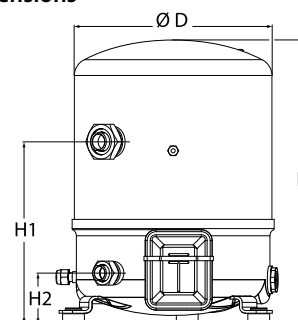
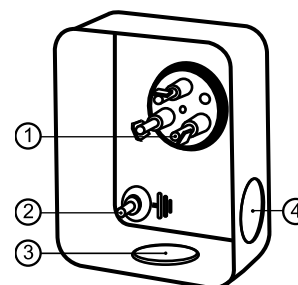


General Characteristics

Model number (on compressor nameplate)		NTZ108A4LR1A
Code number for Singlepack*		120F0004
Code number for Industrial pack**		120F0011
Drawing number		8502012g
Suction and discharge connections		Rotolock
Suction connection		1-3/4" Rotolock
Discharge connection		1-1/4" Rotolock
Suction connection with supplied sleeve		7/8" ODF
Discharge connection with supplied sleeve		3/4" ODF
Oil sight glass		Threaded
Oil equalisation connection		3/8" flare SAE
Oil drain connection		None
LP gauge port		Schrader
IPR valve		30 bar / 8 bar
Cylinders		2
Swept volume		108 cm ³ /rev
Displacement @ Nominal speed		18.8 m ³ /h @ 2900 rpm - 22.7 m ³ /h @ 3500 rpm
Net weight		35 kg
Oil charge		1,8 litre, POE - 160Z
Maximum system test pressure Low Side / High side		25 bar(g) / 30 bar(g)
Maximum differential test pressure		30 bar
Maximum number of starts per hour		12
Refrigerant charge limit		5 kg
Approved refrigerants		R404A, R507A

Dimensions


D=288 mm
H=413 mm
H1=265 mm
H2=74 mm
H3=- mm

Terminal box


IP55 (with cable gland)

- 1: Spade connectors 1/4"
- 2: Earth M4-12
- 3: Knock-out Ø 21 mm (0.83")
- 4: Hole Ø 21 mm (0.83")

Electrical Characteristics

Nominal voltage	380-400V/3/50Hz - 460V/3/60Hz
Voltage range	340-440 V @ 50Hz - 414-506 V @ 60Hz
Winding resistance (between phases) +/- 7% at 25°C	4 Ω
Maximum Continuous Current (MCC)	12.1 A
Locked Rotor Amps (LRA)	45 A
Motor protection	Internal overload protector

Recommended Installation torques

Oil sight glass	50 Nm
Power connections / Earth connection	Nm / 2 Nm
Mounting bolts	15 Nm

Parts shipped with compressor

Mounting kit with grommets, bolts, nuts, sleeves and washers
Suction & Discharge solder sleeves, rotolock nuts and gaskets (shipped with rotolock version only)
Initial oil charge
Installation instructions

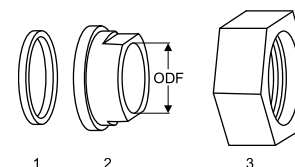
Approvals : CE certified, UL certified (file SA6873), -

*Singlepack: Compressor in cardboard box

**Industrial pack: 6 Unboxed compressors on pallet (order per multiples of 6)

Rotolock accessories, suction side
Code no.

Solder sleeve, P07 (1-3/4" Rotolock, 7/8" ODF)	8153013
Angle adapter, C07 (1-3/4" Rotolock, 7/8" ODF)	8168008
Rotolock valve, V07 (1-3/4" Rotolock, 7/8" ODF)	8168032
Gasket, 1-3/4"	8156132

Gaskets, sleeves and nuts


- 1: Gasket
- 2: Solder sleeve
- 3: Rotolock nut

Rotolock accessories, discharge side
Code no.

Solder sleeve, P04 (1-1/4" Rotolock, 3/4" ODF)	8153008
Angle adapter, C04 (1-1/4" Rotolock, 3/4" ODF)	8168006
Rotolock valve, V04 (1-1/4" Rotolock, 3/4" ODF)	8168029
Gasket, 1-1/4"	8156131

Rotolock accessories, sets
Code no.

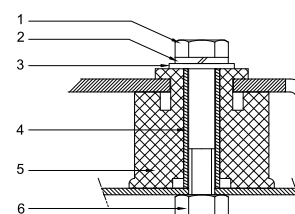
Angle adapter set, C07 (1-3/4"~7/8"), C04 (1-1/4"~3/4")	7703013
Valve set, V07 (1-3/4"~7/8"), V04 (1-1/4"~3/4")	7703006
Gasket set, 1", 1-1/4", 1-3/4", OSG gaskets black & white	8156009

Oil / lubricants
Code no.

POE lubricant, 160PZ, 1 litre can	7754019
POE lubricant, 160PZ, 2.5 litre can	120Z0573

Crankcase heaters
Code no.

PTC heater 27W, CE mark, UL	120Z0459
Belt type crankcase heater, 65 W, 230 V, CE mark, UL	7773107
Belt type crankcase heater, 65 W, 400 V, CE mark, UL	7773117
Belt type crankcase heater, 65 W, 460 V, CE mark, UL	120Z0466

Mounting kit


- 1: Bolt (3x)
- 2: Lock washer (3x)
- 3: Flat washer (3x)
- 4: Sleeve (3x)
- 5: Grommet (3x)
- 6: Nut (3x)

Miscellaneous accessories
Code no.

Acoustic hood for 2 cylinder compressor	120Z0472
Oil equalisation nut	8153127

Spare parts
Code no.

Mounting kit for 1 and 2 cylinder compressor, including 3 grommets, 3 bolts	8156001
Oil sight glass with gaskets (black & white)	8156019
Gasket for oil sight glass (black chloroprene)	8156145
Service kit for terminal box 80 x 96 mm, including 1 cover, 1 clamp	8156134

Performance data at 50 Hz, EN 12900 rating conditions, Suction temp. = 20 °C
R404A

Cond. temp. in °C (tc)	Evaporating temperature in °C (to)							
	-45	-40	-35	-30	-25	-20	-15	-10

Cooling capacity in W

30	-	2 243	3 167	4 303	5 672	7 294	9 189	11 380	-
35	-	-	2 819	3 878	5 148	6 652	8 410	10 442	-
40	-	-	2 465	3 445	4 617	6 001	7 619	9 491	-
45	-	-	-	3 008	4 079	5 342	6 819	8 529	-
50	-	-	-	-	3 537	4 678	6 012	7 559	-
55	-	-	-	-	-	4 011	5 200	6 582	-
60	-	-	-	-	-	3 342	4 386	5 602	-

Power input in W

30	-	1 741	2 089	2 428	2 754	3 066	3 364	3 646	-
35	-	-	2 097	2 474	2 842	3 200	3 547	3 881	-
40	-	-	2 079	2 496	2 907	3 312	3 708	4 095	-
45	-	-	-	2 491	2 947	3 399	3 846	4 287	-
50	-	-	-	-	2 959	3 460	3 959	4 456	-
55	-	-	-	-	-	3 492	4 045	4 598	-
60	-	-	-	-	-	3 494	4 101	4 712	-

Current consumption in A

30	-	4.16	4.51	4.91	5.33	5.74	6.12	6.45	-
35	-	-	4.52	4.94	5.40	5.88	6.36	6.80	-
40	-	-	4.53	4.96	5.46	6.01	6.57	7.12	-
45	-	-	-	4.98	5.52	6.12	6.76	7.41	-
50	-	-	-	-	5.54	6.19	6.91	7.66	-
55	-	-	-	-	-	6.24	7.02	7.86	-
60	-	-	-	-	-	6.24	7.08	8.01	-

Mass flow in kg/h

30	-	54	77	104	138	178	227	284	-
35	-	-	72	99	132	172	219	275	-
40	-	-	67	94	126	165	211	266	-
45	-	-	-	87	119	157	202	256	-
50	-	-	-	-	111	149	193	245	-
55	-	-	-	-	-	139	182	233	-
60	-	-	-	-	-	129	170	220	-

Coefficient of performance (C.O.P.)

30	-	1.29	1.52	1.77	2.06	2.38	2.73	3.12	-
35	-	-	1.34	1.57	1.81	2.08	2.37	2.69	-
40	-	-	1.19	1.38	1.59	1.81	2.05	2.32	-
45	-	-	-	1.21	1.38	1.57	1.77	1.99	-
50	-	-	-	-	1.20	1.35	1.52	1.70	-
55	-	-	-	-	-	1.15	1.29	1.43	-
60	-	-	-	-	-	0.96	1.07	1.19	-

Nominal performance at to = -35 °C, tc = 40 °C

Cooling capacity	2 465	W
Power input	2 079	W
Current consumption	4.53	A
Mass flow	67	kg/h
C.O.P.	1.19	



to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

Rating conditions : Suction gas temp. = 20 °C , Subcooling = 0 K

Pressure switch settings

Maximum HP switch setting	27.7	bar(g)
Minimum LP switch setting	0.1	bar(g)
LP pump down setting	0.1	bar(g)

Sound power data

Sound power level	82.3	dB(A)
With acoustic hood	75.3	dB(A)

All performance data +/- 5%

Performance data at 50 Hz, EN 12900 rating conditions, Superheat = 10 K
R404A

Cond. temp. in °C (tc)	Evaporating temperature in °C (to)							
	-45	-40	-35	-30	-25	-20	-15	-10

Cooling capacity in W

30	1 324	1 995	2 857	3 936	5 257	6 849	8 738	10 951	-
35	1 074	1 698	2 494	3 486	4 701	6 167	7 912	9 963	-
40	-	1 404	2 131	3 035	4 142	5 481	7 079	8 965	-
45	-	1 117	1 772	2 586	3 583	4 792	6 241	7 960	-
50	-	841	1 422	2 142	3 027	4 104	5 402	6 952	-
55	-	-	1 083	1 707	2 477	3 420	4 564	5 941	-
60	-	-	-	1 286	1 937	2 742	3 729	4 930	-

Power input in W

30	1 383	1 741	2 089	2 428	2 754	3 066	3 364	3 646	-
35	1 323	1 713	2 097	2 474	2 842	3 200	3 547	3 881	-
40	-	1 658	2 079	2 496	2 907	3 312	3 708	4 095	-
45	-	1 574	2 033	2 491	2 947	3 399	3 846	4 287	-
50	-	1 460	1 957	2 457	2 959	3 460	3 959	4 456	-
55	-	-	1 850	2 393	2 941	3 492	4 045	4 598	-
60	-	-	-	2 297	2 892	3 494	4 101	4 712	-

Current consumption in A

30	3.89	4.16	4.51	4.91	5.33	5.74	6.12	6.45	-
35	3.93	4.17	4.52	4.94	5.40	5.88	6.36	6.80	-
40	-	4.20	4.53	4.96	5.46	6.01	6.57	7.12	-
45	-	4.22	4.54	4.98	5.52	6.12	6.76	7.41	-
50	-	4.25	4.55	4.99	5.54	6.19	6.91	7.66	-
55	-	-	4.53	4.97	5.55	6.24	7.02	7.86	-
60	-	-	-	4.93	5.52	6.24	7.08	8.01	-

Mass flow in kg/h

30	44	67	93	124	161	205	255	313	-
35	39	61	87	118	155	198	247	304	-
40	-	55	81	112	147	189	238	293	-
45	-	48	74	104	139	180	228	282	-
50	-	41	66	96	130	171	217	270	-
55	-	-	57	86	120	160	205	257	-
60	-	-	-	76	109	148	192	242	-

Coefficient of performance (C.O.P.)

30	0.96	1.15	1.37	1.62	1.91	2.23	2.60	3.00	-
35	0.81	0.99	1.19	1.41	1.65	1.93	2.23	2.57	-
40	-	0.85	1.02	1.22	1.42	1.65	1.91	2.19	-
45	-	0.71	0.87	1.04	1.22	1.41	1.62	1.86	-
50	-	0.58	0.73	0.87	1.02	1.19	1.36	1.56	-
55	-	-	0.59	0.71	0.84	0.98	1.13	1.29	-
60	-	-	-	0.56	0.67	0.78	0.91	1.05	-

Nominal performance at to = -35 °C, tc = 40 °C

Cooling capacity	2 131	W
Power input	2 079	W
Current consumption	4.53	A
Mass flow	81	kg/h
C.O.P.	1.02	

Pressure switch settings

Maximum HP switch setting	27.7	bar(g)
Minimum LP switch setting	0.1	bar(g)
LP pump down setting	0.1	bar(g)

Sound power data

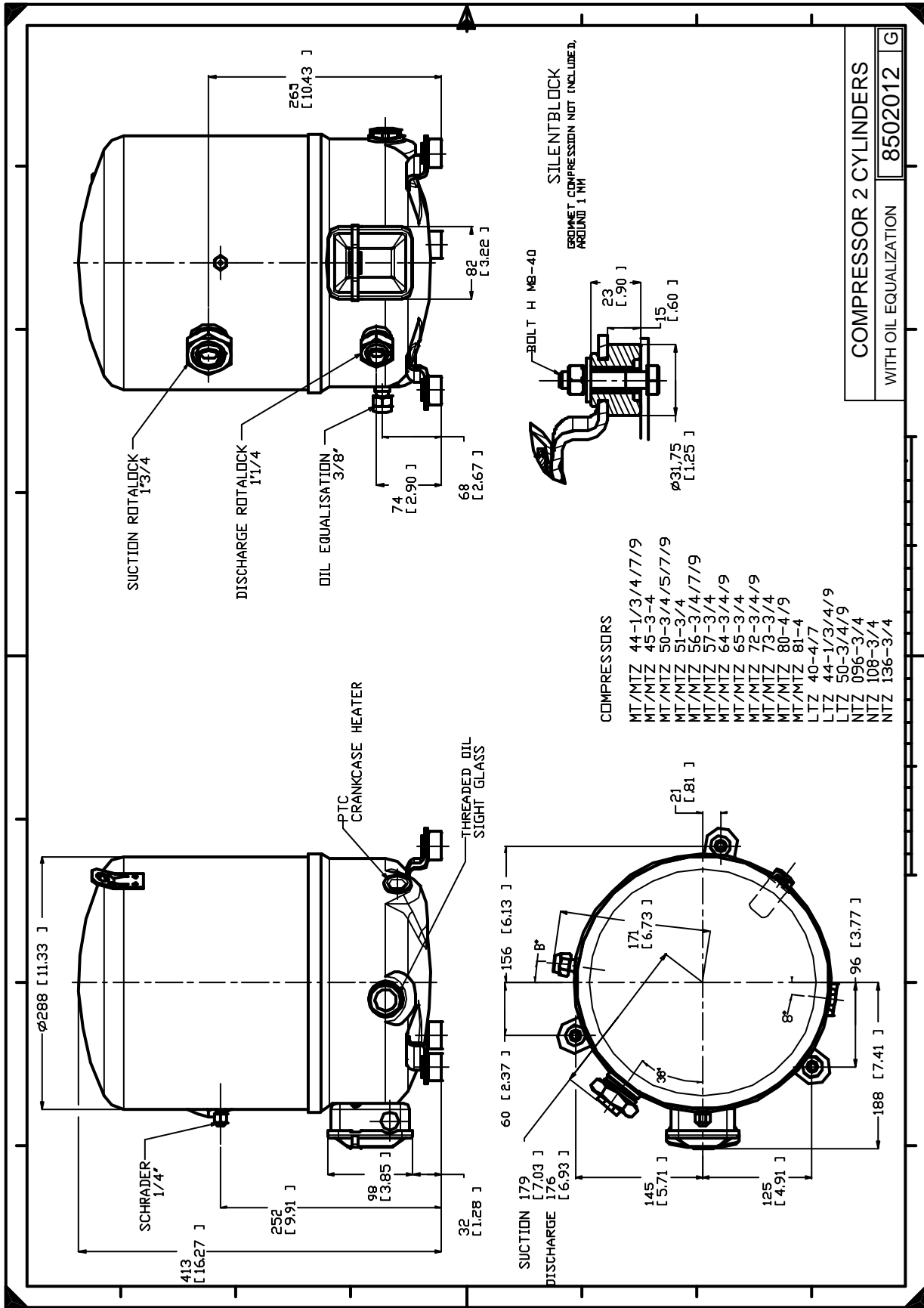
Sound power level	82.3	dB(A)
With acoustic hood	75.3	dB(A)

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

Rating conditions : Superheat = 10 K , Subcooling = 0 K

All performance data +/- 5%



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