

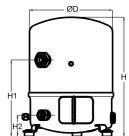




## **General Characteristics**

Model number (on compressor nameplate)		VTZ086AGNR1A
Code number for Singlepack*		120B0003
Drawing number		8502016a
Suction and discharge connections		Rotolock
Suction connection		1-3/4 " Rotolock
Discharge connection		1-1/4 " Rotolock
Suction connection with supplied sleeve		1-1/8 " 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	85.64 cm3/rev	
Net weight	35 kg	
Oil charge	1.8 litre, POE - 160PZ	
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	, R134a, R407C

### **Dimensions**

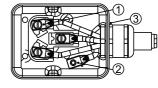


D=288 mm H=413 mm H1=165 mm H2=74 mm H3=- mm

### **Electrical Characteristics**

Nominal voltage	Frequency converter CD302 required with supply voltage 380-480V/3/50-60Hz
Voltage range	342-528 V supply to frequency converter
Winding resistance (between phases) +/- 7% at 25°C	1.37 Ω
Rated Load Amps (RLA)	16 A
Maximum Must Trip current (MMT)	20 A
Locked Rotor Amps (LRA)	74 A
Motor protection	Motor protection by frequency converter

### **Terminal box**



IP54 (with cable gland)

- 1: Power connection, 3 x 4.8 mm (3/16")
- 2: Earth M4
- 3: Hole Ø 33 mm (1.30")

**Recommended Installation torques** 

Oil sight glass	50 Nm
Power connections / Earth connection	3 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 when connected to frequency converter, -

\*Singlepack: Compressor in cardboard box

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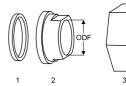
### Datasheet, accessories and spare parts

## Inverter reciprocating compressors VTZ086-G

Rotolock accessories, suction side	Code no.
Solder sleeve, P02 (1-3/4" Rotolock, 1-1/8" ODF)	8153004
Angle adapter, C02 (1-3/4" Rotolock, 1-1/8" ODF)	8168005
Rotolock valve, V02 (1-3/4" Rotolock, 1-1/8" ODF)	8168028
Gasket, 1-3/4"	8156132
Rotolock accessories, discharge side	Code no.

## Gaskets, sleeves and nuts





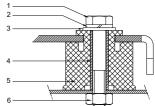
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Rotolock accessories, sets	Code no.
Angle adapter set, C02 (1-3/4"~1-1/8"), C04 (1-1/4"~3/4")	7703014
Valve set, V02 (1-3/4"~1-1/8"), V04 (1-1/4"~3/4")	7703009
Gasket set, 1", 1-1/4", 1-3/4", OSG gaskets black & white	8156009

2: Solder sleeve 3: Rotolock nut

Oil / lubricants	Code no.
POE lubricant, 160PZ, 1 litre can	7754019
POE lubricant, 160PZ, 2.5 litre can	120Z0573

М	ou	ntii	าต	kit

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



Miscellaneous accessories	Code no.
Acoustic hood for 2 cylinder compressor	120Z0472
Acoustic hood for 2 cyl (UL Approved)	7755202
Oil equalisation nut	8153127

Spare	parts
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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
Terminal box incl cover	120Z0146
Terminal box cover	120Z0149
T block connector 52 x 57 mm	8173230

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

6: Nut (3x)



## Inverter reciprocating compressors VTZ086-G

## Performance data at 30 Hz, EN 12900 rating conditions

R134a

Cond. temp. in				Evapora	ating temperature	in °C (to)			
°C (tc)	-15	-10	-5	0	5	10	15		
Cooling capacity		2 277	3 027	3 928	4 994	6 244	7 693		_
35	1 660		ł	1		6 244	1	-	
40	1 496	2 081	2 790	3 640	4 647	5 829	7 200	-	-
45	1 330	1 881	2 547	3 346	4 294	5 406	6 700	-	-
50	1 163	1 679	2 302	3 049	3 935	4 978	6 192	-	-
55	996	1 477	2 056	2 750	3 574	4 545	5 679	-	-
60	-	-	1 811	2 450	3 211	4 110	5 163	-	-
65	-	-	-	2 152	2 849	3 675	4 646	-	-
70	-	-	-	-	-	3 240	4 129	-	-
Power input in V	v								
35	964	1 080	1 172	1 242	1 295	1 335	1 364	-	-
40	985	1 119	1 230	1 320	1 393	1 453	1 504	-	-
45	994	1 146	1 274	1 383	1 475	1 555	1 626	-	-
50	995	1 163	1 308	1 435	1 546	1 645	1 735	-	-
55	992	1 175	1 337	1 480	1 608	1 725	1 835	-	-
60	-	-	1 363	1 522	1 667	1 801	1 928	-	-
65	-	-	-	1 566	1 726	1 877	2 020	-	-
70	-	_	_	-	-	1 955	2 115	-	_
		<u> </u>	l	1		. 000	20		I
Current consum	ption in A								
35	2.16	2.44	2.65	2.81	2.93	3.04	3.15	-	-
40	2.22	2.53	2.76	2.94	3.08	3.20	3.30	-	-
45	2.25	2.60	2.87	3.08	3.23	3.36	3.46	-	-
50	2.25	2.65	2.96	3.20	3.38	3.52	3.64	-	-
55	2.20	2.65	3.01	3.29	3.51	3.67	3.81	-	-
60	-	-	3.03	3.36	3.61	3.81	3.97	-	-
65	-	-	-	3.38	3.68	3.92	4.11	-	-
70	-	-	-	-	-	4.00	4.22	-	-
		<u>I</u>	ı	1					<u> </u>
Mass flow in kg/	h								
35	40	54	70	90	112	137	166	-	-
40	38	52	68	87	109	134	162	-	-
45	36	50	66	84	106	131	159	-	-
50	33	47	63	81	102	127	154	1	-
55	31	44	60	78	99	123	150	-	-
60	-	-	56	74	95	118	145	-	-
65	-	-	-	70	90	113	139	-	-
70	-	-	-	-	-	108	133	-	-
Coefficient of pe	erformance (C (	) P )							
35	1.72	2.11	2.58	3.16	3.86	4.68	5.64	-	_
40	1.72	1.86	2.36	2.76	3.34	4.00	4.79	-	-
45	1.34	1.64	2.00	2.70	2.91	3.48	4.19	-	-
50	1.17	1.04	1.76	2.42	2.55	3.48	3.57	-	-
55	1.00	1.44	1.76	1.86	2.33	2.63	3.10	-	-
-	-	-	1.33			2.03	2.68	-	-
60			1	1.61 1.37	1.93 1.65	1.96	2.08		-
65 70	-	-	-	-	-	1.96	1.95	-	-
70	-		<u> </u>	<u> </u>		1.00	1.50	-	
Nominal perform	nance at to = 5	°C, tc = 50 °C				Pressure switch	settings		
•					_				

-,		
Cooling capacity	3 935	W
Power input	1 546	W
Current consumption	3.38	Α
Mass flow	102	kg/h
C.O.P.	2.55	

to: Evaporating temperature at dew point

Maximum HP switch setting	22.6	bar(g)
Minimum LP switch setting	0.2	bar(g)
LP pump down setting	0.5	bar(g)

### Sound power data

Sound power level	0	dB(A)
With accoustic hood	0	dB(A)

tc: Condensing temperature at dew point

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



## Inverter reciprocating compressors VTZ086-G

## Performance data at 30 Hz, ARI rating conditions

# R134a

Cond. temp. in	Evaporating temperature in °C (to)								
°C (tc)	-15	-10	-5	0	5	10	15		
• " "									
Cooling capacity		1 0.400		1	5.075	0.740	1 0000		1
35	1 798	2 462	3 268	4 233	5 375	6 710	8 256	-	-
40	1 630	2 261	3 027	3 942	5 025	6 293	7 762	-	-
45	1 457	2 056	2 780	3 645	4 668	5 867	7 258	-	-
50	1 283	1 849	2 529	3 342	4 305	5 434	6 747	-	-
55	1 108	1 640	2 276	3 037	3 937	4 996	6 229	-	-
60	-	-	2 023	2 730	3 568	4 555	5 708	-	-
65	-	-	-	2 423	3 198	4 112	5 185	-	-
70	-	-	-	-	-	3 671	4 662	-	-
Power input in V	N								
35	964	1 080	1 172	1 242	1 295	1 335	1 364	-	-
40	985	1 119	1 230	1 320	1 393	1 453	1 504	-	-
45	994	1 146	1 274	1 383	1 475	1 555	1 626	-	-
50	995	1 163	1 308	1 435	1 546	1 645	1 735	-	-
55	992	1 175	1 337	1 480	1 608	1 725	1 835	-	-
60	-	-	1 363	1 522	1 667	1 801	1 928	-	-
65	-	-	-	1 566	1 726	1 877	2 020	-	-
70	-	-	-	-	-	1 955	2 115	_	-
		1		1	I	. 555	2		1
Current consum	nption in A								
35	2.16	2.44	2.65	2.81	2.93	3.04	3.15	-	_
40	2.22	2.53	2.76	2.94	3.08	3.20	3.30	-	_
45	2.25	2.60	2.87	3.08	3.23	3.36	3.46	_	_
50	2.25	2.65	2.96	3.20	3.38	3.52	3.64	-	_
55	2.20	2.65	3.01	3.29	3.51	3.67	3.81	-	_
60	-	-	3.03	3.36	3.61	3.81	3.97	-	-
65	-	_	-	3.38	3.68	3.92	4.11	_	-
70	-	-	-	-	-	4.00	4.22	-	_
70		J		J	I	1.00	1.22		ı
Mass flow in kg/	/h								
35	40	54	70	89	111	136	165	-	-
40	38	52	68	87	108	133	161	-	-
45	36	49	65	84	105	130	158	-	-
50	33	47	63	81	102	126	154	-	-
55	30	44	59	77	98	122	149	-	-
60	-	-	56	74	94	117	144	-	-
65	-	-	-	70	90	112	138	-	-
70	-	-	-	-	-	107	132	-	-
Coefficient of m	f	. <b>D</b> .\							
- 1	erformance (C.O	1	2.70	2 44	4.45	F 02	6.05		
35	1.86	2.28	2.79	3.41	4.15	5.03	6.05	-	-
40	1.65	2.02	2.46	2.99	3.61	4.33	5.16	-	-
45	1.47	1.80	2.18	2.64	3.16	3.77	4.46	-	-
50	1.29	1.59	1.93	2.33	2.79	3.30	3.89	-	-
55	1.12	1.39	1.70	2.05	2.45	2.90	3.40	-	-
60	-	-	1.48	1.79	2.14	2.53	2.96	-	-
65	-	-	-	1.55	1.85	2.19	2.57	-	-
70	-	-	-	-	-	1.88	2.20	-	-
Nominal perforn	mance at to = 7.2	2 °C, tc = 54.4 °C		<u></u>		Pressure switch	settings		

Cooling capacity	4 430	W	
Power input	1 653	W	
Current consumption	3.57	Α	
Mass flow	109	kg/h	
C.O.P.	2.68		

to: Evaporating temperature at dew point

Maximum HP switch setting	22.6	bar(g)
Minimum LP switch setting	0.2	bar(g)
LP pump down setting	0.5	bar(g)

### Sound power data

Sound p	ower level	0	dB(A)	
With acc	coustic hood	0	dB(A)	

tc: Condensing temperature at dew point

Rating conditions : Superheat = 11.1 K , Subcooling = 8.3 K



## Inverter reciprocating compressors VTZ086-G

## Performance data at 35 Hz, EN 12900 rating conditions

R134a

Cond. temp. in				Evapora	iting temperature	in °C (to)			
°C (tc)	-15	-10	-5	0	5	10	15		
Cooling capacity		2 722	2 620	4.609	F 076	7 474	0.212		
35	1 985	+	3 620	4 698	5 976	7 474	9 212	-	-
40	1 790	2 488	3 335	4 352	5 559	6 974	8 618	-	-
45	1 591	2 249	3 046	4 002	5 135	6 467	8 016	-	-
50	1 391	2 009	2 754	3 647	4 707	5 953	7 407	-	-
55	1 191	1 767	2 460	3 290	4 275	5 436	6 793	-	-
60	-	-	2 167	2 932	3 842	4 917	6 177	-	-
65	-	-	-	2 575	3 409	4 397	5 559	-	-
70	-	-	-	-	-	3 879	4 942	-	-
Power input in V	v								
35	1 155	1 287	1 393	1 477	1 546	1 603	1 656	-	-
40	1 181	1 335	1 462	1 567	1 656	1 733	1 805	-	-
45	1 193	1 369	1 518	1 644	1 753	1 851	1 942	-	-
50	1 192	1 391	1 562	1 710	1 840	1 959	2 070	-	-
55	1 179	1 402	1 596	1 767	1 919	2 059	2 191	-	-
60	-	-	1 622	1 816	1 991	2 152	2 306	-	-
65	-	-	-	1 859	2 057	2 241	2 416	-	-
70	-	-	-	-	-	2 327	2 525	-	-
		•	-	•					•
Current consum	ption in A								
35	2.37	2.66	2.89	3.07	3.21	3.33	3.44	-	-
40	2.43	2.76	3.02	3.22	3.37	3.49	3.60	1	-
45	2.46	2.84	3.14	3.36	3.54	3.67	3.79	-	-
50	2.46	2.89	3.23	3.50	3.70	3.85	3.98	-	-
55	2.41	2.90	3.30	3.60	3.84	4.02	4.16	-	-
60	-	-	3.32	3.67	3.95	4.17	4.34	-	-
65	-	-	-	3.70	4.03	4.29	4.49	-	-
70	-	-	-	-	-	4.37	4.61	-	-
Mass flow in kg/		1		1	_	1	1		T
35	48	65	84	107	133	164	199	-	-
40	46	62	82	104	130	160	194	-	-
45	43	59	79	101	127	156	190	-	-
50	40	56	75	97	123	152	185	-	-
55	37	53	71	93	118	147	179	-	-
60	-	-	67	89	113	141	173	-	-
65	-	-	-	84	108	135	166	-	-
70	-	-	-	-	-	129	159	-	-
Coefficient of pe	erformance (C.C	D.P.)			1	<b>.</b>	,		T
35	1.72	2.11	2.60	3.18	3.87	4.66	5.56	-	-
40	1.51	1.86	2.28	2.78	3.36	4.02	4.78	-	-
45	1.33	1.64	2.01	2.43	2.93	3.49	4.13	-	-
50	1.17	1.44	1.76	2.13	2.56	3.04	3.58	-	-
55	1.01	1.26	1.54	1.86	2.23	2.64	3.10	-	-
60	-	-	1.34	1.61	1.93	2.28	2.68	-	-
65	-	-	-	1.38	1.66	1.96	2.30	-	-
70	-	-	-	-	-	1.67	1.96	-	-
Naminal		°0 4 50 °0				Duna a			
Nominal perform	nance at to = 5	~c, tc = 50 °C				Pressure switch	settings		

Cooling capacity	4 707	W
Power input	1 840	W
Current consumption	3.70	Α
Mass flow	123	kg/h
C.O.P.	2.56	

to: Evaporating temperature at dew point

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

Maximum HP switch setting	22.6	bar(g)
Minimum LP switch setting	0.2	bar(g)
LP pump down setting	0.5	bar(g)

### Sound power data

Sound power level	0	dB(A)
With accoustic hood	0	dB(A)

tc: Condensing temperature at dew point



## Inverter reciprocating compressors VTZ086-G

## Performance data at 35 Hz, ARI rating conditions

# R134a

			Evapora	ting temperature	in °C (to)			
-15	-10	-5	0	5	10	15		
	T	_	T		1			
2 150	2 943	3 907	5 063	6 432	8 033	9 887	-	-
1 949	2 704	3 619	4 714	6 011	7 529	9 290	-	-
1 744	2 460	3 324	4 358	5 582	7 017	8 684	-	-
1 535	2 212	3 025	3 997	5 148	6 499	8 070	-	-
1 326	1 962	2 723	3 632	4 709	5 976	7 451	-	-
-	-	2 421	3 266	4 268	5 449	6 828	-	-
-	-	-	2 900	3 827	4 921	6 204	-	-
-	-	-	-	-	4 394	5 579	-	-
.,								
	4 207	4 202	4 477	4.540	4.000	4.050		
								-
	1			1	1			-
		1						-
1 192	1 391	1 562	1 710	1 840	1 959	2 070	-	-
1 179	1 402	1 596	1 767	1 919	2 059	2 191	-	-
-	-	1 622	1 816	1 991	2 152	2 306	-	-
-	-	-	1 859	2 057	2 241	2 416	-	-
-	-	-	-	-	2 327	2 525	-	-
ption in A					•			
2.37	2.66	2.89	3.07	3.21	3.33	3.44	-	-
2.43	2.76	3.02	3.22	3.37	3.49	3.60	-	-
2.46	2.84	3.14	3.36	3.54	3.67	3.79	-	-
2.46	2.89	3.23	3.50	3.70	3.85	3.98	-	-
2.41	2.90	3.30	3.60	3.84	4.02	4.16	-	_
-	-	3.32	3.67	3.95	4.17	4.34	-	-
-	-	_	3.70	4.03	4.29	4.49	-	-
-	-	_	-	-	4.37		-	-
	II.	1	L	l		-		
'h								
	64	84	107	133	163	197	_	_
								_
	1		+		1			_
								_
			+		1			_
			+					-
								-
-	_		_	1 -	128	158	-	-
rformance (C.O	0.P.)							
1.86	2.29	2.81	3.43	4.16	5.01	5.97	-	-
1.65	2.03	2.48	3.01	3.63	4.34	5.15	-	-
1.46	1.80	2.19	2.65	3.18	3.79	4.47	-	-
1.29	1.59	1.94	2.34	2.80	3.32	3.90	-	-
1.12	1.40	1.71	2.06	2.45	2.90	3.40	-	-
	-	1.49	1.80	2.14	2.53	2.96	_	_
-								+
-	-	_	1.56	1.86	2.20	2.57	-	-
	y in W  2 150 1 949 1 744 1 535 1 326 V  1 155 1 181 1 193 1 192 1 179	y in W  2 150	1   W	-15	15		## ## ## ## ## ## ## ## ## ## ## ## ##	### ### ### ### ### ### ### ### ### ##

### Nominal performance at to = 7.2 °C, tc = 54.4 °C

rionina poriorinanos at to	0,	U-1 U		
Cooling capacity		5 299	W	
Power input		1 972	W	
Current consumption		3.91	Α	
Mass flow		130	kg/h	
C.O.P.		2.69		

to: Evaporating temperature at dew point

Rating conditions : Superheat = 11.1 K , Subcooling = 8.3 K

Maximum HP switch setting	22.6	bar(g)
Minimum LP switch setting	0.2	bar(g)
LP pump down setting	0.5	bar(g)

### Sound power data

Sound power level	0	dB(A)
With accoustic hood	0	dB(A)

tc: Condensing temperature at dew point



## Inverter reciprocating compressors VTZ086-G

## Performance data at 40 Hz, EN 12900 rating conditions

R134a

Cond. temp. in				Evapora	ating temperature	in °C (to)			
°C (tc)	-15	-10	-5	0	5	10	15		
				•					
Cooling capacity	2 308	2.164	4 209	5 463	6 952	8 697	10 722		_
35		3 164	ł	1			1	-	
40	2 081	2 892	3 878	5 061	6 465	8 113	10 027	-	-
45	1 851	2 616	3 542	4 653	5 972	7 521	9 324	-	-
50	1 618	2 336	3 203	4 241	5 474	6 924	8 615	-	-
55	1 386	2 056	2 862	3 826	4 972	6 323	7 901	-	-
60	-	-	2 520	3 411	4 469	5 719	7 185	-	-
65	-	-	-	2 996	3 966	5 116	6 467	-	-
70	-	-	-	-	-	4 513	5 749	-	-
Power input in V	v								
35	1 343	1 492	1 612	1 709	1 792	1 865	1 937	-	-
40	1 373	1 548	1 692	1 812	1 915	2 009	2 099	-	-
45	1 387	1 588	1 758	1 902	2 028	2 143	2 253	-	-
50	1 384	1 614	1 811	1 981	2 131	2 269	2 400	-	-
55	1 364	1 625	1 851	2 048	2 224	2 386	2 541	-	-
60	-	-	1 878	2 105	2 308	2 496	2 675	-	-
65	-	-	-	2 150	2 383	2 599	2 804	-	-
70	-	-	-	-	-	2 695	2 928	-	-
				•	-				
Current consum	ption in A								
35	2.61	2.94	3.19	3.38	3.54	3.67	3.79	-	-
40	2.68	3.05	3.33	3.55	3.72	3.85	3.97	-	-
45	2.72	3.14	3.46	3.71	3.90	4.05	4.18	-	-
50	2.71	3.19	3.57	3.86	4.08	4.25	4.39	-	-
55	2.66	3.20	3.64	3.97	4.24	4.44	4.60	-	-
60	-	-	3.66	4.05	4.36	4.60	4.79	-	-
65	-	-	-	4.08	4.45	4.73	4.96	-	-
70	-	-	-	-	-	4.82	5.09	-	-
<b>'</b>		•	•		•	•	•		•
Mass flow in kg/		T	T	Т	T		1		T
35	56	75	98	125	155	191	231	-	-
40	53	72	95	121	151	186	226	-	-
45	50	69	91	117	147	182	221	-	-
50	46	65	87	113	143	176	215	-	-
55	43	61	83	108	137	171	208	-	-
60	-	-	78	103	132	164	201	-	-
65	-	-	-	97	125	157	194	-	-
70	-	-	-	-	-	150	185	-	-
Coefficient of pe	erformance (C.C	D.P.)							
35	1.72	2.12	2.61	3.20	3.88	4.66	5.53	-	-
40	1.52	1.87	2.29	2.79	3.38	4.04	4.78	-	-
45	1.33	1.65	2.01	2.45	2.94	3.51	4.14	1	-
50	1.17	1.45	1.77	2.14	2.57	3.05	3.59	-	-
55	1.02	1.27	1.55	1.87	2.24	2.65	3.11	-	-
60	-	-	1.34	1.62	1.94	2.29	2.69	-	-
65	-	-	-	1.39	1.66	1.97	2.31	-	-
70	-	-	-	-	-	1.67	1.96	-	-
Nominal perform	nance at to = 5	℃, tc = 50 °C				Pressure switch	settings		

-,			
Cooling capacity	5 474	W	
Power input	2 131	W	
Current consumption	4.08	Α	
Mass flow	143	kg/h	
C.O.P.	2.57		

to: Evaporating temperature at dew point

Maximum HP switch setting	22.6	bar(g)
Minimum LP switch setting	0.2	bar(g)
LP pump down setting	0.5	bar(g)

### Sound power data

Sound power level	0	dB(A)
With accoustic hood	0	dB(A)

tc: Condensing temperature at dew point

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



## Inverter reciprocating compressors VTZ086-G

## Performance data at 40 Hz, ARI rating conditions

# R134a

Cond. temp. in				Evapora	ting temperature	in °C (to)			
°C (tc)	-15	-10	-5	0	5	10	15		
				•					
Cooling capacit	y in W	1	1	1	,	1			1
35	2 500	3 422	4 543	5 888	7 482	9 346	11 507	-	-
40	2 267	3 144	4 207	5 482	6 991	8 758	10 809	-	-
45	2 028	2 860	3 865	5 068	6 492	8 162	10 102	-	-
50	1 786	2 572	3 518	4 648	5 987	7 558	9 387	-	-
55	1 542	2 282	3 168	4 225	5 477	6 950	8 666	-	-
60	-	-	2 816	3 799	4 965	6 338	7 942	-	-
65	-	-	-	3 373	4 452	5 725	7 216	-	-
70	1	-	-	-	-	5 112	6 491	-	-
Zavvar innvit in 1	A.								
Power input in V		1 402	1 612	1 700	1 702	1 965	1.027		
35	1 343	1 492	1 612	1 709	1 792	1 865	1 937	-	-
40	1 373	1 548	1 692	1 812	1 915	2 009	2 099	-	-
45	1 387	1 588	1 758	1 902	2 028	2 143	2 253	-	-
50	1 384	1 614	1 811	1 981	2 131	2 269	2 400	-	-
55	1 364	1 625	1 851	2 048	2 224	2 386	2 541	-	-
60	-	-	1 878	2 105	2 308	2 496	2 675	-	-
65	-	-	-	2 150	2 383	2 599	2 804	-	-
70	-	-	-	-	-	2 695	2 928	-	-
_									
Current consum		T 004	0.40	1 000	1 054	0.07	1 0.70		
35	2.61	2.94	3.19	3.38	3.54	3.67	3.79	-	-
40	2.68	3.05	3.33	3.55	3.72	3.85	3.97	-	-
45	2.72	3.14	3.46	3.71	3.90	4.05	4.18	-	-
50	2.71	3.19	3.57	3.86	4.08	4.25	4.39	-	-
55	2.66	3.20	3.64	3.97	4.24	4.44	4.60	-	-
60	-	-	3.66	4.05	4.36	4.60	4.79	-	-
65	-	-	-	4.08	4.45	4.73	4.96	-	-
70	-	-	-	-	-	4.82	5.09	-	-
	η <sub>-</sub>								
Mass flow in kg/		75	07	404	454	100	000		
35	56	75	97	124	154	190	230	-	-
40	53	72	94	120	151	185	225	-	-
45	50	69	91	117	146	181	220	-	-
50	46	65	87	112	142	175	214	-	-
55	42	61	83	108	137	170	207	-	-
60	-	-	78	103	131	163	200	-	-
65	-	-	-	97	125	156	193	-	-
70	-	-	-	-	-	149	184	-	-
Coefficient of pe	erformance (C.C	D.P.)				_			
35	1.86	2.29	2.82	3.44	4.18	5.01	5.94	-	-
40	1.65	2.03	2.49	3.03	3.65	4.36	5.15	-	-
45	1.46	1.80	2.20	2.66	3.20	3.81	4.48	-	-
50	1.29	1.59	1.94	2.35	2.81	3.33	3.91	-	-
55	1.13	1.40	1.71	2.06	2.46	2.91	3.41	-	-
60	-	-	1.50	1.81	2.15	2.54	2.97	-	-
			1	1.57	1.87	2.20	2.57	-	-
65	-	-	-	1.57	1.07	2.20	2.01		

### Nominal performance at to = 7.2 °C, tc = 54.4 °C

Cooling capacity	6 163	W	
Power input	2 285	W	
Current consumption	4.31	Α	
Mass flow	151	kg/h	
C.O.P.	2.70		

to: Evaporating temperature at dew point

Pressure switch settings

Maximum HP switch setting	22.6	bar(g)
Minimum LP switch setting	0.2	bar(g)
LP pump down setting	0.5	bar(g)

### Sound power data

Sound power level	0	dB(A)
With accoustic hood	0	dB(A)

tc: Condensing temperature at dew point

Rating conditions : Superheat = 11.1 K , Subcooling = 8.3 K



## Inverter reciprocating compressors VTZ086-G

## Performance data at 45 Hz, EN 12900 rating conditions

R134a

Cond. temp. in Evaporating temperature in °C (to)									
°C (tc)	-15	-10	-5	0	5	10	15		
<u> </u>		•		•	•	•	•		-
Cooling capacity	y in W								1
35	2 629	3 604	4 794	6 224	7 921	9 912	12 223	-	-
40	2 371	3 295	4 418	5 766	7 366	9 245	11 428	-	-
45	2 109	2 980	4 035	5 301	6 804	8 570	10 626	-	-
50	1 844	2 662	3 649	4 832	6 236	7 889	9 817	-	-
55	1 579	2 343	3 261	4 360	5 665	7 204	9 003	-	-
60	-	-	2 872	3 886	5 092	6 517	8 186	-	-
65	-	-	-	3 414	4 520	5 829	7 368	-	-
70	-	-	-	-	-	5 142	6 551	-	-
Power input in V	v								
35	1 526	1 693	1 828	1 939	2 034	2 121	2 208	_	_
40	1 561	1 757	1 919	2 054	2 172	2 280	2 386	-	-
45	1 576	1 804	1 995	2 158	2 300	2 431	2 557	-	-
50	1 571	1 833	2 056	2 248	2 418	2 574	2 724	_	_
55	1 547	1 844	2 101	2 325	2 525	2 708	2 884	-	_
60	-	-	2 131	2 389	2 620	2 834	3 037	_	_
65	_	-	-	2 438	2 704	2 950	3 183	-	_
70	_	-	-	-	-	3 056	3 322	-	_
· <del>-</del>		ı	I.	1	1				1
Current consum	ption in A								
35	2.90	3.26	3.54	3.75	3.92	4.07	4.21	-	_
40	2.97	3.38	3.70	3.94	4.12	4.27	4.41	_	_
45	3.01	3.48	3.84	4.12	4.33	4.50	4.63	_	_
50	3.01	3.54	3.96	4.28	4.53	4.72	4.87	_	_
55	2.95	3.55	4.03	4.41	4.70	4.92	5.10	_	_
60	-	-	4.06	4.50	4.84	5.11	5.31	-	_
65	_	-	-	4.53	4.93	5.25	5.50	-	_
70	-	-	-	-	-	5.34	5.64	-	_
70						3.04	0.04		
Mass flow in kg/	'h								
35	64	86	112	142	177	217	263	_	_
40	61	82	108	138	173	212	258	-	_
45	57	79	104	134	168	207	252	_	_
50	53	75	100	129	162	201	245		
55	48	70	95	123	157	194	237	<u>-</u>	
60	-	-	89	117	157	187	229	<u>-</u>	
65	<u>-</u>	-	-	117	143	179	229	-	-
70	<u> </u>	-	-	- 111	143	179	221	<u> </u>	
70	<del>-</del>	<u> </u>	<u> </u>		<u> </u>	1/1	211	<u> </u>	<u>-</u>
Coefficient of pe	erformance (C.C	<b>2.13</b>	2.62	3.21	3.90	4.67	5.53	-	_
40	1.72		2.30	2.81	3.39	4.06	4.79		
40	1.52	1.88 1.65	2.30	2.81	2.96	3.53	4.79 4.15	-	-
		+		+		+	1		
50	1.17	1.45	1.78	2.15	2.58	3.07	3.60	-	-
55	1.02	1.27	1.55	1.87	2.24	2.66	3.12	-	-
60	-	-	1.35	1.63	1.94	2.30	2.70	-	-
65	-	-	-	1.40	1.67	1.98	2.31	-	-
70	-	-	-	-	-	1.68	1.97	-	-
Nominal perforn	nance at to = 5	°C. tc = 50 °C				Pressure switch	settings		
		-,		_	Г	11 COOUTE OWITCH		20.0	

tronnia porto manos at to c, to	•• •	
Cooling capacity	6 236	W
Power input	2 418	W
Current consumption	4.53	Α
Mass flow	162	kg/h
C.O.P.	2.58	

to: Evaporating temperature at dew point

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

Maximum HP switch setting	22.6	bar(g)
Minimum LP switch setting	0.2	bar(g)
LP pump down setting	0.5	bar(g)

### Sound power data

Sound power level	0	dB(A)
With accoustic hood	0	dB(A)

tc: Condensing temperature at dew point



## Inverter reciprocating compressors VTZ086-G

## Performance data at 45 Hz, ARI rating conditions

# R134a

Cond. temp. in Evaporating temperature in °C (to)									
°C (tc)	-15	-10	-5	0	5	10	15		
					•				
Cooling capacity	y in W	1	1	1	,	1			1
35	2 847	3 897	5 175	6 709	8 525	10 652	13 117	-	-
40	2 582	3 581	4 793	6 245	7 965	9 980	12 319	-	-
45	2 311	3 259	4 404	5 773	7 396	9 300	11 511	-	-
50	2 036	2 931	4 009	5 296	6 821	8 612	10 696	-	-
55	1 757	2 600	3 610	4 814	6 241	7 919	9 875	-	-
60	-	-	3 209	4 329	5 658	7 222	9 050	-	-
65	-	-	-	3 844	5 073	6 523	8 223	-	-
70	1	-	-	-	-	5 826	7 397	-	-
Power input in \	A/								
Power input in \		1.602	1 020	1.020	2.024	2 121	2 209		
35	1 526	1 693	1 828	1 939	2 034	2 121	2 208	-	-
40	1 561	1 757	1 919	2 054	2 172	2 280	2 386	-	-
45	1 576	1 804	1 995	2 158	2 300	2 431	2 557	-	-
50	1 571	1 833	2 056	2 248	2 418	2 574	2 724	-	-
55	1 547	1 844	2 101	2 325	2 525	2 708	2 884	-	-
60	-	-	2 131	2 389	2 620	2 834	3 037	-	-
65	-	-	-	2 438	2 704	2 950	3 183	-	-
70	-	-	-	-	-	3 056	3 322	-	-
Current consum	•	1	1	1	1	T	1		1
35	2.90	3.26	3.54	3.75	3.92	4.07	4.21	-	-
40	2.97	3.38	3.70	3.94	4.12	4.27	4.41	-	-
45	3.01	3.48	3.84	4.12	4.33	4.50	4.63	-	-
50	3.01	3.54	3.96	4.28	4.53	4.72	4.87	-	-
55	2.95	3.55	4.03	4.41	4.70	4.92	5.10	-	-
60	-	-	4.06	4.50	4.84	5.11	5.31	-	-
65	-	-	-	4.53	4.93	5.25	5.50	-	-
70	-	-	-	-	-	5.34	5.64	-	-
Mass flow in kg	/h								
35	64	85	111	141	176	216	262	-	-
40	60	82	108	137	172	211	256	-	-
45	57	78	104	133	167	206	250	-	-
50	53	74	99	128	162	200	243	-	-
55	48	70	94	123	156	193	236	-	-
60	-	-	89	117	149	186	228	-	-
65	-	-	-	110	142	178	219	-	-
70	-	-	-	-	-	170	210	-	-
· <del>-</del>	1	1	ı	ı	1		· •		1
Coefficient of pe	erformance (C.C	1	1	ı	1	1	, ,		1
35	1.87	2.30	2.83	3.46	4.19	5.02	5.94	-	-
40	1.65	2.04	2.50	3.04	3.67	4.38	5.16	-	-
45	1.47	1.81	2.21	2.68	3.22	3.83	4.50	-	-
50	1.30	1.60	1.95	2.36	2.82	3.35	3.93	-	-
55	1.14	1.41	1.72	2.07	2.47	2.92	3.42	-	-
60	1	-	1.51	1.81	2.16	2.55	2.98	-	-
		-	-	1.58	1.88	2.21	2.58	-	-
65	-	_							

### Nominal performance at to = 7.2 °C, tc = 54.4 °C

reciminal performance at to 7.2 e, to	U-1		
Cooling capacity	7 022	W	
Power input	2 593	W	
Current consumption	4.79	Α	
Mass flow	172	kg/h	
C.O.P.	2.71		

to: Evaporating temperature at dew point

Pressure switch settings

Maximum HP switch setting	22.6	bar(g)
Minimum LP switch setting	0.2	bar(g)
LP pump down setting	0.5	bar(g)

### Sound power data

		. ,
With accoustic hood	0	dB(A)
Sound power level	0	dB(A)

tc: Condensing temperature at dew point

Rating conditions : Superheat = 11.1 K , Subcooling = 8.3 K



## Inverter reciprocating compressors VTZ086-G

## Performance data at 50 Hz, EN 12900 rating conditions

R134a

Cond. temp. in Evaporating temperature in °C (to)									
°C (tc)	-15	-10	-5	0	5	10	15		
		•					•		•
Cooling capacit	y in W	•	•		•	1			ı
35	2 948	4 041	5 376	6 980	8 885	11 119	13 713	-	-
40	2 659	3 695	4 954	6 466	8 262	10 370	12 821	-	-
45	2 366	3 343	4 526	5 945	7 631	9 612	11 919	-	-
50	2 069	2 986	4 093	5 419	6 995	8 849	11 011	-	-
55	1 771	2 628	3 658	4 890	6 354	8 080	10 098	-	-
60	-	-	3 222	4 359	5 712	7 310	9 182	-	-
65	1	-	-	3 829	5 070	6 538	8 264	-	-
70	-	-	-	-	-	5 768	7 347	-	-
Power input in \	W								
35	1 705	1 892	2 042	2 166	2 272	2 369	2 469	_	_
40	1 743	1 963	2 144	2 295	2 426	2 546	2 665		_
45	1 760	2 015	2 229	2 410	2 569		2 857	_	_
50	1 755	2 048	2 229	2 511	2 701	2 715 2 874	3 042	-	-
55	1 726	2 048	2 348	2 598	2 820	3 024	3 220	-	-
60				1		1			-
65	-	-	2 380	2 669	2 927	3 165 3 294	3 391 3 554	-	-
70	-	-	-	2 723	3 020	3 412	3 709	-	-
70	-	-	-	-	-	3412	3 709	-	-
Current consum	antion in A								
35	3.23	3.63	3.94	4.18	4.37	4.53	4.68	_	
40			1	1			4.00	<u>-</u>	_
45	3.31 3.36	3.76 3.87	4.11 4.27	4.38 4.58	4.59 4.82	4.76 5.00	5.15	-	-
				1		1			
50	3.35	3.94	4.40	4.76	5.04	5.25	5.42	-	-
55	3.28	3.95	4.49	4.91	5.23	5.48	5.68	-	-
60	-	-	4.52	5.01	5.39	5.69	5.91	-	-
65	-	-	-	5.04	5.49	5.84	6.12	-	-
70	-	-	-	-	-	5.94	6.28	-	-
Mass flow in kg	/h								
35	72	96	125	159	198	244	296	_	_
40	68	92	123	155	194	238	289		_
		1		1		1			
45	64	88	117	150	188	232	282	-	-
50	59	84	112	144	182	225	275	-	-
55	54	78	106	138	176	218	266	-	-
60	-	-	100	132	168	210	257	-	-
65	-	-	-	124	160	201	247	-	-
70	-	-	-	-	-	191	237	-	-
-	erformance (C.C		T		1	T	<del> </del>		П
35	1.73	2.14	2.63	3.22	3.91	4.69	5.56	-	-
40	1.53	1.88	2.31	2.82	3.41	4.07	4.81	-	-
45	1.34	1.66	2.03	2.47	2.97	3.54	4.17	-	-
50	1.18	1.46	1.78	2.16	2.59	3.08	3.62	-	-
55	1.03	1.28	1.56	1.88	2.25	2.67	3.14	-	-
60	-	-	1.35	1.63	1.95	2.31	2.71	-	-
65	ı	-	-	1.41	1.68	1.98	2.33	-	-
70	-	-	-	-	-	1.69	1.98	-	-
ominal perforr	mance at to = 5	°C, tc = 50 °C			-	Pressure switch			

Cooling capacity	6 995	W
Power input	2 701	W
Current consumption	5.04	Α
Mass flow	182	kg/h
C.O.P.	2.59	

to: Evaporating temperature at dew point

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

Maximum HP switch setting	22.6	bar(g)
Minimum LP switch setting	0.2	bar(g)
LP pump down setting	0.5	bar(g)

### Sound power data

Sound power level	0	dB(A)
With accoustic hood	0	dB(A)

tc: Condensing temperature at dew point



## Inverter reciprocating compressors VTZ086-G

## Performance data at 50 Hz, ARI rating conditions

# R134a

Cond. temp. in				Evapora	ting temperature	in °C (to)			
°C (tc)	-15	-10	-5	0	5	10	15		
Cooling capacity		4.270	F 000	7.504	0.500	44.050	44.747		I
35	3 192	4 370	5 803	7 524	9 562	11 950	14 717	-	-
40	2 896	4 016	5 375	7 004	8 933	11 195	13 820	-	-
45	2 592	3 655	4 939	6 475	8 296	10 431	12 913	-	-
50	2 283	3 288	4 496	5 940	7 651	9 659	11 998	-	-
55	1 971	2 917	4 049	5 400	7 000	8 882	11 076	-	-
60	-	-	3 599	4 856	6 346	8 100	10 150	-	-
65	-	-	-	4 311	5 690	7 317	9 223	-	-
70	-	-	-	-	-	6 534	8 296	-	-
Power input in W	ı								
35	1 705	1 892	2 042	2 166	2 272	2 369	2 469	-	-
40	1 743	1 963	2 144	2 295	2 426	2 546	2 665	=	-
45	1 760	2 015	2 229	2 410	2 569	2 715	2 857	-	-
50	1 755	2 048	2 297	2 511	2 701	2 874	3 042	-	-
55	1 726	2 060	2 348	2 598	2 820	3 024	3 220	-	-
60	-	-	2 380	2 669	2 927	3 165	3 391	-	-
65	-	-	-	2 723	3 020	3 294	3 554	-	_
70	-	_	_	_	_	3 412	3 709	-	-
-		I	I		1				I
Current consum	ption in A				1				
35	3.23	3.63	3.94	4.18	4.37	4.53	4.68	-	-
40	3.31	3.76	4.11	4.38	4.59	4.76	4.90	-	-
45	3.36	3.87	4.27	4.58	4.82	5.00	5.15	-	-
50	3.35	3.94	4.40	4.76	5.04	5.25	5.42	-	-
55	3.28	3.95	4.49	4.91	5.23	5.48	5.68	-	-
60	-	-	4.52	5.01	5.39	5.69	5.91	-	-
65	-	-	-	5.04	5.49	5.84	6.12	-	-
70	-	-	-	-	-	5.94	6.28	-	-
A (1! 1/	i.								
Mass flow in kg/l		00	405	450	407	040	204		I
35	71	96	125	158	197	242	294	-	-
40	68	92	121	154	193	237	288	-	-
45	64	88	116	149	187	231	281	-	-
50	59	83	111	144	181	224	273	-	-
55	54	78	106	138	175	217	265	-	-
60	-	-	100	131	167	209	256	-	-
65	-	-	-	124	159	200	246	-	-
70	-	-	-	-	-	190	236	-	-
coefficient of pe	rformance (C.O	).P.)							
35	1.87	2.31	2.84	3.47	4.21	5.04	5.96	-	-
40	1.66	2.05	2.51	3.05	3.68	4.40	5.19	-	-
45	1.47	1.81	2.22	2.69	3.23	3.84	4.52	-	-
50	1.30	1.61	1.96	2.37	2.83	3.36	3.94	-	-
55	1.14	1.42	1.72	2.08	2.48	2.94	3.44	-	-
60	-	-	1.51	1.82	2.17	2.56	2.99	-	-
65	-	-	-	1.58	1.88	2.22	2.59	-	-
70	-	-	-	-	-	1.91	2.24	-	-

### Nominal performance at to = 7.2 °C, tc = 54.4 °C

	• •		
Cooling capacity	7 876	W	
Power input	2 896	W	
Current consumption	5.33	Α	
Mass flow	193	kg/h	
C.O.P.	2.72		

to: Evaporating temperature at dew point

Rating conditions : Superheat = 11.1 K , Subcooling = 8.3 K

Pressure switch settings

Maximum HP switch setting	22.6	bar(g)
Minimum LP switch setting	0.2	bar(g)
LP pump down setting	0.5	bar(g)

### Sound power data

Sound p	ower level	0	dB(A)	
With acc	coustic hood	0	dB(A)	

tc: Condensing temperature at dew point



## Inverter reciprocating compressors VTZ086-G

## Performance data at 55 Hz, EN 12900 rating conditions

R134a

Cond. temp. in Evaporating temperature in °C (to)									
°C (tc)	-15	-10	-5	0	5	10	15		
						•			
Cooling capacity		4 476	E 054	7 732	0.943	12 210	15 105		I
35	3 264		5 954	1	9 843	12 319	15 195	-	-
40	2 946	4 093	5 487	7 163	9 152	11 488	14 205	-	-
45	2 621	3 703	5 014	6 586	8 454	10 649	13 206	-	-
50	2 292	3 309	4 535	6 004	7 749	9 803	12 199	-	-
55	1 961	2 911	4 053	5 418	7 040	8 952	11 187	-	-
60	-	-	3 569	4 829	6 328	8 098	10 172	-	-
65	-	-	-	4 241	5 616	7 243	9 155	-	-
70	-	-	-	-	-	6 389	8 138	-	-
Power input in V	v								
35	1 880	2 087	2 254	2 390	2 505	2 611	2 718	-	-
40	1 922	2 166	2 366	2 533	2 677	2 808	2 938	-	-
45	1 940	2 223	2 459	2 660	2 835	2 994	3 150	-	-
50	1 933	2 258	2 534	2 771	2 979	3 170	3 354	-	-
55	1 903	2 272	2 590	2 865	3 110	3 335	3 550	-	-
60	-	-	2 626	2 944	3 228	3 489	3 738	-	-
65	-	-	-	3 005	3 331	3 631	3 917	-	-
70	_	_	_	-	-	3 763	4 087	-	_
			L	1	1	0.00	. 55.		I
Current consum	ption in A								
35	3.60	4.04	4.39	4.65	4.86	5.04	5.21	-	-
40	3.69	4.19	4.58	4.88	5.11	5.30	5.46	-	-
45	3.74	4.32	4.76	5.11	5.37	5.57	5.74	-	-
50	3.73	4.39	4.91	5.31	5.62	5.85	6.04	-	-
55	3.66	4.41	5.00	5.47	5.83	6.11	6.32	-	-
60	-	-	5.03	5.58	6.01	6.34	6.59	-	-
65	-	-	-	5.61	6.12	6.51	6.82	-	-
70	-	-	-	-	-	6.62	6.99	-	-
		1	•		•	•	•		l .
Mass flow in kg/	'h								
35	79	107	139	176	220	270	328	-	-
40	75	102	134	171	214	264	320	-	-
45	71	98	129	166	208	257	313	-	-
50	66	93	124	160	202	250	304	1	-
55	60	87	118	153	194	241	295	-	-
60	-	-	111	146	186	233	285	-	-
65	-	-	-	138	177	223	274	-	-
70	-	-	-	-	-	212	262	-	-
Coefficient of pe	orformance (C.)	רם ר							
35	1.74	2.14	2.64	3.24	3.93	4.72	5.59	-	_
40			2.04	2.83	3.42	4.72	4.83		
45	1.53	1.89	2.32			3.56	4.83	-	-
-	1.35	1.67	1	2.48	2.98			-	-
50 55	1.19	1.47	1.79	2.17	2.60	3.09	3.64	-	-
55	1.03	1.28	1.56	1.89	2.26	2.68	3.15	-	-
60	-	-	1.36	1.64	1.96	2.32	2.72	-	-
65	-	-	-	1.41	1.69	1.99	2.34	-	-
70	-	-	-	-	-	1.70	1.99	-	-
Nominal perform	nance at to = 5	°C, tc = 50 °C				Pressure switch	settings		
					_				

Cooling capacity	7 749	W	
Power input	2 979	W	
Current consumption	5.62	Α	
Mass flow	202	kg/h	
C.O.P.	2.60		

to: Evaporating temperature at dew point

Maximum HP switch setting	22.6	bar(g)
Minimum LP switch setting	0.2	bar(g)
LP pump down setting	0.5	bar(g)

### Sound power data

Sound power level	0	dB(A)
With accoustic hood	0	dB(A)

tc: Condensing temperature at dew point

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



## Inverter reciprocating compressors VTZ086-G

## Performance data at 55 Hz, ARI rating conditions

# R134a

Cond. temp. in	Evaporating temperature in °C (to)								
°C (tc)	-15	-10	-5	0	5	10	15		
Cooling canacit	v in W								
Cooling capacit	3 536	4 840	6 427	8 334	10 593	13 239	16 307	_	-
40		4 448		7 758	9 896	12 403		-	-
	3 208		5 954				15 312	-	
45	2 872	4 049	5 471	7 173 6 580	9 190	11 556	14 307		-
50	2 530	3 643	4 981		8 476	10 701	13 292	-	-
55 60	2 183	3 231	4 486 3 987	5 982 5 380	7 755 7 030	9 840 8 974	12 271 11 245	-	-
65		-	-	4 776	6 304	8 106	10 217		-
70	-	-	-	-	- 0 304	7 237	9 189	-	-
70	-	-	-	-	-	1 231	9 109	-	-
Power input in \	W								
35	1 880	2 087	2 254	2 390	2 505	2 611	2 718	-	-
40	1 922	2 166	2 366	2 533	2 677	2 808	2 938	-	-
45	1 940	2 223	2 459	2 660	2 835	2 994	3 150	-	-
50	1 933	2 258	2 534	2 771	2 979	3 170	3 354	-	-
55	1 903	2 272	2 590	2 865	3 110	3 335	3 550	-	-
60	-	-	2 626	2 944	3 228	3 489	3 738	-	-
65	-	-	-	3 005	3 331	3 631	3 917	-	-
70	-	-	-	-	-	3 763	4 087	-	-
Current consum	nption in A								
35	3.60	4.04	4.39	4.65	4.86	5.04	5.21	-	-
40	3.69	4.19	4.58	4.88	5.11	5.30	5.46	-	-
45	3.74	4.32	4.76	5.11	5.37	5.57	5.74	-	-
50	3.73	4.39	4.91	5.31	5.62	5.85	6.04	-	-
55	3.66	4.41	5.00	5.47	5.83	6.11	6.32	-	-
60	-	-	5.03	5.58	6.01	6.34	6.59	-	-
65	•	-	-	5.61	6.12	6.51	6.82	-	-
70	1	-	-	-	-	6.62	6.99	-	-
Mass flow in kg		1	1	1	1	T	1	T	1
35	79	106	138	175	219	269	326	-	-
40	75	102	134	171	213	262	319	-	-
45	71	97	129	165	207	256	311	-	-
50	66	92	123	159	201	248	302	-	-
55	60	86	117	153	193	240	293	-	-
60	-	-	110	145	185	231	283	-	-
65	-	-	-	137	177	222	273	-	-
70	-	-	-	-	-	211	261	-	-
Coefficient of ne	erformance (C.O	.P.)							
35	1.88	2.32	2.85	3.49	4.23	5.07	6.00	_	_
40	1.67	2.05	2.52	3.49	3.70	4.42	5.21	-	_
45	1.48	1.82	2.22	2.70	3.24	3.86	4.54	-	-
50	1.31	1.61	1.97	2.38	2.84	3.38	3.96	-	_
55	1.15	1.42	1.73	2.09	2.49	2.95	3.46	-	-
60	-	-	1.73	1.83	2.49	2.93	3.40	-	-
65	-	-	-	1.59	1.89	2.23	2.61	-	-
70	-	-	-	-	-	1.92	2.25	-	-
		1	I	1	I			I	I
Nominal perforr	mance at to = 7.2	2 °C, tc = 54.4 °C				Pressure switch	settings		
-					_				

Cooling capacity	8 726	W
Power input	3 194	W
Current consumption	5.94	Α
Mass flow	214	kg/h
C.O.P.	2.73	

to: Evaporating temperature at dew point

Maximum HP switch setting	22.6	bar(g)
Minimum LP switch setting	0.2	bar(g)
LP pump down setting	0.5	bar(g)

### Sound power data

Sound power level	0	dB(A)
With accoustic hood	0	dB(A)

tc: Condensing temperature at dew point

Rating conditions : Superheat = 11.1 K , Subcooling = 8.3 K



## Inverter reciprocating compressors VTZ086-G

## Performance data at 60 Hz, EN 12900 rating conditions

R134a

Cond. temp. in				Evapora	ating temperature	in °C (to)			
°C (tc)	-15	-10	-5	0	5	10	15		
<u> </u>		•		•		•			•
Cooling capacity	y in W								
35	3 579	4 908	6 529	8 479	10 794	13 511	16 666	-	-
40	3 230	4 488	6 018	7 855	10 037	12 600	15 581	-	-
45	2 875	4 061	5 499	7 223	9 272	11 680	14 485	-	-
50	2 514	3 629	4 974	6 585	8 499	10 752	13 380	-	-
55	2 151	3 193	4 445	5 942	7 721	9 818	12 270	-	-
60	-	-	3 914	5 297	6 940	8 881	11 156	-	-
65	-	-	-	4 651	6 159	7 943	10 040	-	-
70	-	-	-	-	-	7 005	8 924	-	-
	v								
Power input in V		2 200	2.402	2.044	0.705	2.047	2.057		
35	2 050	2 280	2 463	2 611	2 735	2 847	2 957	-	-
40	2 095	2 365	2 586	2 768	2 924	3 066	3 203	-	-
45	2 114	2 426	2 686	2 906	3 097	3 270	3 438	-	-
50	2 108	2 464	2 767	3 026	3 254	3 462	3 661	-	-
55	2 077	2 481	2 827	3 128	3 396	3 640	3 873	-	-
60	-	-	2 869	3 214	3 523	3 807	4 076	-	-
65	-	-	-	3 284	3 637	3 962	4 271	-	-
70	-	-	-	-	-	4 107	4 457	-	-
Current consum	•	1				T			
35	4.01	4.50	4.89	5.18	5.42	5.61	5.80	-	-
40	4.11	4.67	5.11	5.44	5.70	5.90	6.08	-	-
45	4.17	4.81	5.31	5.69	5.98	6.21	6.40	-	-
50	4.16	4.89	5.47	5.92	6.26	6.52	6.72	-	-
55	4.07	4.91	5.58	6.10	6.50	6.81	7.05	-	-
60	-	-	5.61	6.22	6.69	7.06	7.34	-	-
65	-	-	-	6.26	6.82	7.26	7.60	-	-
70	-	-	-	-	-	7.38	7.79	-	-
Mass flow in kg/	h					•			
35	87	117	152	193	241	296	359	-	-
40	83	112	147	188	235	289	351	-	-
45	78	107	142	182	229	282	343	-	-
50	72	102	136	176	221	274	334	-	-
55	66	95	129	168	213	265	324	-	-
60	-	-	122	160	204	255	313	-	-
65	-	-	-	151	195	244	301	-	-
70	-	-	-	-	-	232	288	-	-
	_								
Coefficient of pe	•	· ·	2.05	2.05	2.05	4.75	F.C4		
35	1.75	2.15	2.65	3.25	3.95	4.75	5.64	-	-
40	1.54	1.90	2.33	2.84	3.43	4.11	4.86	-	-
45	1.36	1.67	2.05	2.49	2.99	3.57	4.21	-	-
50	1.19	1.47	1.80	2.18	2.61	3.11	3.66	-	-
55	1.04	1.29	1.57	1.90	2.27	2.70	3.17	-	-
60	-	-	1.36	1.65	1.97	2.33	2.74	-	-
65	-	-	-	1.42	1.69	2.00	2.35	-	-
70	-	-	-	-	-	1.71	2.00	-	-
						_			
lominal perforn	nance at to = 5	℃, tc = 50 °C			г	Pressure switch			

Cooling capacity	8 499	W
Power input	3 254	W
Current consumption	6.26	Α
Mass flow	221	kg/h
C.O.P.	2.61	

to: Evaporating temperature at dew point

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

Maximum HP switch setting	22.6	bar(g)
Minimum LP switch setting	0.2	bar(g)
LP pump down setting	0.5	bar(g)

### Sound power data

Sound power level	0	dB(A)
With accoustic hood	0	dB(A)

tc: Condensing temperature at dew point



## Inverter reciprocating compressors VTZ086-G

## Performance data at 60 Hz, ARI rating conditions

# R134a

Cond. temp. in	pp. in Evaporating temperature in °C (to)								
°C (tc)	-15	-10	-5	0	5	10	15		
Cooling capacity		5.000	7.40	1 0.400	14.047	11.500	47.007		T
35	3 877	5 306	7 048	9 139	11 617	14 520	17 887	-	-
40	3 518	4 878	6 529	8 508	10 854	13 603	16 795	-	-
45	3 150	4 441	6 000	7 867	10 079	12 675	15 692	-	-
50	2 775	3 995	5 463	7 217	9 296	11 737	14 579	-	-
55	2 394	3 544	4 920	6 561	8 506	10 792	13 458	-	-
60	-	-	4 373	5 901	7 711	9 842	12 333	-	-
65	-	-	-	5 237	6 913	8 889	11 204	-	-
70	-	-	-	-	-	7 936	10 076	-	-
Power input in V	N								
35	2 050	2 280	2 463	2 611	2 735	2 847	2 957	-	-
40	2 095	2 365	2 586	2 768	2 924	3 066	3 203	-	-
45	2 114	2 426	2 686	2 906	3 097	3 270	3 438	-	-
50	2 108	2 464	2 767	3 026	3 254	3 462	3 661	-	-
55	2 077	2 481	2 827	3 128	3 396	3 640	3 873	-	-
60	-	-	2 869	3 214	3 523	3 807	4 076	-	-
65	-	-	-	3 284	3 637	3 962	4 271	-	-
70	-	-	-	-	-	4 107	4 457	-	-
Current consum	ption in A								
35	4.01	4.50	4.89	5.18	5.42	5.61	5.80	-	-
40	4.11	4.67	5.11	5.44	5.70	5.90	6.08	-	-
45	4.17	4.81	5.31	5.69	5.98	6.21	6.40	-	-
50	4.16	4.89	5.47	5.92	6.26	6.52	6.72	-	-
55	4.07	4.91	5.58	6.10	6.50	6.81	7.05	-	-
60	-	-	5.61	6.22	6.69	7.06	7.34	-	-
65	-	-	-	6.26	6.82	7.26	7.60	-	-
70	-	-	-	-	-	7.38	7.79	-	-
Mass flow in kg/	'h								
35	87	116	151	192	240	295	357	-	-
40	82	112	146	187	234	288	349	-	-
45	77	107	141	181	227	280	341	-	-
50	72	101	135	175	220	272	332	-	-
55	66	95	128	167	212	263	322	-	-
60	-	-	121	159	203	254	311	-	-
65	-	-	-	150	194	243	299	-	-
70	-	-	-	-	-	231	286	-	-
Coefficient of pe	erformance (C.C	).P.)							
35	1.89	2.33	2.86	3.50	4.25	5.10	6.05	-	-
40	1.68	2.06	2.53	3.07	3.71	4.44	5.24	-	-
45	1.49	1.83	2.23	2.71	3.25	3.88	4.56	-	-
50	1.32	1.62	1.97	2.39	2.86	3.39	3.98	-	-
55	1.15	1.43	1.74	2.10	2.50	2.96	3.47	-	-
60	-	-	1.52	1.84	2.19	2.59	3.03	-	-
65	-	-	-	1.59	1.90	2.24	2.62	-	-
70	-	-	-	-	-	1.93	2.26	-	-
Nominal perform	nance at to = 7.2	2 °C, tc = 54.4 °C			<u>_l</u>	Pressure switch	settings		

Cooling capacity	9 570	W
Power input	3 487	W
Current consumption	6.62	Α
Mass flow	235	kg/h
C.O.P.	2.74	

to: Evaporating temperature at dew point

Maximum HP switch setting	22.6	bar(g)
Minimum LP switch setting	0.2	bar(g)
LP pump down setting	0.5	bar(g)

### Sound power data

Sound power level	0	dB(A)
With accoustic hood	0	dB(A)

tc: Condensing temperature at dew point

Rating conditions : Superheat = 11.1 K , Subcooling = 8.3 K



## Inverter reciprocating compressors VTZ086-G

## Performance data at 65 Hz, EN 12900 rating conditions

R134a

				Evapora	iting temperature	in °C (to)			
°C (tc)	-15	-10	-5	0	5	10	15		
Cooling capacit	y in W		•	•	•	•			
35	3 892	5 337	7 100	9 221	11 740	14 696	18 129	-	-
40	3 514	4 881	6 545	8 544	10 918	13 706	16 948	-	-
45	3 127	4 417	5 981	7 857	10 085	12 705	15 756	-	-
50	2 735	3 947	5 410	7 163	9 245	11 695	14 555	-	-
55	2 340	3 474	4 835	6 463	8 398	10 680	13 347	-	-
60	-	-	4 257	5 761	7 549	9 660	12 134	-	-
65	-	-	-	5 058	6 698	8 638	10 919	-	-
70	-	-	-	-	-	7 617	9 704	-	-
Power input in	N								
35	2 217	2 470	2 670	2 830	2 961	3 075	3 186	_	_
40	2 265	2 561	2 803	3 001	3 169	3 319	3 462		-
45	2 284	2 626	2 910	3 150	3 356		3 720	_	-
50	2 277	2 666	2 996	3 277	3 524	3 542 3 748	3 961	-	
55	2 248	2 685	3 061	3 387	3 676	3 939	4 190	-	-
60	2 248						<del> </del>		-
65		-	3 109	3 480	3 813	4 118	4 407 4 617	-	-
70	-	-	-	3 561	3 938	4 286 4 447	4 820	-	-
70	-	-	-	-	-	4 447	4 820	-	-
`ant aana	antion in A								
Current consun		F 01	5.44	F 77	6.02	6.24	6.45		
35	4.46	5.01		5.77		<u> </u>	6.45		-
40	4.57	5.20	5.69	6.05	6.34	6.57	6.77	-	-
45	4.64	5.35	5.91	6.33	6.66	6.91	7.12	-	-
50	4.63	5.45	6.09	6.59	6.96	7.25	7.48	-	-
55	4.53	5.46	6.21	6.79	7.23	7.57	7.84	-	-
60	-	-	6.24	6.92	7.45	7.86	8.17	-	-
65	-	-	-	6.96	7.59	8.08	8.46	-	-
70	-	-	-	-	-	8.21	8.67	-	-
/lass flow in kg	/h								
	/11								
		107	405	240	202	200	204		
35	95	127	165	210	262	322	391	-	-
35 40	95 90	122	160	204	256	315	382	-	-
35 40 45	95 90 85	122 117	160 154	204 198	256 249	315 307	382 373	-	-
35 40 45 50	95 90 85 79	122 117 111	160 154 148	204 198 191	256 249 241	315 307 298	382 373 363	-	
35 40 45 50 55	95 90 85 79 72	122 117 111 104	160 154 148 140	204 198 191 183	256 249 241 232	315 307 298 288	382 373 363 352	- - -	- - -
35 40 45 50 55 60	95 90 85 79 72	122 117 111 104	160 154 148 140 132	204 198 191 183 174	256 249 241 232 222	315 307 298 288 277	382 373 363 352 340	- - - -	
35 40 45 50 55 60 65	95 90 85 79 72 -	122 117 111 104 -	160 154 148 140 132	204 198 191 183 174 164	256 249 241 232 222 212	315 307 298 288 277 266	382 373 363 352 340 327	- - - -	
35 40 45 50 55 60	95 90 85 79 72	122 117 111 104	160 154 148 140 132	204 198 191 183 174	256 249 241 232 222	315 307 298 288 277	382 373 363 352 340	- - - -	
35 40 45 50 55 60 65 70	95 90 85 79 72 -	122 117 111 104 - -	160 154 148 140 132	204 198 191 183 174 164	256 249 241 232 222 212	315 307 298 288 277 266	382 373 363 352 340 327	- - - -	
35 40 45 50 55 60 65 70	95 90 85 79 72 -	122 117 111 104 - -	160 154 148 140 132	204 198 191 183 174 164	256 249 241 232 222 212	315 307 298 288 277 266	382 373 363 352 340 327	- - - -	
35 40 45 50 55 60 65 70	95 90 85 79 72 - - -	122 117 111 104 - - -	160 154 148 140 132 -	204 198 191 183 174 164	256 249 241 232 222 212 -	315 307 298 288 277 266 253	382 373 363 352 340 327 313	- - - - -	
35 40 45 50 55 60 65 70 Coefficient of p	95 90 85 79 72 - - - - erformance (C.C	122 117 111 104 - - - - - D.P.)	160 154 148 140 132 - -	204 198 191 183 174 164 -	256 249 241 232 222 212 -	315 307 298 288 277 266 253	382 373 363 352 340 327 313		
35 40 45 50 55 60 65 70 Coefficient of p	95 90 85 79 72 - - - - erformance (C.C 1.76	122 117 111 104 - - - - - - - - - - - - 1.P.)	160 154 148 140 132 - - 2.66 2.34	204 198 191 183 174 164 - 3.26 2.85 2.49	256 249 241 232 222 212 - 3.97 3.44	315 307 298 288 277 266 253 4.78 4.13	382 373 363 352 340 327 313 5.69 4.90	- - - - -	
35 40 45 50 55 60 65 70 <b>Coefficient of p</b> 35 40	95 90 85 79 72 - - - - 2 erformance (C.C 1.76 1.55 1.37	122 117 111 104 - - - - - D.P.) 2.16 1.91 1.68	160 154 148 140 132 - - - 2.66 2.34 2.06	204 198 191 183 174 164 - 3.26 2.85	256 249 241 232 222 212 - 3.97 3.44 3.00	315 307 298 288 277 266 253 4.78 4.13 3.59	382 373 363 352 340 327 313 5.69 4.90 4.24	- - - - -	
35 40 45 50 55 60 65 70  Coefficient of p 35 40 45 50 55	95 90 85 79 72 - - - - erformance (C.C 1.76 1.55 1.37	122 117 111 104 - - - D.P.) 2.16 1.91 1.68 1.48	160 154 148 140 132 - - 2.66 2.34 2.06 1.81	204 198 191 183 174 164 - 3.26 2.85 2.49 2.19 1.91	256 249 241 232 222 212 - 3.97 3.44 3.00 2.62 2.28	315 307 298 288 277 266 253 4.78 4.13 3.59 3.12 2.71	382 373 363 352 340 327 313 5.69 4.90 4.24 3.67 3.19	- - - - - -	
35 40 45 50 55 60 65 70  Coefficient of p 35 40 45 50 55 60	95 90 85 79 72 - - - erformance (C.C 1.76 1.55 1.37 1.20 1.04	122 117 111 104 - - - - D.P.) 2.16 1.91 1.68 1.48 1.29	160 154 148 140 132 - - - 2.66 2.34 2.06 1.81	204 198 191 183 174 164 - 3.26 2.85 2.49 2.19 1.91 1.66	256 249 241 232 222 212 - 3.97 3.44 3.00 2.62 2.28 1.98	315 307 298 288 277 266 253 4.78 4.13 3.59 3.12 2.71 2.35	382 373 363 352 340 327 313 5.69 4.90 4.24 3.67 3.19 2.75	- - - - - - - -	
35 40 45 50 55 60 65 70 <b>Coefficient of p</b> 35 40 45 50	95 90 85 79 72 - - - erformance (C.C 1.76 1.55 1.37 1.20 1.04	122 117 111 104 - - - - D.P.) 2.16 1.91 1.68 1.48 1.29	160 154 148 140 132 - - 2.66 2.34 2.06 1.81 1.58 1.37	204 198 191 183 174 164 - 3.26 2.85 2.49 2.19 1.91	256 249 241 232 222 212 - 3.97 3.44 3.00 2.62 2.28	315 307 298 288 277 266 253 4.78 4.13 3.59 3.12 2.71	382 373 363 352 340 327 313 5.69 4.90 4.24 3.67 3.19	- - - - - - - - -	

-,		
Cooling capacity	9 245	W
Power input	3 524	W
Current consumption	6.96	Α
Mass flow	241	kg/h
C.O.P.	2.62	

to: Evaporating temperature at dew point

Maximum HP switch setting	22.6	bar(g)
Minimum LP switch setting	0.2	bar(g)
LP pump down setting	0.5	bar(g)

### Sound power data

Sound power level	0	dB(A)
With accoustic hood	0	dB(A)

tc: Condensing temperature at dew point

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



## Inverter reciprocating compressors VTZ086-G

## Performance data at 65 Hz, ARI rating conditions

# R134a

Cond. temp. in				Evapora	ating temperature	in °C (to)			
°C (tc)	-15	-10	-5	0	5	10	15		
•							•		
Cooling capacity		Т	T	1	T	1	1		ı
35	4 216	5 770	7 664	9 939	12 635	15 794	19 456	-	-
40	3 826	5 306	7 101	9 254	11 805	14 797	18 269	-	-
45	3 427	4 830	6 526	8 557	10 963	13 787	17 069	-	-
50	3 019	4 346	5 943	7 851	10 112	12 767	15 859	-	-
55	2 604	3 855	5 352	7 137	9 252	11 739	14 639	-	-
60	-	-	4 757	6 418	8 387	10 705	13 414	-	-
65	-	-	-	5 696	7 518	9 667	12 185	-	-
70	-	-	-	-	-	8 629	10 957	-	-
Power input in \	N								
35	2 217	2 470	2 670	2 830	2 961	3 075	3 186	-	_
40	2 265	2 561	2 803	3 001	3 169	3 319	3 462		_
45	2 284	2 626	2 910	3 150	3 356	3 542	3 720		_
50	2 277	2 666	2 996	3 277	3 524	3 748	3 961	-	_
						•			-
55	2 248	2 685	3 061	3 387	3 676	3 939	4 190	-	
60 65	-	-	3 109	3 480	3 813	4 118	4 407	-	-
65	-	-	-	3 561	3 938	4 286	4 617	-	-
70	-	-	-	-	-	4 447	4 820	-	-
	4' i A								
urrent consum	•	F 01	E 44	E 77	6.02	6.24	6.45		
35	4.46	5.01	5.44	5.77	6.02	6.24	6.45	-	-
40	4.57	5.20	5.69	6.05	6.34	6.57	6.77	-	-
45	4.64	5.35	5.91	6.33	6.66	6.91	7.12	-	-
50	4.63	5.45	6.09	6.59	6.96	7.25	7.48	-	-
55	4.53	5.46	6.21	6.79	7.23	7.57	7.84	-	-
60	-	-	6.24	6.92	7.45	7.86	8.17	-	-
65	-	-	-	6.96	7.59	8.08	8.46	-	-
70	-	-	-	-	-	8.21	8.67	-	-
lass flow in kg	/h								
35	94	126	164	209	261	320	389	_	_
40	89	120	159	203	254	313	380	-	-
			1		1				
45	84	116	154	197	247	305	371	-	-
50	78	110	147	190	240	296	361	-	-
55	71	103	140	182	231	287	350		-
60	-	-	132	173	221	276	338	-	-
65	-	-	-	163	211	264	325	-	-
70	-	-	-	-	-	251	311	-	-
Coefficient of pe	erformance (C.C	).P.)					,		
35	1.90	2.34	2.87	3.51	4.27	5.14	6.11	-	-
40	1.69	2.07	2.53	3.08	3.72	4.46	5.28	-	-
45	1.50	1.84	2.24	2.72	3.27	3.89	4.59	-	-
50	1.33	1.63	1.98	2.40	2.87	3.41	4.00	-	-
55	1.16	1.44	1.75	2.11	2.52	2.98	3.49	-	-
	-	-	1.53	1.84	2.20	2.60	3.04	-	-
60			1		1				
60 65	-	-	-	1.60	1.91	2.26	2.64	-	-

### Nominal performance at to = 7.2 °C, tc = 54.4 °C

Nominal performance at to 7.2 0, to	U-1T U	
Cooling capacity	10 410	W
Power input	3 774	W
Current consumption	7.36	Α
Mass flow	256	kg/h
C.O.P.	2.76	

to: Evaporating temperature at dew point

Rating conditions : Superheat = 11.1 K , Subcooling = 8.3 K

Maximum HP switch setting	22.6	bar(g)
Minimum LP switch setting	0.2	bar(g)
LP pump down setting	0.5	bar(g)

### Sound power data

Sound power level	0	dB(A)
With accoustic hood	0	dB(A)

tc: Condensing temperature at dew point



## Inverter reciprocating compressors VTZ086-G

## Performance data at 70 Hz, EN 12900 rating conditions

R134a

Cond. temp. in				Evapora	ating temperature	in °C (to)			
°C (tc)	-15	-10	-5	0	5	10	15		
					-				
Cooling capacity	y in W		•			_			
35	4 203	5 763	7 667	9 959	12 680	15 873	19 581	-	-
40	3 795	5 272	7 069	9 228	11 792	14 804	18 307	-	-
45	3 378	4 771	6 460	8 487	10 894	13 724	17 020	-	-
50	2 954	4 264	5 844	7 737	9 986	12 634	15 722	-	-
55	2 527	3 752	5 223	6 982	9 072	11 536	14 417	-	-
60	-	-	4 598	6 223	8 154	10 434	13 106	-	-
65	-	-	-	5 463	7 234	9 329	11 793	-	-
70	-	-	-	-	-	8 225	10 478	-	-
Power input in V	v								
35	2 380	2 657	2 875	3 046	3 182	3 297	3 404	_	_
40	2 429	2 754	3 018	3 232	3 411	3 567	3 713	<u> </u>	-
		1		1			<del> </del>		
45 50	2 449	2 821	3 131	3 390	3 613	3 810	3 996		
50	2 443	2 864	3 220	3 525	3 791	4 030	4 257	-	-
55	2 417	2 886	3 290	3 640	3 950	4 233	4 500	-	-
60	-	-	3 345	3 742	4 097	4 422	4 731	-	-
65	-	-	-	3 834	4 234	4 603	4 954	-	-
70	-	-	-	-	-	4 780	5 174	-	-
Current consum	•	T		1 0.40	T	T	T - 40 T		
35	4.95	5.57	6.04	6.40	6.69	6.93	7.16	-	-
40	5.08	5.78	6.32	6.73	7.04	7.29	7.51	-	-
45	5.15	5.95	6.57	7.04	7.40	7.67	7.90	-	-
50	5.14	6.05	6.77	7.32	7.73	8.05	8.31	-	-
55	5.03	6.07	6.90	7.54	8.03	8.41	8.71	-	-
60	-	-	6.93	7.69	8.27	8.72	9.08	-	-
65	-	-	-	7.73	8.43	8.97	9.39	-	-
70	-	-	-	-	-	9.12	9.64	-	-
Mass flow in kg/	'h								
35	102	137	179	227	283	348	422	-	-
40	97	132	173	221	276	340	413	-	-
45	91	126	167	214	269	331	403	-	-
50	85	119	160	206	260	322	392	-	-
55	78	112	152	198	251	311	380	-	-
60	-	-	143	188	240	300	367	-	-
65	-	-	-	177	229	287	353	-	-
70	-	-	-	-	-	273	338	-	-
			•		•	•			
Coefficient of pe	erformance (C.C	<b>2.17</b>	2.67	3.27	3.98	4.81	5.75	-	_
		1					1		-
40	1.56	1.91	2.34	2.85	3.46	4.15	4.93	-	
45	1.38	1.69	2.06	2.50	3.02	3.60	4.26	-	-
50	1.21	1.49	1.81	2.19	2.63	3.13	3.69	-	-
55	1.05	1.30	1.59	1.92	2.30	2.73	3.20	-	-
60	-	-	1.37	1.66	1.99	2.36	2.77	-	-
65	-	-	-	1.42	1.71	2.03	2.38	-	-
70	-	-	-	-	-	1.72	2.03	-	-
lominal norfe	nance at to = 5 °	°C +0 = E0 °C				Pressure switch	cottings		
omma periorn	nance at to = 5	U, IU - 50 'U	147			Pressure switch			

	•• •		
Cooling capacity	9 986	W	
Power input	3 791	W	
Current consumption	7.73	Α	
Mass flow	260	kg/h	
C.O.P.	2.63		

to: Evaporating temperature at dew point

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

Maximum HP switch setting	22.6	bar(g)
Minimum LP switch setting	0.2	bar(g)
LP pump down setting	0.5	bar(g)

### Sound power data

Sound power level	0	dB(A)
With accoustic hood	0	dB(A)

tc: Condensing temperature at dew point



## Inverter reciprocating compressors VTZ086-G

## Performance data at 70 Hz, ARI rating conditions

# R134a

Cond. temp. in	emp. in Evaporating temperature in °C (to)								
°C (tc)	-15	-10	-5	0	5	10	15		
On allian and the		•	•	•	•	•	•		•
Cooling capacit									
35	4 552	6 231	8 277	10 734	13 646	17 058	21 015	-	-
40	4 132	5 730	7 670	9 995	12 751	15 983	19 734	-	-
45	3 701	5 217	7 050	9 243	11 843	14 893	18 439	-	-
50	3 261	4 695	6 419	8 480	10 923	13 791	17 131	-	-
55	2 813	4 164	5 781	7 709	9 994	12 680	15 813	-	-
60	-	-	5 137	6 932	9 059	11 562	14 489	-	-
65	-	-	-	6 151	8 120	10 441	13 160	-	-
70	-	-	-	-	-	9 318	11 831	-	-
Power input in \	w								
35	2 380	2 657	2 875	3 046	3 182	3 297	3 404	-	_
40	2 429	2 754	3 018	3 232	3 411	3 567	3 713	-	-
45	2 449	2 821	3 131	3 390	3 613	3 810	3 996	-	_
50	2 443	2 864	3 220	3 525	3 791	4 030	4 257	-	_
55	2 443	2 886	3 290	3 640	3 950	4 233	4 500	-	-
60	-	-	3 345	3 742	4 097	4 422	4 731	-	-
65	-	-	- 3 345	3 834	4 234	4 603	4 954	-	-
70	-	-	-	-	- 4 234	4 780	5 174	-	-
70	-	-	-	_	-	4 7 0 0	5174	-	_
Current consun	nption in A								
35	4.95	5.57	6.04	6.40	6.69	6.93	7.16	-	-
40	5.08	5.78	6.32	6.73	7.04	7.29	7.51	-	-
45	5.15	5.95	6.57	7.04	7.40	7.67	7.90	-	-
50	5.14	6.05	6.77	7.32	7.73	8.05	8.31	-	-
55	5.03	6.07	6.90	7.54	8.03	8.41	8.71	-	-
60	-	-	6.93	7.69	8.27	8.72	9.08	-	-
65	-	-	_	7.73	8.43	8.97	9.39	-	-
70	-	-	-	-	-	9.12	9.64	-	-
-					l	-			l
Mass flow in kg	/h			,		1	,		
35	102	136	178	226	282	346	420	-	-
40	97	131	172	220	275	338	411	-	-
45	91	125	166	213	267	330	401	-	-
50	84	119	159	205	259	320	390	-	-
55	77	111	151	197	249	310	378	-	-
60	-	-	142	187	239	298	365	-	-
65	-	-	-	177	227	285	351	-	-
70	-	-	-	-	-	271	336	-	-
Coefficient of pe	erformance (C.O	.P.)							
35	1.91	2.34	2.88	3.52	4.29	5.17	6.17	-	-
40	1.70	2.08	2.54	3.09	3.74	4.48	5.31	-	_
45	1.51	1.85	2.25	2.73	3.28	3.91	4.61	-	_
50	1.33	1.64	1.99	2.41	2.88	3.42	4.02	-	_
55	1.16	1.04	1.76	2.41	2.53	3.42	3.51	-	-
60	-	-	1.76	1.85	2.33	2.61	3.06	-	-
65				1.60	1.92	2.01	2.66		
70	-	-	-	-	1			-	-
70	-	-	-	-	-	1.95	2.29	-	-

# Nominal performance at to = 7.2 °C, tc = 54.4 °C

	,			
Cooling capacity		11 245	W	
Power input		4 057	W	
Current consumption		8.18	Α	
Mass flow		276	kg/h	
C.O.P.		2.77		

to: Evaporating temperature at dew point

Pressure switch settings

Maximum HP switch setting	22.6	bar(g)
Minimum LP switch setting	0.2	bar(g)
LP pump down setting	0.5	bar(g)

### Sound power data

I	Sound power level	0	dB(A)
	With accoustic hood	0	dB(A)

tc: Condensing temperature at dew point

Rating conditions : Superheat = 11.1 K , Subcooling = 8.3 K



## Inverter reciprocating compressors VTZ086-G

## Performance data at 75 Hz, EN 12900 rating conditions

R134a

Cond. temp. in Evaporating temperature in °C (to)									
°C (tc)	-15	-10	-5	0	5	10	15		
		•				•			
Cooling capacity	y in W	<b>T</b>	•			<b>T</b>			
35	4 512	6 187	8 231	10 692	13 613	17 042	21 025	-	-
40	4 074	5 660	7 590	9 908	12 662	15 896	19 658	-	-
45	3 627	5 123	6 937	9 113	11 698	14 737	18 276	-	-
50	3 172	4 579	6 275	8 308	10 723	13 566	16 883	-	-
55	2 713	4 029	5 608	7 497	9 741	12 388	15 481	-	-
60	-	-	4 937	6 681	8 755	11 203	14 073	-	-
65	-	-	-	5 864	7 766	10 016	12 660	-	1
70	-	-	-	-	-	8 828	11 247	-	-
Power input in V	v								
35	2 539	2 842	3 078	3 259	3 400	3 513	3 611	_	_
40	2 589	2 944	3 230	3 461	3 650	3 812	3 957		
45	2 609	3 013	3 348	3 628			4 267		-
					3 866	4 074			
50 55	2 604	3 057	3 441	3 768	4 053	4 308	4 546	-	-
55	2 582	3 084	3 515	3 890	4 220	4 521	4 804	-	-
60	-	-	3 579	3 999	4 375	4 720	5 047	-	-
65	-	-	-	4 104	4 525	4 913	5 283	-	-
70	-	-	-	-	-	5 108	5 520	-	-
urrent consum	•	1 0.17	1 000	T = 00	T	T	T T		
35	5.49	6.17	6.69	7.09	7.41	7.67	7.93	-	-
40	5.63	6.41	7.00	7.45	7.80	8.08	8.32	-	-
45	5.71	6.59	7.28	7.80	8.19	8.50	8.76	-	-
50	5.70	6.71	7.50	8.11	8.57	8.92	9.21	-	-
55	5.57	6.73	7.64	8.35	8.90	9.32	9.65	-	-
60	-	-	7.68	8.52	9.17	9.67	10.06	-	-
65	-	-	-	8.57	9.34	9.94	10.41	-	-
70	-	-	-	-	-	10.11	10.68	-	-
Mass flow in kg/	h								
35	110	147	192	244	304	374	453	-	-
40	104	142	186	237	297	365	443	-	-
45	98	135	179	230	288	356	433	-	-
50	91	128	171	222	279	345	421	-	-
55	83	120	163	212	269	334	408	-	-
60	-	-	153	202	258	322	394	-	-
65	-	-	-	191	245	308	379	-	-
70	-	-	-	-	-	293	363	-	-
•									
35	erformance (C.C	<b>2.18</b>	2.67	3.28	4.00	4.85	5.82	-	-
40	1.76		2.35	2.86	3.47	4.05	4.97	-	-
45	1.39	1.92 1.70	2.35	2.80		3.62	4.97		-
		+			3.03		1	-	
50	1.22	1.50	1.82	2.20	2.65	3.15	3.71	-	-
55	1.05	1.31	1.60	1.93	2.31	2.74	3.22	-	-
60	-	-	1.38	1.67	2.00	2.37	2.79	-	-
65	-	-	-	1.43	1.72	2.04	2.40	-	-
70	-	-	-	-	-	1.73	2.04	-	-
 		°C to = 50 °C				Dragoure contact	aattinaa		
ominai pertorn	nance at to = 5	C, tC = 50 °C				Pressure switch			

Cooling capacity	10 723	W
Power input	4 053	W
Current consumption	8.57	Α
Mass flow	279	kg/h
C.O.P.	2.65	

to: Evaporating temperature at dew point

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

Maximum HP switch setting	22.6	bar(g)
Minimum LP switch setting	0.2	bar(g)
LP pump down setting	0.5	bar(g)

### Sound power data

Sound power level	0	dB(A)
With accoustic hood	0	dB(A)

tc: Condensing temperature at dew point



## Inverter reciprocating compressors VTZ086-G

## Performance data at 75 Hz, ARI rating conditions

# R134a

Cond. temp. in				Evapora	ating temperature	in °C (to)			
°C (tc)	-15	-10	-5	0	5	10	15		
0 11									
Cooling capacit		6 000	9.000	11 504	14.054	10.045	22.504		l
35	4 887	6 690	8 886	11 524	14 651	18 315	22 564	-	-
40	4 437	6 153	8 235	10 732	13 692	17 162	21 190	-	-
45	3 974	5 602	7 570	9 925	12 717	15 992	19 800	-	-
50	3 501	5 041	6 893	9 106	11 729	14 809	18 396	-	-
55	3 020	4 472	6 208	8 278	10 731	13 616	16 980	-	-
60	-	-	5 516	7 443	9 727	12 415	15 557	-	-
65	-	-	-	6 604	8 717	11 209	14 129	-	-
70	-	-	-	-	-	10 001	12 699	-	-
Power input in \	w								
35	2 539	2 842	3 078	3 259	3 400	3 513	3 611	-	-
40	2 589	2 944	3 230	3 461	3 650	3 812	3 957	-	-
45	2 609	3 013	3 348	3 628	3 866	4 074	4 267	-	-
50	2 604	3 057	3 441	3 768	4 053	4 308	4 546	-	-
55	2 582	3 084	3 515	3 890	4 220	4 521	4 804	-	_
60	-	-	3 579	3 999	4 375	4 720	5 047	-	_
65	_	-	-	4 104	4 525	4 913	5 283	<u> </u>	_
70	-	-	_	-	-	5 108	5 520	-	-
10	<u> </u>	<u> </u>				3 100	3 320		
Current consum	nption in A								
35	5.49	6.17	6.69	7.09	7.41	7.67	7.93	-	-
40	5.63	6.41	7.00	7.45	7.80	8.08	8.32	-	-
45	5.71	6.59	7.28	7.80	8.19	8.50	8.76	-	-
50	5.70	6.71	7.50	8.11	8.57	8.92	9.21	-	-
55	5.57	6.73	7.64	8.35	8.90	9.32	9.65	_	_
60	-	-	7.68	8.52	9.17	9.67	10.06	_	_
65	-	-	-	8.57	9.34	9.94	10.41	-	-
70	-	_	-	-	-	10.11	10.68	-	-
		ı	I.	ı	ı	10	10.00		<u> </u>
Mass flow in kg	/h								
35	109	146	191	242	302	372	451	1	-
40	104	141	185	236	295	363	441	-	-
45	98	135	178	229	287	354	430	-	-
50	91	128	171	220	278	344	419	-	-
55	83	120	162	211	268	332	406	-	-
60	-	-	153	201	257	320	392	-	-
65	-	-	-	190	244	306	377	-	-
70	-	-	-	-	-	291	361	-	-
	_		•	•	•		•		•
-	erformance (C.C	<del>, '</del>	2.00	2.54	4.04	5.04	0.05		I
35	1.93	2.35	2.89	3.54	4.31	5.21	6.25	-	-
40	1.71	2.09	2.55	3.10	3.75	4.50	5.35	-	-
45	1.52	1.86	2.26	2.74	3.29	3.93	4.64	-	-
50	1.34	1.65	2.00	2.42	2.89	3.44	4.05	-	-
55	1.17	1.45	1.77	2.13	2.54	3.01	3.53	-	-
60	-	-	1.54	1.86	2.22	2.63	3.08	-	-
65	-	-	-	1.61	1.93	2.28	2.67	-	-
70									

### Nominal performance at to = 7.2 °C, tc = 54.4 °C

rionina poriorinano at to	- 0, 10 0-1 0	
Cooling capacity	12 075	W
Power input	4 334	W
Current consumption	9.06	Α
Mass flow	296	kg/h
C.O.P.	2.79	

to: Evaporating temperature at dew point

Rating conditions : Superheat = 11.1 K , Subcooling = 8.3 K

Pressure switch settings

Maximum HP switch setting	22.6	bar(g)
Minimum LP switch setting	0.2	bar(g)
LP pump down setting	0.5	bar(g)

### Sound power data

Sound power level	0	dB(A)
With accoustic hood	0	dB(A)

tc: Condensing temperature at dew point



## Inverter reciprocating compressors VTZ086-G

## Performance data at 80 Hz, EN 12900 rating conditions

R134a

819 3352 874 389 899 - - - - - - - - - - - - -	-10  6 608 6 047 5 473 4 892 4 304	-5  8 792  8 108  7 411  6 704  5 991  5 274  -	0 11 420 10 585 9 736 8 876 8 009 7 137 6 263	5 14 541 13 526 12 497 11 456 10 407	18 204 16 982 15 744 14 494	22 458 21 000 19 525	-	-
352 874 389 899 - - - - - - - - - - - - -	6 047 5 473 4 892 4 304 - -	8 108 7 411 6 704 5 991 5 274	10 585 9 736 8 876 8 009 7 137	13 526 12 497 11 456 10 407	16 982 15 744	21 000		
352 874 389 899 - - - - - - - - - - - - -	6 047 5 473 4 892 4 304 - -	8 108 7 411 6 704 5 991 5 274	10 585 9 736 8 876 8 009 7 137	13 526 12 497 11 456 10 407	16 982 15 744	21 000		
352 874 389 899 - - - - - - - - - - - - -	6 047 5 473 4 892 4 304 - -	8 108 7 411 6 704 5 991 5 274	10 585 9 736 8 876 8 009 7 137	13 526 12 497 11 456 10 407	16 982 15 744	21 000		
874 389 899 - - - - - - - - - - - - -	5 473 4 892 4 304 - - -	7 411 6 704 5 991 5 274	9 736 8 876 8 009 7 137	12 497 11 456 10 407	15 744			-
389 899 -      	4 892 4 304 - - -	6 704 5 991 5 274	8 876 8 009 7 137	11 456 10 407		19 525		
899 - - - - - 693 745	4 304 - - -	5 991 5 274 -	8 009 7 137	10 407	14 494		-	-
- - - - 693 745	- - -	5 274 -	7 137			18 037	-	-
- - 693 745	-	-		0.0=0	13 234	16 539	-	-
- 693 745 764	-		6 263	9 352	11 968	15 033	-	-
745 764		-		8 294	10 698	13 523	-	-
745 764	2.000		-	-	9 427	12 011	-	-
745 764	2.000							
745 764		2.070	2.470	2.042	2.724	2 000		
764	3 023	3 278	3 470	3 613	3 721	3 808	-	-
	3 130	3 439	3 687	3 887	4 051	4 195	-	-
(h()	3 200	3 562	3 863	4 116	4 334	4 532	-	-
	3 246	3 657	4 008	4 311	4 581	4 830	-	-
745	3 277	3 736	4 134	4 485	4 803	5 101		-
-	-	3 809	4 251	4 648	5 011	5 355	-	-
-	-	-	4 372	4 810	5 217	5 604	-	-
-	-	-	-	-	5 431	5 858	-	-
_								
n A		1			I			
.06	6.82	7.40	7.84	8.18	8.47	8.75	-	-
.22	7.08	7.74	8.24	8.62	8.92	9.19	-	-
.31	7.29	8.04	8.62	9.05	9.39	9.67	-	-
.29	7.41	8.29	8.96	9.47	9.86	10.17	-	-
.15	7.43	8.45	9.23	9.84	10.30	10.66	-	-
-	-	8.49	9.41	10.13	10.68	11.11	-	-
-	-	-	9.47	10.32	10.98	11.50	-	-
-	-	-	-	-	11.18	11.81	-	-
17	157	205	260	325	399	484	-	-
11	151	198	253	317	390	474	-	-
05	145	191	245	308	380	462	-	-
97	137	183	237	298	369	450	-	-
39	128	174	227	288	357	436	-	-
-	-	164	216	275	344	421	-	-
-	-	-	203	262	329	405	-	-
-	-	-	-		313	387	-	-
								_
	*	1						
.79					1	<del> </del>		-
.59		2.36		3.48	4.19		-	-
40						1	-	-
	1.51	1.83	2.21	2.66	3.16	3.73	-	-
.23	1.31	1.60	1.94	2.32	2.76	3.24	-	-
	-	1.38	1.68	2.01	2.39	2.81	-	-
.23	-	-	1.43	1.72	2.05	2.41	-	-
23 06	-	-	-	-	1.74	2.05	-	-
23 06 -						·		
.7	9 9 0 3 6	9 1.93 0 1.71 3 1.51 6 1.31 - -	9 2.19 2.68 9 1.93 2.36 0 1.71 2.08 3 1.51 1.83 6 1.31 1.60 - 1.38 	9 2.19 2.68 3.29 9 1.93 2.36 2.87 0 1.71 2.08 2.52 3 1.51 1.83 2.21 6 1.31 1.60 1.94 - 1.38 1.68 1.43 - 1.43	9 2.19 2.68 3.29 4.02 9 1.93 2.36 2.87 3.48 0 1.71 2.08 2.52 3.04 3 1.51 1.83 2.21 2.66 6 1.31 1.60 1.94 2.32 - 1.38 1.68 2.01 1.43 1.72	9     2.19     2.68     3.29     4.02     4.89       9     1.93     2.36     2.87     3.48     4.19       0     1.71     2.08     2.52     3.04     3.63       3     1.51     1.83     2.21     2.66     3.16       6     1.31     1.60     1.94     2.32     2.76       -     1.38     1.68     2.01     2.39       -     -     1.43     1.72     2.05       -     -     -     1.74	9 2.19 2.68 3.29 4.02 4.89 5.90 9 1.93 2.36 2.87 3.48 4.19 5.01 0 1.71 2.08 2.52 3.04 3.63 4.31 3 1.51 1.83 2.21 2.66 3.16 3.73 6 1.31 1.60 1.94 2.32 2.76 3.24 - 1.38 1.68 2.01 2.39 2.81 - 1.43 1.72 2.05 2.41 - 1.74 2.05 cto = 5 °C, tc = 50 °C	9     2.19     2.68     3.29     4.02     4.89     5.90     -       9     1.93     2.36     2.87     3.48     4.19     5.01     -       0     1.71     2.08     2.52     3.04     3.63     4.31     -       3     1.51     1.83     2.21     2.66     3.16     3.73     -       6     1.31     1.60     1.94     2.32     2.76     3.24     -       -     1.38     1.68     2.01     2.39     2.81     -       -     -     1.43     1.72     2.05     2.41     -       -     -     -     1.74     2.05     -

Cooling capacity	11 456	W
Power input	4 311	W
Current consumption	9.47	Α
Mass flow	298	kg/h
C.O.P.	2.66	

to: Evaporating temperature at dew point

Maximum HP switch setting	22.6	bar(g)
Minimum LP switch setting	0.2	bar(g)
LP pump down setting	0.5	bar(g)

### Sound power data

Sound power level	0	dB(A)
With accoustic hood	0	dB(A)

tc: Condensing temperature at dew point

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



## Inverter reciprocating compressors VTZ086-G

## Performance data at 80 Hz, ARI rating conditions

# R134a

Cond. temp. in				Evapora	ting temperature	in °C (to)			
°C (tc)	-15	-10	-5	0	5	10	15		
	-	-	-	-	<u> </u>	1			1
Cooling capacit	ty in W								
35	5 219	7 145	9 491	12 309	15 649	19 564	24 102	-	-
40	4 739	6 572	8 797	11 464	14 626	18 334	22 637	-	-
45	4 245	5 985	8 087	10 603	13 586	17 085	21 153	-	-
50	3 740	5 386	7 364	9 729	12 531	15 822	19 653	-	-
55	3 226	4 777	6 632	8 844	11 465	14 546	18 141	-	-
60	-	-	5 892	7 951	10 390	13 262	16 619	-	-
65	-	-	-	7 053	9 310	11 972	15 091	-	-
70	-	-	-	-	-	10 680	13 561	-	-
	•				•				
Power input in	w	•	•	•		_			•
35	2 693	3 023	3 278	3 470	3 613	3 721	3 808	-	-
40	2 745	3 130	3 439	3 687	3 887	4 051	4 195	-	-
45	2 764	3 200	3 562	3 863	4 116	4 334	4 532	-	-
50	2 760	3 246	3 657	4 008	4 311	4 581	4 830	-	-
55	2 745	3 277	3 736	4 134	4 485	4 803	5 101	-	-
60	-	-	3 809	4 251	4 648	5 011	5 355	-	-
65	-	-	-	4 372	4 810	5 217	5 604	-	-
70	-	-	-	-	-	5 431	5 858	-	-
Current consur	nption in A								
35	6.06	6.82	7.40	7.84	8.18	8.47	8.75	-	-
40	6.22	7.08	7.74	8.24	8.62	8.92	9.19	-	-
45	6.31	7.29	8.04	8.62	9.05	9.39	9.67	-	-
50	6.29	7.41	8.29	8.96	9.47	9.86	10.17	-	-
55	6.15	7.43	8.45	9.23	9.84	10.30	10.66	-	-
60	-	-	8.49	9.41	10.13	10.68	11.11	-	-
65	-	-	-	9.47	10.32	10.98	11.50	-	-
70	-	-	-	-	-	11.18	11.81	-	-
	l		•	1		•			I
Mass flow in kg	/h								
35	117	156	204	259	323	397	481	-	-
40	111	151	197	252	315	388	471	-	-
45	104	144	190	244	307	378	460	-	-
50	97	136	182	235	297	367	447	-	-
55	88	128	173	226	286	355	434	-	-
		+						-	-
	-	-	163	215	2/4	342	419		ļ
60	-	-	163	215 202	274 261	342 327	419 403	_	-
60 65				215 202 -	261	327	403	-	-
60								-	-
60 65 70		-				327	403	-	-
60 65 70	-	-				327	403	-	-
60 65 70 Coefficient of p	- erformance (C.C	- - D.P.)	-	202	261	327 311	403 385	-	-
60 65 70 Coefficient of p 35	erformance (C.C	- - D.P.) 2.36	2.90	202 -	261 - 4.33	327 311 5.26	403 385 6.33	-	-
60 65 70 <b>Coefficient of p</b> 35 40	- erformance (C.C 1.94 1.73	- - D.P.) 2.36 2.10	2.90 2.56	202 - 3.55 3.11	261 - 4.33 3.76	327 311 5.26 4.53	403 385 6.33 5.40	-	-
60 65 70 <b>Coefficient of p</b> 35 40 45 50	- erformance (C.C 1.94 1.73 1.54 1.36	2.36 2.10 1.87	2.90 2.56 2.27 2.01	3.55 3.11 2.74 2.43	4.33 3.76 3.30 2.91	327 311 5.26 4.53 3.94	403 385 6.33 5.40 4.67	- - -	
60 65 70 Coefficient of p 35 40 45 50	- erformance (C.C 1.94 1.73 1.54	- - D.P.) 2.36 2.10 1.87	2.90 2.56 2.27 2.01	3.55 3.11 2.74 2.43 2.14	4.33 3.76 3.30 2.91 2.56	327 311 5.26 4.53 3.94 3.45 3.03	403 385 6.33 5.40 4.67 4.07 3.56		
60 65 70 <b>Coefficient of p</b> 35 40 45 50		2.36 2.10 1.87 1.66 1.46	2.90 2.56 2.27 2.01	3.55 3.11 2.74 2.43	4.33 3.76 3.30 2.91	327 311 5.26 4.53 3.94 3.45	403 385 6.33 5.40 4.67 4.07		- - - - -

### Nominal performance at to = 7.2 °C, tc = 54.4 °C

	• •		
Cooling capacity	12 900	W	
Power input	4 606	W	
Current consumption	10.01	Α	
Mass flow	317	kg/h	
C.O.P.	2.80		

to: Evaporating temperature at dew point

Rating conditions : Superheat = 11.1 K , Subcooling = 8.3 K

Pressure switch settings

Maximum HP switch setting	22.6	bar(g)
Minimum LP switch setting	0.2	bar(g)
LP pump down setting	0.5	bar(g)

### Sound power data

Sound power level	0	dB(A)
With accoustic hood	0	dB(A)

tc: Condensing temperature at dew point



## Inverter reciprocating compressors VTZ086-G

## Performance data at 85 Hz, EN 12900 rating conditions

# R134a

Cond. temp. in				Evapora	ting temperature i	in °C (to)			
°C (tc)	-15	-10	-5	0	5	10	15		
			•	•		•			
Cooling capacit									П
35	5 124	7 026	9 349	12 144	15 463	19 358	23 882	-	-
40	4 628	6 430	8 623	11 257	14 386	18 060	22 334	-	-
45	4 121	5 821	7 882	10 355	13 292	16 745	20 767	-	-
50	3 604	5 203	7 131	9 441	12 185	15 416	19 185	-	-
55	3 083	4 577	6 372	8 518	11 069	14 076	17 591	-	-
60	-	-	5 609	7 590	9 946	12 728	15 988	-	-
65	-	-	-	6 660	8 820	11 375	14 379	-	-
70	-	-	-	-	-	10 022	12 769	-	-
Power input in \	w								
35	2 844	3 202	3 475	3 678	3 823	3 923	3 994	_	_
40	2 896	3 313	3 647	3 911	4 120	4 286	4 425	-	_
45	2 914	3 384	3 773	4 095	4 362	4 590	4 791	-	_
50	2 912	3 430	3 870	4 244	4 566	4 849	5 108	_	
55	2 905	3 468	3 952	4 374	4 745	5 079	5 106	-	_
60			4 036	4 499		5 295	5 655		-
65	-	-	4 036		4 915 5 091		5 916	-	
	-	-		4 637		5 513		-	-
70	-	-	-	-	-	5 748	6 189	-	-
Current consun	nption in A								
35	6.68	7.51	8.15	8.63	9.01	9.33	9.64	-	_
40	6.86	7.80	8.53	9.08	9.49	9.83	10.13	_	_
45	6.95	8.03	8.87	9.50	9.98	10.35	10.66	-	_
50	6.93	8.17	9.14	9.87	10.43	10.86	11.21	_	_
55	6.78	8.19	9.31	10.17	10.43	11.35	11.74	-	
60	-	- 0.19	9.36	10.17	11.16	11.77	12.24	-	_
				†					
65	-	-	-	10.44	11.37	12.10	12.68	-	-
70	-	-	-	-	-	12.32	13.01	-	-
Mass flow in kg	ı/h								
35	124	167	218	277	345	424	515	-	-
40	118	161	211	269	337	415	504	-	-
45	111	154	203	261	328	404	492	-	-
50	104	146	195	252	317	393	478	-	-
55	95	136	185	241	306	380	464	-	-
60	-	-	174	229	293	365	448	-	-
65	-	-	-	216	279	350	431	-	-
70	-	-	-	-	-	333	412	-	-
				•	•				•
	erformance (C.C	1	0.00	2.00	4.05	4.00	5.00		
35	1.80	2.19	2.69	3.30	4.05	4.93	5.98	-	-
40	1.60	1.94	2.36	2.88	3.49	4.21	5.05	-	-
45	1.41	1.72	2.09	2.53	3.05	3.65	4.33	-	-
50	1.24	1.52	1.84	2.22	2.67	3.18	3.76	-	-
55	1.06	1.32	1.61	1.95	2.33	2.77	3.26	-	-
60	-	-	1.39	1.69	2.02	2.40	2.83	-	-
65	-	-	-	1.44	1.73	2.06	2.43	-	-
70	-	-	-	-	-	1.74	2.06	-	-

### Nominal performance at to = 5 °C, tc = 50 °C

Cooling capacity	12 185	W
Power input	4 566	W
Current consumption	10.43	Α
Mass flow	317	kg/h
C.O.P.	2.67	

to: Evaporating temperature at dew point

Pressure switch settings

Maximum HP switch setting	22.6	bar(g)
Minimum LP switch setting	0.2	bar(g)
LP pump down setting	0.5	bar(g)

### Sound power data

Sound power level	0	dB(A)
With accoustic hood	0	dB(A)

tc: Condensing temperature at dew point

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



## Inverter reciprocating compressors VTZ086-G

## Performance data at 85 Hz, ARI rating conditions

# R134a

Cond. temp. in	1. temp. in Evaporating temperature in °C (to)								
°C (tc)	-15	-10	-5	0	5	10	15		
Cooling capacity		I	40.000	10.000	10011	00.004	05.004		I
35	5 549	7 597	10 092	13 089	16 641	20 804	25 631	-	-
40	5 040	6 989	9 355	12 192	15 555	19 498	24 075	-	-
45	4 515	6 365	8 601	11 278	14 450	18 172	22 498	-	-
50	3 978	5 728	7 833	10 348	13 328	16 828	20 903	-	-
55	3 431	5 080	7 054	9 406	12 194	15 471	19 294	-	-
60	-	-	6 266	8 456	11 050	14 104	17 674	-	-
65	-	-	-	7 499	9 899	12 730	16 047	-	-
70	-	-	-	-	-	11 353	14 417	-	-
Power input in \	N								
35	2 844	3 202	3 475	3 678	3 823	3 923	3 994	-	-
40	2 896	3 313	3 647	3 911	4 120	4 286	4 425	-	-
45	2 914	3 384	3 773	4 095	4 362	4 590	4 791	-	-
50	2 912	3 430	3 870	4 244	4 566	4 849	5 108	-	-
55	2 905	3 468	3 952	4 374	4 745	5 079	5 391	-	-
60	-	-	4 036	4 499	4 915	5 295	5 655	-	-
65	-	-	-	4 637	5 091	5 513	5 916	-	-
70	-	-	-	-	-	5 748	6 189	-	-
		•		•	•	•	•		•
Current consum	nption in A								
35	6.68	7.51	8.15	8.63	9.01	9.33	9.64	-	-
40	6.86	7.80	8.53	9.08	9.49	9.83	10.13	-	-
45	6.95	8.03	8.87	9.50	9.98	10.35	10.66	-	-
50	6.93	8.17	9.14	9.87	10.43	10.86	11.21	-	-
55	6.78	8.19	9.31	10.17	10.84	11.35	11.74	-	-
60	-	-	9.36	10.37	11.16	11.77	12.24	-	-
65	-	-	-	10.44	11.37	12.10	12.68	-	-
70	-	-	-	-	-	12.32	13.01	-	-
									·
Mass flow in kg		1						T	ı
35	124	166	217	275	344	422	512	-	-
40	118	160	210	268	335	413	501	-	-
45	111	153	202	260	326	402	489	-	-
50	103	145	194	250	316	390	476	-	-
55	94	136	184	240	304	378	461	-	-
60	-	-	173	228	291	363	445	-	-
65	-	-	-	215	277	348	428	-	-
70	-	-	-	-	-	331	409	-	-
Coefficient of pe	erformance (C.O		ı	1	1	1	1	1	T
35	1.95	2.37	2.90	3.56	4.35	5.30	6.42	-	-
40	1.74	2.11	2.57	3.12	3.78	4.55	5.44	-	-
45	1.55	1.88	2.28	2.75	3.31	3.96	4.70	-	-
50	1.37	1.67	2.02	2.44	2.92	3.47	4.09	-	-
55	1.18	1.47	1.78	2.15	2.57	3.05	3.58	-	-
60	-	-	1.55	1.88	2.25	2.66	3.13	-	-
65	-	-	-	1.62	1.94	2.31	2.71	-	-
70	-	-	-	-	-	1.98	2.33	-	-
Na						<b>.</b>	441		
Nominal perforr	nance at to = 7.2	2 °C, tc = 54.4 °C				Pressure switch	settings		

Ī	Cooling capacity	13 720	W
	Power input	4 872	W
	Current consumption	11.03	Α
	Mass flow	337	kg/h
	C.O.P.	2.82	

to: Evaporating temperature at dew point

Maximum HP switch setting	22.6	bar(g)
Minimum LP switch setting	0.2	bar(g)
LP pump down setting	0.5	bar(g)

### Sound power data

I	Sound power level	0	dB(A)
	With accoustic hood	0	dB(A)

tc: Condensing temperature at dew point

Rating conditions : Superheat = 11.1 K , Subcooling = 8.3 K



## Inverter reciprocating compressors VTZ086-G

## Performance data at 90 Hz, EN 12900 rating conditions

R134a

Cond. temp. in				Evapora	ting temperature	in °C (to)			
°C (tc)	-15	-10	-5	0	5	10	15		
•		•		•		•			
Cooling capacity	y in W				•	_	,		
35	5 426	7 442	9 902	12 863	16 378	20 505	25 297	-	-
40	4 902	6 812	9 134	11 925	15 239	19 132	23 659	-	-
45	4 365	6 167	8 350	10 970	14 082	17 740	22 001	-	-
50	3 818	5 512	7 555	10 002	12 910	16 332	20 325	-	-
55	3 266	4 849	6 750	9 024	11 727	14 912	18 636	-	-
60	-	-	5 941	8 040	10 536	13 483	16 936	1	-
65	-	-	-	7 053	9 341	12 048	15 230	1	•
70	-	-	-	-	-	10 612	13 521	1	-
Power input in V	v								
35	2 990	3 378	3 671	3 883	4 028	4 119	4 169	-	_
40	3 043	3 492	3 851	4 133	4 350	4 517	4 647		
45	3 059	3 564	3 980	4 323	4 606	4 842	5 044		
50	3 059	3 611	4 078	4 475	4 816	5 113	5 380	-	
55	3 063	3 654	4 165	4 608	4 999	5 350	5 675	-	-
60	3 003	- 5 004	4 260	4 743			5 948		-
65	<u>-</u>		4 200	4 743	5 176 5 367	5 573 5 803	6 220	-	-
70	<u> </u>	-	-	4 898	5 307		6 511	-	-
70	-	-		_		6 059	וופס	-	-
Current consum	ention in A								
35	7.33	8.26	8.96	9.49	9.90	10.25	10.59	_	
40	7.53	†		9.49	1	+	1	-	-
45	7.64	8.58 8.83	9.37 9.75	10.44	10.43 10.96	10.80	11.12 11.71	-	-
		1		1		11.37			
50	7.62	8.98	10.04	10.85	11.46	11.93	12.31	-	-
55	7.44	9.00	10.23	11.18	11.91	12.46	12.90	-	-
60	-	-	10.28	11.39	12.26	12.93	13.45	-	-
65	-	-	-	11.47	12.49	13.30	13.93	-	-
70	-	-	-	-	-	13.54	14.30	-	-
Mass flow in kg/	'h								
35	132	177	231	293	366	450	545	-	_
40	125	170	223	285	357	439	534	-	_
45	118	163	215	277	347	428	521	-	_
50	110	154	206	267	336	416	507		
55	100	145	196	256	324	402	491	-	-
	-	- 145	184	243			491	-	-
60				1	310	387 370			
65 70	-	-	-	229	295	1	456	-	-
70	-	-	-	-	-	352	436	-	-
Coefficient of pe	•	2.20	2.70	3.31	4.07	4.00	6.07		
35	1.81	1				4.98		-	-
40	1.61	1.95	2.37	2.89	3.50	4.24	5.09	-	-
45	1.43	1.73	2.10	2.54	3.06	3.66	4.36	-	-
50	1.25	1.53	1.85	2.23	2.68	3.19	3.78	-	-
55	1.07	1.33	1.62	1.96	2.35	2.79	3.28	-	-
60	-	-	1.39	1.70	2.04	2.42	2.85	-	-
65	-	-	-	1.44	1.74	2.08	2.45	-	-
70	-	-	-	-	-	1.75	2.08	-	-
lominal norfo	22200 at to = 5 °	°C +0 = E0 °C				Pressure switch	cottings		
ommai periorn	nance at to = 5 °	o, ic − 50 °C		_		Pressure switch			

	•• •	
Cooling capacity	12 910	W
Power input	4 816	W
Current consumption	11.46	Α
Mass flow	336	kg/h
C.O.P.	2.68	

to: Evaporating temperature at dew point

Maximum HP switch setting	22.6	bar(g)
Minimum LP switch setting	0.2	bar(g)
LP pump down setting	0.5	bar(g)

### Sound power data

Sound power level	0	dB(A)
With accoustic hood	0	dB(A)

tc: Condensing temperature at dew point

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



## Inverter reciprocating compressors VTZ086-G

## Performance data at 90 Hz, ARI rating conditions

# R134a

Cond. temp. in				Evapora	ting temperature	in °C (to)			
°C (tc)	-15	-10	-5	0	5	10	15		
		•	•	•	•	•			
Cooling capacity		1	T	1	1	1	1		1
35	5 877	8 047	10 689	13 864	17 627	22 036	27 149	-	-
40	5 339	7 404	9 910	12 916	16 478	20 655	25 504	-	-
45	4 783	6 743	9 112	11 948	15 308	19 252	23 835	-	-
50	4 214	6 068	8 298	10 963	14 121	17 829	22 146	-	-
55	3 635	5 382	7 472	9 965	12 918	16 391	20 441	-	-
60	-	-	6 637	8 957	11 705	14 941	18 723	-	-
65	-	-	-	7 942	10 485	13 483	16 997	-	-
70	1	-	-	-	-	12 022	15 267	-	-
Power input in \	A/								
		2 270	2 671	2 002	4 020	4 110	4 160		_
35 40	2 990 3 043	3 378 3 492	3 671 3 851	3 883 4 133	4 028 4 350	4 119	4 169 4 647	-	-
						4 517			
45	3 059	3 564	3 980	4 323	4 606	4 842	5 044	-	-
50	3 059	3 611	4 078	4 475	4 816	5 113	5 380	-	-
55	3 063	3 654	4 165	4 608	4 999	5 350	5 675	-	-
60	-	-	4 260	4 743	5 176	5 573	5 948	-	-
65	-	-	-	4 898	5 367	5 803	6 220	-	-
70	-	-	-	-	-	6 059	6 511	-	-
	4: i A								
urrent consum	•	8.26	8.96	9.49	9.90	10.25	10.59		
35	7.33	+		1	1				-
40	7.53	8.58	9.37	9.97	10.43	10.80	11.12	-	-
45	7.64	8.83	9.75	10.44	10.96	11.37	11.71	-	-
50	7.62	8.98	10.04	10.85	11.46	11.93	12.31	-	-
55	7.44	9.00	10.23	11.18	11.91	12.46	12.90	-	-
60	-	-	10.28	11.39	12.26	12.93	13.45	-	-
65	-	-	-	11.47	12.49	13.30	13.93	-	-
70	-	-	-	-	-	13.54	14.30	-	-
Mass flow in kg	/h								
35	131	176	229	292	364	447	542	-	-
40	125	170	222	284	355	437	531	-	-
45	117	162	214	275	345	426	518	-	_
50	109	154	205	265	334	414	504	_	-
55	100	144	195	254	322	400	489	-	-
60	-	-	184	242	309	385	472	-	-
65	-	_	-	228	294	368	454	<u>-</u>	_
70	-	_	_	-	-	350	433	_	_
. •	<u> </u>	1	ı	1	1		.50		
-	erformance (C.C	1		T -	1 .	_			
35	1.97	2.38	2.91	3.57	4.38	5.35	6.51	-	-
40	1.75	2.12	2.57	3.13	3.79	4.57	5.49	-	-
45	1.56	1.89	2.29	2.76	3.32	3.98	4.73	-	-
50	1.38	1.68	2.03	2.45	2.93	3.49	4.12	-	-
55	1.19	1.47	1.79	2.16	2.58	3.06	3.60	-	-
60	-	-	1.56	1.89	2.26	2.68	3.15	-	-
65	-	-	-	1.62	1.95	2.32	2.73	-	-

### Nominal performance at to = 7.2 °C, tc = 54.4 °C

Nominal performance at to 7.2 0, to	04.4 0	
Cooling capacity	14 536	W
Power input	5 134	W
Current consumption	12.12	Α
Mass flow	357	kg/h
C.O.P.	2.83	

to: Evaporating temperature at dew point

Pressure switch settings

Maximum HP switch setting	22.6	bar(g)
Minimum LP switch setting	0.2	bar(g)
LP pump down setting	0.5	bar(g)

### Sound power data

Sound power level	0	dB(A)
With accoustic hood	0	dB(A)

tc: Condensing temperature at dew point

Rating conditions : Superheat = 11.1 K , Subcooling = 8.3 K



## Inverter reciprocating compressors VTZ086-G

## Performance data at 30 Hz, EN 12900 rating conditions, Superheat = 10 K

# **R404A**

Cond. temp. in	in Evaporating temperature in °C (to)								
°C (tc)	-30	-25	-20	-15	-10	-5	0	5	
Caaling consoit	ne in M								
Cooling capacit		2.592	3 516	4.650	6.022	7.655		1	
20	1 837	2 582	3 516	4 659	6 032	7 655	- 7.750	-	-
30	1 338	1 950	2 717	3 660	4 800	6 156	7 750	9 601	-
35	1 124	1 675	2 365	3 214	4 243	5 473	6 923	8 614	-
40	928	1 422	2 039	2 799	3 722	4 828	6 139	7 674	-
45	749	1 190	1 738	2 412	3 232	4 220	5 395	6 778	-
50	582	975	1 458	2 050	2 772	3 645	4 689	5 924	-
55	-	774	1 196	1 711	2 339	3 101	4 017	5 109	-
60	-	-	949	1 390	1 928	2 584	3 377	4 329	-
ower input in \	N								
20	1 180	1 314	1 418	1 493	1 541	1 564	-	-	-
30	1 206	1 400	1 562	1 694	1 796	1 870	1 919	1 942	-
35	1 192	1 421	1 616	1 779	1 912	2 017	2 094	2 145	-
40	1 160	1 425	1 655	1 853	2 020	2 157	2 266	2 348	-
45	1 109	1 413	1 681	1 916	2 119	2 291	2 434	2 550	-
50	1 038	1 383	1 692	1 967	2 209	2 419	2 599	2 750	-
55	-	1 336	1 688	2 006	2 289	2 539	2 758	2 948	-
60	-	-	1 669	2 031	2 358	2 651	2 912	3 143	-
		I.						1	
urrent consun	nption in A								
20	3.56	3.25	3.04	2.90	2.81	2.75	-	-	-
30	3.40	3.25	3.19	3.18	3.21	3.25	3.28	3.27	-
35	3.24	3.19	3.21	3.28	3.37	3.47	3.55	3.58	-
40	3.04	3.08	3.19	3.34	3.51	3.68	3.81	3.89	1
45	2.79	2.95	3.15	3.39	3.64	3.87	4.07	4.20	-
50	2.51	2.78	3.09	3.42	3.75	4.06	4.33	4.52	-
55	-	2.59	3.00	3.44	3.86	4.25	4.59	4.85	-
60	-	-	2.91	3.45	3.97	4.45	4.87	5.20	-
4 fl i l	//_								
Mass flow in kg		70	04	404	454	101		1	
20	51	70	94	121	154	191	-	-	-
30	42	60	81	107	137	171	211	257	-
35	38	55	76	100	129	162	201	245	-
40	34	51	71	94	122	154	191	233	-
45	30	46	65	88	115	145	181	222	-
50	26	42	61	82	108	138	172	211	-
55	-	38	56	77	101	130	163	201	-
60	-	-	51	71	95	123	155	191	-
•	erformance (C.C	1	T	T	T	Т		T	
20	1.56	1.97	2.48	3.12	3.91	4.90	-	-	-
30	1.11	1.39	1.74	2.16	2.67	3.29	4.04	4.94	-
35	0.94	1.18	1.46	1.81	2.22	2.71	3.31	4.02	-
40	0.80	1.00	1.23	1.51	1.84	2.24	2.71	3.27	-
45	0.68	0.84	1.03	1.26	1.53	1.84	2.22	2.66	-
50	0.56	0.71	0.86	1.04	1.26	1.51	1.80	2.15	-
55	1	0.58	0.71	0.85	1.02	1.22	1.46	1.73	-
60	_	-	0.57	0.68	0.82	0.97	1.16	1.38	_

### Nominal performance at to = -10 °C, tc = 45 °C

recimian perfermance at to 10 0,	.0 40 0		
Cooling capacity	3 232	W	
Power input	2 119	W	
Current consumption	3.64	Α	
Mass flow	115	kg/h	
C.O.P.	1.53		

to: Evaporating temperature at dew point

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

Pressure switch settings

Maximum HP switch setting	27.7	bar(g)
Minimum LP switch setting	0.2	bar(g)
LP pump down setting	0.9	bar(g)

### Sound power data

Sound power level	0	dB(A)
With accoustic hood	0	dB(A)

tc: Condensing temperature at dew point



## Inverter reciprocating compressors VTZ086-G

## Performance data at 30 Hz, EN 12900 rating conditions, Suction temp. = 20 °C

# **R404A**

Cond. temp. in	cond. temp. in Evaporating temperature in °C (to)								
°C (tc)	-30	-25	-20	-15	-10	-5	0	5	
Cooling conseil	ty in W	•	•	•		•	•		
Cooling capacit		2.022	2 025	5.070	0.554	0.202			
20	2 012	2 822	3 835	5 072	6 554	8 303	-	-	-
30	1 490	2 165	3 009	4 043	5 290	6 770	8 505	10 516	-
35	1 264	1 878	2 644	3 584	4 719	6 071	7 661	9 511	-
40	1 058	1 615	2 308	3 157	4 184	5 413	6 863	8 557	-
45	868	1 373	1 996	2 759	3 684	4 793	6 108	7 651	-
50	-	1 149	1 708	2 389	3 217	4 211	5 396	6 792	-
55	-	-	1 439	2 045	2 780	3 666	4 726	5 981	-
60	-	-	-	1 726	2 375	3 159	4 102	5 225	-
Power input in \	w								
20	1 180	1 314	1 418	1 493	1 541	1 564	-	-	-
30	1 206	1 400	1 562	1 694	1 796	1 870	1 919	1 942	-
35	1 192	1 421	1 616	1 779	1 912	2 017	2 094	2 145	-
40	1 160	1 425	1 655	1 853	2 020	2 157	2 266	2 348	-
45	1 109	1 413	1 681	1 916	2 119	2 291	2 434	2 550	-
50	-	1 383	1 692	1 967	2 209	2 419	2 599	2 750	-
55	-	-	1 688	2 006	2 289	2 539	2 758	2 948	-
60	-	-	-	2 031	2 358	2 651	2 912	3 143	-
Current consun	nntion in A		•				•		
20	3.56	3.25	3.04	2.90	2.81	2.75	_	_	_
30	3.40	3.25	3.19	3.18	3.21	3.25	3.28	3.27	_
35	3.24	3.19	3.21	3.28	3.37	3.47	3.55	3.58	_
40	3.04	3.08	3.19	3.34	3.51	3.68	3.81	3.89	_
45	2.79	2.95	3.15	3.39	3.64	3.87	4.07	4.20	
50	-	2.78	3.09	3.42	3.75	4.06	4.33	4.52	_
55		-	3.00	3.44	3.86	4.25	4.59	4.85	
60	-	-	-	3.45	3.97	4.45	4.87	5.20	-
00				3.43	0.91	4.45	4.01	5.20	
Mass flow in kg	ı/h								
20	51	70	93	120	153	190	-	-	ı
30	42	60	81	106	136	170	210	256	-
35	38	55	75	100	128	161	200	243	
40	34	50	70	94	121	153	189	231	-
45	30	46	65	88	114	145	180	220	1
50	-	42	60	82	107	137	171	210	-
55	-	-	55	76	101	129	162	199	-
60	-	-	-	71	95	122	154	190	-
Coefficient of p	erformance (C.C	D.P.)							
20	1.71	2.15	2.70	3.40	4.25	5.31	-	-	-
30	1.24	1.55	1.93	2.39	2.95	3.62	4.43	5.41	-
35	1.06	1.32	1.64	2.01	2.47	3.01	3.66	4.43	-
40	0.91	1.13	1.39	1.70	2.07	2.51	3.03	3.64	-
45	0.78	0.97	1.19	1.44	1.74	2.09	2.51	3.00	-
70	-	1	1.01	1.21	1.46	1.74	2.08	2.47	-
	-	0.03						1	
50 55	-	0.83	0.85	1.02	1.21	1.44	1.71	2.03	-

### Nominal performance at to = -10 °C, tc = 45 °C

	-,	
Cooling capacity	3 684	W
Power input	2 119	W
Current consumption	3.64	Α
Mass flow	114	kg/h
C.O.P.	1.74	

to: Evaporating temperature at dew point

Rating conditions : Superheat = 11.1 K , Subcooling = 8.3 K

Pressure switch settings

Maximum HP switch setting	27.7	bar(g)
Minimum LP switch setting	0.2	bar(g)
LP pump down setting	0.9	bar(g)

### Sound power data

Sound power level	0	dB(A)
With accoustic hood	0	dB(A)

tc: Condensing temperature at dew point



## Inverter reciprocating compressors VTZ086-G

## Performance data at 35 Hz, EN 12900 rating conditions, Superheat = 10 K

# **R404A**

Cond. temp. in Evaporating temperature in °C (to)									
°C (tc)	-30	-25	-20	-15	-10	-5	0	5	
O 1i	: \4/								
Cooling capacit	2 285	3 163	4 253	5 578	7 163	9 033		-	
20		1	1				- 0.005	<del> </del>	-
30	1 675	2 412	3 326	4 441	5 781	7 371	9 235	11 396	-
35	1 406	2 076	2 905	3 919	5 141	6 594	8 305	10 295	-
40	1 157	1 763	2 511	3 426	4 531	5 851	7 411	9 233	-
45	928	1 472	2 141	2 959	3 950	5 139	6 550	8 208	-
50	716	1 200	1 792	2 516	3 396	4 457	5 722	7 216	-
55	-	947	1 464	2 097	2 868	3 802	4 924	6 258	-
60	-	-	1 154	1 698	2 362	3 173	4 154	5 329	-
Power input in V	N								
20	1 382	1 539	1 662	1 751	1 808	1 833	_	-	-
30	1 416	1 642	1 831	1 985	2 105	2 192	2 246	2 269	-
35	1 402	1 666	1 892	2 083	2 239	2 360	2 448	2 504	-
40	1 367	1 671	1 937	2 167	2 361	2 520	2 644	2 735	_
45	1 308	1 656	1 965	2 237	2 471	2 670	2 833	2 962	_
50	1 227	1 620	1 975	2 290	2 568	2 809	3 014	3 184	_
55	-	1 563	1 965	2 328	2 651	2 938	3 187	3 400	_
60	-	-	1 936	2 348	2 720	3 054	3 350	3 609	_
00		ı	1 000	2010	2720	0 00 1	0 000	0 000	
Current consum	nption in A								
20	3.28	3.25	3.23	3.22	3.20	3.18	_	-	-
30	3.31	3.44	3.56	3.66	3.75	3.81	3.85	3.86	-
35	3.21	3.42	3.62	3.80	3.95	4.07	4.15	4.19	-
40	3.04	3.35	3.64	3.90	4.12	4.30	4.43	4.51	_
45	2.81	3.23	3.62	3.96	4.26	4.50	4.70	4.83	_
50	2.54	3.07	3.56	3.99	4.38	4.70	4.96	5.15	_
55	-	2.87	3.47	4.01	4.48	4.89	5.23	5.48	_
60	-	-	3.36	4.01	4.59	5.08	5.50	5.83	_
00			0.00			0.00	0.00	0.00	
Mass flow in kg		T	T		1	1		<del>, , , , , , , , , , , , , , , , , , , </del>	
20	63	86	113	145	182	225	-	-	-
30	53	74	100	130	165	205	252	305	-
35	48	69	93	122	156	196	241	293	-
40	43	63	87	115	148	186	230	280	-
45	37	57	81	108	140	177	220	269	-
50	32	52	74	101	132	168	210	257	-
55	1	46	68	94	124	159	200	246	-
60	-	-	62	87	117	151	190	235	-
Coefficient of pe	erformance (C.C	D.P.)							
20	1.65	2.06	2.56	3.19	3.96	4.93	-	-	-
30	1.18	1.47	1.82	2.24	2.75	3.36	4.11	5.02	-
35	1.00	1.25	1.54	1.88	2.30	2.79	3.39	4.11	-
40	0.85	1.06	1.30	1.58	1.92	2.32	2.80	3.38	-
	0.71	0.89	1.09	1.32	1.60	1.93	2.31	2.77	-
45		1						1	
45 50		0.74	0.91	1 10	1.32	1.59	7 90	22/	-
45 50 55	0.58	0.74 0.61	0.91 0.75	1.10 0.90	1.32	1.59 1.29	1.90 1.55	2.27 1.84	<u>-</u>

### Nominal performance at to = -10 °C, tc = 45 °C

monimum portormando at to	0,			
Cooling capacity		3 950	W	
Power input		2 471	W	
Current consumption		4.26	Α	
Mass flow		140	kg/h	
C.O.P.		1.60		

to: Evaporating temperature at dew point

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

Maximum HP switch setting	27.7	bar(g)
Minimum LP switch setting	0.2	bar(g)
LP pump down setting	0.9	bar(g)

### Sound power data

Sound power level	0	dB(A)
With accoustic hood	0	dB(A)

tc: Condensing temperature at dew point



## Inverter reciprocating compressors VTZ086-G

## Performance data at 35 Hz, EN 12900 rating conditions, Suction temp. = 20 °C

# **R404A**

Cond. temp. in	Evaporating temperature in °C (to)								
°C (tc)	-30	-25	-20	-15	-10	-5	0	5	
Na - 11	- ! W								
Cooling capacity		0.457	4.000	0.070	7.704	0.700	1	1	
20	2 502	3 457	4 638	6 072	7 784	9 798	-	-	-
30	1 865	2 678	3 683	4 905	6 371	8 106	10 134	12 481	-
35	1 581	2 328	3 249	4 370	5 717	7 315	9 190	11 368	
40	1 319	2 002	2 842	3 864	5 094	6 560	8 285	10 296	-
45	1 076	1 698	2 459	3 385	4 503	5 838	7 416	9 264	-
50	-	1 414	2 100	2 933	3 941	5 149	6 585	8 273	-
55	-	-	1 762	2 507	3 409	4 495	5 792	7 327	-
60	-	-	-	2 107	2 909	3 880	5 045	6 433	-
Power input in V	v								
20	1 382	1 539	1 662	1 751	1 808	1 833	-	-	-
30	1 416	1 642	1 831	1 985	2 105	2 192	2 246	2 269	-
35	1 402	1 666	1 892	2 083	2 239	2 360	2 448	2 504	-
40	1 367	1 671	1 937	2 167	2 361	2 520	2 644	2 735	-
45	1 308	1 656	1 965	2 237	2 471	2 670	2 833	2 962	-
50	-	1 620	1 975	2 290	2 568	2 809	3 014	3 184	-
55	-	-	1 965	2 328	2 651	2 938	3 187	3 400	-
60	-	-	-	2 348	2 720	3 054	3 350	3 609	-
current consum	ption in A								
20	3.28	3.25	3.23	3.22	3.20	3.18	-	-	-
30	3.31	3.44	3.56	3.66	3.75	3.81	3.85	3.86	-
35	3.21	3.42	3.62	3.80	3.95	4.07	4.15	4.19	-
40	3.04	3.35	3.64	3.90	4.12	4.30	4.43	4.51	-
45	2.81	3.23	3.62	3.96	4.26	4.50	4.70	4.83	-
50	-	3.07	3.56	3.99	4.38	4.70	4.96	5.15	-
55	-	-	3.47	4.01	4.48	4.89	5.23	5.48	-
60	-	-	-	4.01	4.59	5.08	5.50	5.83	-
4 (lassa lassa									
lass flow in kg/			140	1 444	104	004	1	1	
20	63	86	113	144	181	224	-	-	-
30	52	74	99	129	164	204	250	303	-
35	47	68	93	122	155	194	239	291	-
40	42	63	86	114	147	185	229	279	-
45	37	57	80	107	139	176	218	267	-
50	-	51	74	100	131	167	208	256	-
55	-	-	68	94	124	158	198	244	-
60	-	-	-	87	116	150	189	233	-
Coefficient of pe	erformance (C.C	).P.)							
20	1.81	2.25	2.79	3.47	4.31	5.35	-	-	-
30	1.32	1.63	2.01	2.47	3.03	3.70	4.51	5.50	-
35	1.13	1.40	1.72	2.10	2.55	3.10	3.75	4.54	-
40	0.97	1.20	1.47	1.78	2.16	2.60	3.13	3.76	-
45	0.82	1.03	1.25	1.51	1.82	2.19	2.62	3.13	-
50	-	0.87	1.06	1.28	1.53	1.83	2.18	2.60	-
55	-	-	0.90	1.08	1.29	1.53	1.82	2.15	-
60	_	_	_	0.90	1.07	1.27	1.51	1.78	-

# Nominal performance at to = -10 °C, tc = 45 °C

monimum portormanoo at to	0,			
Cooling capacity		4 503	W	
Power input		2 471	W	
Current consumption		4.26	Α	
Mass flow		139	kg/h	
C.O.P.		1.82		

to: Evaporating temperature at dew point

Rating conditions : Superheat = 11.1 K , Subcooling = 8.3 K

Pressure switch settings

Maximum HP switch setting	27.7	bar(g)
Minimum LP switch setting	0.2	bar(g)
LP pump down setting	0.9	bar(g)

### Sound power data

Sound power level	0	dB(A)
With accoustic hood	0	dB(A)

tc: Condensing temperature at dew point



## Inverter reciprocating compressors VTZ086-G

## Performance data at 40 Hz, EN 12900 rating conditions, Superheat = 10 K

# **R404A**

Cond. temp. in				Evapora	ting temperature	in °C (to)			
°C (tc)	-30	-25	-20	-15	-10	-5	0	5	
Cooling cancal	ty in W								
Cooling capaci 20	2 717	3 725	4 968	6 474	8 269	10 382	_	_	_
30	2 005	2 865	3 924	5 208	6 746	8 566	10 694	13 160	
35	1 684	2 472	3 439	4 615	6 026	7 700	9 665	11 950	_
40	1 386	2 101	2 979	4 046	5 331	6 861	8 664	10 768	_
45	1 109	1 753	2 542	3 502	4 662	6 048	7 690	9 614	-
50	851	1 426	2 127	2 981	4 016	5 261	6 742	8 488	
55	-	1 120	1 733	2 482	3 394	4 497	5 819	7 387	
60	-	-	1 360	2 004	2 794	3 757	4 920	6 311	
	_	_	1 300	2 004	2754	0 101	+ 320	0011	
ower input in	w								
20	1 589	1 769	1 911	2 016	2 084	2 115	-	-	-
30	1 631	1 887	2 105	2 283	2 423	2 524	2 588	2 614	-
35	1 616	1 915	2 174	2 393	2 573	2 714	2 816	2 879	-
40	1 577	1 921	2 224	2 487	2 709	2 891	3 034	3 138	-
45	1 512	1 904	2 254	2 562	2 830	3 056	3 243	3 389	-
50	1 420	1 862	2 261	2 618	2 934	3 208	3 440	3 632	-
55	-	1 795	2 246	2 655	3 020	3 344	3 625	3 865	-
60	-	-	2 207	2 670	3 088	3 464	3 797	4 088	-
urrent consur 20	3.10	3.32	3.46	3.56	3.61	3.63	_	_	_
30	3.28	3.65	3.92	4.13	4.27	4.37	4.42	4.44	-
35	3.23	3.68	4.04	4.31	4.51	4.66	4.75	4.80	-
40	3.09	3.64	4.08	4.43	4.70	4.90	5.05	5.14	_
45	2.88	3.53	4.07	4.51	4.86	5.12	5.32	5.46	_
50	2.60	3.37	4.02	4.55	4.98	5.32	5.59	5.79	_
55	-	3.17	3.92	4.56	5.09	5.52	5.86	6.12	_
60	-	-	3.81	4.56	5.19	5.71	6.13	6.47	-
lass flow in ko	g/h								
20	75	101	132	168	210	259	-	-	-
30	63	88	118	152	192	238	292	352	-
35	57	82	110	144	183	228	280	340	-
40	51	75	103	136	174	218	269	327	-
45	45	68	96	128	165	208	258	315	-
50	38	61	88	120	156	199	247	303	-
55	-	54	81	111	147	189	236	290	-
60	-	-	73	103	138	178	225	278	-
oofficient of -	erformance (C.O	, D )							
20	1.71	2.11	2.60	3.21	3.97	4.91	-	-	-
30	1.23	1.52	1.86	2.28	2.78	3.39	4.13	5.03	-
35	1.04	1.29	1.58	1.93	2.34	2.84	3.43	4.15	_
40	0.88	1.09	1.34	1.63	1.97	2.37	2.86	3.43	_
45	0.73	0.92	1.13	1.37	1.65	1.98	2.37	2.84	-
		0.92	0.94	1.14	1.37	1.64	1.96	2.34	-
	0.60	0.11	U.34	1.14	1.37	1.04	1.80	2.04	
50	0.60		0.77	0 04	1 12	1 3/1	1.61	1 01	_
		0.62	0.77 0.62	0.94 0.75	1.12 0.90	1.34 1.08	1.61 1.30	1.91 1.54	-

Cooling capacity	4 662	W
Power input	2 830	W
Current consumption	4.86	Α
Mass flow	165	kg/h
C.O.P.	1.65	

to: Evaporating temperature at dew point

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

Maximum HP switch setting	27.7	bar(g)
Minimum LP switch setting	0.2	bar(g)
LP pump down setting	0.9	bar(g)

### Sound power data

Sound power level	0	dB(A)
With accoustic hood	0	dB(A)

tc: Condensing temperature at dew point



## Inverter reciprocating compressors VTZ086-G

## Performance data at 40 Hz, EN 12900 rating conditions, Suction temp. = 20 °C

# **R404A**

Cond. temp. in		Evaporating temperature in °C (to)							
°C (tc)	-30	-25	-20	-15	-10	-5	0	5	
Cooling capacity	v in W								
20	2 975	4 071	5 418	7 047	8 985	11 261	_	_ [	_
30	2 232	3 181	4 345	5 753	7 435	9 419	11 736	14 413	
35	1 895	2 772	3 846	5 145	6 701		1	1	
						8 541	10 696	13 195	-
40	1 580	2 387	3 371	4 564	5 994	7 692	9 687	12 007	
45	1 285	2 023	2 920	4 007	5 314	6 870	8 707	10 852	-
50	-	1 680	2 491	3 475	4 660	6 078	7 758	9 731	-
55	-	-	2 085	2 968	4 034	5 317	6 845	8 649	-
60	-	-	-	2 488	3 441	4 593	5 975	7 619	-
Power input in V	N								
20	1 589	1 769	1 911	2 016	2 084	2 115	-	-	-
30	1 631	1 887	2 105	2 283	2 423	2 524	2 588	2 614	-
35	1 616	1 915	2 174	2 393	2 573	2 714	2 816	2 879	-
40	1 577	1 921	2 224	2 487	2 709	2 891	3 034	3 138	-
45	1 512	1 904	2 254	2 562	2 830	3 056	3 243	3 389	-
50	-	1 862	2 261	2 618	2 934	3 208	3 440	3 632	-
55	-	-	2 246	2 655	3 020	3 344	3 625	3 865	-
60	-	-	-	2 670	3 088	3 464	3 797	4 088	-
Surrent concum	untion in A								
20	3.10	3.32	3.46	3.56	3.61	3.63			
30	3.28	3.65	3.92		4.27	4.37	4.42	4.44	
35	3.23	3.68	4.04	4.13 4.31	4.27	4.66	4.42	4.80	-
			4.04			1		+	
40 45	3.09	3.64		4.43	4.70	4.90	5.05	5.14	
45	2.88	3.53	4.07	4.51	4.86	5.12	5.32	5.46	-
50	-	3.37	4.02	4.55	4.98	5.32	5.59	5.79	
55 60	-	-	3.92	4.56 4.56	5.09 5.19	5.52 5.71	5.86 6.13	6.12 6.47	-
00	-	-	_	4.50	5.19	5.71	0.13	0.47	
Mass flow in kg/	/h		T	T	ı	1	T	1 1	
20	75	101	132	167	209	257	-	-	-
30	63	88	117	151	191	237	290	350	-
35	57	81	110	143	182	227	279	337	-
40	51	75	102	135	173	217	268	325	-
45	44	68	95	127	164	207	257	313	-
50	-	61	88	119	155	197	246	301	-
55	-	-	80	111	146	187	235	288	-
60	-	-	-	102	137	177	224	276	-
Coefficient of pe	erformance (C.C	).P.)							
20	1.87	2.30	2.83	3.50	4.31	5.32	-	-	-
30	1.37	1.69	2.06	2.52	3.07	3.73	4.53	5.51	-
35	1.17	1.45	1.77	2.15	2.60	3.15	3.80	4.58	-
40	1.00	1.24	1.52	1.84	2.21	2.66	3.19	3.83	-
45	0.85	1.06	1.30	1.56	1.88	2.25	2.68	3.20	-
	-	0.90	1.10	1.33	1.59	1.89	2.26	2.68	_
50		1						1	
50 55	-	-	0.93	1.12	1.34	1.59	1.89	2.24	-

### Nominal performance at to = -10 °C, tc = 45 °C

Cooling capacity	5 314	W	
Power input	2 830	W	
Current consumption	4.86	Α	
Mass flow	164	kg/h	
C.O.P.	1.88		

to: Evaporating temperature at dew point

Rating conditions : Superheat = 11.1 K , Subcooling = 8.3 K

Pressure switch settings

N	faximum HP switch setting	27.7	bar(g)
N	linimum LP switch setting	0.2	bar(g)
L	P pump down setting	0.9	bar(g)

### Sound power data

Sound power level	0	dB(A)
With accoustic hood	0	dB(A)

tc: Condensing temperature at dew point



## Inverter reciprocating compressors VTZ086-G

## Performance data at 45 Hz, EN 12900 rating conditions, Superheat = 10 K

# **R404A**

Cond. temp. in				Evapora	iting temperature	in °C (to)			
°C (tc)	-30	-25	-20	-15	-10	-5	0	5	
			•				•		
Cooling capacit	ty in W								
20	3 133	4 269	5 663	7 345	9 348	11 702	-	-	-
30	2 329	3 310	4 510	5 961	7 694	9 740	12 130	14 894	-
35	1 960	2 863	3 966	5 301	6 898	8 789	11 005	13 576	-
40	1 614	2 438	3 443	4 661	6 122	7 858	9 900	12 277	-
45	1 290	2 034	2 941	4 042	5 367	6 947	8 814	10 998	-
50	988	1 653	2 461	3 444	4 632	6 056	7 748	9 738	-
55	-	1 293	2 002	2 867	3 918	5 186	6 702	8 497	-
60	-	-	1 565	2 311	3 224	4 335	5 675	7 275	-
			•			•		'	
Power input in	w								
20	1 800	2 004	2 167	2 289	2 370	2 411	_	-	-
30	1 849	2 138	2 384	2 587	2 749	2 868	2 944	2 977	-
35	1 835	2 169	2 461	2 710	2 915	3 077	3 196	3 271	-
40	1 792	2 176	2 516	2 812	3 064	3 272	3 436	3 556	-
45	1 721	2 156	2 547	2 893	3 195	3 452	3 664	3 831	-
50	1 618	2 108	2 553	2 952	3 306	3 614	3 877	4 094	_
55	-	2 031	2 532	2 987	3 395	3 758	4 074	4 343	_
60	-	-	2 483	2 996	3 462	3 882	4 254	4 579	_
	I	1	2 .00	2000	0 .02	0 002	. 20 .		
Current consun	nption in A								
20	3.02	3.44	3.73	3.92	4.04	4.10	_	_	_
30	3.32	3.88	4.30	4.59	4.79	4.91	4.98	5.03	_
35	3.30	3.95	4.44	4.80	5.06	5.23	5.34	5.41	_
40	3.19	3.93	4.51	4.95	5.27	5.50	5.65	5.76	_
45	2.99	3.84	4.52	5.04	5.44	5.73	5.94	6.10	_
50	2.72	3.69	4.47	5.09	5.57	5.94	6.22	6.43	
		1				+	<u> </u>	t	
55 60	-	3.48	4.37 4.24	5.10 5.09	5.68	6.13 6.32	6.49 6.76	6.77 7.12	-
60	-	-	4.24	5.09	5.77	0.32	0.76	7.12	-
Maaa flaw in ka	./h								
Mass flow in kg	ı	110	151	101	220	202		1	
20 30	87 73	116 102	151 135	191 174	238 219	292 271	331	398	-
		1	1	†	1	+	<u> </u>	†	-
35	66	94	127	165	210	261	319	386	-
40	59	87	119	157	200	250	308	373	-
45	52	79	111	148	190	239	296	360	-
50	44	71	102	138	180	229	284	347	-
55	-	63	93	129	170	217	272	334	-
60	-	-	84	119	159	206	259	320	-
Daa#lal4 - 5		. <b>.</b> .							
	erformance (C.C	1	0.04	0.04	1 001	4.05		1	
20	1.74	2.13	2.61	3.21	3.94	4.85	-	-	-
30	1.26	1.55	1.89	2.30	2.80	3.40	4.12	5.00	-
35	1.07	1.32	1.61	1.96	2.37	2.86	3.44	4.15	-
40	0.90	1.12	1.37	1.66	2.00	2.40	2.88	3.45	-
45	0.75	0.94	1.15	1.40	1.68	2.01	2.41	2.87	-
50	0.61	0.78	0.96	1.17	1.40	1.68	2.00	2.38	-
55	-	0.64	0.79	0.96	1.15	1.38	1.65	1.96	-
60	-	-	0.63	0.77	0.93	1.12	1.33	1.59	-

### Nominal performance at to = -10 °C, tc = 45 °C

porrormaneo arte e e,			
Cooling capacity	5 367	W	
Power input	3 195	W	
Current consumption	5.44	Α	
Mass flow	190	kg/h	
C.O.P.	1.68		

to: Evaporating temperature at dew point

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

Pressure switch settings

Maximum HP switch setting	27.7	bar(g)
Minimum LP switch setting	0.2	bar(g)
LP pump down setting	0.9	bar(g)

### Sound power data

Sound power level	0	dB(A)
With accoustic hood	0	dB(A)

tc: Condensing temperature at dew point



## Inverter reciprocating compressors VTZ086-G

## Performance data at 45 Hz, EN 12900 rating conditions, Suction temp. = 20 °C

# **R404A**

Cond. temp. in		Evaporating temperature in °C (to)							
°C (tc)	-30	-25	-20	-15	-10	-5	0	5	
		•	•	•	•	•	•		
Cooling capacity		4.004	0.475	7,000	40.450	40.000		1	
20	3 430	4 664	6 175	7 996	10 158	12 693	-	-	-
30	2 593	3 674	4 994	6 585	8 480	10 711	13 311	16 312	-
35	2 206	3 211	4 435	5 911	7 671	9 750	12 179	14 991	-
40	1 840	2 768	3 896	5 257	6 884	8 810	11 068	13 691	-
45	1 495	2 347	3 379	4 625	6 118	7 891	9 979	12 414	-
50	-	1 947	2 883	4 014	5 374	6 997	8 916	11 164	-
55	-	-	2 410	3 428	4 657	6 130	7 883	9 949	-
60	-	-	-	2 869	3 970	5 300	6 892	8 782	-
Power input in V	v								
20	1 800	2 004	2 167	2 289	2 370	2 411	-	-	-
30	1 849	2 138	2 384	2 587	2 749	2 868	2 944	2 977	-
35	1 835	2 169	2 461	2 710	2 915	3 077	3 196	3 271	-
40	1 792	2 176	2 516	2 812	3 064	3 272	3 436	3 556	-
45	1 721	2 156	2 547	2 893	3 195	3 452	3 664	3 831	-
50	-	2 108	2 553	2 952	3 306	3 614	3 877	4 094	-
55	-	-	2 532	2 987	3 395	3 758	4 074	4 343	-
60	-	-	-	2 996	3 462	3 882	4 254	4 579	-
						•			
urrent consum	ption in A			<b>T</b>	•				
20	3.02	3.44	3.73	3.92	4.04	4.10	-	-	-
30	3.32	3.88	4.30	4.59	4.79	4.91	4.98	5.03	-
35	3.30	3.95	4.44	4.80	5.06	5.23	5.34	5.41	-
40	3.19	3.93	4.51	4.95	5.27	5.50	5.65	5.76	-
45	2.99	3.84	4.52	5.04	5.44	5.73	5.94	6.10	-
50	-	3.69	4.47	5.09	5.57	5.94	6.22	6.43	-
55	-	-	4.37	5.10	5.68	6.13	6.49	6.77	-
60	-	-	-	5.09	5.77	6.32	6.76	7.12	-
Anna flavo in loni	n_								
lass flow in kg/		116	150	100	226	200	_	_ [	
20	86	116	150	190	236	290	1	+	-
30	73	101	134	173	218	269	329	396	-
35	59	94	127	164	208	259	317	383	-
40		86	118	156	199	249	306	371	-
45	52	79	110	147	189	238	294	358	-
50	-	71	102	137	179	227	282	345	-
55	-	-	93	128	169	216	270	332	-
60	-	-	-	118	158	205	258	318	-
Coefficient of pe	erformance (C.C	D.P.)							
20	1.91	2.33	2.85	3.49	4.29	5.27	-	-	-
30	1.40	1.72	2.10	2.54	3.08	3.74	4.52	5.48	-
35	1.20	1.48	1.80	2.18	2.63	3.17	3.81	4.58	-
40	1.03	1.27	1.55	1.87	2.25	2.69	3.22	3.85	-
45	0.87	1.09	1.33	1.60	1.91	2.29	2.72	3.24	-
50	-	0.92	1.13	1.36	1.63	1.94	2.30	2.73	-
55	-	-	0.95	1.15	1.37	1.63	1.94	2.29	-
60	_	_	_	0.96	1.15	1.37	1.62	1.92	_

### Nominal performance at to = -10 °C, tc = 45 °C

Cooling capacity	6 118	W	
Power input	3 195	W	
Current consumption	5.44	Α	
Mass flow	189	kg/h	
C.O.P.	1.91		

to: Evaporating temperature at dew point

Rating conditions : Superheat = 11.1 K , Subcooling = 8.3 K

Pressure switch settings

Maximum HP swite	ch setting	27.7	bar(g)
Minimum LP switch	n setting	0.2	bar(g)
LP pump down set	ting	0.9	bar(g)

### Sound power data

Sound power level	0	dB(A)
With accoustic hood	0	dB(A)

tc: Condensing temperature at dew point



## Inverter reciprocating compressors VTZ086-G

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

## **R404A**

Cond. temp. in				Evapora	ting temperature	in °C (to)			
°C (tc)	-30	-25	-20	-15	-10	-5	0	5	
Olinnit.	. : 14/								
Cooling capacity		4 702	6 225	9 104	10.402	12.002	1		
20	3 533	4 793	6 335	8 194	10 402	12 993	-	-	-
30	2 647	3 745	5 086	6 701	8 626	10 895	13 540	16 597	-
35	2 233	3 249	4 485	5 977	7 758	9 862	12 323	15 175	-
40	1 841	2 772	3 903	5 269	6 904	8 842	11 117	13 762	-
45	1 472	2 315	3 339	4 578	6 066	7 836	9 922	12 359	-
50	1 125	1 880	2 796	3 905	5 244	6 844	8 740	10 967	-
55 60	-	1 467	2 272 1 771	3 251 2 617	4 438 3 651	5 867 4 907	7 572 6 419	9 587 8 220	-
60	-	-	1771	2017	3 00 1	4 907	0 4 19	6 220	-
Power input in V	v								
20	2 015	2 244	2 429	2 570	2 667	2 719	-	-	-
30	2 072	2 392	2 668	2 898	3 083	3 222	3 314	3 359	-
35	2 057	2 427	2 753	3 032	3 264	3 450	3 589	3 680	-
40	2 011	2 435	2 812	3 143	3 426	3 662	3 851	3 990	-
45	1 933	2 412	2 845	3 230	3 567	3 856	4 096	4 287	-
50	1 820	2 358	2 848	3 290	3 684	4 028	4 324	4 569	-
55	_	2 271	2 822	3 324	3 776	4 179	4 532	4 835	
60	-	-	2 763	3 327	3 842	4 306	4 720	5 082	-
Current consum	•	2.62	4.04	4 24	1 40	4.50	T		
20	3.05	3.63	4.04	4.31	4.48	4.58		-	<u> </u>
30 35	3.42	4.14 4.24	4.67 4.84	5.04 5.28	5.29 5.58	5.44	5.54 5.92	5.62 6.02	-
1	3.43					5.78			
40	3.34	4.24	4.93	5.45	5.82	6.07	6.25	6.39	-
45	3.16 2.89	4.17	4.95	5.55	6.00	6.32	6.56	6.74	-
50	-	4.01 3.80	4.91	5.61	6.14	6.54	6.84	7.08	-
55 60		-	4.81 4.67	5.62 5.60	6.25 6.34	6.74 6.92	7.12 7.39	7.42 7.78	-
00	-		4.07	5.00	0.34	0.92	7.59	1.10	
Mass flow in kg/	h								
20	98	131	169	213	265	324	-	-	-
30	83	115	153	196	246	303	369	444	-
35	76	107	144	187	236	293	357	431	-
40	68	99	135	177	226	282	345	418	-
45	59	90	126	167	215	270	333	405	-
50	50	81	116	157	204	258	320	391	-
55	-	71	106	146	192	246	307	377	-
60	-	-	95	135	180	233	293	362	-
									_
Coefficient of pe	erformance (C.C 1.75	2.14	2.61	3.19	3.90	4.78	-	- 1	
30	1.75	1.57	1.91	2.31	2.80	3.38	4.09	4.94	
35	1.28	1.34	1.63	1.97	2.80	2.86	3.43	4.94	
40	0.92	1.34	1.03	1.68	2.38	2.80	2.89	3.45	<u> </u>
45	0.92	0.96	1.17	1.42	1.70	2.41	2.69	2.88	-
50	0.76	0.96	0.98	1.42	1.70	1.70	2.42	2.40	-
55	-	0.65	0.96	0.98	1.42	1.70	1.67	1.98	-
60	-	-	0.64	0.98	0.95	1.40	1.36	1.62	
00			0.04	0.19	0.30	1.14	1.50	1.02	
Nominal perform	nance at to = -10	0 °C, tc = 45 °C				Pressure switch	settings		
Cooling capacity		6.066	\//			Maximum HP swi		27.7	har(a)

Cooling capacity	6 066	W
Power input	3 567	W
Current consumption	6.00	Α
Mass flow	215	kg/h
C.O.P.	1.70	

to: Evaporating temperature at dew point

Maximum HP switch setting	27.7	bar(g)
Minimum LP switch setting	0.2	bar(g)
LP pump down setting	0.9	bar(g)

### Sound power data

Į.				_
	With accoustic hood	0	dB(A)	
	Sound power level	0	dB(A)	

tc: Condensing temperature at dew point

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



## Inverter reciprocating compressors VTZ086-G

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

## **R404A**

Cond. temp. in	nd. temp. in Evaporating temperature in °C (to)								
°C (tc)	-30	-25	-20	-15	-10	-5	0	5	
Cooling capacit	ty in W								
20	3 869	5 238	6 909	8 919	11 302	14 094	_	_	_
30		4 158	5 631	7 402	9 507	11 980	14 859		
35	2 946 2 513	3 644	5 016	6 665	8 628	10 940	13 638	18 177	-
40	2 099	3 148	4 417	5 943	7 763	9 913	12 428	16 756 15 346	-
		2 671			6 914	8 901			-
45 50	1 706	2 214	3 836 3 275	5 238 4 552	6 084	7 907	11 234 10 058	13 950 12 573	
55	-	-	2 734	3 887	5 276	6 936	8 907	11 225	•
60	-	-	-	3 249	4 497	6 000	7 796	9 922	-
00	-	-	-	3 249	4 497	0 000	7 790	9 922	-
Power input in \	w								
20	2 015	2 244	2 429	2 570	2 667	2 719	-	-	1
30	2 072	2 392	2 668	2 898	3 083	3 222	3 314	3 359	ı
35	2 057	2 427	2 753	3 032	3 264	3 450	3 589	3 680	-
40	2 011	2 435	2 812	3 143	3 426	3 662	3 851	3 990	1
45	1 933	2 412	2 845	3 230	3 567	3 856	4 096	4 287	-
50	-	2 358	2 848	3 290	3 684	4 028	4 324	4 569	-
55	-	-	2 822	3 324	3 776	4 179	4 532	4 835	1
60	-	-	-	3 327	3 842	4 306	4 720	5 082	-
•									
Current consun	l'	0.00	104	1 4 04	1.10	1.50		1	
20	3.05	3.63	4.04	4.31	4.48	4.58	-	-	-
30	3.42	4.14	4.67	5.04	5.29	5.44	5.54	5.62	-
35	3.43	4.24	4.84	5.28	5.58	5.78	5.92	6.02	-
40	3.34	4.24	4.93	5.45	5.82	6.07	6.25	6.39	-
45	3.16	4.17	4.95	5.55	6.00	6.32	6.56	6.74	-
50	-	4.01	4.91	5.61	6.14	6.54	6.84	7.08	-
55	-	-	4.81	5.62	6.25	6.74	7.12	7.42	-
60	-	-	-	5.60	6.34	6.92	7.39	7.78	-
Mass flow in kg	ı/h								
20	97	130	168	212	263	322	-	-	-
30	83	115	152	195	244	301	367	441	-
35	75	107	143	185	234	291	355	428	-
40	67	98	134	176	224	280	343	416	-
45	59	90	125	166	214	268	331	402	-
50	-	80	115	156	203	257	318	389	-
55	-	-	105	145	191	244	305	374	-
60	-	-	-	134	179	232	291	360	-
Coefficient of n	erformance (C.O	).P.)							
20	1.92	2.33	2.84	3.47	4.24	5.18	-	-	-
30	1.42	1.74	2.11	2.55	3.08	3.72	4.48	5.41	-
35	1.22	1.50	1.82	2.20	2.64	3.17	3.80	4.55	-
40	1.04	1.29	1.57	1.89	2.27	2.71	3.23	3.85	-
45	0.88	1.11	1.35	1.62	1.94	2.31	2.74	3.25	-
50	-	0.94	1.15	1.38	1.65	1.96	2.33	2.75	_
	1	5.51							
55	-	-	0.97	1.17	1.40	1.66	1.97	2.32	-

### Nominal performance at to = -10 °C, tc = 45 °C

recinition periodical actor in	-,	
Cooling capacity	6 914	W
Power input	3 567	W
Current consumption	6.00	Α
Mass flow	214	kg/h
C.O.P.	1.94	

to: Evaporating temperature at dew point

Rating conditions : Superheat = 11.1 K , Subcooling = 8.3 K

Pressure switch settings

Maximum HP switch setting	27.7	bar(g)
Minimum LP switch setting	0.2	bar(g)
LP pump down setting	0.9	bar(g)

## Sound power data

With accoustic hood	0	dB(A)
Sound power level	0	dB(A)

tc: Condensing temperature at dew point



## Inverter reciprocating compressors VTZ086-G

## Performance data at 55 Hz, EN 12900 rating conditions, Superheat = 10 K

## **R404A**

Cond. temp. in				Evapora	ting temperature	in °C (to)			
°C (tc)	-30	-25	-20	-15	-10	-5	0	5	
Cooling capaci	ty in W								
20	3 917	5 299	6 987	9 018	11 429	14 256	-	-	-
30	2 958	4 172	5 650	7 428	9 542	12 029	14 926	18 269	-
35	2 503	3 630	4 998	6 644	8 606	10 919	13 620	16 746	-
40	2 068	3 103	4 359	5 872	7 677	9 813	12 315	15 221	-
45	1 654	2 596	3 736	5 111	6 758	8 714	11 014	13 696	-
50	1 263	2 108	3 130	4 365	5 851	7 623	9 719	12 175	-
55	-	1 642	2 543	3 635	4 956	6 543	8 431	10 657	-
60	-	-	1 977	2 923	4 077	5 474	7 152	9 146	-
Power input in	W								
20	2 235	2 488	2 697	2 859	2 974	3 041	-	-	-
30	2 298	2 651	2 957	3 215	3 425	3 586	3 698	3 759	-
35	2 283	2 690	3 049	3 360	3 622	3 834	3 995	4 106	-
40	2 234	2 698	3 113	3 479	3 796	4 062	4 277	4 440	-
45	2 150	2 673	3 147	3 571	3 945	4 268	4 539	4 758	-
50	2 027	2 613	3 149	3 634	4 068	4 451	4 781	5 058	-
55	-	2 515	3 116	3 666	4 163	4 608	5 000	5 339	-
60	-	-	3 047	3 664	4 227	4 738	5 195	5 597	-
Current consur	nption in A								
20	3.17	3.88	4.38	4.72	4.94	5.07	-	-	-
30	3.59	4.43	5.05	5.49	5.78	5.97	6.10	6.20	-
35	3.62	4.55	5.24	5.74	6.09	6.33	6.49	6.62	-
40	3.54	4.57	5.35	5.93	6.34	6.63	6.84	7.01	-
45	3.37	4.50	5.38	6.05	6.54	6.90	7.16	7.38	-
50	3.10	4.35	5.34	6.11	6.69	7.13	7.46	7.73	-
55	-	4.14	5.25	6.12	6.80	7.33	7.74	8.09	-
60	-	-	5.09	6.09	6.88	7.51	8.02	8.44	-
				•					
Mass flow in kg	/h								
20	108	144	186	235	291	355	-	-	-
30	93	128	169	217	272	335	407	489	-
35	85	120	160	207	262	324	395	476	-
40	76	111	151	197	251	312	383	463	-
45	67	101	141	187	240	300	370	449	-
50	57	91	130	175	228	288	356	434	-
55	-	80	118	163	215	274	342	419	-
60	-	-	106	150	201	260	327	403	-
	-	•	•	•	•	•	•		
Coefficient of p	erformance (C.C	).P.)							
20	1.75	2.13	2.59	3.15	3.84	4.69	-	-	-
30	1.29	1.57	1.91	2.31	2.79	3.35	4.04	4.86	-
35	1.10	1.35	1.64	1.98	2.38	2.85	3.41	4.08	-
40	0.93	1.15	1.40	1.69	2.02	2.42	2.88	3.43	-
45	0.77	0.97	1.19	1.43	1.71	2.04	2.43	2.88	-
50	0.62	0.81	0.99	1.20	1.44	1.71	2.03	2.41	-
55	-	0.65	0.82	0.99	1.19	1.42	1.69	2.00	-
	-	1	+	0.80	0.96	1	1.38	1.63	

### Nominal performance at to = -10 °C, tc = 45 °C

	recinital perioritation at to	 		
ĺ	Cooling capacity	6 758	W	
	Power input	3 945	W	
	Current consumption	6.54	Α	
	Mass flow	240	kg/h	
	C.O.P.	1.71		

to: Evaporating temperature at dew point

Pressure switch settings

Maximum HP switch setting	27.7	bar(g)
Minimum LP switch setting	0.2	bar(g)
LP pump down setting	0.9	bar(g)

### Sound power data

I	Sound power level	0	dB(A)
	With accoustic hood	0	dB(A)

tc: Condensing temperature at dew point

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



## Inverter reciprocating compressors VTZ086-G

## Performance data at 55 Hz, EN 12900 rating conditions, Suction temp. = 20 °C

## **R404A**

Cond. temp. in				Evapora	ting temperature	in °C (to)			
°C (tc)	-30	-25	-20	-15	-10	-5	0	5	
		•	•	•	•	•	•	· '	
Cooling capacity		5 700	7.000	0.040	10.440	45.404	1	1	
20	4 289	5 790	7 620	9 816	12 418	15 464	-	-	-
30	3 292	4 632	6 256	8 205	10 516	13 228	16 380	20 009	-
35	2 816	4 071	5 589	7 409	9 571	12 112	15 073	18 490	-
40	2 358	3 525	4 933	6 623	8 632	11 001	13 769	16 973	-
45	1 917	2 995	4 291	5 848	7 704	9 898	12 471	15 460	-
50	-	2 483	3 666	5 088	6 788	8 807	11 184	13 958	-
55	-	-	3 060	4 346	5 891	7 735	9 917	12 478	-
60	-	-	-	3 629	5 021	6 693	8 686	11 040	-
ower input in V	v								
20	2 235	2 488	2 697	2 859	2 974	3 041	-	-	-
30	2 298	2 651	2 957	3 215	3 425	3 586	3 698	3 759	-
35	2 283	2 690	3 049	3 360	3 622	3 834	3 995	4 106	-
40	2 234	2 698	3 113	3 479	3 796	4 062	4 277	4 440	-
45	2 150	2 673	3 147	3 571	3 945	4 268	4 539	4 758	-
50	-	2 613	3 149	3 634	4 068	4 451	4 781	5 058	-
55	-	-	3 116	3 666	4 163	4 608	5 000	5 339	-
60	-	-	-	3 664	4 227	4 738	5 195	5 597	-
•		•	•	•	•	•	•		
urrent consum	ption in A								
20	3.17	3.88	4.38	4.72	4.94	5.07	-	-	-
30	3.59	4.43	5.05	5.49	5.78	5.97	6.10	6.20	-
35	3.62	4.55	5.24	5.74	6.09	6.33	6.49	6.62	-
40	3.54	4.57	5.35	5.93	6.34	6.63	6.84	7.01	-
45	3.37	4.50	5.38	6.05	6.54	6.90	7.16	7.38	-
50	-	4.35	5.34	6.11	6.69	7.13	7.46	7.73	-
55	-	-	5.25	6.12	6.80	7.33	7.74	8.09	-
60	-	-	-	6.09	6.88	7.51	8.02	8.44	-
<u> </u>									
lass flow in kg/	/h	1	•	1	•	•	•		
20	108	144	185	233	289	353	-	-	-
30	93	128	168	216	270	333	404	485	-
35	84	119	159	206	260	322	393	473	-
40	76	110	150	196	249	311	380	460	-
45	66	100	140	186	238	299	367	446	-
50	-	90	129	174	226	286	354	431	-
55	-	-	118	162	214	273	340	416	-
60	-	-	-	150	200	258	325	400	-
cofficient of	orformance (C.C	) P )							
<u> </u>	erformance (C.C		2 02	2.42	4 40	5.00	1	T	
20	1.92	2.33	2.83	3.43	4.18	5.08	- 4.40	-	-
30	1.43	1.75	2.12	2.55	3.07	3.69	4.43	5.32	-
35	1.23	1.51	1.83	2.21	2.64	3.16	3.77	4.50	-
40	1.06	1.31	1.58	1.90	2.27	2.71	3.22	3.82	-
45	0.89	1.12	1.36	1.64	1.95	2.32	2.75	3.25	-
50	-	0.95	1.16	1.40	1.67	1.98	2.34	2.76	-
55	-	-	0.98	1.19	1.42	1.68	1.98	2.34	-
60	-	-	-	0.99	1.19	1.41	1.67	1.97	-

### Nominal performance at to = -10 °C, tc = 45 °C

Cooling capacity	7 704	W	
Power input	3 945	W	
Current consumption	6.54	Α	
Mass flow	238	kg/h	
C.O.P.	1.95		

to: Evaporating temperature at dew point

Rating conditions : Superheat = 11.1 K , Subcooling = 8.3 K

Pressure switch settings

Maximum HP switch setting	27.7	bar(g)
Minimum LP switch setting	0.2	bar(g)
LP pump down setting	0.9	bar(g)

#### Sound power data

Sound power level	0	dB(A)
With accoustic hood	0	dB(A)

tc: Condensing temperature at dew point



## Inverter reciprocating compressors VTZ086-G

## Performance data at 60 Hz, EN 12900 rating conditions, Superheat = 10 K

## **R404A**

Cond. temp. in Evaporating temperature in °C (to)									
°C (tc)	-30	-25	-20	-15	-10	-5	0	5	
Cooling conceit	by in W								
Cooling capacit		F 796	7.617	0.810	12.420	15 400			-
	4 285	5 786	7 617	9 819	12 430	15 490	-	-	-
30	3 262	4 590	6 203	8 141	10 441	13 144	16 287	19 911	-
35	2 770	4 005	5 503	7 302	9 441	11 959	14 896	18 289	-
40	2 294	3 433	4 811	6 468	8 441	10 771	13 496	16 655	-
45	1 837	2 876	4 131	5 640	7 445	9 582	12 091	15 011	-
50	1 403	2 337	3 464	4 823	6 454	8 394	10 684	13 361	-
55	-	1 818	2 814	4 018	5 471	7 211	9 277	11 708	-
60	-	-	2 183	3 229	4 500	6 035	7 873	10 053	-
Power input in \	w								
20	2 458	2 738	2 970	3 155	3 290	3 376	-	-	-
30	2 529	2 914	3 251	3 539	3 776	3 962	4 096	4 177	-
35	2 514	2 957	3 350	3 694	3 986	4 227	4 415	4 549	-
40	2 462	2 965	3 419	3 821	4 172	4 470	4 715	4 906	-
45	2 371	2 938	3 454	3 919	4 331	4 689	4 994	5 244	-
50	2 238	2 872	3 454	3 983	4 459	4 882	5 249	5 561	-
55	-	2 764	3 415	4 013	4 556	5 045	5 479	5 856	-
60	-	-	3 336	4 004	4 618	5 177	5 679	6 125	-
		JI	JI	l .	l.	- II.	JI		
urrent consum	•	T	1	T = 45		T 5.50	1	1	
20	3.40	4.19	4.76	5.15	5.41	5.58	-	-	-
30	3.81	4.74	5.43	5.92	6.25	6.48	6.64	6.79	-
35	3.85	4.87	5.63	6.19	6.58	6.85	7.05	7.22	-
40	3.79	4.90	5.76	6.39	6.85	7.18	7.43	7.63	-
45	3.62	4.85	5.80	6.52	7.06	7.46	7.77	8.02	-
50	3.36	4.71	5.77	6.59	7.22	7.71	8.08	8.40	-
55	-	4.49	5.67	6.61	7.34	7.91	8.37	8.76	-
60	-	-	5.50	6.57	7.41	8.09	8.64	9.11	-
Mass flow in kg	/h								
20	119	158	203	256	316	386	-	-	-
30	103	141	186	238	297	366	444	533	
35	94	132	177	228	287	355	432	520	-
40	84	122	166	217	276	343	419	506	-
45	74	112	156	206	264	330	406	492	-
50	63	100	144	194	251	317	392	476	-
55	-	88	131	180	237	302	376	460	-
60	-	-	117	166	222	287	360	443	-
Coefficient of m	erformance (C.C								
20	1.74	2.11	2.56	3.11	3.78	4.59	_	-	_
30	1.74	1.58	1.91	2.30	2.77	3.32	3.98	4.77	-
35	1.10	1.35	1.91	1.98	2.77	2.83	3.98	4.77	-
40	0.93	1.16	1.41	1.69	2.02	2.41	2.86	3.40	-
45	0.78	0.98	1.20	1.44	1.72	2.04	2.42	2.86	-
50	0.63	0.81	1.00	1.21	1.45	1.72	2.04	2.40	-
55	-	0.66	0.82	1.00	1.20	1.43	1.69	2.00	-
60	-	-	0.65	0.81	0.97	1.17	1.39	1.64	-

#### Nominal performance at to = -10 °C, tc = 45 °C

	,		
Cooling capacity	7 445	W	
Power input	4 331	W	
Current consumption	7.06	Α	
Mass flow	264	kg/h	
C.O.P.	1.72		

to: Evaporating temperature at dew point

Pressure switch settings

Maximum HP switch setting	27.7	bar(g)
Minimum LP switch setting	0.2	bar(g)
LP pump down setting	0.9	bar(g)

## Sound power data

With accoustic hood	0	dB(A)
Sound power level	0	dB(A)

tc: Condensing temperature at dew point

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



## Inverter reciprocating compressors VTZ086-G

## Performance data at 60 Hz, EN 12900 rating conditions, Suction temp. = 20 °C

## **R404A**

Cond. temp. in	cond. temp. in Evaporating temperature in °C (to)								
°C (tc)	-30	-25	-20	-15	-10	-5	0	5	
Cooling capacit	ty in W								
20	4 692	6 322	8 307	10 688	13 506	16 802	_	_	_
30	3 632	5 096	6 869	8 992	11 507	14 454	17 873	21 807	_
35	3 117	4 492	6 154	8 142	10 499	13 267	16 485	20 194	_
40	2 615	3 899	5 445	7 295	9 491	12 075	15 088	18 572	
45	2 130	3 318	4 745	6 454	8 486	10 884	13 689	16 944	-
50	2 130	2 752	4 058	5 622	7 488	9 698	12 294	15 319	
55	_	-	3 386	4 804	6 503	8 525	10 913	13 708	
60	-	-	-	4 008	5 542	7 379	9 562	12 136	-
00	-	_	-	4 008	5 542	7 379	9 302	12 130	-
Power input in \	w								
20	2 458	2 738	2 970	3 155	3 290	3 376	-	-	-
30	2 529	2 914	3 251	3 539	3 776	3 962	4 096	4 177	-
35	2 514	2 957	3 350	3 694	3 986	4 227	4 415	4 549	ı
40	2 462	2 965	3 419	3 821	4 172	4 470	4 715	4 906	-
45	2 371	2 938	3 454	3 919	4 331	4 689	4 994	5 244	-
50	-	2 872	3 454	3 983	4 459	4 882	5 249	5 561	-
55	-	-	3 415	4 013	4 556	5 045	5 479	5 856	-
60	-	-	-	4 004	4 618	5 177	5 679	6 125	-
Current consun	nption in A	1		1	T				
20	3.40	4.19	4.76	5.15	5.41	5.58	-	-	-
30	3.81	4.74	5.43	5.92	6.25	6.48	6.64	6.79	-
35	3.85	4.87	5.63	6.19	6.58	6.85	7.05	7.22	-
40	3.79	4.90	5.76	6.39	6.85	7.18	7.43	7.63	-
45	3.62	4.85	5.80	6.52	7.06	7.46	7.77	8.02	1
50	-	4.71	5.77	6.59	7.22	7.71	8.08	8.40	-
55	-	-	5.67	6.61	7.34	7.91	8.37	8.76	-
60	-	-	-	6.57	7.41	8.09	8.64	9.11	-
Mass flow in kg	/h								
20	118	157	202	254	314	384	-	-	-
30	102	140	185	236	296	364	441	529	-
35	93	131	176	227	285	353	429	516	-
40	84	122	165	216	274	341	417	503	-
45	74	111	155	205	262	328	403	489	-
50	-	100	143	193	250	315	389	473	-
55	-	-	130	179	236	300	374	457	-
60	-	-	-	165	221	285	358	440	-
	erformance (C.C	).P.)		1		1			
20	1.91	2.31	2.80	3.39	4.10	4.98	-	-	-
30	1.44	1.75	2.11	2.54	3.05	3.65	4.36	5.22	-
35	1.24	1.52	1.84	2.20	2.63	3.14	3.73	4.44	-
40	1.06	1.31	1.59	1.91	2.28	2.70	3.20	3.79	-
45	0.90	1.13	1.37	1.65	1.96	2.32	2.74	3.23	-
50	-	0.96	1.17	1.41	1.68	1.99	2.34	2.75	-
-	_	_	0.99	1.20	1.43	1.69	1.99	2.34	-
55			<u> </u>						

### Nominal performance at to = -10 °C, tc = 45 °C

		,	
ĺ	Cooling capacity	8 486	W
	Power input	4 331	W
	Current consumption	7.06	Α
	Mass flow	262	kg/h
	C.O.P.	1.96	

to: Evaporating temperature at dew point

Rating conditions : Superheat = 11.1 K , Subcooling = 8.3 K

Pressure switch settings

Maximum HP switch setting	27.7	bar(g)
Minimum LP switch setting	0.2	bar(g)
LP pump down setting	0.9	bar(g)

#### Sound power data

Sound power level	0	dB(A)
With accoustic hood	0	dB(A)

tc: Condensing temperature at dew point



## Inverter reciprocating compressors VTZ086-G

## Performance data at 65 Hz, EN 12900 rating conditions, Superheat = 10 K

## **R404A**

Cond. temp. in	temp. in Evaporating temperature in °C (to)								
°C (tc)	-30	-25	-20	-15	-10	-5	0	5	
Cooling conceit	w in W								
Cooling capacit		6 254	9.226	10 507	12 406	16 604	_		-
	4 638	1	8 226	10 597	13 406	16 694		-	-
30	3 561	4 999	6 745	8 840	11 324	14 238	17 624	21 522	-
35	3 034	4 376	6 001	7 950	10 264	12 984	16 150	19 804	-
40	2 520	3 760	5 259	7 058	9 196	11 716	14 658	18 063	-
45	2 022	3 156	4 524	6 166	8 125	10 439	13 152	16 303	-
50	1 543	2 566	3 798	5 279	7 052	9 157	11 635	14 527	-
55	-	1 995	3 085	4 401	5 983	7 873	10 111	12 739	-
60	-	-	2 389	3 534	4 921	6 591	8 584	10 942	-
Power input in \	W								
20	2 686	2 992	3 250	3 459	3 617	3 724	-	-	-
30	2 763	3 182	3 551	3 869	4 134	4 348	4 508	4 614	-
35	2 748	3 228	3 657	4 034	4 358	4 630	4 847	5 009	-
40	2 693	3 237	3 729	4 169	4 555	4 888	5 165	5 387	-
45	2 596	3 207	3 766	4 271	4 722	5 119	5 460	5 744	-
50	2 453	3 135	3 763	4 337	4 857	5 320	5 728	6 078	-
55	-	3 017	3 718	4 365	4 955	5 490	5 967	6 386	-
60	-	-	3 628	4 350	5 015	5 623	6 173	6 665	-
<u> </u>		•	•	•	•	•	•	•	
urrent consun	nption in A								
20	3.73	4.57	5.18	5.61	5.90	6.10	-	-	-
30	4.10	5.08	5.81	6.34	6.72	6.99	7.19	7.37	-
35	4.15	5.21	6.02	6.62	7.05	7.37	7.61	7.82	-
40	4.09	5.25	6.15	6.83	7.34	7.71	8.00	8.25	-
45	3.93	5.21	6.21	6.98	7.57	8.01	8.37	8.67	-
50	3.67	5.07	6.19	7.06	7.74	8.27	8.70	9.07	-
55	-	4.85	6.09	7.08	7.86	8.49	9.00	9.44	-
60	-	-	5.91	7.02	7.93	8.66	9.27	9.80	-
					l.		l.		
lass flow in kg	/h								
20	128	170	219	276	341	416	-	-	-
30	112	154	202	258	323	396	480	576	-
35	103	144	193	248	312	385	468	563	-
40	93	134	182	237	301	373	456	549	
45	81	123	170	225	288	360	442	534	-
50	69	110	158	212	274	345	426	518	-
55	-	97	144	198	259	330	410	501	-
60	-	-	128	182	243	313	392	482	-
Coefficient of n	erformance (C.C	).P.)							
20	1.73	2.09	2.53	3.06	3.71	4.48	-	-	-
30	1.73	1.57	1.90	2.29	2.74	3.27	3.91	4.66	
35	1.10	1.36	1.64	1.97	2.74	2.80	3.33	3.95	_
40	0.94	1.16	1.41	1.69	2.02	2.40	2.84	3.35	
45	0.78	0.98	1.41	1.44	1.72	2.40	2.41	2.84	-
50		0.98	1.01	1.22		1.72	2.41	2.39	-
	0.63	0.82	0.83	1.22	1.45 1.21	1.72	1.69	1.99	
55	-					1			-
60	-	-	0.66	0.81	0.98	1.17	1.39	1.64	-

#### Nominal performance at to = -10 °C, tc = 45 °C

	,			
Cooling capacity		8 125	W	
Power input		4 722	W	
Current consumption		7.57	Α	
Mass flow		288	kg/h	
C.O.P.		1.72		

to: Evaporating temperature at dew point

Pressure switch settings

Maximum HP switch setting	27.7	bar(g)
Minimum LP switch setting	0.2	bar(g)
LP pump down setting	0.9	bar(g)

### Sound power data

Sound p	ower level	0	dB(A)	
With acc	coustic hood	0	dB(A)	

tc: Condensing temperature at dew point

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



## Inverter reciprocating compressors VTZ086-G

## Performance data at 65 Hz, EN 12900 rating conditions, Suction temp. = 20 °C

## **R404A**

Cond. temp. in	mp. in Evaporating temperature in °C (to)								
°C (tc)	-30	-25	-20	-15	-10	-5	0	5	
Cooling capacit	v in W								
20	5 078	6 834	8 971	11 535	14 566	18 109	_	_	_
30	3 964	5 550	7 469	9 765	12 480	15 657	19 340	23 572	_
35	3 414	4 908	6 711	8 865	11 414	14 403	17 873	21 868	_
40	2 872	4 271	5 952	7 960	10 340	13 135	16 388	20 142	-
45	2 343	3 641	5 197	7 055	9 261	11 858	14 891	18 402	-
50	2 343	3 022	4 449	6 154	8 183	10 579	13 389	16 655	
55	-		3 712	5 262	7 112	9 308	11 894		-
60	-	-		4 387	6 060	8 058	10 426	14 916 13 209	-
60	-	-	-	4 307	6 060	0 050	10 420	13 209	-
Power input in \	N								
20	2 686	2 992	3 250	3 459	3 617	3 724	-	-	-
30	2 763	3 182	3 551	3 869	4 134	4 348	4 508	4 614	-
35	2 748	3 228	3 657	4 034	4 358	4 630	4 847	5 009	-
40	2 693	3 237	3 729	4 169	4 555	4 888	5 165	5 387	-
45	2 596	3 207	3 766	4 271	4 722	5 119	5 460	5 744	-
50		3 135	3 763	4 337	4 857	5 320	5 728	6 078	-
55	-	-	3 718	4 365	4 955	5 490	5 967	6 386	-
60	-	-	-	4 350	5 015	5 623	6 173	6 665	-
Current consum	nption in A								
20	3.73	4.57	5.18	5.61	5.90	6.10	_	-	-
30	4.10	5.08	5.81	6.34	6.72	6.99	7.19	7.37	-
35	4.15	5.21	6.02	6.62	7.05	7.37	7.61	7.82	_
40	4.09	5.25	6.15	6.83	7.34	7.71	8.00	8.25	_
45	3.93	5.21	6.21	6.98	7.57	8.01	8.37	8.67	-
50	-	5.07	6.19	7.06	7.74	8.27	8.70	9.07	-
55	-	-	6.09	7.08	7.86	8.49	9.00	9.44	_
60	-	_	-	7.02	7.93	8.66	9.27	9.80	-
							-		
Mass flow in kg		1 400	1	a= :	1 000		1	1	
20	128	169	218	274	339	414	-	-	-
30	112	153	201	257	321	394	477	572	-
35	102	144	191	247	310	383	466	559	-
40	92	133	181	236	299	371	453	545	-
45	81	122	169	224	286	358	439	531	-
50	-	110	157	211	273	343	424	515	-
55	-	-	143	196	258	328	407	497	-
60	-	-	-	181	242	311	390	479	-
	erformance (C.C	1	2.70	2.22	4.00	4.00		Ī	
20	1.89	2.28	2.76	3.33	4.03	4.86	4 20	- 5 11	-
30 35	1.43 1.24	1.74	2.10	2.52	3.02	3.60	4.29	5.11	-
		1.52	1.84	2.20	2.62	3.11	3.69	4.37	
40	1.07	1.32	1.60	1.91	2.27	2.69	3.17	3.74	-
45	0.90	1.14	1.38	1.65	1.96	2.32	2.73	3.20	-
50	-	0.96	1.18	1.42	1.68	1.99	2.34	2.74	-
55	-	-	1.00	1.21	1.44	1.70	1.99	2.34	-
60	-	-	-	1.01	1.21	1.43	1.69	1.98	-

### Nominal performance at to = -10 °C, tc = 45 °C

	,			
Cooling capacity		9 261	W	
Power input		4 722	W	
Current consumption		7.57	Α	
Mass flow		286	kg/h	
C.O.P.		1.96		

to: Evaporating temperature at dew point

Rating conditions : Superheat = 11.1 K , Subcooling = 8.3 K

Pressure switch settings

Maximum HP switch setting	27.7	bar(g)
Minimum LP switch setting	0.2	bar(g)
LP pump down setting	0.9	bar(g)

## Sound power data

Į.				_
	With accoustic hood	0	dB(A)	
	Sound power level	0	dB(A)	

tc: Condensing temperature at dew point



## Inverter reciprocating compressors VTZ086-G

## Performance data at 70 Hz, EN 12900 rating conditions, Superheat = 10 K

## **R404A**

Cond. temp. in	ond. temp. in Evaporating temperature in °C (to)								
°C (tc)	-30	-25	-20	-15	-10	-5	0	5	
2U									
Cooling capacit		0.700		11.051	44.055	17.070	I		
20	4 974	6 703	8 814	11 351	14 355	17 870	-	-	-
30	3 853	5 400	7 276	9 526	12 190	15 313	18 936	23 103	-
35	3 295	4 742	6 492	8 589	11 074	13 991	17 383	21 292	-
40	2 744	4 086	5 704	7 642	9 942	12 648	15 802	19 447	-
45	2 206	3 435	4 915	6 689	8 798	11 287	14 197	17 572	-
50	1 685	2 796	4 131	5 734	7 647	9 912	12 573	15 671	-
55	-	2 172	3 357	4 783	6 493	8 528	10 933	13 750	-
60	-	-	2 596	3 839	5 340	7 140	9 284	11 813	-
Power input in \	N								
20	2 917	3 252	3 536	3 771	3 954	4 086	_	-	-
30	3 002	3 454	3 855	4 205	4 501	4 745	4 934	5 069	-
35	2 987	3 503	3 968	4 380	4 738	5 042	5 292	5 486	-
40	2 929	3 513	4 045	4 522	4 946	5 314	5 627	5 884	_
45	2 825	3 481	4 082	4 629	5 121	5 557	5 937	6 259	_
50	2 672	3 402	4 077	4 697	5 260	5 767	6 217	6 609	_
55	-	3 274	4 026	4 722	5 360	5 942	6 465	6 929	
60	-	-	3 925	4 700	5 418	6 077	6 676	7 217	
00			3 923	4700	3410	0011	0 070	7 217	
urrent consun	nntion in A								
20	4.17	5.01	5.63	6.08	6.41	6.64	_	_	
30	4.46	5.45	6.20	6.76	7.17	7.48	7.72	7.95	_
35	4.49	5.57	6.40	7.03	7.51	7.87	8.16	8.42	_
40	4.43	5.62	6.54	7.26	7.80	8.23	8.57	8.88	
45	4.28	5.58	6.61	7.42	8.05	8.55	8.96	9.32	
50	4.03	5.45	6.60	7.51	8.24	8.83	9.31	9.74	-
55	-	5.22	6.50	7.53	8.37	9.05	9.62	10.13	-
60	-	-	6.30	7.46	8.42	9.21	9.89	10.49	-
lass flow in kg	/h								
20	138	183	235	296	366	446	-	-	-
30	121	166	218	278	347	426	516	618	-
35	112	156	208	268	337	415	504	605	-
40	101	146	197	257	325	403	491	591	-
45	89	134	185	244	312	389	477	576	-
50	75	120	171	230	297	374	461	559	-
55	-	105	156	215	281	357	443	540	-
60	-	-	139	198	264	339	424	520	-
coefficient of n	orformance (C.C	, D.)							
•	erformance (C.C	1	2.40	2.04	2.62	4 27		<u> </u>	
20	1.70	2.06	2.49	3.01	3.63	4.37	- 2.04	- 4 FG	-
30	1.28	1.56	1.89	2.27	2.71	3.23	3.84	4.56	-
35	1.10	1.35	1.64	1.96	2.34	2.77	3.28	3.88	-
40	0.94	1.16	1.41	1.69	2.01	2.38	2.81	3.31	-
45	0.78	0.99	1.20	1.44	1.72	2.03	2.39	2.81	-
50	0.63	0.82	1.01	1.22	1.45	1.72	2.02	2.37	-
55	-	0.66	0.83	1.01	1.21	1.44	1.69	1.98	-
60	-	-	0.66	0.82	0.99	1.18	1.39	1.64	-

#### Nominal performance at to = -10 °C, tc = 45 °C

	.,		
Cooling capacity	8 798	W	
Power input	5 121	W	
Current consumption	8.05	Α	
Mass flow	312	kg/h	
C.O.P.	1.72		

to: Evaporating temperature at dew point

Pressure switch settings

Maximum HP switch setting	27.7	bar(g)
Minimum LP switch setting	0.2	bar(g)
LP pump down setting	0.9	bar(g)

#### Sound power data

Sound power level	0	dB(A)
With accoustic hood	0	dB(A)

tc: Condensing temperature at dew point

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



## Inverter reciprocating compressors VTZ086-G

## Performance data at 70 Hz, EN 12900 rating conditions, Suction temp. = 20 °C

## **R404A**

Cond. temp. in	I. temp. in Evaporating temperature in °C (to)								
°C (tc)	-30	-25	-20	-15	-10	-5	0	5	
Cooling capacit	v in W								
20	5 447	7 324	9 612	12 355	15 598	19 384	_		_
30	4 289	5 995	8 057	10 522	13 434	16 839	20 780	25 303	_
35	3 707	5 318	7 260	9 577	12 316	15 521	19 238	23 511	_
40	3 129	4 640	6 455	8 619	11 179	14 179	17 667	21 685	_
45	2 557	3 963	5 646	7 653	10 029	12 821	16 074	19 834	_
50	-	3 293	4 840	6 684	8 872	11 451	14 468	17 967	_
55	_	-	4 039	5 719	7 717	10 082	12 861	16 100	_
60	-	-	-	4 766	6 576	8 730	11 275	14 259	_
					0 0.0	0.00		11.200	
Power input in \		T	T	T	Т	1	1	T	T
20	2 917	3 252	3 536	3 771	3 954	4 086	-	-	-
30	3 002	3 454	3 855	4 205	4 501	4 745	4 934	5 069	-
35	2 987	3 503	3 968	4 380	4 738	5 042	5 292	5 486	-
40	2 929	3 513	4 045	4 522	4 946	5 314	5 627	5 884	-
45	2 825	3 481	4 082	4 629	5 121	5 557	5 937	6 259	-
50	-	3 402	4 077	4 697	5 260	5 767	6 217	6 609	-
55	-	-	4 026	4 722	5 360	5 942	6 465	6 929	-
60	-	-	-	4 700	5 418	6 077	6 676	7 217	-
Current consum	nption in A								
20	4.17	5.01	5.63	6.08	6.41	6.64	_	_	_
30	4.46	5.45	6.20	6.76	7.17	7.48	7.72	7.95	_
35	4.49	5.57	6.40	7.03	7.51	7.87	8.16	8.42	_
40	4.43	5.62	6.54	7.26	7.80	8.23	8.57	8.88	_
45	4.28	5.58	6.61	7.42	8.05	8.55	8.96	9.32	-
50	-	5.45	6.60	7.51	8.24	8.83	9.31	9.74	-
55	-	-	6.50	7.53	8.37	9.05	9.62	10.13	-
60	-	-	-	7.46	8.42	9.21	9.89	10.49	-
		l	l		-	-			l .
Mass flow in kg			I	T			П		I
20	137	182	233	294	363	443	-	-	-
30	121	165	217	277	345	424	513	614	-
35	111	156	207	266	335	413	501	601	-
40	100	145	196	255	323	400	488	587	-
45	88	133	184	243	310	387	474	572	-
50	-	119	170	229	296	372	458	555	-
55	-	-	155	214	280	355	441	537	-
60	-	-	-	196	262	337	422	517	-
	erformance (C.O		<del></del>	1	Τ		1	1	<del></del>
20	1.87	2.25	2.72	3.28	3.94	4.74	-	-	-
30	1.43	1.74	2.09	2.50	2.98	3.55	4.21	4.99	-
35	1.24	1.52	1.83	2.19	2.60	3.08	3.64	4.29	-
40	1.07	1.32	1.60	1.91	2.26	2.67	3.14	3.69	-
45	0.91	1.14	1.38	1.65	1.96	2.31	2.71	3.17	-
50	-	0.97	1.19	1.42	1.69	1.99	2.33	2.72	-
55	-	-	1.00	1.21	1.44	1.70	1.99	2.32	-
60	-	-	-	1.01	1.21	1.44	1.69	1.98	-

### Nominal performance at to = -10 °C, tc = 45 °C

Cooling capacity	10 029	W	
Power input	5 121	W	
Current consumption	8.05	Α	
Mass flow	310	kg/h	
C.O.P.	1.96		

to: Evaporating temperature at dew point

Pressure switch settings

Maximum HP switch setting	27.7	bar(g)
Minimum LP switch setting	0.2	bar(g)
LP pump down setting	0.9	bar(g)

## Sound power data

With accoustic hood	0	dB(A)
Sound power level	0	dB(A)

tc: Condensing temperature at dew point

Rating conditions : Superheat = 11.1 K , Subcooling = 8.3 K



## Inverter reciprocating compressors VTZ086-G

## Performance data at 75 Hz, EN 12900 rating conditions, Superheat = 10 K

## **R404A**

Cond. temp. in				Evapora	ting temperature	in °C (to)			
°C (tc)	-30	-25	-20	-15	-10	-5	0	5	
Cooling capacit	v in W								
20	5 295	7 133	9 381	12 081	15 278	19 017	_	_	_
30		5 792	7 797	10 198	13 040	16 367	20 223	1	-
	4 139						1	24 653	-
35	3 553	5 103	6 976	9 218	11 872	14 983	18 595	22 752	-
40	2 969	4 409	6 144	8 219	10 679	13 567	16 927	20 805	-
45	2 392	3 715	5 305	7 207	9 465	12 123	15 226	18 818	-
50	1 827	3 027	4 465	6 187	8 237	10 659	13 496	16 795	-
55	-	2 349	3 629	5 164	6 999	9 177	11 743	14 742	-
60	-	-	2 803	4 144	5 757	7 685	9 972	12 664	-
Power input in \	W								
20	3 153	3 516	3 828	4 090	4 301	4 460	-	-	-
30	3 244	3 731	4 165	4 547	4 877	5 153	5 375	5 542	-
35	3 229	3 783	4 284	4 732	5 126	5 465	5 750	5 979	-
40	3 169	3 794	4 365	4 882	5 344	5 750	6 101	6 396	-
45	3 059	3 759	4 403	4 993	5 526	6 004	6 425	6 788	-
50	2 896	3 674	4 396	5 061	5 670	6 222	6 717	7 153	-
55	-	3 535	4 338	5 084	5 771	6 401	6 973	7 485	-
60	-	-	4 227	5 055	5 826	6 537	7 189	7 781	-
		•	•	•		•	•		
Current consum		F 54	0.40	0.50	6.02	7.00	1		
20	4.70	5.51	6.12	6.58	6.93	7.20	-	-	-
30	4.88	5.84	6.59	7.17	7.61	7.96	8.26	8.54	-
35	4.89	5.94	6.78	7.43	7.95	8.35	8.70	9.01	-
40	4.83	5.99	6.92	7.66	8.25	8.73	9.13	9.50	-
45	4.68	5.96	7.00	7.84	8.52	9.07	9.54	9.97	-
50	4.44	5.84	7.00	7.95	8.72	9.37	9.92	10.42	-
55	-	5.61	6.90	7.97	8.86	9.60	10.25	10.83	-
60	-	-	6.69	7.89	8.90	9.76	10.51	11.18	-
Mass flow in kg	/h								
20	147	194	250	315	389	475	-	-	-
30	130	178	234	298	371	456	551	660	-
35	121	168	224	288	361	445	539	647	-
40	109	157	213	276	349	432	526	632	-
45	96	145	200	263	336	418	511	616	-
50	82	130	185	248	320	402	495	599	-
55	-	114	169	232	303	385	476	579	-
60	-	-	151	213	284	365	456	558	-
Coefficient of p	erformance (C.O	.P.)							
20	1.68	2.03	2.45	2.95	3.55	4.26	-	_	-
30	1.28	1.55	1.87	2.24	2.67	3.18	3.76	4.45	_
35	1.10	1.35	1.63	1.95	2.32	2.74	3.23	3.81	_
40	0.94	1.16	1.41	1.68	2.00	2.36	2.77	3.25	_
45	0.78	0.99	1.20	1.44	1.71	2.02	2.37	2.77	-
50	0.63	0.82	1.02	1.22	1.45	1.71	2.01	2.35	
55	-	0.62	0.84	1.02	1.43	1.43	1.68	1.97	-
		-							
60	-	<u> </u>	0.66	0.82	0.99	1.18	1.39	1.63	-

### Nominal performance at to = -10 °C, tc = 45 °C

Cooling capacity	9 465	W	
Power input	5 526	W	
Current consumption	8.52	Α	
Mass flow	336	kg/h	
C.O.P.	1.71		

to: Evaporating temperature at dew point

Pressure switch settings

Maximum HP switch setting	27.7	bar(g)
Minimum LP switch setting	0.2	bar(g)
LP pump down setting	0.9	bar(g)

## Sound power data

Sound power level	0	dB(A)
With accoustic hood	0	dB(A)

tc: Condensing temperature at dew point

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



## Inverter reciprocating compressors VTZ086-G

## Performance data at 75 Hz, EN 12900 rating conditions, Suction temp. = 20 °C

## **R404A**

Cond. temp. in				Evapora	ting temperature	in °C (to)			
°C (tc)	-30	-25	-20	-15	-10	-5	0	5	
Cooling capacit	ty in W								
20	5 798	7 795	10 230	13 150	16 601	20 628	_	_	_
30	4 607	6 429	8 633	11 265	14 371	17 998	22 193	27 001	_
35	3 997	5 723	7 801	10 278	13 203	16 621	20 579	25 123	_
40	3 384	5 007	6 953	9 270	12 007	15 209	18 925	23 200	
45	2 772	4 286	6 094	8 246	10 789	13 771	17 239	21 240	_
50	-	3 565	5 231	7 212	9 557	12 314	15 531	19 255	
55		-	4 367	6 175	8 319	10 849	13 814	17 261	
60	-	-	-	5 144	7 089	9 395	12 112	15 287	
00		ı		0111	7 000	0 000	12 112	10 207	
Power input in \	w	•	•	•	1	•	•		
20	3 153	3 516	3 828	4 090	4 301	4 460	-	-	-
30	3 244	3 731	4 165	4 547	4 877	5 153	5 375	5 542	-
35	3 229	3 783	4 284	4 732	5 126	5 465	5 750	5 979	-
40	3 169	3 794	4 365	4 882	5 344	5 750	6 101	6 396	-
45	3 059	3 759	4 403	4 993	5 526	6 004	6 425	6 788	-
50	-	3 674	4 396	5 061	5 670	6 222	6 717	7 153	-
55	-	-	4 338	5 084	5 771	6 401	6 973	7 485	-
60	-	-	-	5 055	5 826	6 537	7 189	7 781	-
Current consun	nption in A	1			T	1			
20	4.70	5.51	6.12	6.58	6.93	7.20	-	-	-
30	4.88	5.84	6.59	7.17	7.61	7.96	8.26	8.54	-
35	4.89	5.94	6.78	7.43	7.95	8.35	8.70	9.01	-
40	4.83	5.99	6.92	7.66	8.25	8.73	9.13	9.50	-
45	4.68	5.96	7.00	7.84	8.52	9.07	9.54	9.97	-
50	-	5.84	7.00	7.95	8.72	9.37	9.92	10.42	-
55	-	-	6.90	7.97	8.86	9.60	10.25	10.83	-
60	-	-	-	7.89	8.90	9.76	10.51	11.18	-
Mass flow in kg	/h								
20	146	193	248	313	387	472	-	-	-
30	130	177	232	296	369	453	548	655	-
35	120	167	223	286	359	442	536	642	-
40	109	156	211	275	347	429	523	628	1
45	96	144	199	262	334	415	508	612	1
50	-	129	184	247	319	400	492	595	-
55	-	-	168	231	302	382	473	576	-
60	-	-	-	212	283	363	453	554	-
Coefficient of p	erformance (C.O	D.P.)							
20	1.84	2.22	2.67	3.22	3.86	4.63	-	-	-
30	1.42	1.72	2.07	2.48	2.95	3.49	4.13	4.87	1
35	1.24	1.51	1.82	2.17	2.58	3.04	3.58	4.20	-
40	1.07	1.32	1.59	1.90	2.25	2.65	3.10	3.63	-
45	0.91	1.14	1.38	1.65	1.95	2.29	2.68	3.13	-
50	-	0.97	1.19	1.42	1.69	1.98	2.31	2.69	-
	-	_	1.01	1.21	1.44	1.69	1.98	2.31	-
55									

### Nominal performance at to = -10 °C, tc = 45 °C

Cooling capacity	10 789	W
Power input	5 526	W
Current consumption	8.52	Α
Mass flow	334	kg/h
C.O.P.	1.95	

to: Evaporating temperature at dew point

Pressure switch settings

Maximum HP switch setting	27.7	bar(g)
Minimum LP switch setting	0.2	bar(g)
LP pump down setting	0.9	bar(g)

## Sound power data

I	Sound power level	0	dB(A)
	With accoustic hood	0	dB(A)

tc: Condensing temperature at dew point

Rating conditions : Superheat = 11.1 K , Subcooling = 8.3 K



## Inverter reciprocating compressors VTZ086-G

## Performance data at 80 Hz, EN 12900 rating conditions, Superheat = 10 K

## **R404A**

Cond. temp. in				Evapora	ating temperature	in °C (to)			
°C (tc)	-30	-25	-20	-15	-10	-5	0	5	
N 11									
Cooling capacity		7.545	0.000	40.700	40.470	20.420		1	
20	5 599	7 545	9 926	12 788	16 176	20 136	-	-	-
30	4 418	6 174	8 305	10 857	13 874	17 402	21 486	26 173	-
35	3 808	5 458	7 453	9 838	12 658	15 958	19 786	24 185	-
40	3 192	4 729	6 580	8 791	11 406	14 473	18 035	22 138	-
45	2 578	3 994	5 694	7 722	10 126	12 950	16 240	20 041	-
50	1 971	3 258	4 799	6 639	8 823	11 397	14 407	17 897	-
55	-	2 528	3 902	5 545	7 502	9 819	12 541	15 714	-
60	-	-	3 010	4 448	6 171	8 223	10 650	13 497	-
ower input in V	v								
20	3 393	3 785	4 126	4 417	4 658	4 848	_	-	-
30	3 491	4 012	4 480	4 896	5 260	5 571	5 829	6 034	-
35	3 476	4 067	4 605	5 090	5 521	5 898	6 221	6 490	-
40	3 413	4 078	4 690	5 246	5 748	6 195	6 587	6 924	-
45	3 297	4 041	4 729	5 361	5 938	6 459	6 924	7 333	-
50	3 124	3 950	4 719	5 431	6 087	6 685	7 227	7 711	-
55	-	3 801	4 655	5 451	6 189	6 869	7 490	8 054	-
60	-	-	4 532	5 415	6 240	7 005	7 711	8 358	-
		•	•	•	•	•	•		
urrent consum	ption in A								
20	5.34	6.08	6.65	7.11	7.47	7.77	-	-	-
30	5.36	6.26	6.98	7.57	8.04	8.43	8.78	9.12	-
35	5.34	6.34	7.15	7.82	8.36	8.82	9.23	9.61	-
40	5.27	6.38	7.30	8.05	8.68	9.21	9.68	10.12	-
45	5.13	6.36	7.38	8.24	8.96	9.58	10.13	10.63	-
50	4.89	6.24	7.39	8.36	9.19	9.90	10.53	11.11	-
55	-	6.02	7.29	8.39	9.33	10.14	10.87	11.54	-
60	-	-	7.07	8.29	9.36	10.29	11.12	11.89	-
lass flow in kg/		1		1		1	T	T T	
20	155	205	264	333	412	503	-	-	-
30	139	190	249	317	395	485	586	700	-
35	129	180	239	307	385	473	574	687	-
40	117	169	228	295	373	461	560	673	-
45	104	155	214	282	359	446	545	656	-
50	88	140	199	267	343	430	528	638	-
55	-	122	182	249	325	411	509	618	-
60	-	-	162	229	305	390	487	595	-
coefficient of pe	erformance (C.C	D.P.)							
20	1.65	1.99	2.41	2.89	3.47	4.15	-	-	-
30	1.27	1.54	1.85	2.22	2.64	3.12	3.69	4.34	-
35	1.10	1.34	1.62	1.93	2.29	2.71	3.18	3.73	-
40	0.94	1.16	1.40	1.68	1.98	2.34	2.74	3.20	-
45	0.78	0.99	1.20	1.44	1.71	2.00	2.35	2.73	-
50	0.63	0.82	1.02	1.22	1.45	1.70	1.99	2.32	-
55	-	0.67	0.84	1.02	1.21	1.43	1.67	1.95	-
60	-	-	0.66	0.82	0.99	1.17	1.38	1.61	_

# Nominal performance at to = -10 °C, tc = 45 °C

Cooling capacity	10 126	W
Power input	5 938	W
Current consumption	8.96	Α
Mass flow	359	kg/h
C.O.P.	1.71	

to: Evaporating temperature at dew point

Pressure switch settings

Maximum HP switch setting	27.7	bar(g)
Minimum LP switch setting	0.2	bar(g)
LP pump down setting	0.9	bar(g)

#### Sound power data

Sound power level	0	dB(A)
With accoustic hood	0	dB(A)

tc: Condensing temperature at dew point

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



## Inverter reciprocating compressors VTZ086-G

## Performance data at 80 Hz, EN 12900 rating conditions, Suction temp. = 20 °C

## **R404A**

Cond. temp. in				Evapora	ting temperature	in °C (to)			
°C (tc)	-30	-25	-20	-15	-10	-5	0	5	
`aalina aanaaitı	ı in W								
20 20	6 131	8 245	10 825	13 920	17 576	21 841	-	_	_
30	4 918	6 854	9 197	11 992	15 289	19 136	23 579	28 665	
		6 122	8 334					26 704	
35 40	4 284 3 639	5 371	7 447	10 969 9 915	14 076 12 825	17 703 16 225	21 896 20 163		-
45	2 988	4 608	6 540	8 836	11 543	14 710	18 387	24 687 22 621	-
50	-	3 837	5 621	7 738	10 237	13 167	16 578	20 519	
55		-	4 696	6 630	8 918	11 608	14 752	18 399	
60		-	4 090	5 522	7 600	10 054	12 934	16 293	
00				0 022	7 000	10 004	12 304	10 230	
ower input in V	V	T	1		1	•	1		
20	3 393	3 785	4 126	4 417	4 658	4 848	-	-	-
30	3 491	4 012	4 480	4 896	5 260	5 571	5 829	6 034	-
35	3 476	4 067	4 605	5 090	5 521	5 898	6 221	6 490	-
40	3 413	4 078	4 690	5 246	5 748	6 195	6 587	6 924	-
45	3 297	4 041	4 729	5 361	5 938	6 459	6 924	7 333	-
50	-	3 950	4 719	5 431	6 087	6 685	7 227	7 711	-
55	-	-	4 655	5 451	6 189	6 869	7 490	8 054	-
60	-	-	-	5 415	6 240	7 005	7 711	8 358	-
20	5.34	6.08	6.65	7.11	7.47	7.77	_	_	
30	5.36	6.26	6.98	7.57	8.04	8.43	8.78	9.12	
35	5.34	6.34	7.15	7.82	8.36	8.82	9.23	9.61	_
40	5.27	6.38	7.30	8.05	8.68	9.21	9.68	10.12	
45	5.13	6.36	7.38	8.24	8.96	9.58	10.13	10.63	_
50	-	6.24	7.39	8.36	9.19	9.90	10.53	11.11	
55		-	7.29	8.39	9.33	10.14	10.87	11.54	_
60	<u>-</u>	-	-	8.29	9.36	10.14	11.12	11.89	
00			_	0.23	3.30	10.20	11.12	11.00	
lass flow in kg/	h								
20	154	204	263	331	410	500	-	-	-
30	138	189	247	315	393	482	582	696	-
35	128	179	238	305	382	471	570	683	-
40	117	168	226	294	371	458	557	668	-
45	103	155	213	280	357	444	542	652	-
50	-	139	198	265	341	427	525	634	-
55	-	-	181	248	323	409	505	614	-
60	-	-	-	228	303	388	484	591	-
oefficient of ne	erformance (C.C	).P.)							
20	1.81	2.18	2.62	3.15	3.77	4.51	-	-	
30	1.41	1.71	2.05	2.45	2.91	3.43	4.05	4.75	_
35	1.23	1.51	1.81	2.16	2.55	3.00	3.52	4.11	-
40	1.07	1.32	1.59	1.89	2.23	2.62	3.06	3.57	_
45	0.91	1.14	1.38	1.65	1.94	2.28	2.66	3.08	
50	-	0.97	1.19	1.42	1.68	1.97	2.29	2.66	
		0.07						1	_
55	-	-	1.01	1.22	1.44	1.69	1.97	2.28	

### Nominal performance at to = -10 °C, tc = 45 °C

		,			
Cooling capacity			11 543	W	
Power input			5 938	W	
Current consumpti	on		8.96	Α	
Mass flow			357	kg/h	
C.O.P.			1.94		

to: Evaporating temperature at dew point

Pressure switch settings

Maximum HP switch setting	27.7	bar(g)
Minimum LP switch setting	0.2	bar(g)
LP pump down setting	0.9	bar(g)

## Sound power data

I	Sound power level	0	dB(A)
	With accoustic hood	0	dB(A)

tc: Condensing temperature at dew point

Rating conditions : Superheat = 11.1 K , Subcooling = 8.3 K



## Inverter reciprocating compressors VTZ086-G

## Performance data at 85 Hz, EN 12900 rating conditions, Superheat = 10 K

## **R404A**

Cond. temp. in				Evapora	ting temperature	in °C (to)			
°C (tc)	-30	-25	-20	-15	-10	-5	0	5	
N 11									
Cooling capacity		7.000	40.450	40.474	47.047	24 225	T		
20	5 888	7 938	10 450	13 471	17 047	21 225	-	-	-
30	4 691	6 548	8 803	11 502	14 691	18 416	22 724	27 662	-
35	4 060	5 809	7 923	10 448	13 431	16 918	20 955	25 589	-
40	3 415	5 048	7 013	9 356	12 125	15 365	19 124	23 446	-
45	2 765	4 273	6 080	8 234	10 781	13 766	17 237	21 240	-
50	2 116	3 490	5 132	7 088	9 405	12 127	15 303	18 978	-
55	-	2 707	4 176	5 926	8 003	10 455	13 327	16 666	
60	-	-	3 217	4 753	6 583	8 756	11 316	14 311	-
Power input in V	v								
20	3 638	4 059	4 430	4 752	5 025	5 249	-	-	-
30	3 741	4 297	4 800	5 252	5 652	6 000	6 298	6 544	-
35	3 727	4 355	4 931	5 454	5 923	6 340	6 705	7 017	-
40	3 661	4 367	5 019	5 617	6 160	6 650	7 086	7 468	-
45	3 539	4 327	5 059	5 736	6 357	6 923	7 435	7 891	-
50	3 357	4 230	5 046	5 806	6 509	7 156	7 747	8 282	-
55	-	4 071	4 976	5 823	6 612	7 344	8 018	8 636	-
60	-	-	4 842	5 780	6 659	7 480	8 242	8 946	-
urrent consum	ption in A	1	1		,	1	,	, ,	
20	6.08	6.70	7.22	7.65	8.02	8.35	-	-	-
30	5.90	6.70	7.38	7.95	8.45	8.90	9.31	9.70	-
35	5.85	6.75	7.52	8.19	8.76	9.28	9.75	10.20	-
40	5.77	6.78	7.66	8.42	9.09	9.68	10.23	10.74	-
45	5.63	6.76	7.76	8.63	9.39	10.08	10.70	11.29	-
50	5.39	6.66	7.78	8.76	9.63	10.42	11.14	11.81	-
55	-	6.43	7.68	8.79	9.78	10.68	11.49	12.26	-
60	-	-	7.44	8.68	9.80	10.81	11.74	12.61	-
lace flow in ka	'h								
lass flow in kg/ 20	163	216	278	351	435	531	_		
30	148	201	264	336	418	513	620	741	
		1	1					t	
35 40	138 126	192 180	254 243	326 314	408 396	502 489	608 594	727 712	
45	111	166	229	301	382	474	579	695	<u> </u>
50	95	150	213	285	366	474	561	676	
55	- 95	131	194	266	347	438	540	655	
60		-	173	244	325	416	540	631	
00		-	173	244	323	410	317	031	-
<u> </u>	erformance (C.C	1		T	1		1	,	
20	1.62	1.96	2.36	2.83	3.39	4.04	-	-	-
30	1.25	1.52	1.83	2.19	2.60	3.07	3.61	4.23	-
35	1.09	1.33	1.61	1.92	2.27	2.67	3.13	3.65	-
40	0.93	1.16	1.40	1.67	1.97	2.31	2.70	3.14	-
45	0.78	0.99	1.20	1.44	1.70	1.99	2.32	2.69	-
50	0.63	0.83	1.02	1.22	1.44	1.69	1.98	2.29	-
55	-	0.67	0.84	1.02	1.21	1.42	1.66	1.93	-
60	-	-	0.66	0.82	0.99	1.17	1.37	1.60	_

# Nominal performance at to = -10 °C, tc = 45 °C

	,	
Cooling capacity	10 781	W
Power input	6 357	W
Current consumption	9.39	Α
Mass flow	382	kg/h
C.O.P.	1.70	

to: Evaporating temperature at dew point

Pressure switch settings

Maximum HP switch setting	27.7	bar(g)
Minimum LP switch setting	0.2	bar(g)
LP pump down setting	0.9	bar(g)

## Sound power data

Sound p	ower level	0	dB(A)	
With acc	coustic hood	0	dB(A)	

tc: Condensing temperature at dew point

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



## Inverter reciprocating compressors VTZ086-G

## Performance data at 85 Hz, EN 12900 rating conditions, Suction temp. = 20 °C

## **R404A**

Cond. temp. in	Evaporating temperature in °C (to)								
°C (tc)	-30	-25	-20	-15	-10	-5	0	5	
Cooling consoit	v in W								
Cooling capacity 20	6 448	8 674	11 397	14 664	18 523	23 023	_	_	_
30	5 222	7 270	9 748	12 705	16 190	20 251	24 937	30 296	
		1		1					
35	4 568	6 515	8 859	11 650	14 936	18 767	23 190	28 255	-
40	3 894	5 733	7 936	10 553	13 633	17 226	21 380	26 145	
45	3 205	4 930	6 985	9 421	12 289	15 637	19 516	23 975	-
50	-	4 111	6 012	8 262	10 912	14 011	17 610	21 758	-
55	-	-	5 025	7 085	9 513	12 360	15 677	19 514	-
60	-	-	-	5 900	8 108	10 705	13 744	17 276	-
Power input in V	N							,	
20	3 638	4 059	4 430	4 752	5 025	5 249	-	-	-
30	3 741	4 297	4 800	5 252	5 652	6 000	6 298	6 544	-
35	3 727	4 355	4 931	5 454	5 923	6 340	6 705	7 017	-
40	3 661	4 367	5 019	5 617	6 160	6 650	7 086	7 468	-
45	3 539	4 327	5 059	5 736	6 357	6 923	7 435	7 891	-
50	-	4 230	5 046	5 806	6 509	7 156	7 747	8 282	-
55	-	-	4 976	5 823	6 612	7 344	8 018	8 636	-
60	-	-	-	5 780	6 659	7 480	8 242	8 946	-
Current consum	ention in A								
20	6.08	6.70	7.22	7.65	8.02	8.35	_	_	
30	5.90	6.70	7.38	7.95	8.45	8.90	9.31	9.70	
35	5.85	6.75	7.52	8.19	8.76	9.28	9.75	10.20	
40	5.77	6.78	7.66	8.42	9.09	9.68	10.23	10.20	
45	5.63	6.76	7.76	8.63	9.39	10.08	10.70	11.29	
50	-	6.66	7.78	8.76	9.63	10.42	11.14	11.81	
55	-	-		8.79	9.78	10.42		12.26	<u> </u>
60	-	-	7.68	8.68	9.70	10.81	11.49 11.74	12.26	-
00				0.00	3.00	10.01	11.74	12.01	
Mass flow in kg		Т	1	Т	1	Т	T		
20	162	215	277	349	432	527	-	-	-
30	147	200	262	334	416	510	616	736	-
35	137	191	253	324	406	499	604	722	-
40	125	179	241	313	394	486	590	708	-
45	111	165	228	299	380	472	575	691	-
50	-	149	212	283	364	455	557	672	-
55	-	-	193	265	345	435	537	651	-
60	-	-	-	243	323	413	514	627	-
Coefficient of pe	erformance (C.C	D.P.)							
20	1.77	2.14	2.57	3.09	3.69	4.39	-	-	-
30	1.40	1.69	2.03	2.42	2.86	3.38	3.96	4.63	-
35	1.23	1.50	1.80	2.14	2.52	2.96	3.46	4.03	-
40	1.06	1.31	1.58	1.88	2.21	2.59	3.02	3.50	-
45	0.91	1.14	1.38	1.64	1.93	2.26	2.63	3.04	-
	-	0.97	1.19	1.42	1.68	1.96	2.27	2.63	-
50 I		+	ł					1	
50 55	-	-	1.01	1.22	1.44	1.68	1.96	2.26	-

### Nominal performance at to = -10 °C, tc = 45 °C

tronnia porto manos at to			
Cooling capacity	12 289	W	
Power input	6 357	W	
Current consumption	9.39	Α	
Mass flow	380	kg/h	
C.O.P.	1.93		

to: Evaporating temperature at dew point

Pressure switch settings

Maximum HP switch setting	27.7	bar(g)
Minimum LP switch setting	0.2	bar(g)
LP pump down setting	0.9	bar(g)

### Sound power data

I	Sound power level	0	dB(A)
	With accoustic hood	0	dB(A)

tc: Condensing temperature at dew point

Rating conditions : Superheat = 11.1 K , Subcooling = 8.3 K



## Inverter reciprocating compressors VTZ086-G

## Performance data at 90 Hz, EN 12900 rating conditions, Superheat = 10 K

## **R404A**

Cond. temp. in	Evaporating temperature in °C (to)								
°C (tc)	-30	-25	-20	-15	-10	-5	0	5	
0 11	! >4/								
Cooling capacit		0.212	10.052	14 121	17.002	22.205			
20	6 161	8 312	10 953	14 131	17 893	22 285	-	-	-
30	4 958	6 914	9 290	12 134	15 491	19 410	23 938	29 120	-
35	4 309	6 154	8 385	11 048	14 191	17 860	22 103	26 966	
40	3 638	5 364	7 441	9 915	12 835	16 245	20 194	24 729	-
45	2 953	4 551	6 465	8 742	11 429	14 572	18 219	22 417	-
50	2 261	3 723	5 466	7 536	9 982	12 849	16 186	20 038	-
55	-	2 887	4 450	6 305	8 501	11 084	14 101	17 599	-
60	-	-	3 424	5 056	6 994	9 283	11 972	15 107	-
Power input in \	N								
20	3 886	4 337	4 740	5 095	5 402	5 663	-	-	-
30	3 996	4 586	5 125	5 614	6 052	6 440	6 780	7 072	-
35	3 982	4 648	5 262	5 823	6 333	6 793	7 202	7 561	-
40	3 913	4 661	5 353	5 993	6 579	7 113	7 596	8 028	-
45	3 786	4 618	5 394	6 115	6 782	7 396	7 956	8 465	-
50	3 593	4 514	5 379	6 186	6 938	7 636	8 278	8 868	-
55	-	4 345	5 301	6 200	7 041	7 826	8 556	9 231	-
60	-	-	5 156	6 149	7 085	7 962	8 783	9 547	_
		I .			1				
Current consum	nption in A								
20	6.92	7.39	7.82	8.22	8.59	8.95	-	-	-
30	6.51	7.17	7.77	8.34	8.86	9.35	9.82	10.28	_
35	6.41	7.18	7.88	8.54	9.15	9.72	10.26	10.79	_
40	6.31	7.20	8.02	8.77	9.48	10.14	10.76	11.36	_
45	6.17	7.18	8.12	8.99	9.80	10.56	11.27	11.95	_
50	5.94	7.09	8.15	9.14	10.06	10.93	11.74	12.51	_
55	-	6.86	8.06	9.18	10.22	11.20	12.12	12.99	-
60	-	-	7.80	9.05	10.22	11.32	12.36	13.33	-
		I .		1			1		
Mass flow in kg	/h								
20	171	226	292	368	456	558	-	_	_
30	156	213	278	354	441	541	653	780	_
35	146	203	269	345	431	530	641	766	_
40	134	191	258	333	419	517	627	751	_
45	119	177	244	319	405	502	611	734	_
50	101	160	227	303	388	485	593	714	_
55	-	140	207	283	369	464	572	692	_
60	_	-	184	260	345	441	547	666	
•••	·		1 107		1 070	1 171	1 571	1 000	
Coefficient of po	•	<del>,                                    </del>	0.04	0.77	0.04	1 001	1		
20	1.59	1.92	2.31	2.77	3.31	3.94	-	-	-
30	1.24	1.51	1.81	2.16	2.56	3.01	3.53	4.12	-
35	1.08	1.32	1.59	1.90	2.24	2.63	3.07	3.57	-
40	0.93	1.15	1.39	1.65	1.95	2.28	2.66	3.08	-
45	0.78	0.99	1.20	1.43	1.69	1.97	2.29	2.65	-
50	0.63	0.82	1.02	1.22	1.44	1.68	1.96	2.26	
55	-	0.66	0.84	1.02	1.21	1.42	1.65	1.91	-
60	-	-	0.66	0.82	0.99	1.17	1.36	1.58	-
						_			
Nominal perform	mance at to = -1	0 °C, tc = 45 °C	a W		-	Pressure switch		27.7	har(n)

Cooling capacity	11 429	W
Power input	6 782	W
Current consumption	9.80	Α
Mass flow	405	kg/h
C.O.P.	1.69	

to: Evaporating temperature at dew point

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

Maximum HP switch setting	27.7	bar(g)
Minimum LP switch setting	0.2	bar(g)
LP pump down setting	0.9	bar(g)

#### Sound power data

Sound power level	0	dB(A)
With accoustic hood	0	dB(A)

tc: Condensing temperature at dew point



## Inverter reciprocating compressors VTZ086-G

## Performance data at 90 Hz, EN 12900 rating conditions, Suction temp. = 20 °C

## **R404A**

Cond. temp. in				Evapora	ting temperature	in °C (to)			
°C (tc)	-30	-25	-20	-15	-10	-5	0	5	
		•	•	•	•		•		
Cooling capacity		T	1	Т	Т		T		
20	6 746	9 083	11 945	15 382	19 442	24 173	-	-	-
30	5 519	7 675	10 287	13 403	17 072	21 345	26 269	31 894	-
35	4 848	6 902	9 376	12 319	15 782	19 813	24 461	29 776	-
40	4 147	6 092	8 421	11 184	14 431	18 212	22 577	27 576	-
45	3 423	5 251	7 427	10 003	13 028	16 553	20 628	25 303	-
50	-	4 385	6 403	8 785	11 582	14 845	18 626	22 973	-
55	-	-	5 354	7 539	10 105	13 103	16 587	20 606	-
60	-	-	-	6 277	8 613	11 350	14 540	18 236	-
Power input in V	v								
20	3 886	4 337	4 740	5 095	5 402	5 663	-	_	-
30	3 996	4 586	5 125	5 614	6 052	6 440	6 780	7 072	-
35	3 982	4 648	5 262	5 823	6 333	6 793	7 202	7 561	_
40	3 913	4 661	5 353	5 993	6 579	7 113	7 596	8 028	_
45	3 786	4 618	5 394	6 115	6 782	7 396	7 956	8 465	_
50	-	4 514	5 379	6 186	6 938	7 636	8 278	8 868	-
55	-	-	5 301	6 200	7 041	7 826	8 556	9 231	-
60	-	_	-	6 149	7 085	7 962	8 783	9 547	_
		1	1						
urrent consum	ption in A								
20	6.92	7.39	7.82	8.22	8.59	8.95	-	-	-
30	6.51	7.17	7.77	8.34	8.86	9.35	9.82	10.28	-
35	6.41	7.18	7.88	8.54	9.15	9.72	10.26	10.79	-
40	6.31	7.20	8.02	8.77	9.48	10.14	10.76	11.36	-
45	6.17	7.18	8.12	8.99	9.80	10.56	11.27	11.95	-
50	-	7.09	8.15	9.14	10.06	10.93	11.74	12.51	-
55	-	-	8.06	9.18	10.22	11.20	12.12	12.99	-
60	-	-	-	9.05	10.22	11.32	12.36	13.33	-
Anna flannin kar	n_								
Mass flow in kg/		225	200	200	454	554	1		
20	170	225	290	366	454	554	- 640	775	-
30	155	211	277	352	439	537	649	775	-
35	145	202	267	343	429	527	637	761	-
40	133	190	256	331	417	514	623	746	-
45	118	176	242	317	403	499	608	729	-
50	-	159	226	301	386	482	589	709	-
55	-	-	206	281	366	462	568	687	-
60	-	-	-	259	343	438	544	662	-
Coefficient of pe	•	· ·	T	T	1	1	1	, · · · · · · · · · · · · · · · · · · ·	
20	1.74	2.09	2.52	3.02	3.60	4.27	-	-	-
30	1.38	1.67	2.01	2.39	2.82	3.31	3.87	4.51	-
35	1.22	1.48	1.78	2.12	2.49	2.92	3.40	3.94	-
40	1.06	1.31	1.57	1.87	2.19	2.56	2.97	3.44	-
45	0.90	1.14	1.38	1.64	1.92	2.24	2.59	2.99	-
50	-	0.97	1.19	1.42	1.67	1.94	2.25	2.59	-
55	-	-	1.01	1.22	1.44	1.67	1.94	2.23	-
60	-	_	-	1.02	1.22	1.43	1.66	1.91	_

### Nominal performance at to = -10 °C, tc = 45 °C

Cooling capacity	13 028	W	
Power input	6 782	W	
Current consumption	9.80	Α	
Mass flow	403	kg/h	
C.O.P.	1.92		

to: Evaporating temperature at dew point

Rating conditions : Superheat = 11.1 K , Subcooling = 8.3 K

Pressure switch settings

Maximum HP switch setting	27.7	bar(g)
Minimum LP switch setting	0.2	bar(g)
LP pump down setting	0.9	bar(g)

#### Sound power data

Sound power level	0	dB(A)
With accoustic hood	0	dB(A)

tc: Condensing temperature at dew point



## Inverter reciprocating compressors VTZ086-G

## Performance data at 30 Hz, EN 12900 rating conditions

**R407C** 

Cond. temp. in				Evapora	iting temperature	in °C (to)			
°C (tc)	-17.5	-15	-10	-5	0	5	10	15	
Cooling capacit				T		T			
20	3 139	3 682	4 969	6 546	8 445	-	-	-	-
30	2 412	2 856	3 900	5 178	6 721	8 560	10 726	-	-
40	1 802	2 181	3 051	4 099	5 353	6 846	8 609	10 672	-
45	-	1 867	2 677	3 634	4 770	6 116	7 703	9 562	-
50	-	-	2 318	3 203	4 237	5 453	6 881	8 553	-
55	-	-	1 963	2 792	3 742	4 845	6 131	7 632	-
60	-	-	-	2 388	3 271	4 277	5 439	6 786	-
65	-	-	-	-	2 811	3 738	4 793	6 004	-
Power input in \	w								
20	1 103	1 137	1 187	1 219	1 239	-	_	_	-
30	1 276	1 343	1 451	1 529	1 584	1 623	1 654	_	-
40	1 358	1 472	1 665	1 815	1 930	2 018	2 085	2 139	_
45	-	1 493	1 738	1 934	2 090	2 212	2 307	2 383	-
50	-	-	1 782	2 031	2 233	2 396	2 526	2 631	_
55		-	1 791	2 099	2 355	2 565	2 737	2 877	
60	-	_	-	2 134	2 449	2 713	2 933	3 115	-
65		_	-	-	2 511	2 835	3 109	3 341	_
00	_	_		_	2 311	2 000	0 100	0 0 4 1	
Current consun	nption in A								
20	1.51	1.71	2.15	2.60	3.06	-	-	-	-
30	1.88	2.16	2.71	3.23	3.70	4.12	4.46	-	-
40	1.98	2.35	3.06	3.68	4.21	4.63	4.92	5.09	-
45	-	2.38	3.18	3.87	4.44	4.87	5.16	5.29	-
50	-	_	3.28	4.04	4.66	5.12	5.41	5.52	-
55	-	-	3.37	4.22	4.90	5.40	5.69	5.78	-
60	-	_	_	4.41	5.16	5.70	6.02	6.10	_
65	-	-	-	-	5.45	6.04	6.39	6.48	-
		•		1		1	1		
Mass flow in kg	/h								
20	60	70	93	121	154	-	-	-	-
30	50	59	80	104	133	167	206	-	-
40	41	50	68	90	116	146	181	221	-
45	-	45	63	84	109	137	170	208	-
50	-	-	58	79	102	130	161	197	-
55	-	-	53	73	96	122	152	186	-
60	-	-	-	67	90	115	144	177	-
65	-	-	-	-	84	109	137	168	
20	erformance (C.C 2.85	3.24	4.19	5.37	6.81	-	_		
		+				1	1	-	-
30	1.89	2.13	2.69	3.39	4.24	5.27	6.49	- 4.00	-
40	1.33	1.48	1.83	2.26	2.77	3.39	4.13	4.99	-
45	-	1.25	1.54	1.88	2.28	2.77	3.34	4.01	-
50	-	-	1.30	1.58	1.90	2.28	2.72	3.25	-
55	-	-	1.10	1.33	1.59	1.89	2.24	2.65	-
60 65	-	-	-	1.12	1.34	1.58	1.85	2.18	-
	-	-	-	-	1.12	1.32	1.54	1.80	-

#### Nominal performance at to = 5 °C, tc = 50 °C

	,	
Cooling capacity	5 453	W
Power input	2 396	W
Current consumption	5.12	Α
Mass flow	130	kg/h
C.O.P.	2.28	

to: Evaporating temperature at dew point

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

Pressure switch settings

Maximum HP switch setting	29.4	bar(g)
Minimum LP switch setting	0.2	bar(g)
LP pump down setting	1.3	bar(g)

#### Sound power data

Sound power level	0	dB(A)
With accoustic hood	0	dB(A)

tc: Condensing temperature at dew point



## Inverter reciprocating compressors VTZ086-G

## Performance data at 30 Hz, ARI rating conditions

## **R407C**

Cond. temp. in				Evapora	ting temperature	in °C (to)			
°C (tc)	-17.5	-15	-10	-5	0	5	10	15	
			•						
cooling capacity		1	1	T	1	1	T	T T	
20	3 338	3 914	5 276	6 945	8 953	-	-	-	-
30	2 585	3 060	4 174	5 536	7 178	9 132	11 432	-	-
40	1 952	2 360	3 298	4 424	5 771	7 371	9 259	11 465	-
45	-	2 034	2 911	3 946	5 172	6 623	8 330	10 328	-
50	-	-	2 539	3 502	4 626	5 945	7 491	9 297	-
55	-	-	-	3 079	4 119	5 324	6 727	8 360	-
60	-	-	-	2 661	3 638	4 748	6 025	7 505	-
65	-	-	-	-	3 167	4 203	5 375	6 719	-
ower input in V	v								
20	1 103	1 137	1 187	1 219	1 239	-	_	_	_
30	1 276	1 343	1 451	1 529	1 584	1 623	1 654	_	_
40	1 358	1 472	1 665	1 815	1 930	2 018	2 085	2 139	_
45	-	1 493	1 738	1 934	2 090	2 212	2 307	2 383	
50	_	-	1 782	2 031	2 233	2 396	2 526	2 631	_
55	_	_	-	2 099	2 355	2 565	2 737	2 877	
60		-	_	2 134	2 449	2 713	2 933	3 115	
65	_	_	-	-	2 511	2 835	3 109	3 341	_
00		_	_		2311	2 555	1 0 100	0 0 7 1	
Current consum	ption in A								
20	1.51	1.71	2.15	2.60	3.06	-	-	-	-
30	1.88	2.16	2.71	3.23	3.70	4.12	4.46	-	-
40	1.98	2.35	3.06	3.68	4.21	4.63	4.92	5.09	-
45	-	2.38	3.18	3.87	4.44	4.87	5.16	5.29	-
50	-	_	3.28	4.04	4.66	5.12	5.41	5.52	-
55	-	-	_	4.22	4.90	5.40	5.69	5.78	_
60	-	-	-	4.41	5.16	5.70	6.02	6.10	_
65	-	-	-	-	5.45	6.04	6.39	6.48	-
			1	ı	1				
/lass flow in kg/	h								
20	60	70	93	120	153	-	-	-	-
30	50	59	79	103	132	166	205	-	-
40	41	49	68	90	115	145	180	220	-
45	-	45	63	84	108	137	169	207	-
50	-	-	58	78	102	129	160	195	-
55	-	-	-	73	96	122	151	185	-
60	-	-	-	67	89	115	143	176	-
65	-	-	-	-	83	108	136	167	-
	_							•	
Coefficient of pe	•	1	1 4	5.70	7.00	1	1	1	
20	3.03	3.44	4.45	5.70	7.22	-	-	-	-
30	2.03	2.28	2.88	3.62	4.53	5.63	6.91	-	-
40	1.44	1.60	1.98	2.44	2.99	3.65	4.44	5.36	-
45	-	1.36	1.67	2.04	2.47	2.99	3.61	4.33	-
50	-	-	1.43	1.72	2.07	2.48	2.97	3.53	-
55	-	-	-	1.47	1.75	2.08	2.46	2.91	-
60	-	-	-	1.25	1.49	1.75	2.05	2.41	-
65	-	-	-	-	1.26	1.48	1.73	2.01	-

# Nominal performance at to = 7.2 °C, tc = 54.4 °C

Cooling capacity	5 993	W
Power input	2 623	W
Current consumption	5.52	Α
Mass flow	135	kg/h
C.O.P.	2.28	

to: Evaporating temperature at dew point

Rating conditions : Superheat = 11.1 K , Subcooling = 8.3 K

Pressure switch settings

Maximum HP switch setting	29.4	bar(g)
Minimum LP switch setting	0.2	bar(g)
LP pump down setting	1.3	bar(g)

#### Sound power data

Sound power level	0	dB(A)
With accoustic hood	0	dB(A)

tc: Condensing temperature at dew point



## Inverter reciprocating compressors VTZ086-G

## Performance data at 35 Hz, EN 12900 rating conditions

## **R407C**

Cond. temp. in				Evapora	ting temperature	in °C (to)			
°C (tc)	-17.5	-15	-10	-5	0	5	10	15	
			•		•	•	•		
Cooling capacity		T	Т		T	1	Т	T T	
20	3 400	4 028	5 504	7 292	9 418	-	-	-	-
30	2 700	3 238	4 491	5 999	7 788	9 883	12 310	-	-
40	2 056	2 529	3 610	4 888	6 390	8 141	10 167	12 493	-
45	-	2 180	3 193	4 375	5 753	7 350	9 194	11 310	-
50	-	-	2 780	3 878	5 143	6 601	8 275	10 193	-
55	-	-	2 359	3 387	4 552	5 881	7 400	9 132	-
60	-	-	-	2 891	3 969	5 183	6 557	8 117	-
65	-	-	-	-	3 384	4 495	5 738	7 137	-
Power input in V	v								
20	1 351	1 397	1 465	1 510	1 543	_	_	_	_
30	1 517	1 600	1 729	1 822	1 887	1 935	1 976	_	-
40	1 592	1 726	1 950	2 121	2 250	2 347	2 423	2 486	_
45	-	1 745	2 027	2 250	2 423	2 556	2 661	2 747	_
50	_	-	2 074	2 355	2 580	2 759	2 900	3 016	_
55	_	_	2 083	2 432	2 717	2 948	3 135	3 288	_
60	_	-	-	2 473	2 826	3 117	3 357	3 556	_
65	_	_	-	-	2 901	3 260	3 561	3 813	_
		1	ı	1	_ 50.				
Current consum	ption in A								
20	2.24	2.41	2.78	3.17	3.55	-	-	-	-
30	2.61	2.86	3.35	3.81	4.23	4.59	4.88	-	-
40	2.73	3.08	3.74	4.32	4.81	5.21	5.49	5.64	-
45	-	3.12	3.87	4.53	5.08	5.50	5.79	5.93	-
50	-	-	3.98	4.72	5.33	5.80	6.11	6.25	-
55	-	-	4.05	4.89	5.57	6.09	6.44	6.58	_
60	_	-	_	5.04	5.81	6.39	6.78	6.94	-
65	-	-	-	-	6.04	6.70	7.14	7.33	-
					•				
Mass flow in kg/	h								
20	65	77	103	135	172	-	-	-	-
30	56	67	92	120	154	193	237	-	-
40	47	58	81	108	139	174	214	259	-
45	-	53	76	102	131	165	203	246	-
50	-	-	70	95	124	157	193	234	-
55	-	-	63	89	117	148	183	223	-
60	-	-	-	81	109	140	174	211	-
65	-	-	-	-	101	131	164	200	-
•		•	•	•	•	•	•		
Coefficient of pe	•	· ·	1	T	Ţ	1	1	1	
20	2.52	2.88	3.76	4.83	6.10	-	-	-	-
30	1.78	2.02	2.60	3.29	4.13	5.11	6.23	-	-
40	1.29	1.47	1.85	2.30	2.84	3.47	4.20	5.02	-
45	-	1.25	1.58	1.94	2.37	2.88	3.46	4.12	-
50	-	-	1.34	1.65	1.99	2.39	2.85	3.38	-
55	-	-	1.13	1.39	1.68	2.00	2.36	2.78	-
60	-	-	-	1.17	1.40	1.66	1.95	2.28	-
65	-	_	_	-	1.17	1.38	1.61	1.87	-

## Nominal performance at to = 5 °C, tc = 50 °C

-,		
Cooling capacity	6 601	W
Power input	2 759	W
Current consumption	5.80	Α
Mass flow	157	kg/h
C.O.P.	2.39	

to: Evaporating temperature at dew point

Pressure switch settings

Maximum HP switch setting	29.4	bar(g)
Minimum LP switch setting	0.2	bar(g)
LP pump down setting	1.3	bar(g)

#### Sound power data

Sound power level	0	dB(A)
With accoustic hood	0	dB(A)

tc: Condensing temperature at dew point

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



## Inverter reciprocating compressors VTZ086-G

## Performance data at 35 Hz, ARI rating conditions

## **R407C**

Cond. temp. in	Evaporating temperature in °C (to)								
°C (tc)	-17.5	-15	-10	-5	0	5	10	15	
Cooling canacity	in W								
Cooling capacity 20	3 615	4 282	5 845	7 737	9 984	_	_	<u> </u>	
30	2 894	3 469	4 806	6 413	8 316	10 543	13 120	-	
								†	
40	2 226	2 737	3 901	5 276	6 888	8 765	10 933	13 420	
45	-	2 375	3 472	4 751	6 237	7 959	9 943	12 216	-
50	-	-	3 045	4 241	5 616	7 196	9 008	11 081	-
55	-	-	-	3 735	5 012	6 464	8 119	10 004	-
60	-	-	-	3 222	4 415	5 753	7 264	8 976	-
65	-	-	-	-	3 814	5 053	6 435	7 988	-
Power input in W	1								
20	1 351	1 397	1 465	1 510	1 543	-	-	-	-
30	1 517	1 600	1 729	1 822	1 887	1 935	1 976	-	-
40	1 592	1 726	1 950	2 121	2 250	2 347	2 423	2 486	-
45	-	1 745	2 027	2 250	2 423	2 556	2 661	2 747	-
50	-	-	2 074	2 355	2 580	2 759	2 900	3 016	-
55	-	-	-	2 432	2 717	2 948	3 135	3 288	-
60	-	-	-	2 473	2 826	3 117	3 357	3 556	-
65	-	-	-	-	2 901	3 260	3 561	3 813	-
Current consum		T		T		T	I	1	
20	2.24	2.41	2.78	3.17	3.55	-	-	-	-
30	2.61	2.86	3.35	3.81	4.23	4.59	4.88	-	-
40	2.73	3.08	3.74	4.32	4.81	5.21	5.49	5.64	-
45	-	3.12	3.87	4.53	5.08	5.50	5.79	5.93	-
50	-	-	3.98	4.72	5.33	5.80	6.11	6.25	-
55	-	-	-	4.89	5.57	6.09	6.44	6.58	-
60	-	-	-	5.04	5.81	6.39	6.78	6.94	-
65	-	-	-	-	6.04	6.70	7.14	7.33	-
Mass flow in kg/l	า								
20	65	76	103	134	171	_	_	_	_
30	56	67	91	120	153	191	235	_	-
40	47	57	81	107	138	173	212	257	_
45	-	52	75	101	131	164	202	245	-
50	_	_	69	95	124	156	192	233	_
55	_	_		88	116	147	182	221	_
60		-	_	81	109	139	173	210	
65	-	_	_	-	100	130	163	199	
· · ·									
Coefficient of per	•	1	2.00	F 40	6.47	<u> </u>			
20	2.68	3.07	3.99	5.12	6.47	1	- 0.04	-	-
30	1.91	2.17	2.78	3.52	4.41	5.45	6.64		-
40	1.40	1.59	2.00	2.49	3.06	3.73	4.51	5.40	-
45	-	1.36	1.71	2.11	2.57	3.11	3.74	4.45	-
50	-	-	1.47	1.80	2.18	2.61	3.11	3.67	-
55	-	-	-	1.54	1.84	2.19	2.59	3.04	-
60	-	-	-	1.30	1.56	1.85	2.16	2.52	-
65	-	-	-	-	1.31	1.55	1.81	2.09	-

#### Nominal performance at to = 7.2 °C, tc = 54.4 °C

recinitial perioritianee at to	0,	U-1 U		
Cooling capacity		7 259	W	
Power input		3 010	W	
Current consumption		6.23	Α	
Mass flow		163	kg/h	
C.O.P.		2.41		

to: Evaporating temperature at dew point

Rating conditions : Superheat = 11.1 K , Subcooling = 8.3 K

Pressure switch settings

Maximum HP switch setting	29.4	bar(g)
Minimum LP switch setting	0.2	bar(g)
LP pump down setting	1.3	bar(g)

#### Sound power data

Sound power level	0	dB(A)
With accoustic hood	0	dB(A)

tc: Condensing temperature at dew point



## Inverter reciprocating compressors VTZ086-G

## Performance data at 40 Hz, EN 12900 rating conditions

**R407C** 

Cond. temp. in				Evapora	ating temperature	in °C (to)			
°C (tc)	-17.5	-15	-10	-5	0	5	10	15	
Caaling samesite	. : 10/								
Cooling capacity	3 701	4 410	6 069	8 068	10 429	_	_		
30	3 016	3 642	5 090	6 817	8 849	11 207	13 916	-	<u> </u>
								<del> </del>	
40	2 337	2 898	4 170	5 664	7 403	9 409	11 706	14 318	-
45		2 515	3 714	5 104	6 710	8 554	10 660	13 050	-
50	-	-	3 249	4 546	6 028	7 719	9 642	11 820	-
55	-	-	2 769	3 981	5 348	6 895	8 645	10 620	-
60	-	-	-	3 401	4 663	6 075	7 661	9 442	-
65	-	-	-	-	3 965	5 252	6 682	8 279	-
Power input in V	v								
20	1 594	1 650	1 737	1 796	1 840	-	-	-	-
30	1 758	1 854	2 006	2 114	2 191	2 249	2 299	-	-
40	1 831	1 984	2 237	2 430	2 575	2 684	2 770	2 844	-
45	-	2 002	2 319	2 568	2 761	2 909	3 026	3 123	-
50	-	-	2 370	2 684	2 933	3 130	3 286	3 415	-
55	-	-	2 383	2 770	3 085	3 338	3 544	3 713	-
60	-	-	-	2 820	3 208	3 528	3 791	4 010	-
65	=	-	-	-	3 297	3 692	4 022	4 299	-
Current consum	ption in A	1	T	T	T	T	•		
20	2.93	3.08	3.39	3.72	4.05	-	-	-	-
30	3.29	3.52	3.96	4.37	4.75	5.07	5.31	-	-
40	3.45	3.78	4.39	4.93	5.40	5.78	6.04	6.18	-
45	-	3.83	4.54	5.17	5.70	6.12	6.41	6.56	-
50	-	-	4.65	5.37	5.98	6.46	6.78	6.95	-
55	-	-	4.71	5.54	6.23	6.78	7.15	7.35	-
60	-	-	-	5.67	6.46	7.08	7.52	7.76	-
65	-	-	-	-	6.65	7.36	7.87	8.16	-
Maga flow in ka/	<b>L</b>								
Mass flow in kg/		84	114	149	190	<u> </u>	_	_	
30	71 63	75	114 104	137	175	218	268	-	
40	54	66	94	125	161	201	246	297	-
45	- 54	61	88	119	153	192	236	284	-
50	<u> </u>	-	81	112	146	183	225	271	<u> </u>
55		-	74	104	137	174	214	259	
60	-	-	-	96	128	164	203	246	<u>-</u>
65	-	-	-	-	118	153	191	232	<u> </u>
00		_			110	100	101	202	
Coefficient of pe	•	1	Т	Т		1		<del> </del>	
20	2.32	2.67	3.50	4.49	5.67	-	-	-	-
30	1.72	1.96	2.54	3.22	4.04	4.98	6.05	-	-
40	1.28	1.46	1.86	2.33	2.88	3.51	4.23	5.03	-
45	-	1.26	1.60	1.99	2.43	2.94	3.52	4.18	-
50	-	-	1.37	1.69	2.06	2.47	2.93	3.46	-
55	-	-	1.16	1.44	1.73	2.07	2.44	2.86	-
60	-	-	-	1.21	1.45	1.72	2.02	2.35	-
65	-	-	-	-	1.20	1.42	1.66	1.93	-
						_			
Nominal perform	nance at to = 5	℃, tc = 50 °C				Pressure switch	settings		

-,			
Cooling capacity	7 719	W	
Power input	3 130	W	
Current consumption	6.46	Α	
Mass flow	183	kg/h	
C.O.P.	2.47		

to: Evaporating temperature at dew point

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

Maximum HP switch setting	29.4	bar(g)
Minimum LP switch setting	0.2	bar(g)
LP pump down setting	1.3	bar(g)

#### Sound power data

Sound power level	0	dB(A)
With accoustic hood	0	dB(A)

tc: Condensing temperature at dew point



## Inverter reciprocating compressors VTZ086-G

## Performance data at 40 Hz, ARI rating conditions

## **R407C**

Cond. temp. in	Evaporating temperature in °C (to)								
°C (tc)	-17.5	-15	-10	-5	0	5	10	15	
Cooling capacity	in W								
20	3 935	4 688	6 445	8 560	11 056	_	<u> </u>	<u> </u>	_
30	3 233	3 902	5 446	7 288	9 449	11 956	14 831	_	_
40	2 532	3 136	4 507	6 113	7 980	10 130	12 589	15 381	
45	2 552	2 740	4 039	5 543	7 276	9 263	11 528	14 096	<u> </u>
			1			1		1	-
50	-	-	3 560	4 971	6 582	8 415	10 496	12 849	-
55	-	-	-	4 391	5 888	7 578	9 485	11 634	-
60	-	-	-	3 791	5 187	6 744	8 487	10 441	-
65	-	-	-	-	4 468	5 904	7 494	9 265	-
Power input in W	1								
20	1 594	1 650	1 737	1 796	1 840	-	-	-	-
30	1 758	1 854	2 006	2 114	2 191	2 249	2 299	-	-
40	1 831	1 984	2 237	2 430	2 575	2 684	2 770	2 844	-
45	-	2 002	2 319	2 568	2 761	2 909	3 026	3 123	
50	-	-	2 370	2 684	2 933	3 130	3 286	3 415	-
55	-	-	-	2 770	3 085	3 338	3 544	3 713	-
60	-	-	-	2 820	3 208	3 528	3 791	4 010	-
65	-	-	-	-	3 297	3 692	4 022	4 299	-
		•	•						
Current consum					1			1	
20	2.93	3.08	3.39	3.72	4.05	-	-	-	-
30	3.29	3.52	3.96	4.37	4.75	5.07	5.31	-	-
40	3.45	3.78	4.39	4.93	5.40	5.78	6.04	6.18	-
45	-	3.83	4.54	5.17	5.70	6.12	6.41	6.56	-
50	-	-	4.65	5.37	5.98	6.46	6.78	6.95	-
55	-	-	-	5.54	6.23	6.78	7.15	7.35	-
60	-	-	-	5.67	6.46	7.08	7.52	7.76	-
65	-	-	-	-	6.65	7.36	7.87	8.16	-
Mass flow in kg/h	n								
20	71	83	113	148	189	_	_		
30	63	75	103	136	174	217	266	_	
40	53	66	93	124	160	200	245	295	
45	-	60	87	118	152	191	234	282	
		+	†			†	224	270	
50		-	81	111	145	182			
55	-	-	-	104	137	173	213	257	-
60	-	-	-	95	127	163	202	244	-
65	-	-	-	-	117	152	190	231	-
Coefficient of pe	rformance (C.C	D.P.)							
20	2.47	2.84	3.71	4.77	6.01	-	-	-	-
30	1.84	2.10	2.71	3.45	4.31	5.32	6.45	-	-
40	1.38	1.58	2.02	2.52	3.10	3.77	4.55	5.41	-
45	-	1.37	1.74	2.16	2.64	3.18	3.81	4.51	-
50	-	-	1.50	1.85	2.24	2.69	3.19	3.76	-
55	-	-	-	1.58	1.91	2.27	2.68	3.13	-
60	-	-	-	1.34	1.62	1.91	2.24	2.60	-
65	-	-	-	-	1.36	1.60	1.86	2.16	-

#### Nominal performance at to = 7.2 °C, tc = 54.4 °C

rediffical portormation at to 7:2 0;	10 04.4 0	
Cooling capacity	8 497	W
Power input	3 407	W
Current consumption	6.92	Α
Mass flow	191	kg/h
C.O.P.	2.49	

to: Evaporating temperature at dew point

Rating conditions : Superheat = 11.1 K , Subcooling = 8.3 K

Pressure switch settings

Maximum HP switch setting	29.4	bar(g)
Minimum LP switch setting	0.2	bar(g)
LP pump down setting	1.3	bar(g)

### Sound power data

Sound power level	0	dB(A)
With accoustic hood	0	dB(A)

tc: Condensing temperature at dew point



## Inverter reciprocating compressors VTZ086-G

## Performance data at 45 Hz, EN 12900 rating conditions

**R407C** 

Cond. temp. in	Evaporating temperature in °C (to)								
°C (tc)	-17.5	-15	-10	-5	0	5	10	15	
Cooling canacity	ı in W								
Cooling capacity 20	4 041	4 828	6 664	8 874	11 479	_	<u> </u>	<u> </u>	_
30	3 361	4 067	5 695	7 633	9 904	12 533	15 542	-	
								†	
40	2 647	3 286	4 733	6 427	8 392	10 651	13 228	16 148	-
45	-	2 872	4 239	5 821	7 643	9 728	12 099	14 782	-
50	-	-	3 728	5 206	6 891	8 808	10 981	13 433	-
55	-	-	3 194	4 573	6 129	7 886	9 866	12 095	-
60	-	-	-	3 919	5 352	6 955	8 750	10 762	-
65	-	-	-	-	4 553	6 008	7 625	9 427	-
Power input in W	ı								
20	1 831	1 898	2 002	2 075	2 130	-	-	-	-
30	1 999	2 108	2 281	2 406	2 496	2 565	2 625	-	-
40	2 074	2 244	2 525	2 741	2 904	3 028	3 126	3 212	-
45	-	2 265	2 615	2 890	3 104	3 270	3 402	3 512	
50	-	-	2 672	3 016	3 291	3 509	3 683	3 829	-
55	-	-	2 691	3 114	3 458	3 737	3 964	4 153	-
60	-	-	-	3 173	3 597	3 946	4 236	4 478	-
65	-	-	-	-	3 700	4 130	4 491	4 796	-
Current consum		0.74	0.00	4.00	4.54		1	1	
20	3.58	3.71	3.98	4.26	4.54		-	-	-
30	3.95	4.15	4.55	4.92	5.26	5.54	5.76	-	-
40	4.13	4.44	5.01	5.53	5.98	6.33	6.59	6.72	-
45	-	4.50	5.18	5.79	6.31	6.72	7.01	7.17	-
50	-	-	5.30	6.01	6.61	7.09	7.44	7.63	-
55	-	-	5.35	6.18	6.88	7.44	7.85	8.09	-
60	-	-	-	6.29	7.10	7.76	8.24	8.54	-
65	-	-	-	-	7.27	8.03	8.60	8.97	-
Mass flow in kg/l	h								
20	78	92	125	164	209	-	-	-	-
30	70	84	116	153	196	244	299	-	-
40	61	75	106	142	182	227	278	335	-
45	-	69	100	135	175	218	267	322	-
50	-	-	93	128	166	209	256	308	-
55	-	-	86	120	157	199	244	295	-
60	-	_	-	110	147	188	232	280	-
65	-	-	-	-	136	175	218	264	-
20	2.21	2.54	3.33	4.28	5.39	_	-	_	
30	1.68	1.93	2.50	3.17	3.97	4.89	5.92	-	
40	1.08	1.93	1.87	2.35	2.89	3.52	4.23	5.03	
									-
45	-	1.27	1.62	2.01	2.46	2.98	3.56	4.21	-
50	-	-	1.40	1.73	2.09	2.51	2.98	3.51	-
55	-	-	1.19	1.47	1.77	2.11	2.49	2.91	-
60	-	-	-	1.23	1.49	1.76	2.07	2.40	-
65	-	-	-	-	1.23	1.45	1.70	1.97	-

#### Nominal performance at to = 5 °C, tc = 50 °C

Cooling capacity	8 808	W
Power input	3 509	W
Current consumption	7.09	Α
Mass flow	209	kg/h
C.O.P.	2.51	

to: Evaporating temperature at dew point

Pressure switch settings

Maximum HP switch setting	29.4	bar(g)
Minimum LP switch setting	0.2	bar(g)
LP pump down setting	1.3	bar(g)

## Sound power data

I	Sound power level	0	dB(A)
	With accoustic hood	0	dB(A)

tc: Condensing temperature at dew point

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



## Inverter reciprocating compressors VTZ086-G

## Performance data at 45 Hz, ARI rating conditions

## **R407C**

Cond. temp. in				Evapora	ating temperature	in °C (to)			
°C (tc)	-17.5	-15	-10	-5	0	5	10	15	
			•						
ooling capacity		1	T					1	
20	4 298	5 131	7 077	9 415	12 168	-	-	-	-
30	3 603	4 357	6 095	8 160	10 576	13 370	16 564	-	-
40	2 867	3 556	5 115	6 937	9 046	11 468	14 226	17 346	-
45	-	3 128	4 610	6 321	8 287	10 534	13 085	15 966	-
50	-	-	4 084	5 693	7 524	9 602	11 953	14 603	-
55	-	-	-	5 044	6 748	8 666	10 825	13 250	-
60	-	-	-	4 368	5 953	7 719	9 694	11 901	-
65	-	-	-	-	5 130	6 754	8 552	10 551	-
ower input in V	v								
20	1 831	1 898	2 002	2 075	2 130	-	_	-	-
30	1 999	2 108	2 281	2 406	2 496	2 565	2 625	-	-
40	2 074	2 244	2 525	2 741	2 904	3 028	3 126	3 212	-
45	-	2 265	2 615	2 890	3 104	3 270	3 402	3 512	-
50	-	-	2 672	3 016	3 291	3 509	3 683	3 829	-
55	-	-	-	3 114	3 458	3 737	3 964	4 153	-
60	-	-	-	3 173	3 597	3 946	4 236	4 478	-
65	-	-	-	-	3 700	4 130	4 491	4 796	-
		•	•						
urrent consum	ption in A								
20	3.58	3.71	3.98	4.26	4.54	-	-	-	-
30	3.95	4.15	4.55	4.92	5.26	5.54	5.76	-	-
40	4.13	4.44	5.01	5.53	5.98	6.33	6.59	6.72	-
45	-	4.50	5.18	5.79	6.31	6.72	7.01	7.17	-
50	-	-	5.30	6.01	6.61	7.09	7.44	7.63	-
55	-	-	-	6.18	6.88	7.44	7.85	8.09	-
60	-	-	-	6.29	7.10	7.76	8.24	8.54	-
65	-	-	-	-	7.27	8.03	8.60	8.97	-
lass flow in kg/		1	1	Т	Т	1	1	T	
20	77	91	124	163	208	-	-	-	-
30	70	84	115	152	195	243	297	-	-
40	61	75	106	141	181	226	276	333	-
45	-	69	100	135	174	217	266	320	-
50	-	-	93	127	165	208	255	307	-
55	-	-	-	119	156	198	243	293	-
60	-	-	-	110	146	186	230	278	-
65	-	-	-	-	135	174	216	263	-
coefficient of pe	rformance (C.C	D.P.)							
20	2.35	2.70	3.54	4.54	5.71	-	-	-	-
30	1.80	2.07	2.67	3.39	4.24	5.21	6.31	-	-
40	1.38	1.58	2.03	2.53	3.12	3.79	4.55	5.40	-
45	-	1.38	1.76	2.19	2.67	3.22	3.85	4.55	-
50	-	-	1.53	1.89	2.29	2.74	3.25	3.81	-
55	-	-	-	1.62	1.95	2.32	2.73	3.19	-
60	-	-	-	1.38	1.66	1.96	2.29	2.66	-
65	-	_	_	-	1.39	1.64	1.90	2.20	_

# Nominal performance at to = 7.2 °C, tc = 54.4 °C

	,			
Cooling capacity		9 707	W	
Power input		3 813	W	
Current consumption		7.60	Α	
Mass flow		218	kg/h	
C.O.P.		2.55		

to: Evaporating temperature at dew point

Rating conditions : Superheat = 11.1 K , Subcooling = 8.3 K

Pressure switch settings

Maximum HP switch setting	29.4	bar(g)
Minimum LP switch setting	0.2	bar(g)
LP pump down setting	1.3	bar(g)

### Sound power data

Sound power level	0	dB(A)
With accoustic hood	0	dB(A)

tc: Condensing temperature at dew point



## Inverter reciprocating compressors VTZ086-G

## Performance data at 50 Hz, EN 12900 rating conditions

**R407C** 

Cond. temp. in	Evaporating temperature in °C (to)								
°C (tc)	-17.5	-15	-10	-5	0	5	10	15	
lin	. : \4/								
20 20	4 422	5 281	7 289	9 708	12 566	_	_		
		1	1	1			-	-	
30	3 735	4 513	6 309	8 447	10 954	13 859	17 189	+	
40	2 985	3 694	5 299	7 177	9 358	11 867	14 732	17 982	-
45	-	3 251	4 769	6 526	8 551	10 871	13 513	16 505	-
50	-	-	4 215	5 857	7 732	9 868	12 292	15 032	-
55	-	-	3 633	5 165	6 896	8 853	11 064	13 557	-
60	-	-	-	4 444	6 036	7 820	9 825	12 077	-
65	-	-	-	-	5 147	6 765	8 568	10 584	-
Power input in V	ı				•				
20	2 062	2 140	2 261	2 348	2 414	-	-	-	-
30	2 238	2 360	2 555	2 698	2 803	2 883	2 953	-	-
40	2 323	2 507	2 815	3 054	3 237	3 379	3 492	3 591	-
45		2 534	2 913	3 214	3 452	3 638	3 788	3 915	_
50	-	-	2 980	3 353	3 654	3 896	4 092	4 257	-
55	-	-	3 006	3 462	3 836	4 143	4 395	4 607	-
60	-	-	-	3 533	3 991	4 372	4 690	4 960	-
65	-	-	-	-	4 110	4 575	4 969	5 306	-
	_								
Current consum		1.00		1 . 70	T 00		1		
20	4.19	4.30	4.54	4.78	5.02	-	-	-	-
30	4.56	4.75	5.11	5.46	5.76	6.02	6.21	-	-
40	4.76	5.06	5.61	6.11	6.53	6.88	7.12	7.25	-
45	-	5.13	5.80	6.39	6.90	7.30	7.60	7.76	-
50	-	-	5.92	6.63	7.23	7.71	8.07	8.28	-
55	-	-	5.98	6.81	7.52	8.09	8.52	8.79	-
60	-	-	-	6.91	7.74	8.43	8.94	9.28	-
65	-	-	-	-	7.90	8.70	9.32	9.75	-
Mass flow in kg/	h								
20	85	101	137	179	229	-	-	-	-
30	78	93	129	169	216	270	331	-	_
40	69	84	119	158	203	253	310	373	-
45	-	78	113	152	195	244	299	359	-
50	-	-	106	144	187	234	287	345	-
55	-	-	97	135	177	223	274	330	-
60	-	-	-	125	166	211	260	314	-
65	-	-	-	-	153	197	245	297	-
	_								
20 20	rformance (C.C 2.14	2.47	3.22	4.13	5.21	_	_		
30	1.67		2.47	3.13		1	5.82	-	
40		1.91	1.88		3.91 2.89	4.81 3.51	4.22	<del>                                     </del>	-
	1.29	1.47		2.35		+		5.01	-
45 50	-	1.28	1.64	2.03	2.48	2.99	3.57	4.22	-
50	-	-	1.41	1.75	2.12	2.53	3.00	3.53	-
55	-	-	1.21	1.49	1.80	2.14	2.52	2.94	-
60	-	-	-	1.26	1.51	1.79	2.09	2.43	-
65	-	-	-	-	1.25	1.48	1.72	1.99	-

#### Nominal performance at to = 5 °C, tc = 50 °C

	•••	
Cooling capacity	9 868	W
Power input	3 896	W
Current consumption	7.71	Α
Mass flow	234	kg/h
C.O.P.	2.53	

to: Evaporating temperature at dew point

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

Pressure switch settings

Maximum HP switch setting	29.4	bar(g)
Minimum LP switch setting	0.2	bar(g)
LP pump down setting	1.3	bar(g)

### Sound power data

Sound power level	0	dB(A)
With accoustic hood	0	dB(A)

tc: Condensing temperature at dew point



## Inverter reciprocating compressors VTZ086-G

## Performance data at 50 Hz, ARI rating conditions

## **R407C**

Cond. temp. in				Evapora	ating temperature	in °C (to)			
°C (tc)	-17.5	-15	-10	-5	0	5	10	15	
Cooling capacity		T	T	1		-		<u> </u>	
20	4 702	5 613	7 741	10 301	13 321	-	-	-	-
30	4 004	4 835	6 751	9 029	11 698	14 785	18 320	-	-
40	3 233	3 997	5 726	7 747	10 087	12 777	15 844	19 317	-
45	-	3 541	5 186	7 087	9 272	11 771	14 613	17 827	-
50	-	-	4 618	6 405	8 442	10 758	13 381	16 341	-
55	-	-	-	5 697	7 592	9 730	12 140	14 852	-
60	-	-	-	4 953	6 713	8 680	10 884	13 355	-
65	-	-	-	-	5 800	7 604	9 609	11 845	-
Power input in W	v								
20	2 062	2 140	2 261	2 348	2 414	_	_	-	_
30	2 238	2 360	2 555	2 698	2 803	2 883	2 953	_	_
40	2 323	2 507	2 815	3 054	3 237	3 379	3 492	3 591	-
45	-	2 534	2 913	3 214	3 452	3 638	3 788	3 915	-
50	_	-	2 980	3 353	3 654	3 896	4 092	4 257	_
55	_	-	-	3 462	3 836	4 143	4 395	4 607	
60		-		3 533	3 991	4 372	4 690	4 960	
65	<u>-</u>	-	_	-	4 110	4 575	4 969	5 306	
00		1	I.	1	1110	1070	1 000	0 000	
urrent consum	ption in A								
20	4.19	4.30	4.54	4.78	5.02	-	_	-	-
30	4.56	4.75	5.11	5.46	5.76	6.02	6.21	-	-
40	4.76	5.06	5.61	6.11	6.53	6.88	7.12	7.25	-
45	-	5.13	5.80	6.39	6.90	7.30	7.60	7.76	_
50	-	_	5.92	6.63	7.23	7.71	8.07	8.28	_
55	-	-	-	6.81	7.52	8.09	8.52	8.79	_
60	_	_	-	6.91	7.74	8.43	8.94	9.28	-
65	-	_	-	-	7.90	8.70	9.32	9.75	-
			1	1	I	1			
/lass flow in kg/l	h								
20	84	100	136	178	228	_	_	_	-
30	77	93	128	168	215	268	329	-	-
40	68	84	118	157	202	252	308	370	-
45	-	78	112	151	194	243	297	357	-
50	-	-	105	143	186	233	285	343	_
55	-	-	-	134	176	222	272	328	_
60	-	-	-	124	165	210	259	312	-
65	-	-	-	-	152	196	243	295	-
•		1		<u> </u>					
coefficient of pe	•	1	0.40	4.00	5.50	1		<del>                                     </del>	
20	2.28	2.62	3.42	4.39	5.52	- 5.40	-	-	-
30	1.79	2.05	2.64	3.35	4.17	5.13	6.20	-	-
40	1.39	1.59	2.03	2.54	3.12	3.78	4.54	5.38	-
45	-	1.40	1.78	2.20	2.69	3.24	3.86	4.55	-
50	-	-	1.55	1.91	2.31	2.76	3.27	3.84	-
55	-	-	-	1.65	1.98	2.35	2.76	3.22	-
60	-	-	-	1.40	1.68	1.99	2.32	2.69	-
65	-	-	-	-	1.41	1.66	1.93	2.23	-
	<del>-</del>	0.00 4= = = 1.12=				B			
ominal perform	nance at to = 7.	2 °C, tc = 54.4 °C		_	Г	Pressure switch		20.4	h = =/=)

Cooling capacity	10 890	W
Power input	4 228	W
Current consumption	8.25	Α
Mass flow	245	kg/h
C.O.P.	2.58	

to: Evaporating temperature at dew point

Maximum HP switch setting	29.4	bar(g)
Minimum LP switch setting	0.2	bar(g)
LP pump down setting	1.3	bar(g)

### Sound power data

Sound power level	0	dB(A)
With accoustic hood	0	dB(A)

tc: Condensing temperature at dew point

Rating conditions : Superheat = 11.1 K , Subcooling = 8.3 K



## Inverter reciprocating compressors VTZ086-G

## Performance data at 55 Hz, EN 12900 rating conditions

## **R407C**

Cond. temp. in				Evapora	ating temperature	in °C (to)			
°C (tc)	-17.5	-15	-10	-5	0	5	10	15	
		•	•	•	•	•	•		
cooling capacity		T	T	1		T	1		
20	4 842	5 769	7 944	10 573	13 691	-	-	-	-
30	4 137	4 981	6 930	9 258	11 998	15 187	18 857	-	-
40	3 351	4 121	5 866	7 914	10 300	13 056	16 219	19 822	-
45	-	3 652	5 303	7 219	9 435	11 984	14 901	18 220	-
50	-	-	4 711	6 501	8 552	10 899	13 576	16 617	-
55	-	-	4 087	5 755	7 647	9 797	12 239	15 007	-
60	-	-	-	4 976	6 715	8 673	10 885	13 386	-
65	-	-	-	-	5 749	7 521	9 509	11 747	-
Power input in V	v								
20	2 288	2 376	2 514	2 615	2 691	-	-	_	
30	2 478	2 610	2 827	2 990	3 111	3 204	3 283		_
40	2 576	2 773	3 107	3 370	3 575	3 737	3 868	3 980	_
45	-	2 809	3 215	3 543	3 805	4 015	4 186	4 331	
50	<u>-</u>	-	3 292	3 694	4 023	4 291	4 512	4 699	_
55	_	-	3 329	3 816	4 220	4 557	4 838	5 077	
60	_	-	-	3 900	4 391	4 805	5 155	5 455	_
65	_	-	_	-	4 526	5 027	5 457	5 828	_
00	· · · · · · · · · · · · · · · · · · ·			_	1 . 520	1 0 021	1 0 107	3 320	
Current consum	ption in A								
20	4.77	4.86	5.08	5.30	5.51	_	-	_	-
30	5.13	5.31	5.65	5.97	6.26	6.50	6.67	-	-
40	5.36	5.64	6.18	6.66	7.08	7.41	7.65	7.78	-
45	-	5.73	6.38	6.97	7.47	7.87	8.16	8.33	-
50	-	-	6.52	7.23	7.83	8.32	8.68	8.90	-
55	-	-	6.58	7.42	8.14	8.73	9.17	9.46	_
60	-	_	_	7.53	8.38	9.08	9.63	10.00	-
65	-	-	-	-	8.54	9.37	10.03	10.50	-
Į.		I	I			I			
Mass flow in kg/	'h								
20	93	110	149	195	249	-	-	-	-
30	86	103	141	186	237	296	363	-	-
40	77	94	132	175	223	279	341	411	-
45	-	88	125	168	215	269	329	397	-
50	-	-	118	160	207	259	317	382	-
55	-	-	109	151	196	247	303	365	-
60	-	-	-	140	185	234	288	348	-
65	-	-	-	-	171	219	272	329	-
J.		•	•	•		•	•	-	
Coefficient of pe	,	D.P.)	1	T		1	1		
20	2.12	2.43	3.16	4.04	5.09	-	-	-	-
30	1.67	1.91	2.45	3.10	3.86	4.74	5.74	-	-
40	1.30	1.49	1.89	2.35	2.88	3.49	4.19	4.98	-
45	-	1.30	1.65	2.04	2.48	2.98	3.56	4.21	-
50	-	-	1.43	1.76	2.13	2.54	3.01	3.54	-
55	-	-	1.23	1.51	1.81	2.15	2.53	2.96	-
60	-	-	-	1.28	1.53	1.81	2.11	2.45	-
65	_	_	_	_	1.27	1.50	1.74	2.02	_

## Nominal performance at to = 5 °C, tc = 50 °C

-,		
Cooling capacity	10 899	W
Power input	4 291	W
Current consumption	8.32	Α
Mass flow	259	kg/h
C.O.P.	2.54	

to: Evaporating temperature at dew point

Pressure switch settings

Maximum HP switch setting	29.4	bar(g)
Minimum LP switch setting	0.2	bar(g)
LP pump down setting	1.3	bar(g)

## Sound power data

I	Sound power level	0	dB(A)
	With accoustic hood	0	dB(A)

tc: Condensing temperature at dew point

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



## Inverter reciprocating compressors VTZ086-G

## Performance data at 55 Hz, ARI rating conditions

## **R407C**

Cond. temp. in				Evapora	ating temperature	in °C (to)			
°C (tc)	-17.5	-15	-10	-5	0	5	10	15	
cooling capacity		T	1	1	T	T	1		
20	5 149	6 132	8 436	11 218	14 514	-	-	-	-
30	4 435	5 336	7 415	9 896	12 813	16 201	20 097	-	-
40	3 630	4 460	6 340	8 542	11 103	14 057	17 442	21 293	-
45	-	3 977	5 767	7 839	10 230	12 976	16 114	19 679	-
50	-	-	5 161	7 109	9 337	11 882	14 778	18 063	-
55	-	-	-	6 348	8 419	10 767	13 428	16 440	-
60	-	-	-	5 547	7 468	9 627	12 059	14 802	-
65	-	-	-	-	6 478	8 454	10 665	13 147	-
ower input in V	v								
20	2 288	2 376	2 514	2 615	2 691	-	-	_	_
30	2 478	2 610	2 827	2 990	3 111	3 204	3 283		_
40	2 576	2 773	3 107	3 370	3 575	3 737	3 868	3 980	_
45	-	2 809	3 215	3 543	3 805	4 015	4 186	4 331	
50	<u>-</u>	-	3 292	3 694	4 023	4 291	4 512	4 699	_
55	_	_	-	3 816	4 220	4 557	4 838	5 077	
60	-	-	-	3 900	4 391	4 805	5 155	5 455	
65	_	_	_	-	4 526	5 027	5 457	5 828	
00	_				4 020	3 027	0 407	3 020	
Current consum	ption in A								
20	4.77	4.86	5.08	5.30	5.51	_	_	_	_
30	5.13	5.31	5.65	5.97	6.26	6.50	6.67	_	-
40	5.36	5.64	6.18	6.66	7.08	7.41	7.65	7.78	-
45	-	5.73	6.38	6.97	7.47	7.87	8.16	8.33	_
50	-	-	6.52	7.23	7.83	8.32	8.68	8.90	
55		-	-	7.42	8.14	8.73	9.17	9.46	
60	-	_	-	7.53	8.38	9.08	9.63	10.00	_
65	_	-	_	-	8.54	9.37	10.03	10.50	_
00			I		0.01	0.07	10.00	10.00	
Mass flow in kg/	h								
20	93	109	148	194	248	-	_	_	_
30	86	103	140	185	236	294	361	-	-
40	77	94	131	174	222	277	339	408	_
45	-	88	125	167	214	268	327	394	-
50	-	-	117	159	205	257	315	379	-
55	-	-	-	150	195	246	301	363	-
60	-	-	-	139	184	233	287	346	-
65	-	-	-	-	170	218	270	327	_
		1	1	1					
Coefficient of pe		T .	1	1	T	T	1		
20	2.25	2.58	3.36	4.29	5.39	-	-	-	-
30	1.79	2.04	2.62	3.31	4.12	5.06	6.12	-	-
40	1.41	1.61	2.04	2.53	3.11	3.76	4.51	5.35	-
45	-	1.42	1.79	2.21	2.69	3.23	3.85	4.54	-
50	-	-	1.57	1.92	2.32	2.77	3.28	3.84	-
55	-	-	-	1.66	1.99	2.36	2.78	3.24	-
60	-	-	-	1.42	1.70	2.00	2.34	2.71	-
65	-	-	-	-	1.43	1.68	1.95	2.26	-

# Nominal performance at to = 7.2 °C, tc = 54.4 °C

Cooling capacity	12 044	W	
Power input	4 652	W	
Current consumption	8.89	Α	
Mass flow	271	kg/h	
C.O.P.	2.59		

to: Evaporating temperature at dew point

Rating conditions : Superheat = 11.1 K , Subcooling = 8.3 K

Pressure switch settings

Maximum HP switch setting	29.4	bar(g)
Minimum LP switch setting	0.2	bar(g)
LP pump down setting	1.3	bar(g)

### Sound power data

Sound power level	0	dB(A)
With accoustic hood	0	dB(A)

tc: Condensing temperature at dew point



## Inverter reciprocating compressors VTZ086-G

## Performance data at 60 Hz, EN 12900 rating conditions

## **R407C**

Cond. temp. in				Evapora	ating temperature	in °C (to)			
°C (tc)	-17.5	-15	-10	-5	0	5	10	15	
ooling capacity 20	5 302	6 293	8 628	11 467	14 854	_	1		
			1			†	- 20 545	-	-
30	4 568	5 469	7 558	10 066	13 037	16 516	20 545	-	-
40	3 746	4 568	6 436	8 638	11 218	14 220	17 688	21 666	-
45	-	4 074	5 841	7 900	10 293	13 066	16 262	19 926	-
50	-	-	5 216	7 137	9 351	11 901	14 832	18 187	-
55	-	-	4 555	6 344	8 384	10 718	13 390	16 444	-
60	-	-	-	5 516	7 388	9 512	11 931	14 690	-
65	-	-	-	-	6 357	8 277	10 450	12 919	-
Power input in V	V								
20	2 508	2 605	2 761	2 876	2 961	-	-	-	-
30	2 716	2 860	3 098	3 281	3 420	3 528	3 615	-	-
40	2 834	3 043	3 400	3 688	3 918	4 102	4 253	4 380	-
45	-	3 089	3 520	3 874	4 163	4 400	4 595	4 761	-
50	-	-	3 609	4 039	4 396	4 694	4 944	5 157	-
55	-	-	3 660	4 174	4 610	4 978	5 291	5 561	-
60	-	-	-	4 274	4 796	5 244	5 630	5 965	-
65	-	-	-	-	4 949	5 486	5 953	6 363	-
		•							
current consum				1	Т		1		
20	5.30	5.39	5.59	5.79	6.00	-	-	-	-
30	5.67	5.84	6.17	6.48	6.75	6.97	7.14	-	-
40	5.91	6.19	6.72	7.20	7.60	7.93	8.16	8.30	-
45	-	6.29	6.94	7.52	8.02	8.42	8.71	8.89	-
50	-	-	7.10	7.80	8.41	8.90	9.27	9.50	-
55	-	-	7.17	8.02	8.74	9.34	9.80	10.10	-
60	-	-	-	8.14	9.01	9.73	10.29	10.69	-
65	-	-	-	-	9.19	10.05	10.73	11.23	-
/lass flow in kg/	/h								
20	102	120	162	212	271	-	_	_	_
30	95	113	154	202	258	322	395	_	_
40	86	104	144	190	243	304	372	449	_
45	-	98	138	184	235	293	359	434	
50		-	131	175	226	282	346	418	
55	-	_	122	166	215	270	332	400	
60	-	-	-	155	203	257	316	382	
65				-	189	241	299	362	
03		_	-	-	109	241	299	302	
coefficient of pe	erformance (C.C	, <i>'</i>	1		T	1	1	,	
20	2.11	2.42	3.12	3.99	5.02	-	-	-	-
30	1.68	1.91	2.44	3.07	3.81	4.68	5.68	-	-
40	1.32	1.50	1.89	2.34	2.86	3.47	4.16	4.95	-
45	-	1.32	1.66	2.04	2.47	2.97	3.54	4.19	-
50	-	-	1.45	1.77	2.13	2.54	3.00	3.53	-
55	-	-	1.24	1.52	1.82	2.15	2.53	2.96	-
60	-	-	-	1.29	1.54	1.81	2.12	2.46	-
65	_	_	_	_	1.28	1.51	1.76	2.03	-

## Nominal performance at to = 5 °C, tc = 50 °C

Cooling capacity	11 901	W	
Power input	4 694	W	
Current consumption	8.90	Α	
Mass flow	282	kg/h	
C.O.P.	2.54		

to: Evaporating temperature at dew point

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

Pressure switch settings

Maximum HP switch setting	29.4	bar(g)
Minimum LP switch setting	0.2	bar(g)
LP pump down setting	1.3	bar(g)

### Sound power data

Sound power level	0	dB(A)
With accoustic hood	0	dB(A)

tc: Condensing temperature at dew point



## Inverter reciprocating compressors VTZ086-G

## Performance data at 60 Hz, ARI rating conditions

## **R407C**

Cond. temp. in				Evapora	ating temperature	in °C (to)			
°C (tc)	-17.5	-15	-10	-5	0	5	10	15	
Cooling capacity		T				1	1	F	
20	5 638	6 690	9 162	12 166	15 747	-	-	-	-
30	4 897	5 859	8 088	10 760	13 922	17 619	21 897	-	-
40	4 057	4 944	6 956	9 323	12 093	15 310	19 022	23 274	-
45	-	4 438	6 352	8 578	11 161	14 148	17 587	21 523	-
50	-	-	5 714	7 805	10 209	12 974	16 145	19 771	-
55	-	-	-	6 998	9 230	11 779	14 691	18 014	-
60	-	-	-	6 149	8 218	10 558	13 218	16 244	-
65	-	-	-	-	7 164	9 305	11 720	14 458	-
Power input in V	v								
20	2 508	2 605	2 761	2 876	2 961	_	_	_	_
30	2 716	2 860	3 098	3 281	3 420	3 528	3 615	_	_
40	2 834	3 043	3 400	3 688	3 918	4 102	4 253	4 380	_
45	-	3 089	3 520	3 874	4 163	4 400	4 595	4 761	
50	<u>-</u>	-	3 609	4 039	4 396	4 694	4 944	5 157	
55		-	-	4 174	4 610	4 978	5 291	5 561	
60	-	-		4 174	4 796	5 244	5 630	5 965	
65	-	-	-	-	4 949	5 486	5 953	6 363	
03					4 545	3 400	3 933	0 303	
urrent consum	ption in A								
20	5.30	5.39	5.59	5.79	6.00	-	-	-	-
30	5.67	5.84	6.17	6.48	6.75	6.97	7.14	_	_
40	5.91	6.19	6.72	7.20	7.60	7.93	8.16	8.30	_
45	-	6.29	6.94	7.52	8.02	8.42	8.71	8.89	_
50	-	_	7.10	7.80	8.41	8.90	9.27	9.50	_
55	_	_	-	8.02	8.74	9.34	9.80	10.10	_
60	_	_	-	8.14	9.01	9.73	10.29	10.69	-
65	-	_	-	-	9.19	10.05	10.73	11.23	-
		I.	I.	L					
Mass flow in kg/	h								
20	101	119	161	211	269	-	-	-	-
30	95	113	153	201	256	320	393	-	-
40	86	104	144	189	242	302	370	446	-
45	-	98	137	183	234	292	357	431	-
50	-	-	130	175	225	281	344	415	-
55	-	-	-	165	214	269	330	398	-
60	-	-	-	154	202	255	314	380	-
65	-	-	-	-	188	240	297	360	-
•		•	•	•	•	•	•		
Coefficient of pe	•	<del>, '</del>				1	1		
20	2.25	2.57	3.32	4.23	5.32	-	-	-	-
30	1.80	2.05	2.61	3.28	4.07	4.99	6.06		-
40	1.43	1.62	2.05	2.53	3.09	3.73	4.47	5.31	-
45	-	1.44	1.80	2.21	2.68	3.22	3.83	4.52	-
50	-	-	1.58	1.93	2.32	2.76	3.27	3.83	-
55	-	-	-	1.68	2.00	2.37	2.78	3.24	-
60	-	-	-	1.44	1.71	2.01	2.35	2.72	-
65	-	-	-	-	1.45	1.70	1.97	2.27	-
						_			
Nominal perform	ance at to = 7.2	2 °C, tc = 54.4 °C	) \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\		г	Pressure switch		20.4	h = =/=)

Cooling capacity	13 170	W
Power input	5 085	W
Current consumption	9.50	Α
Mass flow	296	kg/h
C.O.P.	2.59	

to: Evaporating temperature at dew point

Maximum HP switch setting	29.4	bar(g)
Minimum LP switch setting	0.2	bar(g)
LP pump down setting	1.3	bar(g)

### Sound power data

Sound power level	0	dB(A)
With accoustic hood	0	dB(A)

tc: Condensing temperature at dew point

Rating conditions : Superheat = 11.1 K , Subcooling = 8.3 K



## Inverter reciprocating compressors VTZ086-G

## Performance data at 65 Hz, EN 12900 rating conditions

## **R407C**

Cond. temp. in				Evapora	ating temperature	in °C (to)			
°C (tc)	-17.5	-15	-10	-5	0	5	10	15	
			U			1			
cooling capacity		1	1	1	T	1	_		
20	5 802	6 853	9 342	12 390	16 056	-	-	-	-
30	5 028	5 980	8 194	10 872	14 070	17 845	22 255	-	-
40	4 168	5 035	7 009	9 349	12 113	15 357	19 139	23 515	-
45	-	4 519	6 384	8 568	11 127	14 118	17 598	21 624	-
50	-	-	5 729	7 765	10 127	12 873	16 060	19 744	-
55	-	-	5 037	6 932	9 106	11 616	14 517	17 868	-
60	-	-	-	6 063	8 057	10 338	12 963	15 988	-
65	-	-	-	-	6 973	9 033	11 389	14 098	-
Power input in V	v								
20	2 723	2 829	3 002	3 130	3 224	-	_	_	_
30	2 954	3 107	3 367	3 572	3 730	3 853	3 949	<del>  _  </del>	_
40	3 097	3 315	3 695	4 008	4 265	4 475	4 647	4 791	_
45	-	3 375	3 828	4 209	4 527	4 793	5 015	5 203	
50	<u>-</u>	-	3 931	4 387	4 776	5 106	5 387	5 628	
55	_	_	3 999	4 538	5 005	5 408	5 756	6 059	_
60	_	_	-	4 655	5 208	5 691	6 115	6 488	_
65	<u>-</u>	-	-	-	5 378	5 951	6 458	6 909	
00	· · · · · · · · · · · · · · · · · · ·	_	_	_	1 0010	1 0 001	1 0 100	0 000	
Current consum	ption in A								
20	5.80	5.89	6.08	6.28	6.48	-	_	_	-
30	6.16	6.33	6.66	6.96	7.23	7.45	7.62	-	-
40	6.42	6.71	7.24	7.71	8.11	8.44	8.67	8.81	-
45	-	6.81	7.48	8.06	8.56	8.96	9.25	9.42	-
50	-	-	7.65	8.36	8.97	9.46	9.83	10.06	-
55	-	-	7.74	8.60	9.34	9.94	10.40	10.71	_
60	_	-	_	8.75	9.64	10.37	10.94	11.34	-
65	-	-	-	-	9.85	10.72	11.42	11.93	-
			1		I				
Mass flow in kg/	h								
20	111	131	175	229	293	-	-	-	-
30	105	124	167	218	278	348	428	-	-
40	96	115	157	206	263	328	402	488	-
45	-	109	151	199	254	317	389	471	-
50	-	-	144	191	245	306	375	453	-
55	-	-	135	181	234	293	360	435	-
60	-	-	-	170	222	279	343	416	-
65	-	-	-	-	208	263	325	395	-
Coefficient of pe	•	1	2 11	2.06	4.00	1		T	
20	2.13	2.42	3.11	3.96	4.98	- 4.62	- E 64	-	-
30	1.70	1.92	2.43	3.04	3.77	4.63	5.64	- 4.01	-
40	1.35	1.52	1.90	2.33	2.84	3.43	4.12	4.91	-
45	-	1.34	1.67	2.04	2.46	2.95	3.51	4.16	-
50	-	-	1.46	1.77	2.12	2.52	2.98	3.51	-
55	-	-	1.26	1.53	1.82	2.15	2.52	2.95	-
60	-	-	-	1.30	1.55	1.82	2.12	2.46	-
65	-	-	-	-	1.30	1.52	1.76	2.04	-

## Nominal performance at to = 5 °C, tc = 50 °C

-, -, -, -, -, -, -, -, -, -, -, -, -, -		
Cooling capacity	12 873	W
Power input	5 106	W
Current consumption	9.46	Α
Mass flow	306	kg/h
C.O.P.	2.52	

to: Evaporating temperature at dew point

Pressure switch settings

Maximum HP switch setting	29.4	bar(g)
Minimum LP switch setting	0.2	bar(g)
LP pump down setting	1.3	bar(g)

### Sound power data

Sound power level	0	dB(A)
With accoustic hood	0	dB(A)

tc: Condensing temperature at dew point

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



## Inverter reciprocating compressors VTZ086-G

## Performance data at 65 Hz, ARI rating conditions

## **R407C**

Cond. temp. in				Evapora	ating temperature	in °C (to)			
°C (tc)	-17.5	-15	-10	-5	0	5	10	15	
•								•	
cooling capacit		1	T	1	T	Т	Т		
20	6 170	7 285	9 921	13 146	17 021	-	-	-	-
30	5 390	6 406	8 768	11 622	15 025	19 037	23 719	-	-
40	4 514	5 449	7 575	10 091	13 057	16 534	20 582	25 260	-
45	-	4 922	6 943	9 304	12 065	15 288	19 031	23 357	-
50	-	-	6 276	8 492	11 057	14 034	17 482	21 463	-
55	-	-	-	7 646	10 025	12 765	15 928	19 574	-
60	-	-	-	6 759	8 962	11 475	14 360	17 680	-
65	-	-	-	-	7 857	10 154	12 774	15 777	-
Power input in \	N								
20	2 723	2 829	3 002	3 130	3 224	_	_	-	-
30	2 954	3 107	3 367	3 572	3 730	3 853	3 949	_	-
40	3 097	3 315	3 695	4 008	4 265	4 475	4 647	4 791	-
45	-	3 375	3 828	4 209	4 527	4 793	5 015	5 203	-
50	-	-	3 931	4 387	4 776	5 106	5 387	5 628	-
55	-	-	-	4 538	5 005	5 408	5 756	6 059	_
60		-	-	4 655	5 208	5 691	6 115	6 488	
65	-	-	_	-	5 378	5 951	6 458	6 909	
00	-	_	_	1	1 0010	0 001	J 700	0 000	
Current consum	nption in A								
20	5.80	5.89	6.08	6.28	6.48	_	_	_	_
30	6.16	6.33	6.66	6.96	7.23	7.45	7.62	_	-
40	6.42	6.71	7.24	7.71	8.11	8.44	8.67	8.81	-
45	-	6.81	7.48	8.06	8.56	8.96	9.25	9.42	_
50		-	7.65	8.36	8.97	9.46	9.83	10.06	
55		-	-	8.60	9.34	9.94	10.40	10.71	
60	_	-	_	8.75	9.64	10.37	10.94	11.34	_
65	<u> </u>	-	-	-	9.85	10.72	11.42	11.93	
00				1	3.00	10.72	11.72	11.55	
Mass flow in kg/	/h								
20	111	130	174	228	291	_	_	_	_
30	104	123	166	217	276	346	426	-	
40	95	114	156	205	261	326	400	<del> </del>	
								485	
45 50	-	108	150	198	253	315	387	468	-
50	-	-	143	190	243	304	373	451	-
55	-	-	-	180	232	291	358	432	-
60	-	-	-	169	220	277	341	413	-
65	-	-	-	-	206	262	323	392	-
-	erformance (C.C	· ·	T -			Т	T	<del>                                     </del>	
20	2.27	2.58	3.31	4.20	5.28	-	-	-	-
30	1.82	2.06	2.60	3.25	4.03	4.94	6.01	-	-
40	1.46	1.64	2.05	2.52	3.06	3.69	4.43	5.27	-
45	-	1.46	1.81	2.21	2.67	3.19	3.79	4.49	-
50	-	-	1.60	1.94	2.32	2.75	3.25	3.81	-
55	-	-	-	1.68	2.00	2.36	2.77	3.23	-
	-	-	-	1.45	1.72	2.02	2.35	2.72	-
60									
60 65	-	-	-	-	1.46	1.71	1.98	2.28	-

Cooling capacity	14 269	W
Power input	5 528	W
Current consumption	10.10	Α
Mass flow	321	kg/h
C.O.P.	2.58	

to: Evaporating temperature at dew point

Rating conditions : Superheat = 11.1 K , Subcooling = 8.3 K

Maximum HP switch setting	29.4	bar(g)
Minimum LP switch setting	0.2	bar(g)
LP pump down setting	1.3	bar(g)

### Sound power data

Sound power level	0	dB(A)
With accoustic hood	0	dB(A)

tc: Condensing temperature at dew point



## Inverter reciprocating compressors VTZ086-G

## Performance data at 70 Hz, EN 12900 rating conditions

## **R407C**

Cond. temp. in				Evapora	ating temperature	in °C (to)			
°C (tc)	-17.5	-15	-10	-5	0	5	10	15	
<u>'</u>		•		•	•	•	•	· •	
cooling capacity		Т	1	T	1	Т	T	T T	
20	6 341	7 449	10 085	13 343	17 295	-	-	-	-
30	5 517	6 511	8 838	11 675	15 098	19 177	23 985	-	-
40	4 618	5 522	7 583	10 047	12 984	16 468	20 572	25 368	-
45	-	4 985	6 932	9 224	11 936	15 140	18 908	23 314	-
50	-	-	6 251	8 385	10 882	13 817	17 261	21 287	-
55	-	-	5 534	7 519	9 814	12 490	15 621	19 280	-
60	-	-	-	6 618	8 721	11 150	13 980	17 281	-
65	-	-	-	-	7 595	9 789	12 328	15 284	-
Power input in V	v								
20	2 932	3 047	3 236	3 379	3 481	-	_	_	-
30	3 191	3 354	3 635	3 862	4 042	4 181	4 285	_	-
40	3 365	3 590	3 991	4 331	4 617	4 855	5 051	5 212	-
45	-	3 667	4 139	4 546	4 896	5 193	5 446	5 659	-
50	-	-	4 259	4 740	5 160	5 525	5 841	6 115	-
55	-	-	4 345	4 908	5 406	5 845	6 231	6 572	-
60	-	-	-	5 042	5 625	6 146	6 610	7 025	-
65	-	-	-	-	5 814	6 423	6 972	7 469	-
l.		1	1	1		-			
Current consum	ption in A								
20	6.26	6.35	6.54	6.75	6.97	-	-	-	-
30	6.62	6.80	7.13	7.43	7.70	7.93	8.12	-	-
40	6.89	7.18	7.73	8.20	8.61	8.93	9.17	9.31	-
45	-	7.30	7.98	8.57	9.07	9.47	9.76	9.94	-
50	-	-	8.18	8.90	9.52	10.01	10.37	10.60	-
55	-	-	8.29	9.17	9.92	10.53	10.98	11.29	-
60	-	-	-	9.36	10.26	11.00	11.57	11.96	-
65	-	-	-	-	10.52	11.41	12.11	12.61	-
Mass flow in kg/			1	T		1	T	1	
20	122	142	189	246	315	-	-	-	-
30	115	135	180	234	298	374	461	-	-
40	106	126	170	221	282	351	433	526	-
45	-	120	164	214	273	340	418	508	-
50	-	-	157	206	263	328	403	489	-
55	-	-	148	197	252	315	387	469	-
60	-	-	-	186	240	301	370	449	-
65	-	-	-	-	226	285	352	428	-
Coefficient of pe	erformance (C.C	D.P.)							
20	2.16	2.45	3.12	3.95	4.97	-	-	-	-
30	1.73	1.94	2.43	3.02	3.74	4.59	5.60	-	-
40	1.37	1.54	1.90	2.32	2.81	3.39	4.07	4.87	-
45	-	1.36	1.67	2.03	2.44	2.92	3.47	4.12	-
50	-	-	1.47	1.77	2.11	2.50	2.95	3.48	-
55	-	-	1.27	1.53	1.82	2.14	2.51	2.93	-
60	-	-	-	1.31	1.55	1.81	2.11	2.46	-
65	-	-	-	-	1.31	1.52	1.77	2.05	_

### Nominal performance at to = 5 °C, tc = 50 °C

Cooling capacity	13 817	W
Power input	5 525	W
Current consumption	10.01	Α
Mass flow	328	kg/h
C.O.P.	2.50	

to: Evaporating temperature at dew point

Pressure switch settings

Maximum HP switch setting	29.4	bar(g)
Minimum LP switch setting	0.2	bar(g)
LP pump down setting	1.3	bar(g)

### Sound power data

Sound power level	0	dB(A)
With accoustic hood	0	dB(A)

tc: Condensing temperature at dew point

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



## Inverter reciprocating compressors VTZ086-G

## Performance data at 70 Hz, ARI rating conditions

## **R407C**

Cond. temp. in				Evapora	ating temperature	in °C (to)			
°C (tc)	-17.5	-15	-10	-5	0	5	10	15	
Cooling capacit		1	1	1		Т	1		
20	6 743	7 918	10 710	14 157	18 335	-	-	-	-
30	5 913	6 975	9 457	12 480	16 122	20 457	25 563	-	-
40	5 002	5 976	8 196	10 844	13 996	17 731	22 124	27 252	-
45	-	5 430	7 538	10 016	12 942	16 394	20 448	25 182	-
50	-	-	6 848	9 169	11 881	15 062	18 790	23 141	-
55	-	-	-	8 293	10 804	13 726	17 139	21 120	-
60	-	-	-	7 377	9 700	12 377	15 487	19 110	-
65	-	-	-	-	8 559	11 004	13 827	17 105	-
Power input in V	v								
20	2 932	3 047	3 236	3 379	3 481	_	_	_	
30	3 191	3 354	3 635	3 862	4 042	4 181	4 285	_	-
40	3 365	3 590	3 991	4 331	4 617	4 855	5 051	5 212	_
45	-	3 667	4 139	4 546	4 896	5 193	5 446	5 659	
50	-	-	4 259	4 740	5 160	5 525	5 841	6 115	
55		-	-	4 908	5 406	5 845	6 231	6 572	
60	-	-	-	5 042	5 625	6 146	6 610	7 025	
65	<u> </u>	-	-	5 042	5 814	6 423	6 972	7 469	<u> </u>
υυ	-			<u> </u>	J 014	0 423	0 3/2	7 409	-
urrent consum	ntion in A								
20	6.26	6.35	6.54	6.75	6.97	_	I _	_	
30	6.62	6.80	7.13	7.43	7.70	7.93	8.12	_	_
40	6.89	7.18	7.73	8.20	8.61	8.93	9.17	9.31	
45	-	7.30	7.98	8.57	9.07	9.47	9.76	9.94	_
50	<u> </u>	-	8.18	8.90	9.52	10.01	10.37	10.60	
55		-	-	9.17	9.92	10.53	10.98	11.29	
60	-	-	-	9.17	10.26	11.00		1	
65		-	-	9.50	10.26	11.41	11.57 12.11	11.96 12.61	-
05	-	-			10.52	11.41	12.11	12.01	
Mass flow in kg/	'h								
20	121	141	188	245	313	_	_	_	_
30	114	134	179	233	297	371	459	-	
40	106	125	169	220	280	349	439	523	
45	-	120	163	213	271	338	415	504	
50 50	<u> </u>			205	261	326	400	1	
		-	156					486	-
55	-	-		196	251	313	385	467	-
60	-	-	-	185	238	299	368	447	-
65	-	-	-	-	225	284	350	425	-
	erformance (C.C	1	T -	T .	T _	T	T	<del>                                     </del>	
20	2.30	2.60	3.31	4.19	5.27	-	-	-	-
30	1.85	2.08	2.60	3.23	3.99	4.89	5.97	-	-
40	1.49	1.66	2.05	2.50	3.03	3.65	4.38	5.23	-
45	-	1.48	1.82	2.20	2.64	3.16	3.75	4.45	-
50	-	-	1.61	1.93	2.30	2.73	3.22	3.78	-
55	-	-	-	1.69	2.00	2.35	2.75	3.21	-
60	-	-	-	1.46	1.72	2.01	2.34	2.72	-
65	-	-	-	-	1.47	1.71	1.98	2.29	-
lominal perforn	nance at to = 7.2	2 °C, tc = 54.4 °C	2 14/		-	Pressure switch		20.4	h = =/=\

C.O.P.

Cooling capacity Power input

Mass flow

Current consumption

to: Evaporating temperature at dew point tc: Condensing temperature at dew point

Rating conditions : Superheat = 11.1 K , Subcooling = 8.3 K

15 339

5 979

10.68

345

2.57

W

W

Maximum HP switch setting	29.4	bar(g)
Minimum LP switch setting	0.2	bar(g)
LP pump down setting	1.3	bar(g)

	Sound	power	data
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Sound power level	0	dB(A)
With accoustic hood	0	dB(A)



## Inverter reciprocating compressors VTZ086-G

## Performance data at 75 Hz, EN 12900 rating conditions

## **R407C**

Cond. temp. in				Evapora	ating temperature	in °C (to)			
°C (tc)	-17.5	-15	-10	-5	0	5	10	15	
				•	•	•		<del> </del>	
cooling capacit		1	1	T	T	T		т т	
20	6 921	8 080	10 859	14 326	18 573	-	-	-	-
30	6 034	7 064	9 489	12 477	16 119	20 509	25 737	-	-
40	5 097	6 028	8 161	10 731	13 831	17 553	21 988	27 227	-
45	-	5 474	7 484	9 869	12 720	16 131	20 192	24 995	-
50	-	-	6 782	8 997	11 616	14 731	18 434	22 816	-
55	-	-	6 045	8 105	10 506	13 341	16 701	20 678	-
60	-	-	-	7 180	9 379	11 950	14 982	18 569	-
65	-	-	-	-	8 224	10 545	13 266	16 478	-
Power input in V	v								
20	3 136	3 258	3 464	3 621	3 731	-	_	_	_
30	3 428	3 599	3 901	4 152	4 355	4 511	4 624	_	
40	3 637	3 869	4 289	4 657	4 974	5 242	5 464	5 643	_
45	-	3 965	4 453	4 887	5 270	5 602	5 888	6 129	-
50	_	-	4 591	5 097	5 550	5 953	6 307	6 616	-
55	_	-	4 698	5 282	5 812	6 289	6 718	7 100	-
60	_	-	-	5 437	6 048	6 607	7 116	7 576	_
65	-	-	-	-	6 256	6 901	7 495	8 040	_
		1	1	1	1	1 230.	1		
Current consum	ption in A								
20	6.68	6.78	6.98	7.21	7.45	-	-	-	-
30	7.04	7.23	7.57	7.88	8.17	8.41	8.62	-	-
40	7.32	7.63	8.19	8.68	9.09	9.42	9.66	9.81	-
45	-	7.76	8.46	9.07	9.57	9.97	10.26	10.44	-
50	-	-	8.68	9.42	10.04	10.54	10.90	11.12	-
55	-	-	8.83	9.73	10.49	11.09	11.54	11.83	-
60	-	-	-	9.97	10.88	11.62	12.18	12.55	-
65	-	-	-	-	11.20	12.09	12.78	13.27	-
<u>'</u>		•	•	•	•	•			
Mass flow in kg	'h								
20	133	154	204	265	338	-	-	-	-
30	126	146	193	250	318	399	495	-	-
40	117	138	183	237	300	375	462	565	-
45	-	132	177	229	290	362	446	544	-
50	-	-	170	221	281	350	430	524	-
55	-	-	162	212	270	337	414	504	-
60	-	-	-	202	258	322	397	483	-
65	-	-	-	-	245	307	379	461	-
Coefficient of pe	erformance (C.C	D.P.)							
20	2.21	2.48	3.13	3.96	4.98		_	-	_
30	1.76	1.96	2.43	3.00	3.70	4.55	5.57	-	_
40	1.40	1.56	1.90	2.30	2.78	3.35	4.02	4.82	-
45	-	1.38	1.68	2.02	2.41	2.88	3.43	4.08	_
50	_	-	1.48	1.76	2.09	2.47	2.92	3.45	_
55		-	1.40	1.53	1.81	2.12	2.49	2.91	
60	-	-	1.29	1.32	1.55	1.81	2.49	2.45	
00		_	<u> </u>	1.32	1.00	1.01	4.11	4.70	

## Nominal performance at to = 5 °C, tc = 50 °C

Cooling capacity	14 731	W
Power input	5 953	W
Current consumption	10.54	Α
Mass flow	350	kg/h
C.O.P.	2.47	

to: Evaporating temperature at dew point

Pressure switch settings

Maximum HP switch setting	29.4	bar(g)
Minimum LP switch setting	0.2	bar(g)
LP pump down setting	1.3	bar(g)

## Sound power data

With accoustic hood	0	dB(A)
Sound power level	0	dB(A)

tc: Condensing temperature at dew point

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



## Inverter reciprocating compressors VTZ086-G

## Performance data at 75 Hz, ARI rating conditions

## **R407C**

Cond. temp. in				Evapora	ating temperature	in °C (to)			
°C (tc)	-17.5	-15	-10	-5	0	5	10	15	
			•						
ooling capacity		1				1		1	
20	7 360	8 589	11 532	15 200	19 689	-	-	-	-
30	6 468	7 567	10 154	13 337	17 213	21 879	27 429	-	-
40	5 520	6 524	8 820	11 583	14 910	18 899	23 646	29 248	-
45	-	5 962	8 138	10 716	13 793	17 467	21 837	26 998	-
50	-	-	7 429	9 839	12 682	16 059	20 067	24 803	-
55	-	-	-	8 939	11 566	14 662	18 324	22 652	-
60	-	-	-	8 003	10 432	13 264	16 598	20 535	-
65	-	-	-	-	9 268	11 854	14 878	18 442	-
ower input in V	v								
20	3 136	3 258	3 464	3 621	3 731	_	_	_ 1	-
30	3 428	3 599	3 901	4 152	4 355	4 511	4 624	_	-
40	3 637	3 869	4 289	4 657	4 974	5 242	5 464	5 643	-
45	-	3 965	4 453	4 887	5 270	5 602	5 888	6 129	-
50	-	-	4 591	5 097	5 550	5 953	6 307	6 616	-
55	-	-	-	5 282	5 812	6 289	6 718	7 100	-
60	_	-	_	5 437	6 048	6 607	7 116	7 576	-
65	_	-	_	_	6 256	6 901	7 495	8 040	-
		1	1	1					
Current consum	ption in A								
20	6.68	6.78	6.98	7.21	7.45	-	-	-	-
30	7.04	7.23	7.57	7.88	8.17	8.41	8.62	-	-
40	7.32	7.63	8.19	8.68	9.09	9.42	9.66	9.81	-
45	-	7.76	8.46	9.07	9.57	9.97	10.26	10.44	-
50	-	-	8.68	9.42	10.04	10.54	10.90	11.12	-
55	-	-	-	9.73	10.49	11.09	11.54	11.83	-
60	-	-	-	9.97	10.88	11.62	12.18	12.55	-
65	-	-	-	-	11.20	12.09	12.78	13.27	-
lass flow in kg/		T	1	1		1	T	T T	
20	132	153	202	263	336	-	-	-	-
30	125	145	192	249	317	397	492	-	-
40	117	137	182	235	298	372	460	561	-
45	-	131	176	228	289	360	444	541	-
50	-	-	169	220	279	348	428	521	
55	-	-	-	211	268	335	411	500	-
60	-	-	-	201	257	321	394	480	-
65	-	-	-	-	243	305	377	458	-
coefficient of pe	erformance (C.C	D.P.)							
20	2.35	2.64	3.33	4.20	5.28	-	-	-	-
30	1.89	2.10	2.60	3.21	3.95	4.85	5.93	-	-
40	1.52	1.69	2.06	2.49	3.00	3.61	4.33	5.18	-
45	-	1.50	1.83	2.19	2.62	3.12	3.71	4.41	-
50	-	-	1.62	1.93	2.28	2.70	3.18	3.75	-
55	-	-	-	1.69	1.99	2.33	2.73	3.19	-
60	-	-	-	1.47	1.72	2.01	2.33	2.71	-
65	-	_	_	-	1.48	1.72	1.99	2.29	_

# Nominal performance at to = 7.2 °C, tc = 54.4 °C

Cooling capacity	16 382	W	
Power input	6 440	W	
Current consumption	11.24	Α	
Mass flow	369	kg/h	
C.O.P.	2.54		

to: Evaporating temperature at dew point

Pressure switch settings

Maximum HP switch setting	29.4	bar(g)
Minimum LP switch setting	0.2	bar(g)
LP pump down setting	1.3	bar(g)

### Sound power data

Sound power level	0	dB(A)
With accoustic hood	0	dB(A)

tc: Condensing temperature at dew point  $% \left( 1\right) =\left( 1\right) \left( 1\right)$ 

Rating conditions : Superheat = 11.1 K , Subcooling = 8.3 K



## Inverter reciprocating compressors VTZ086-G

## Performance data at 80 Hz, EN 12900 rating conditions

## **R407C**

Cond. temp. in				Evapora	ting temperature	in °C (to)			
°C (tc)	-17.5	-15	-10	-5	0	5	10	15	
	. : \A/								
ooling capacity 20	7 540	8 747	11 662	15 338	19 888	_	_		
				1		1		-	-
30	6 579	7 638	10 147	13 275	17 136	21 842	27 509	-	-
40	5 604	6 554	8 740	11 403	14 655	18 612	23 386	29 090	
45		5 984	8 040	10 501	13 480	17 092	21 450	26 669	-
50	-	-	7 322	9 601	12 328	15 616	19 579	24 332	-
55	-	-	6 570	8 689	11 184	14 169	17 758	22 064	-
60	-	-	-	7 750	10 033	12 736	15 971	19 852	-
65	-	-	-	-	8 861	11 301	14 203	17 680	-
ower input in V	V								
20	3 334	3 464	3 686	3 857	3 975	-	-	-	-
30	3 664	3 843	4 166	4 442	4 669	4 844	4 964	_	-
40	3 915	4 150	4 589	4 985	5 334	5 636	5 887	6 085	-
45	-	4 269	4 771	5 232	5 649	6 019	6 341	6 611	-
50	-	-	4 929	5 458	5 946	6 389	6 785	7 131	-
55	-	-	5 060	5 662	6 223	6 742	7 216	7 642	-
60	-	-	-	5 838	6 477	7 076	7 631	8 141	-
65	-	-	-	-	6 705	7 387	8 027	8 624	-
			•						
urrent consum	ption in A	•			•		1		
20	7.06	7.17	7.40	7.65	7.93	-	-	-	-
30	7.43	7.62	7.99	8.32	8.63	8.90	9.13	-	-
40	7.70	8.03	8.62	9.13	9.55	9.89	10.14	10.30	-
45	-	8.18	8.91	9.54	10.05	10.45	10.74	10.92	-
50	-	-	9.16	9.93	10.56	11.05	11.40	11.61	-
55	-	-	9.35	10.28	11.04	11.64	12.08	12.34	-
60	-	-	-	10.57	11.49	12.23	12.77	13.11	-
65	-	-	-	-	11.89	12.78	13.45	13.89	-
Anna flass in leaf	L								
Mass flow in kg/		467	240	202	202	_	_	T	
20	145	167	219	283	362	1		-	-
30	137	158	207	266	338	425	529	-	-
40	129	150	196	251	318	397	492	603	-
45 50	-	144	190	244	308	384	474	581	-
50	-	-	183	236	298	371	457	559	-
55	-	-	176	227	287	357	440	537	-
60	-	-	-	218	276	344	423	516	-
65	-	-	-	-	264	329	405	494	-
Coefficient of pe	rformance (C.C	).P.)							
20	2.26	2.53	3.16	3.98	5.00	-	-	-	-
30	1.80	1.99	2.44	2.99	3.67	4.51	5.54	-	-
40	1.43	1.58	1.90	2.29	2.75	3.30	3.97	4.78	-
45	-	1.40	1.69	2.01	2.39	2.84	3.38	4.03	-
50	-	-	1.49	1.76	2.07	2.44	2.89	3.41	-
55	-	-	1.30	1.53	1.80	2.10	2.46	2.89	-
60	-	-	-	1.33	1.55	1.80	2.09	2.44	-
65	-	-	-	_	1.32	1.53	1.77	2.05	_

## Nominal performance at to = 5 °C, tc = 50 °C

Cooling capacity	15 616	W
Power input	6 389	W
Current consumption	11.05	Α
Mass flow	371	kg/h
C.O.P.	2.44	

to: Evaporating temperature at dew point

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

Pressure switch settings

Maximum HP switch setting	29.4	bar(g)
Minimum LP switch setting	0.2	bar(g)
LP pump down setting	1.3	bar(g)

## Sound power data

Į.				_
	With accoustic hood	0	dB(A)	
	Sound power level	0	dB(A)	

tc: Condensing temperature at dew point



## Inverter reciprocating compressors VTZ086-G

## Performance data at 80 Hz, ARI rating conditions

## **R407C**

Cond. temp. in	Evaporating temperature in °C (to)								
°C (tc)	-17.5	-15	-10	-5	0	5	10	15	
Cooling canacity	in W								
Cooling capacity 20	8 018	9 298	12 385	16 274	21 084	_	<u> </u>	_	_
30	7 053	8 182	10 858	14 191	18 298	23 301	29 318	-	
								<del>                                     </del>	
40 45	6 069	7 093 6 518	9 446 8 743	12 307 11 402	15 798 14 616	20 039 18 508	25 149 23 197	31 250 28 805	
	-							1	
50	-	-	8 020	10 499	13 460 12 313	17 024	21 314	26 450	-
55	-	-	-	9 584		15 572	19 484	24 171	-
60	-	-	-	8 638	11 160	14 136	17 693	21 953	-
65	-	-	-	-	9 985	12 704	15 929	19 786	-
ower input in W	ı					_			
20	3 334	3 464	3 686	3 857	3 975	-	-	-	-
30	3 664	3 843	4 166	4 442	4 669	4 844	4 964	-	-
40	3 915	4 150	4 589	4 985	5 334	5 636	5 887	6 085	-
45	-	4 269	4 771	5 232	5 649	6 019	6 341	6 611	-
50	-	-	4 929	5 458	5 946	6 389	6 785	7 131	-
55	-	-	-	5 662	6 223	6 742	7 216	7 642	-
60	-	-	-	5 838	6 477	7 076	7 631	8 141	-
65	-	-	-	-	6 705	7 387	8 027	8 624	-
					_				
Current consum			ı	ı	1		1	1	
20	7.06	7.17	7.40	7.65	7.93	-	-	-	-
30	7.43	7.62	7.99	8.32	8.63	8.90	9.13	-	-
40	7.70	8.03	8.62	9.13	9.55	9.89	10.14	10.30	-
45	-	8.18	8.91	9.54	10.05	10.45	10.74	10.92	-
50	-	-	9.16	9.93	10.56	11.05	11.40	11.61	-
55	-	-	-	10.28	11.04	11.64	12.08	12.34	-
60	-	-	-	10.57	11.49	12.23	12.77	13.11	-
65	-	-	-	-	11.89	12.78	13.45	13.89	-
Mass flow in kg/l	•								
20	144	166	217	282	360	_	<u> </u>	_	
30	136	157	206	265	337	423	526	-	
	128	149					489	+	
40 45	-	149	195 189	250 243	316 306	395 382	489	600 577	<u>-</u>
	<u> </u>	-			296	<u> </u>			
50			182	235		369	454	555	
55	-	-	-	226	286	355	438	534	-
60	-	-	-	217	274	342	421	513	-
65	-	-	-	-	262	327	403	491	-
Coefficient of pe	rformance (C.C	D.P.)						,	
20	2.40	2.68	3.36	4.22	5.30	-	-	-	-
30	1.92	2.13	2.61	3.19	3.92	4.81	5.91	-	-
40	1.55	1.71	2.06	2.47	2.96	3.56	4.27	5.14	-
45	-	1.53	1.83	2.18	2.59	3.07	3.66	4.36	-
50	-	-	1.63	1.92	2.26	2.66	3.14	3.71	-
55	-	-	-	1.69	1.98	2.31	2.70	3.16	-
60	-	-	-	1.48	1.72	2.00	2.32	2.70	-
65	-	-	-	-	1.49	1.72	1.98	2.29	-

#### Nominal performance at to = 7.2 °C, tc = 54.4 °C

recimial performance at to 7.2 0, to	U-1	
Cooling capacity	17 397	W
Power input	6 911	W
Current consumption	11.78	Α
Mass flow	392	kg/h
C.O.P.	2.52	

to: Evaporating temperature at dew point

Rating conditions : Superheat = 11.1 K , Subcooling = 8.3 K

Pressure switch settings

Maximum HP switch setting	29.4	bar(g)
Minimum LP switch setting	0.2	bar(g)
LP pump down setting	1.3	bar(g)

#### Sound power data

Sound power level	0	dB(A)
With accoustic hood	0	dB(A)

tc: Condensing temperature at dew point



## Inverter reciprocating compressors VTZ086-G

## Performance data at 85 Hz, EN 12900 rating conditions

**R407C** 

Cond. temp. in	Evaporating temperature in °C (to)								
°C (tc)	-17.5	-15	-10	-5	0	5	10	15	
Saaling aanaait	ı in M								
20 20	8 199	9 450	12 495	16 379	21 242	_	_	_ [	
30	7 154	8 233	10 813	14 071	18 146	23 177	29 302	-	
40	6 139	7 100	9 322	12 061	15 456		24 766	<del> </del>	
45		6 517	8 601	11 121	14 215	19 644 18 023	22 682	30 959 28 333	
	-			+				1	
50	-	-	7 870	10 197	13 018	16 472	20 697	25 833	
55	-	-	7 110	9 272	11 847	14 974	18 791	23 438	-
60	-	-	-	8 326	10 682 9 504	13 508	16 944	21 129	-
65	-	-	-	-	9 504	12 057	15 139	18 889	
ower input in W	ı			1	1		1		
20	3 527	3 663	3 901	4 087	4 212	-	-	-	-
30	3 900	4 085	4 429	4 732	4 984	5 178	5 307	-	-
40	4 197	4 434	4 890	5 315	5 700	6 037	6 319	6 537	-
45	-	4 578	5 092	5 579	6 033	6 444	6 804	7 107	-
50	-	-	5 272	5 824	6 347	6 833	7 273	7 661	-
55	-	-	5 429	6 046	6 640	7 202	7 725	8 199	-
60	-	-	-	6 246	6 912	7 552	8 157	8 719	-
65	-	-	-	-	7 160	7 879	8 568	9 220	-
Current consum		7.50	7.70	0.00	0.44			1	
20	7.41	7.53	7.79	8.09	8.41	-	-	-	-
30	7.77	7.98	8.38	8.74	9.08	9.38	9.66	-	-
40	8.05	8.40	9.03	9.56	10.00	10.35	10.61	10.78	-
45	-	8.56	9.34	9.99	10.52	10.92	11.21	11.38	-
50	-	-	9.61	10.41	11.05	11.54	11.87	12.07	-
55	-	-	9.84	10.81	11.58	12.18	12.59	12.82	-
60	-	-	-	11.17	12.10	12.83	13.34	13.64	-
65	-	-	-	-	12.59	13.47	14.10	14.50	-
/lass flow in kg/l	h								
20	157	180	234	302	387	-	-	-	-
30	149	171	220	282	358	451	564	-	-
40	141	162	209	266	335	419	521	642	-
45	-	157	203	258	325	405	501	617	-
50	-	-	197	251	314	391	483	593	-
55	-	-	190	243	304	378	466	571	-
60	-	-	-	234	294	365	449	549	-
65	-	-	-	-	283	351	432	528	-
Coefficient of pe	2.32	2.58	3.20	4.01	5.04	_	_		
30	1.83	2.02	2.44	2.97	3.64	4.48	5.52	_	
40	1.46	1.60	1.91	2.27	2.71	3.25	3.92	4.74	
45	-	1.42	1.69	1.99		2.80	3.33	1	
50	-	-	1.69	1.75	2.36 2.05	2.60	2.85	3.99 3.37	
	-	-						1	<u> </u>
55			1.31	1.53	1.78	2.08	2.43	2.86	
60	-	-	-	1.33	1.55	1.79	2.08	2.42	-
65	-	-	-	-	1.33	1.53	1.77	2.05	-

#### Nominal performance at to = 5 °C, tc = 50 °C

	•• •	
Cooling capacity	16 472	W
Power input	6 833	W
Current consumption	11.54	Α
Mass flow	391	kg/h
C.O.P.	2.41	

to: Evaporating temperature at dew point

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

Pressure switch settings

Maximum HP switch setting	29.4	bar(g)
Minimum LP switch setting	0.2	bar(g)
LP pump down setting	1.3	bar(g)

### Sound power data

Sound power level	0	dB(A)
With accoustic hood	0	dB(A)

tc: Condensing temperature at dew point



## Inverter reciprocating compressors VTZ086-G

## Performance data at 85 Hz, ARI rating conditions

## **R407C**

Cond. temp. in				Evapora	ating temperature	in °C (to)			
°C (tc)	-17.5	-15	-10	-5	0	5	10	15	
			•		•	•	•	· •	
cooling capacity						1		1	
20	8 719	10 045	13 269	17 379	22 519	-	-	-	-
30	7 668	8 820	11 571	15 042	19 378	24 725	31 229	-	-
40	6 648	7 683	10 075	13 018	16 661	21 150	26 634	33 257	-
45	-	7 097	9 353	12 075	15 413	19 516	24 530	30 603	-
50	-	-	8 621	11 151	14 214	17 957	22 530	28 082	-
55	-	-	-	10 227	13 043	16 456	20 617	25 675	-
60	-	-	-	9 281	11 881	14 994	18 772	23 366	-
65	-	-	-	-	10 710	13 553	16 979	21 139	-
ower input in V	v								
20	3 527	3 663	3 901	4 087	4 212	-	_	-	-
30	3 900	4 085	4 429	4 732	4 984	5 178	5 307	-	-
40	4 197	4 434	4 890	5 315	5 700	6 037	6 319	6 537	-
45	-	4 578	5 092	5 579	6 033	6 444	6 804	7 107	-
50	-	-	5 272	5 824	6 347	6 833	7 273	7 661	-
55	-	-	-	6 046	6 640	7 202	7 725	8 199	-
60	-	-	-	6 246	6 912	7 552	8 157	8 719	-
65	-	-	-	-	7 160	7 879	8 568	9 220	-
urrent consum	ption in A								
20	7.41	7.53	7.79	8.09	8.41	-	-	-	-
30	7.77	7.98	8.38	8.74	9.08	9.38	9.66	-	-
40	8.05	8.40	9.03	9.56	10.00	10.35	10.61	10.78	-
45	-	8.56	9.34	9.99	10.52	10.92	11.21	11.38	-
50	-	-	9.61	10.41	11.05	11.54	11.87	12.07	-
55	-	-	-	10.81	11.58	12.18	12.59	12.82	-
60	-	-	-	11.17	12.10	12.83	13.34	13.64	-
65	-	-	-	-	12.59	13.47	14.10	14.50	-
lass flow in kg/		T	1	T	T	1	T	T T	
20	156	179	233	301	385	-	-	-	-
30	148	170	219	281	356	449	561	-	-
40	141	161	208	264	333	417	518	638	-
45	-	156	202	257	323	402	498	613	-
50	-	-	196	249	313	389	480	590	-
55	-	-	-	241	303	376	463	567	-
60	-	-	-	233	292	363	446	546	-
65	-	-	-	-	281	349	430	525	-
Coefficient of pe	erformance (C.C	D.P.)							
20	2.47	2.74	3.40	4.25	5.35	-	-	-	-
30	1.97	2.16	2.61	3.18	3.89	4.77	5.88	-	-
40	1.58	1.73	2.06	2.45	2.92	3.50	4.21	5.09	-
45	-	1.55	1.84	2.16	2.55	3.03	3.60	4.31	-
50	-	-	1.64	1.91	2.24	2.63	3.10	3.67	-
55	-	-	-	1.69	1.96	2.28	2.67	3.13	-
60	-	-	_	1.49	1.72	1.99	2.30	2.68	-
65	-	-	-	-	1.50	1.72	1.98	2.29	_

# Nominal performance at to = 7.2 °C, tc = 54.4 °C

Cooling capacity	18 383	W	
Power input	7 390	W	
Current consumption	12.30	Α	
Mass flow	414	kg/h	
C.O.P.	2.49		

to: Evaporating temperature at dew point

Pressure switch settings

Maximum HP switch setting	29.4	bar(g)
Minimum LP switch setting	0.2	bar(g)
LP pump down setting	1.3	bar(g)

### Sound power data

Sound power level	0	dB(A)
With accoustic hood	0	dB(A)

tc: Condensing temperature at dew point

Rating conditions : Superheat = 11.1 K , Subcooling = 8.3 K



## Inverter reciprocating compressors VTZ086-G

## Performance data at 90 Hz, EN 12900 rating conditions

**R407C** 

Cond. temp. in				Evapora	iting temperature	in °C (to)			
°C (tc)	-17.5	-15	-10	-5	0	5	10	15	
Cooling capacit		10.100	10.057	1 47 450		F	1	1	
20	8 898	10 188	13 357	17 450	22 634	-	-	-	-
30	7 757	8 850	11 487	14 865	19 151	24 512	31 115	-	-
40	6 701	7 665	9 907	12 707	16 233	20 651	26 128	32 831	-
45	-	7 071	9 166	11 728	14 925	18 923	23 889	29 989	-
50	-	-	8 426	10 785	13 687	17 299	21 788	27 320	-
55	-	-	7 665	9 854	12 495	15 755	19 800	24 798	-
60	-	-	-	8 911	11 325	14 267	17 904	22 401	-
65	-	-	-	-	10 154	12 812	16 074	20 105	-
Power input in \	w								
20	3 714	3 857	4 111	4 310	4 442	_	_	_ 1	-
30	4 134	4 326	4 691	5 021	5 301	5 516	5 651	_	-
40	4 484	4 722	5 193	5 647	6 070	6 446	6 761	7 001	-
45	-	4 893	5 415	5 930	6 422	6 877	7 279	7 616	_
50	-	-	5 619	6 193	6 753	7 285	7 774	8 206	_
55		_	5 805	6 436	7 063	7 671	8 245	8 771	
60	_	_	-	6 661	7 353	8 035	8 693	9 312	
65	-	-	_	-	7 622	8 378	9 118	9 828	
00		·	· -	1	1 022	0 070	3 110	J 020	
Current consun	nption in A								
20	7.71	7.86	8.16	8.50	8.88	-	-	-	-
30	8.08	8.31	8.75	9.15	9.52	9.86	10.19	-	_
40	8.35	8.73	9.41	9.97	10.43	10.79	11.07	11.26	-
45	-	8.90	9.73	10.42	10.96	11.37	11.66	11.82	-
50	-	-	10.04	10.87	11.52	12.01	12.33	12.50	-
55	-	_	10.32	11.32	12.11	12.69	13.08	13.27	_
60	-	_	_	11.76	12.71	13.42	13.89	14.14	_
65	-	-	-	-	13.30	14.16	14.75	15.07	-
		1	1			•		J.	
Mass flow in kg	/h								
20	170	194	250	322	412	-	-	-	-
30	162	183	234	298	378	477	599	-	-
40	154	175	222	280	352	441	549	681	-
45	-	171	217	272	341	425	528	653	-
50	-	-	211	265	331	411	509	627	-
55	-	-	205	258	321	398	491	604	-
60	-	-	-	250	312	385	474	582	-
65	-	-	-	-	302	373	459	562	-
-	erformance (C.C	1	2.05	4.05	F 40		1	1	
20	2.40	2.64	3.25	4.05	5.10	- 4.44		-	-
30	1.88	2.05	2.45	2.96	3.61	4.44	5.51	-	-
40	1.49	1.62	1.91	2.25	2.67	3.20	3.86	4.69	-
45	-	1.45	1.69	1.98	2.32	2.75	3.28	3.94	-
50	-	-	1.50	1.74	2.03	2.37	2.80	3.33	-
55	-	-	1.32	1.53	1.77	2.05	2.40	2.83	-
60	-	-	-	1.34	1.54	1.78	2.06	2.41	-
65	-	-	-	-	1.33	1.53	1.76	2.05	-

#### Nominal performance at to = 5 °C, tc = 50 °C

Cooling capacity	17 299	W
Power input	7 285	W
Current consumption	12.01	Α
Mass flow	411	kg/h
C.O.P.	2.37	

to: Evaporating temperature at dew point

Maximum HP switch setting	29.4	bar(g)
Minimum LP switch setting	0.2	bar(g)
LP pump down setting	1.3	bar(g)

### Sound power data

Sound power level	0	dB(A)
With accoustic hood	0	dB(A)

tc: Condensing temperature at dew point

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



## Inverter reciprocating compressors VTZ086-G

## Performance data at 90 Hz, ARI rating conditions

**R407C** 

Cond. temp. in				Evapora	ting temperature	in °C (to)			
°C (tc)	-17.5	-15	-10	-5	0	5	10	15	
Cooling capacit		10.000	11.105	10.545		T	1	F	
20	9 462	10 829	14 185	18 515	23 994	-	-	-	-
30	8 315	9 481	12 292	15 890	20 451	26 150	33 162	-	-
40	7 258	8 295	10 706	13 715	17 498	22 234	28 099	35 269	-
45	-	7 701	9 967	12 735	16 183	20 490	25 834	32 392	-
50	-	-	9 231	11 795	14 944	18 859	23 717	29 698	-
55	-	-	-	10 869	13 756	17 315	21 725	27 165	-
60	-	-	-	9 933	12 597	15 837	19 835	24 772	-
65	-	-	-	-	11 442	14 403	18 028	22 501	-
Power input in \	w								
20	3 714	3 857	4 111	4 310	4 442	-	_	_	-
30	4 134	4 326	4 691	5 021	5 301	5 516	5 651	_	-
40	4 484	4 722	5 193	5 647	6 070	6 446	6 761	7 001	_
45	-	4 893	5 415	5 930	6 422	6 877	7 279	7 616	_
50		-	5 619	6 193	6 753	7 285	7 774	8 206	
55	-	-	-	6 436	7 063	7 671	8 245	8 771	
60	-	-	-	6 661	7 353	8 035	8 693	9 312	
65	-	-	-		7 622	†	1	<del>                                     </del>	
UU	<u>-</u>	<u> </u>		<u> </u>	1 022	8 378	9 118	9 828	<u>-</u>
Current consun	nption in A								
20	7.71	7.86	8.16	8.50	8.88	-	-	_	-
30	8.08	8.31	8.75	9.15	9.52	9.86	10.19	-	_
40	8.35	8.73	9.41	9.97	10.43	10.79	11.07	11.26	_
45	-	8.90	9.73	10.42	10.96	11.37	11.66	11.82	_
50	-	-	10.04	10.87	11.52	12.01	12.33	12.50	_
55	-	_	-	11.32	12.11	12.69	13.08	13.27	-
60	-	_	_	11.76	12.71	13.42	13.89	14.14	_
65	-	_	_	-	13.30	14.16	14.75	15.07	_
		I	I.	I	10.00			10.01	
Mass flow in kg	/h								
20	169	193	249	321	410	-	-	-	-
30	161	182	233	297	376	475	595	-	-
40	153	174	221	279	350	438	546	677	_
45	-	170	215	271	339	423	525	649	-
50	-	-	210	264	329	408	506	624	-
55	-	-	-	256	319	395	488	600	_
60	-	-	-	249	310	383	472	579	-
65	-	-	-	-	300	371	456	558	-
		•	•	•	•		•		
-	erformance (C.C	1	2.45	4.00	F 40		1	<del>                                     </del>	
20	2.55	2.81	3.45	4.30	5.40	-		-	-
30	2.01	2.19	2.62	3.16	3.86	4.74	5.87		-
40	1.62	1.76	2.06	2.43	2.88	3.45	4.16	5.04	-
45	-	1.57	1.84	2.15	2.52	2.98	3.55	4.25	-
50	-	-	1.64	1.90	2.21	2.59	3.05	3.62	-
55	-	-	-	1.69	1.95	2.26	2.63	3.10	-
60	-	-	-	1.49	1.71	1.97	2.28	2.66	-
	-	-	-	-	1.50	1.72	1.98	2.29	_

#### Nominal performance at to = 7.2 °C, tc = 54.4 °C

Cooling capacity	19 342	W
Power input	7 879	W
Current consumption	12.80	Α
Mass flow	436	kg/h
C.O.P.	2.46	

to: Evaporating temperature at dew point

Rating conditions : Superheat = 11.1 K , Subcooling = 8.3 K

Maximum HP switch setting	29.4	bar(g)
Minimum LP switch setting	0.2	bar(g)
LP pump down setting	1.3	bar(g)

## Sound power data

I	Sound power level	0	dB(A)
	With accoustic hood	0	dB(A)

tc: Condensing temperature at dew point