

Model

Designation	NLE13KK.4	220-240V/50Hz 1~	Sales code:	105H6939
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Compressor design

Oil type	Mineral	Refrigerant(s)	R600a
Oil viscosity	15cST	Displacement	13,25cm ³ / 0,81cu.in
Oil quantity	265cm ³ / 9fl.oz	Compressors on pallet	80
Refr. charge - tech. limit	150g / 5,3oz		
Free gas volume comp.	2310cm ³ / 78,1fl.oz		
Weight	10kg / 22lbs		
Motor protection	1# internal		
Winding resistance main	13,7Ω (at 25°C)		
Winding resistance aux	14,9Ω (at 25°C)		
Max. winding temp.	125°C / 257°F		
Max. discharge temp.	130°C / 266°F		



General - Configurations with NLE13KK.4

	Conf. 1	Conf. 2	Conf. 3
Motorconfiguration	RSIR	RSCR	RSCR
Power supply (nominal)	220-240V/50Hz	220-240V/50Hz	220-240V/50Hz
Number of phases	1	1	1
Voltage range	198-254V	198-254V	198-254V
Approvals	CB, VDE	CB, VDE	CB, VDE
Starting torque	LST	LST	LST
Note	- / -		

Applications with NLE13KK.4

	Conf. 1	Conf. 2	Conf. 3
Refrigerant	R600a	R600a	R600a
Application	LBP	LBP	LBP
System cooling	static	static	static
Hot gas defrost	- / -	- / -	- / -
Long interval pull down	- / -	- / -	- / -

Electrical data - Configurations with NLE13KK.4

	Conf. 1	Conf. 2	Conf. 3
Starting device type	PTC	PTC	PTC
Run capacitor	- / -	4μF	4μF
Start capacitor	- / -	- / -	- / -
LRA (locked rotor amps / 4s)	5,8A	5,8A	5,8A
RLA (rated load amps / 1s)	1,1A	1,1A	1,1A
Cut in current	10,3A	10,3A	10,3A

Model

Designation

NLE13KK.4

220-240V/50Hz 1~

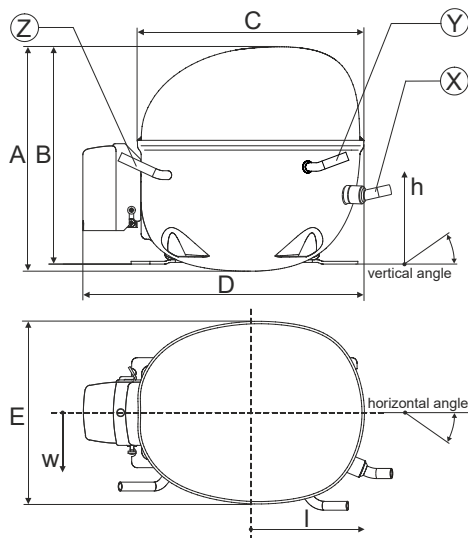
Sales code:

105H6939

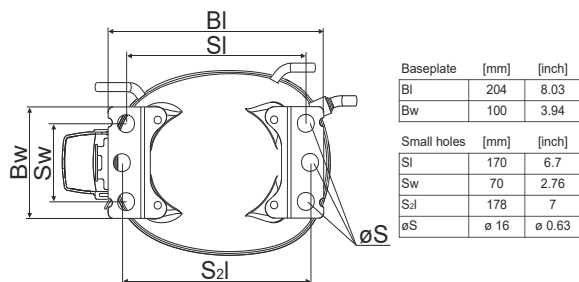
Compressor dimensions

Housing	A Height	190,5mm / 7,5in
	B Height	184,5mm / 7,26in
	C Length shell	205mm / 8,07in
	D Length w. cover	254mm / 10in
	E Width	166mm / 6,54in

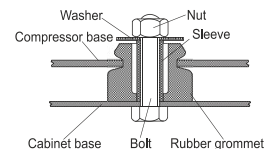
Connectors	Suction	Discharge	Process
	X	Y	Z
Diameter [mm]	øi 6,11-6,29	øi 9,61-9,79	øi 6,11-6,29
(i:inside, o:outside) [in]	øi 0,24-0,25	øi 0,38-0,39	øi 0,24-0,25
Material	copper	copper	copper
Horizontal angle ±2°	0°	0°	0°
Vertical angle ±2°	15°	35°	155°
Position l/h/w [mm]	126/76/78	133/103/54	-107/94/72
[in]	4,9/3/3,1	5,2/4/2,1	-4,2/3,7/2,8
Straight tube l. [mm]	12	12	12
[in]	0,5	0,5	0,5



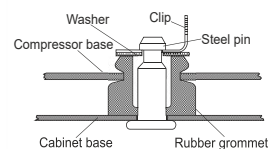
Compressor fixation



Bolt joint



Snap-on



Mounting accessories

	one comp.	multi pack
Bolt joint M6 ø16mm	118-1917	118-1918
Bolt joint ø1/4" ø16mm	118-1946	
Snap-on ø7,3 ø16mm	118-1947	118-1919

Model

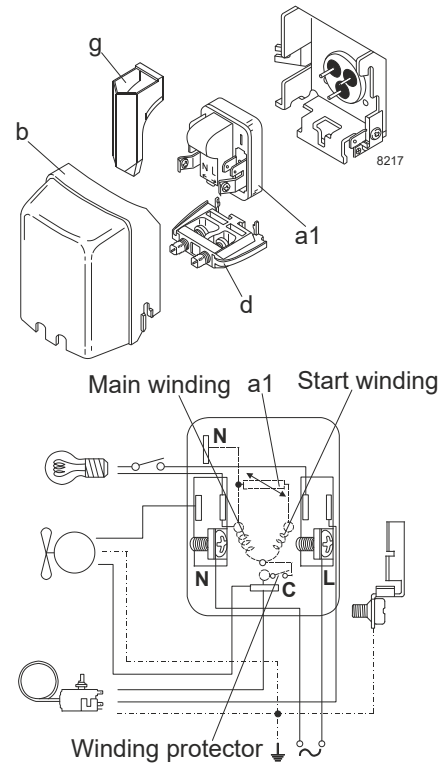
Designation	NLE13KK.4	220-240V/50Hz	Conf. 1	Sales code:	105H6939
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Configuration

Motorconfiguration	RSIR
Power supply (nominal)	220-240V/50Hz 1~
Refrigerant	R600a
Application	LBP
Voltage range	198-254V
Starting torque	LST
Approvals	CB VDE

Electrical accessories / wiring diagram

RSIR

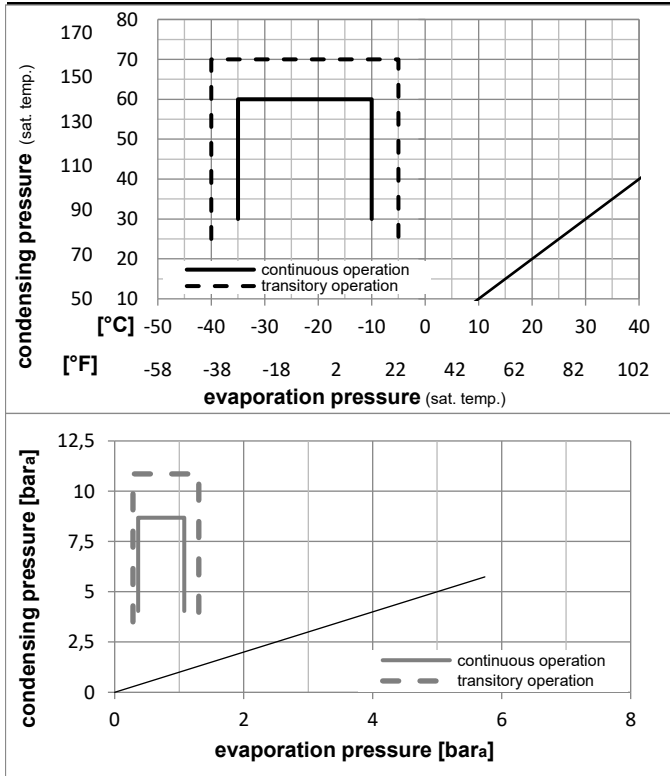


Ambient temperatures / system cooling

Ambient temperature min.:	10°C / 50°F
Ambient temperature max.:	43°C / 110°F

System cooling (n/a: outside limits)			
T ambient	LBP	MBP	HBP
32°C / 90°F	static	n/a	n/a
38°C / 100°F	static	n/a	n/a
43°C / 110°F	static	n/a	n/a

Operation pressure range



Components

a1	PTC starter (220V, 250hm, 4.8mm)	103N0018
b	plastic cover	103N2011
d	cord relief	103N1010
g	protection screen for PTC	103N0476

Alternative components

a1	PTC starter (220V, 250hm, 6.3mm)	103N0011
b	plastic cover	103N2010
d	cord relief	103N1010
g	protection screen for PTC	103N0476

Model

Designation **NLE13KK.4 220-240V/50Hz** Conf. 1 Sales code: **105H6939**

Optimization + standard conditions

R600a, 220V/50Hz, RSIR, static, CB, VDE

		Evaporating pressure (saturation temperature)				Condensing pressure (saturation temperature)			Return gas temp.		Liquid temp.		Cooling capacity			COP	EER	Power consumption		
		pe	pc	RGT	Tliq	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[kcal/Wh]	P1	I	Current consumption		Ref. mass flow				
[°C]	[°F]	[°C]	[°F]	[°C]	[°F]							[W]	[A]	[kg/h]			ASHRAE LBP			
-23	-10	54	130	32	90	225,4	770	194,0	1,50	5,13	1,29	150,2	1,00	2,42			ASHRAE LBP			
-25	-13	55	131	32	90	170,0	581	146,3	1,18	4,03	1,02	144,0	0,97	2,22			cecomaf LBP			
-35	-31	40	104	20	68	122,0	417	105,0	1,13	3,87	0,98	107,7	0,85	1,49			EN12900 LBP			
-23	-10	49	120	4,4	40	183,7	627	158,1	1,25	4,28	1,08	146,6	0,98	2,68			ARI540 LBP			
-23	-10	41	105	32	90	242,6	829	208,8	1,72	5,88	1,48	140,9	0,96	2,60			AHAM LBP			
-35	-31	45	113	32	90	117,1	400	100,8	1,08	3,68	0,93	108,8	0,85	1,39			opt			

Performance tables

R600a, 220V/50Hz, RSIR, static, CB, VDE

	pe		Cooling capacity			COP	EER	P1	I	m	
	[°C]	[°F]	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[kcal/Wh]	[W]	[A]	[kg/h]
[°C / °F]	-35	-31	117,1	400	100,8	1,08	3,68	0,93	108,8	0,85	1,39
cond. pressure	-30	-22	153,4	524	132,0	1,25	4,26	1,07	122,9	0,89	1,82
pc= 45/113	-25	-13	197,4	674	169,9	1,43	4,87	1,23	138,4	0,95	2,35
return gas temp.	-23	-10	214,4	732	184,5	1,49	5,08	1,28	144,1	0,97	2,55
RGT= 32/90	-20	-4	250,4	855	215,5	1,60	5,47	1,38	156,2	1,03	2,99
liquid temp	-15	5	313,4	1070	269,7	1,77	6,03	1,52	177,5	1,12	3,74
Tliq= 45/113	-10	14	387,4	1323	333,4	1,91	6,51	1,64	203,2	1,23	4,64
[°C / °F]	-35	-31	98,7	337	85,0	0,91	3,11	0,78	108,3	0,86	1,28
cond. pressure	-30	-22	130,9	447	112,7	1,04	3,56	0,90	125,7	0,90	1,71
pc= 55/131	-25	-13	170,0	581	146,3	1,18	4,03	1,02	144,0	0,97	2,22
return gas temp	-23	-10	185,1	632	159,3	1,23	4,20	1,06	150,6	1,00	2,42
RGT= 32/90	-20	-4	217,2	742	186,9	1,32	4,52	1,14	164,2	1,05	2,84
liquid temp	-15	5	273,5	934	235,4	1,46	4,99	1,26	187,3	1,16	3,58
Tliq= 55/131	-10	14	340,0	1161	292,6	1,59	5,42	1,37	214,3	1,27	4,46

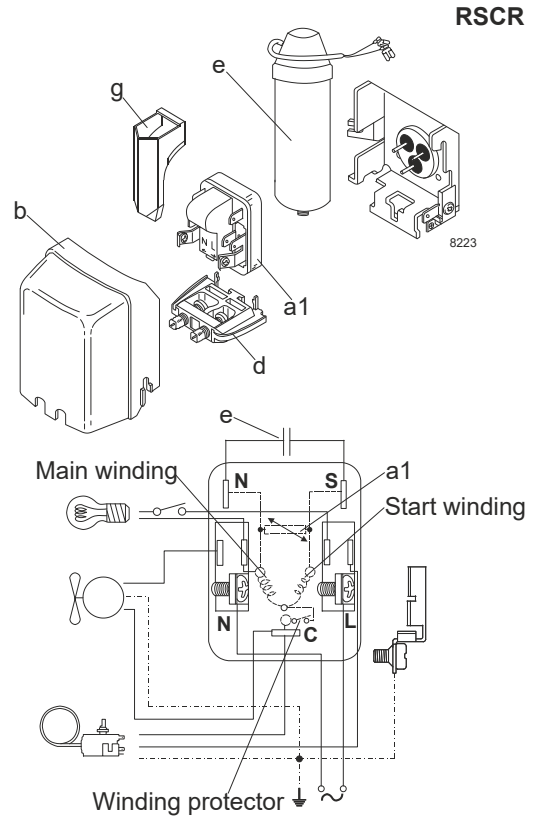
Model

Designation	NLE13KK.4	220-240V/50Hz	Conf. 2	Sales code:	105H6939
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Configuration

Motorconfiguration	RSCR
Power supply (nominal)	220-240V/50Hz 1~
Refrigerant	R600a
Application	LBP
Voltage range	198-254V
Starting torque	LST
Approvals	CB VDE

Electrical accessories / wiring diagram

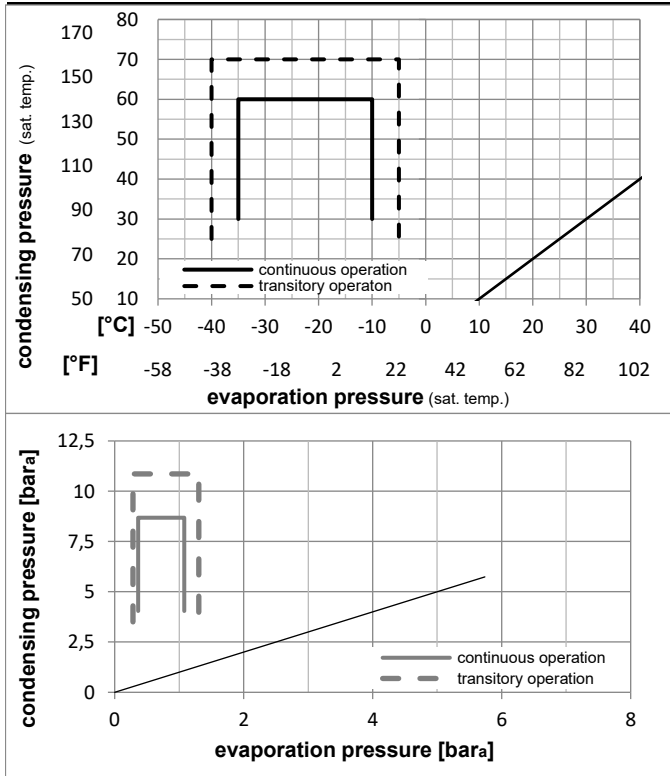


Ambient temperatures / system cooling

Ambient temperature min.:	10°C / 50°F
Ambient temperature max.:	43°C / 110°F

System cooling (n/a: outside limits)			
T ambient	LBP	MBP	HBP
32°C / 90°F	static	n/a	n/a
38°C / 100°F	static	n/a	n/a
43°C / 110°F	static	n/a	n/a

Operation pressure range



Components

a1	PTC starter (220V, 250hm, 4.8mm)	103N0021
e	run capacitor (4μF, 4.8mm)	117-7119
b	plastic cover	103N2010
d	cord relief	103N1010
g	protection screen for PTC	103N0476
	bracket for run capacitor	117-0300

Alternative components

a1	e-PTC starter (220V, 250hm, 4.8mm)	103N0050
b	plastic cover	103N2011
	screw M4x8mm	117-0301

Model

Designation **NLE13KK.4** **220-240V/50Hz** Conf. 2 Sales code: **105H6939**

Optimization + standard conditions

R600a, 220V/50Hz, RSCR, static, CB, VDE

		Evaporating pressure (saturation temperature)				Condensing pressure (saturation temperature)						Power consumption			
		Return gas temp.		Liquid temp.		Cooling capacity		COP	EER		P1	I	Ref. mass flow		
		pe	pc	RGT	Tliq	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[kcal/Wh]	[W]	[A]	[kg/h]	
[°C]	[°F]	[°C]	[°F]	[°C]	[°F]										
-23	54	32	32	225,4	770	194,0	1,56	5,33	1,34	144,3	0,76	2,42	ASHRAE LBP		
-10	130	90	90												
-25	55	32	55	170,0	581	146,3	1,23	4,19	1,06	138,5	0,73	2,22	cecomaf LBP		
-13	131	90	131												
-35	40	20	40	122,0	417	105,0	1,18	4,03	1,02	103,4	0,57	1,49	EN12900 LBP		
-31	104	68	104												
-23	49	4,4	49	183,7	627	158,1	1,30	4,45	1,12	141,1	0,75	2,68	ARI540 LBP		
-10	120	40	120												
-23	41	32	32	242,6	829	208,8	1,79	6,13	1,54	135,3	0,72	2,60	AHAM LBP		
-10	105	90	90												
-35	45	32	45	117,1	400	100,8	1,12	3,82	0,96	104,6	0,57	1,39	opt		
-31	113	90	113												

Performance tables

R600a, 220V/50Hz, RSCR, static, CB, VDE

	pe		Cooling capacity			COP	EER	P1	I	m	
	[°C]	[°F]	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[kcal/Wh]	[W]	[A]	[kg/h]
[°C / °F]	-35	-31	117,1	400	100,8	1,12	3,82	0,96	104,6	0,57	1,39
cond. pressure	-30	-22	153,4	524	132,0	1,30	4,43	1,12	118,3	0,63	1,82
pc= 45/113	-25	-13	197,4	674	169,9	1,48	5,06	1,28	133,2	0,71	2,35
return gas temp.	-23	-10	214,4	732	184,5	1,55	5,28	1,33	138,6	0,74	2,55
RGT= 32/90	-20	-4	250,4	855	215,5	1,67	5,71	1,44	149,9	0,79	2,99
liquid temp	-15	5	313,4	1070	269,7	1,85	6,32	1,59	169,3	0,89	3,74
Tliq= 45/113	-10	14	387,4	1323	333,4	2,02	6,88	1,73	192,2	1,00	4,64
[°C / °F]	-35	-31	98,7	337	85,0	0,95	3,24	0,82	104,0	0,57	1,28
cond. pressure	-30	-22	130,9	447	112,7	1,08	3,70	0,93	120,9	0,65	1,71
pc= 55/131	-25	-13	170,0	581	146,3	1,23	4,19	1,06	138,5	0,73	2,22
return gas temp	-23	-10	185,1	632	159,3	1,28	4,37	1,10	144,8	0,76	2,42
RGT= 32/90	-20	-4	217,2	742	186,9	1,38	4,71	1,19	157,6	0,83	2,84
liquid temp	-15	5	273,5	934	235,4	1,53	5,22	1,32	179,0	0,94	3,58
Tliq= 55/131	-10	14	340,0	1161	292,6	1,67	5,71	1,44	203,5	1,06	4,46

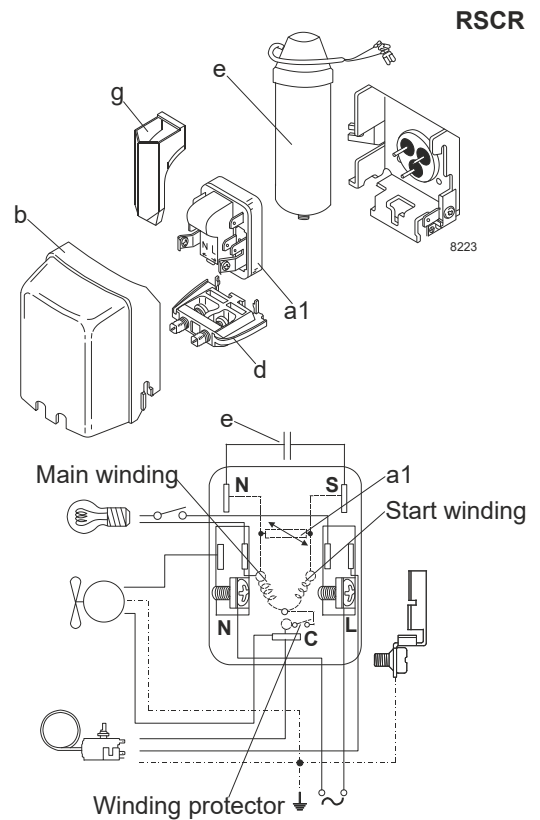
Model

Designation	NLE13KK.4	220-240V/50Hz	Conf. 3	Sales code:	105H6939
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Configuration

Motorconfiguration	RSCR
Power supply (nominal)	220-240V/50Hz 1~
Refrigerant	R600a
Application	LBP
Voltage range	198-254V
Starting torque	LST
Approvals	CB VDE

Electrical accessories / wiring diagram

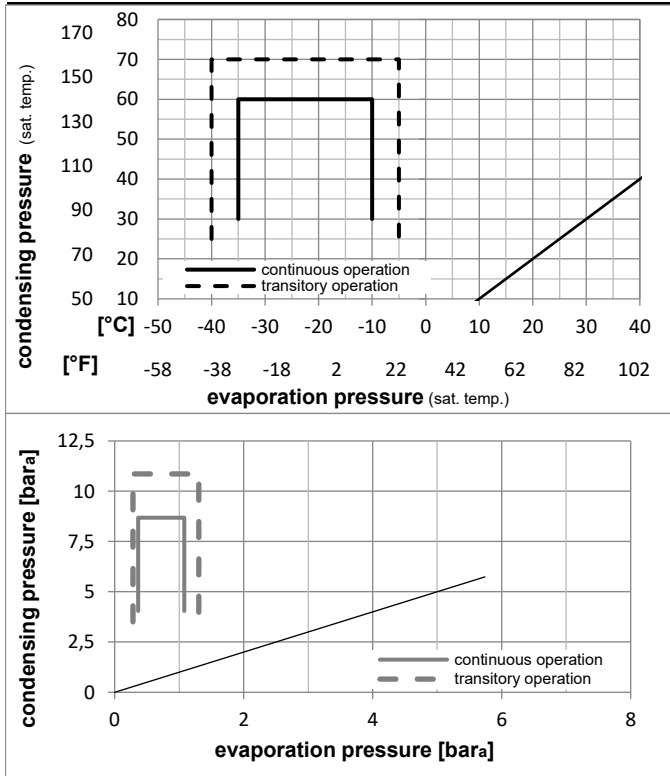


Ambient temperatures / system cooling

Ambient temperature min.:	10°C / 50°F
Ambient temperature max.:	43°C / 110°F

System cooling (n/a: outside limits)			
T ambient	LBP	MBP	HBP
32°C / 90°F	static	n/a	n/a
38°C / 100°F	static	n/a	n/a
43°C / 110°F	static	n/a	n/a

Operation pressure range



Components

a1	PTC starter (220V, 250hm, 6.3mm)	103N0016
e	run capacitor (4μF, 6.3mm)	117-7117
b	plastic cover	103N2010
d	cord relief	103N1010
g	protection screen for PTC	103N0476
	bracket for run capacitor	117-0300

Alternative components

b	plastic cover	103N2011
	screw M4x8mm	117-0301

Model

Designation **NLE13KK.4** **220-240V/50Hz** Conf. 3 Sales code: **105H6939**

Optimization + standard conditions

R600a, 220V/50Hz, RSCR, static, CB, VDE

		Evaporating pressure (saturation temperature)				Condensing pressure (saturation temperature)						Power consumption			
		Return gas temp.		Liquid temp.		Cooling capacity		COP	EER		P1	Current consumption		Ref. mass flow	
		pe	pc	RGT	Tliq	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[kcal/Wh]	[W]	I	m	
[°C]	[°F]	[°C]	[°F]	[°C]	[°F]								[A]	[kg/h]	ASHRAE LBP
-23	54	32	32	225,4	770	194,0	1,56	5,33	1,34	144,3	0,76	2,42	ASHRAE LBP		
-10	130	90	90												
-25	55	32	55	170,0	581	146,3	1,23	4,19	1,06	138,5	0,73	2,22	cecomaf LBP		
-13	131	90	131												
-35	40	20	40	122,0	417	105,0	1,18	4,03	1,02	103,4	0,57	1,49	EN12900 LBP		
-31	104	68	104												
-23	49	4,4	49	183,7	627	158,1	1,30	4,45	1,12	141,1	0,75	2,68	ARI540 LBP		
-10	120	40	120												
-23	41	32	32	242,6	829	208,8	1,79	6,13	1,54	135,3	0,72	2,60	AHAM LBP		
-10	105	90	90												
-35	45	32	45	117,1	400	100,8	1,12	3,82	0,96	104,6	0,57	1,39	opt		
-31	113	90	113												

Performance tables

R600a, 220V/50Hz, RSCR, static, CB, VDE

	pe		Cooling capacity			COP	EER		P1	I	m
	[°C]	[°F]	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[kcal/Wh]	[W]	[A]	[kg/h]
[°C / °F]	-35	-31	117,1	400	100,8	1,12	3,82	0,96	104,6	0,57	1,39
cond. pressure	-30	-22	153,4	524	132,0	1,30	4,43	1,12	118,3	0,63	1,82
pc= 45/113	-25	-13	197,4	674	169,9	1,48	5,06	1,28	133,2	0,71	2,35
return gas temp.	-23	-10	214,4	732	184,5	1,55	5,28	1,33	138,6	0,74	2,55
RGT= 32/90	-20	-4	250,4	855	215,5	1,67	5,71	1,44	149,9	0,79	2,99
liquid temp	-15	5	313,4	1070	269,7	1,85	6,32	1,59	169,3	0,89	3,74
Tliq= 45/113	-10	14	387,4	1323	333,4	2,02	6,88	1,73	192,2	1,00	4,64
[°C / °F]	-35	-31	98,7	337	85,0	0,95	3,24	0,82	104,0	0,57	1,28
cond. pressure	-30	-22	130,9	447	112,7	1,08	3,70	0,93	120,9	0,65	1,71
pc= 55/131	-25	-13	170,0	581	146,3	1,23	4,19	1,06	138,5	0,73	2,22
return gas temp	-23	-10	185,1	632	159,3	1,28	4,37	1,10	144,8	0,76	2,42
RGT= 32/90	-20	-4	217,2	742	186,9	1,38	4,71	1,19	157,6	0,83	2,84
liquid temp	-15	5	273,5	934	235,4	1,53	5,22	1,32	179,0	0,94	3,58
Tliq= 55/131	-10	14	340,0	1161	292,6	1,67	5,71	1,44	203,5	1,06	4,46