

Model: NTZ108

Data

Type: Hermetic piston compressors

Producer: Danfoss-Maneurop

Series: NTZ

Model: NTZ108

Technical data

Cylinder count:	2
Displacement [m ³ /h]:	18,7
Cylinder capacity [cm ³]:	108
RPM [min ⁻¹]:	2900
Weight [kg]:	35
Oil charge [dm ³]:	1,8
Oil type:	160Z
Crankcase heater type:	PTC35W
Maximum system test pressure low side / high side:	25 / 30
Maximum number of starts without softstart [1/h]:	12
Refrigerant charge limit [dm ³]:	5
Refrigerant:	R404A
Sound power [dB]:	82
Sound power with acoustic hood [dB]:	75
IP rating:	IP 55

Connections

	<u>inches</u>
Suction Rotolock valve connection:	1 3/4"
Discharge Rotolock valve connection:	1 1/4"
Suction connection with supplied sleeve:	7/8"
Discharge connection with supplied sleeve:	3/4"

Approvals

CCC	+
CE	+
UL	+
Gost	+

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Capacity

R404A/R507

Cooling capacity [W]

$t_c \setminus t_e$	-45	-40	-35	-30	-25	-20	-15	-10
30	1 218	1 991	2 962	4 150	5 576	7 257	9 215	11 469
35	1 033	1 766	2 676	3 783	5 105	6 662	8 475	10 562
40	834	1 524	2 369	3 390	4 606	6 035	7 699	9 616
45	625	1 268	2 046	2 978	4 083	5 381	6 893	8 636
50	-	1 005	1 711	2 550	3 542	4 706	6 061	7 628
55	-	-	1 370	2 113	2 988	4 013	5 209	6 596
60	-	-	1 027	1 671	2 425	3 309	4 342	5 545

Power input [W]

$t_c \setminus t_e$	-45	-40	-35	-30	-25	-20	-15	-10
30	1 437	1 757	2 106	2 468	2 828	3 170	3 479	3 739
35	1 426	1 760	2 135	2 535	2 945	3 349	3 732	4 078
40	1 404	1 745	2 139	2 570	3 022	3 481	3 932	4 357
45	1 372	1 713	2 119	2 574	3 063	3 570	4 080	4 578
50	-	1 667	2 077	2 550	3 067	3 616	4 180	4 743
55	-	-	2 016	2 498	3 038	3 621	4 231	4 853
60	-	-	1 936	2 422	2 977	3 587	4 237	4 910

Current [A]

$t_c \setminus t_e$	-45	-40	-35	-30	-25	-20	-15	-10
30	3.53	4.09	4.57	5.01	5.44	5.90	6.41	7.03
35	3.56	4.12	4.62	5.09	5.57	6.10	6.70	7.42
40	3.53	4.09	4.61	5.12	5.66	6.25	6.95	7.76
45	3.43	4.00	4.54	5.10	5.69	6.36	7.15	8.08
50	-	3.86	4.43	5.03	5.68	6.44	7.31	8.35
55	-	-	4.27	4.92	5.64	6.47	7.45	8.60
60	-	-	4.08	4.77	5.56	6.48	7.56	8.83

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Capacity

Mass flow [kg/s]

$t_c \setminus t_e$	-45	-40	-35	-30	-25	-20	-15	-10
30	29.18	47.97	71.42	100.31	135.42	177.52	227.41	285.85
35	26.08	44.95	68.24	96.73	131.21	172.45	221.24	278.35
40	22.32	41.14	64.14	92.11	125.84	166.09	213.65	269.30
45	17.90	36.54	59.13	86.45	119.29	158.42	204.62	258.68
50	-	31.14	53.18	79.73	111.55	149.43	194.15	246.50
55	-	-	46.30	71.94	102.62	139.12	182.23	232.73
60	-	-	38.47	63.07	92.48	127.48	168.85	217.37

C.O.P. [W/W]

$t_c \setminus t_e$	-45	-40	-35	-30	-25	-20	-15	-10
30	0.85	1.13	1.41	1.68	1.97	2.29	2.65	3.07
35	0.72	1.00	1.25	1.49	1.73	1.99	2.27	2.59
40	0.59	0.87	1.11	1.32	1.52	1.73	1.96	2.21
45	0.46	0.74	0.97	1.16	1.33	1.51	1.69	1.89
50	-	0.60	0.82	1.00	1.15	1.30	1.45	1.61
55	-	-	0.68	0.85	0.98	1.11	1.23	1.36
60	-	-	0.53	0.69	0.81	0.92	1.02	1.13

Operating conditions: suction gas return temperature: 20°C, subcooling: 0 K

t_c - Condensing temperature [°C]

t_e - Evaporating temperature [°C]

Application range

