar
Connection suction line	76 mm - 3 1/8"
Connection suction line (NH3)	DN 80
Connection discharge line	54 mm - 2 1/8"
Connection discharge line (NH3)	DN 50
Adapter for ECO (NH3)	DN 20 (Option)
Oil type NH3	Clavus G68/46/32 , SHC 224/226E
Oil flow control	Option
Discharge gas temperature sensor	Standard
Start unloading	Standard
Capacity control	100-75-50% (Standard)
Discharge shut-off valve	Option
ECO connection with shut-off valve	Option
Coupling	KS 720/ KS 730 (Option)
Coupling housing	Option