

Model

Designation	HXK87AT	220-240V/50Hz 1~	Sales code:	16408900
-------------	----------------	-------------------------	-------------	-----------------

Compressor design

Oil type	Mineral	Refrigerant(s)	R600a
Oil viscosity	5cSt	Displacement	8,8cm ³ / 0,54cu.in
Oil quantity	162cm ³ / 5,5fl.oz	Compressors on pallet	100
Refr. charge - tech. limit	150g / 5,3oz		
Free gas volume comp.	1620cm ³ / 54,8fl.oz		
Weight	8,6kg / 19lbs		
Motor protection	external		
Winding resistance main	18,8Ω (at 25°C)		
Winding resistance aux	10,7Ω (at 25°C)		
Max. winding temp.	130°C / 266°F		
Max. discharge temp.	130°C / 266°F		



General - Configurations with HXK87AT

	Conf. 1	Conf. 2	Conf. 3
Motor configuration	RSCR	RSIR	RSCR
Power supply (nominal)	200-240V/50Hz	200-240V/50Hz	208-230V/60Hz
Number of phases	1	1	1
Voltage range	170-264V	170-264V	198-253V
Approvals	VDE	VDE	VDE
Starting torque	LST	LST	LST
Note	Various options of connectors are possible - please contact SECOP-Sales.		

Applications with HXK87AT

	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 HXK87AT

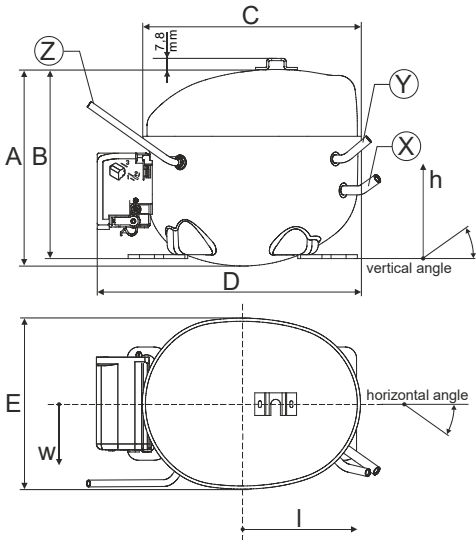
	Conf. 1	Conf. 2	Conf. 3
Starting device type	PTC	PTC	PTC
Run capacitor	4μF	-/-	4μF
Start capacitor	-/-	-/-	-/-
LRA (locked rotor amps / 4s/ U(N))	6,6A		
RLA (rated load amps / 1s/ U(N))	0,6A	-/-A	-/-A
Cut in current (U(N))			

Model			
Designation	HXK87AT	220-240V/50Hz 1~	Sales code: 16408900

Compressor dimensions

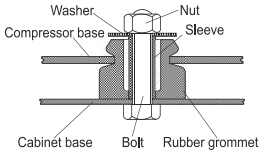
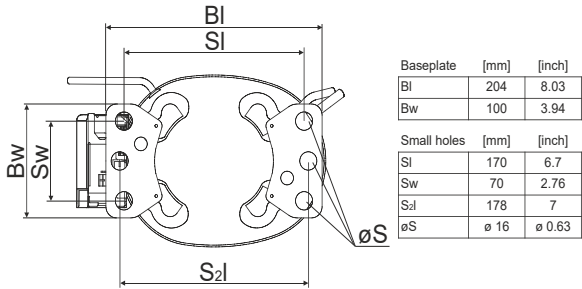
Housing	A Height	174mm / 6,85in
	B Height	167mm / 6,57in
	C Length shell	194mm / 7,64in
	D Length w. cover	238mm / 9,37in
	E Width	151mm / 5,94in

Connectors		Suction	Discharge	Process
		X	Y	Z
Diameter	[mm]	øi 6,1-6,2	øi 5,1-5,2	øo 5,92-6,08
(i:inside, o:outside)	[in]	øi 0,24-0,24	øi 0,2-0,2	øo 0,23-0,24
Material		copper	copper	copper
Horizontal angle	±2°	45°	13°	0°
Vertical angle	±2°	30°	40°	145°
Position l/h/w	[mm]	120/72/62	112/106/62	-140/136/70
	[in]	4,7/2,8/2,4	4,4/4,2/2,4	-5,5/5,4/2,8
Straight tube l.	[mm]	14	14	75
	[in]	0,5	0,5	3

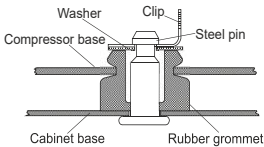


Compressor fixation

Bolt joint



Snap-on



Mounting accessories

- '4ZN' with rubber grommet
- '4ZN' with rubber grommet and sleeve for M6
- Bolt joint kit
- '4ZN' with Snap on kit

- order code
- 772N
- 768N
- 4ZN + 118-1917 (18)
- 776N

Application notes

Provision for PE Grounding is located at the PE Stamp on the compressor Housing with dip-tray fixture (omega bracket).

Various options of connectors are possible - please contact SECOP-Sales.

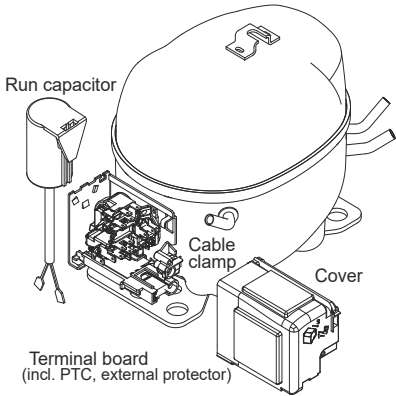
Model				
Designation	HXK87AT	200-240V/50Hz	Conf. 1	Sales code: 16408900

Configuration

Electrical accessories / wiring diagram

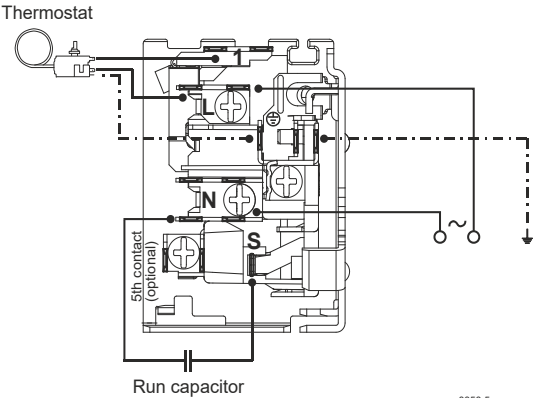
Motor configuration	RSCR
Power supply (nominal)	200-240V/50Hz 1~
Refrigerant	R600a
Application	LBP
Voltage range	170-264V
Starting torque	LST
Approvals	VDE

RSCR

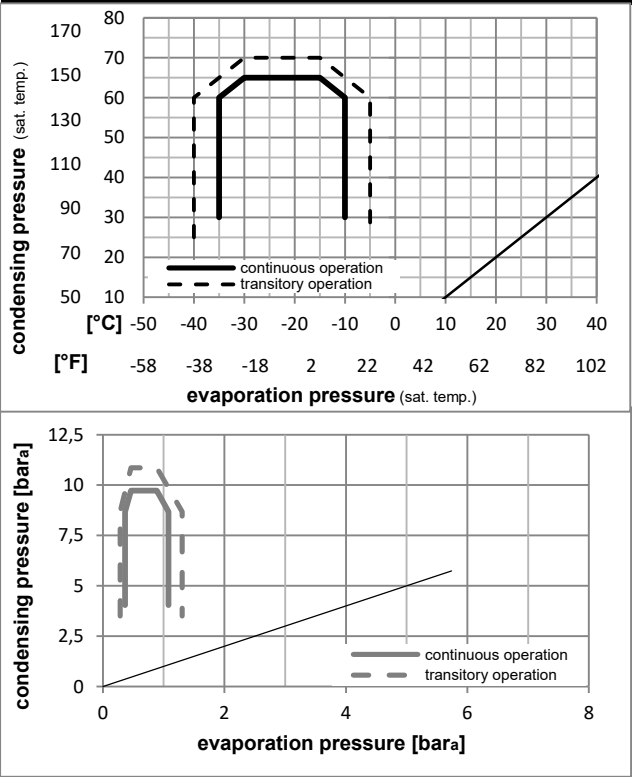


Ambient/ machine room temperatures minimum /maximum

Ambient temperature range:	10 - 43°C / 50 - 110°F
Machine room temperature range:	10 - 48°C / 50 - 119°F
Compressor cooling:	static



Operation pressure range



Components

. terminal board (PTC, 6.3mm)	16413200
. run capacitor (4µF, 6.3mm)	15186801
b cover terminal board	10636401
. cable clamp	16058100
. screw - uni6954	10636000
. screw - uni6954	10636200

Alternative components

. screw uni en iso 4757	10641201
-------------------------	----------

Model

Designation **HXK87AT** **200-240V/50Hz** Conf. 1 Sales code: **16408900**

Optimization + standard conditions

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

Evaporating pressure (saturation temperature)					Condensing pressure (saturation temperature)						Power consumption			
Return gas temp.					Liquid temp.						Current consumption			
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]	ṁ		
[°C]	[°F]											[kg/h]		
-23	54	32	32	154,9	529	133,3	1,71	5,84	1,47	90,5	0,47	1,66		
-10	130	90	90									ASHRAE LBP		
-25	55	32	55	116,7	399	100,5	1,34	4,58	1,15	87,1	0,45	1,52		
-13	131	90	131									cecomaf LBP		
-35	40	20	40	91,2	312	78,5	1,35	4,60	1,16	67,7	0,32	1,11		
-31	104	68	104									EN12900 LBP		
-23	49	4,4	49	125,1	427	107,7	1,42	4,85	1,22	88,0	0,46	1,83		
-10	120	40	120									ARI540 LBP		
-23	41	32	32	162,7	555	140,0	1,94	6,64	1,67	83,6	0,44	1,75		
-10	105	90	90									AHAM LBP		
-35	45	32	45	88,6	302	76,2	1,28	4,38	1,10	69,0	0,30	1,05		
-31	113	90	113									opt		

Performance tables

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

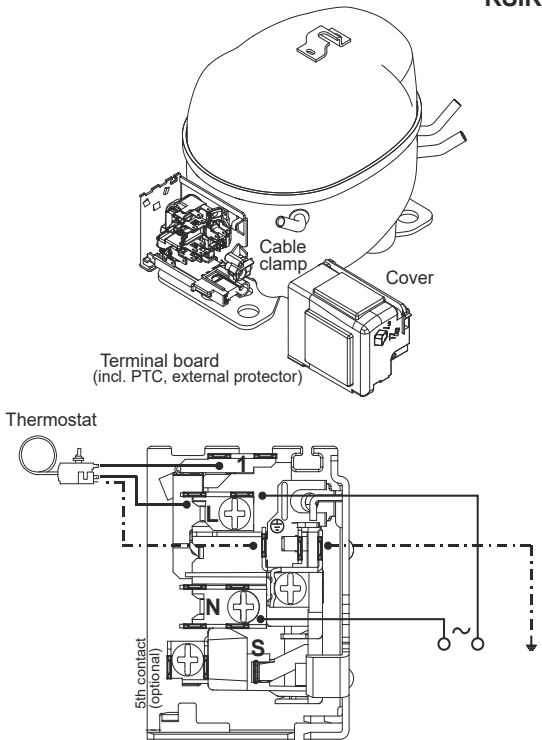
	pe		Cooling capacity			COP	EER		P1	I	m
	[°C]	[°F]	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[kcal/Wh]	[W]	[A]	[kg/h]
[°C / °F]	-35	-31	88,6	302	76,2	1,28	4,38	1,10	69,0	0,30	1,05
cond. pressure	-30	-22	106,0	362	91,3	1,41	4,83	1,22	75,0	0,38	1,26
pc= 45/113	-25	-13	133,4	456	114,8	1,61	5,49	1,38	83,0	0,44	1,59
return gas temp.	-23	-10	144,9	495	124,7	1,68	5,75	1,45	86,0	0,45	1,73
RGT= 32/90	-20	-4	170,0	580	146,3	1,84	6,29	1,58	92,3	0,48	2,03
liquid temp	-15	5	215,0	734	185,0	2,10	7,16	1,80	102,6	0,52	2,57
Tliq= 45/113	-10	14	267,7	914	230,4	2,36	8,08	2,04	113,2	0,57	3,21
[°C / °F]	-35	-31	72,7	248	62,6	1,05	3,59	0,91	69,1	0,26	0,95
cond. pressure	-30	-22	90,8	310	78,1	1,18	4,01	1,01	77,2	0,37	1,18
pc= 55/131	-25	-13	116,7	399	100,5	1,34	4,58	1,15	87,1	0,45	1,52
return gas temp	-23	-10	127,3	435	109,5	1,40	4,79	1,21	90,8	0,47	1,66
RGT= 32/90	-20	-4	149,9	512	129,0	1,53	5,21	1,31	98,3	0,51	1,96
liquid temp	-15	5	189,6	647	163,1	1,72	5,88	1,48	110,2	0,56	2,48
Tliq= 55/131	-10	14	235,0	802	202,2	1,92	6,56	1,65	122,4	0,61	3,08

Model				
Designation	HXK87AT	200-240V/50Hz	Conf. 2	Sales code: 16408900

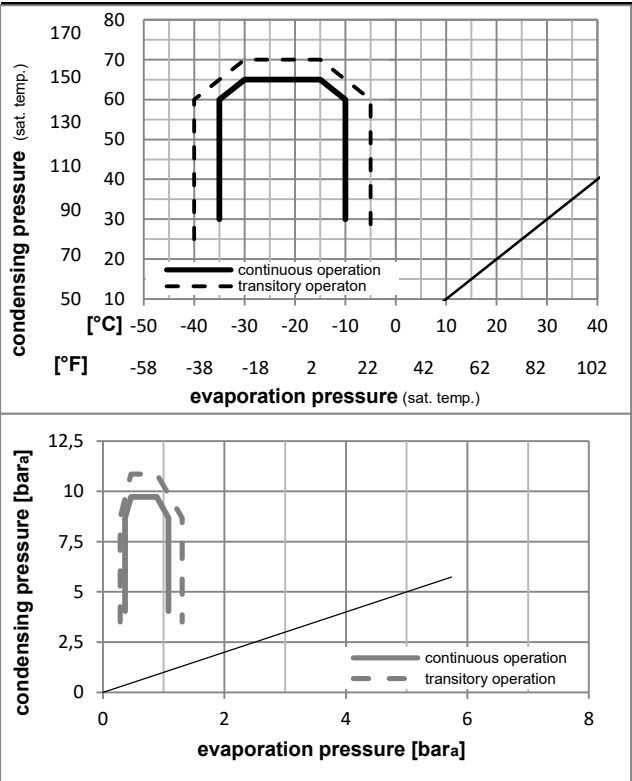
Configuration		Electrical accessories / wiring diagram		
Motor configuration	RSIR	RSIR		
Power supply (nominal)	200-240V/50Hz 1~			
Refrigerant	R600a			
Application	LBP			
Voltage range	170-264V			
Starting torque	LST			
Approvals	VDE			

Ambient/ machine room temperatures minimum /maximum

Ambient temperature range:	10 - 43°C / 50 - 110°F
Machine room temperature range:	10 - 48°C / 50 - 119°F
Compressor cooling:	static



Operation pressure range



Components		
.	terminal board (PTC, 6.3mm)	16413200
b	cover terminal board	10636401
.	cable clamp	16058100
.	screw - uni6954	10636000
.	screw - uni6954	10636200
.	screw uni en iso 4757	10641201

Model

Designation **HXK87AT** **200-240V/50Hz** Conf. 2 Sales code: **16408900**

Optimization + standard conditions

R600a, 200V/50Hz, RSIR, static, VDE

Evaporating pressure (saturation temperature)					Condensing pressure (saturation temperature)						Power consumption																																																																																																		
Return gas temp.					Current consumption						Ref. mass flow																																																																																																		
Liquid temp.					Cooling capacity						COP				EER				P1				I				ṁ																																																																																		
pe					pc					RGT					Tliq					[W]					[Btu/h]					[kcal/h]					[W/W]					[Btu/Wh]					[kcal/Wh]					[W]					[A]					[kg/h]																																																	
[°C]					-23					54					32					32					153,7					525					132,3					1,67					5,70					1,44					92,2					0,48					1,65					ASHRAE LBP																																							
[°F]					-10					130					90					90																																																																																									
[°C]					-25					55					32					55					115,9					396					99,7					1,31					4,46					1,12					88,7					0,45					1,51					cecomaf LBP																																							
[°F]					-13					131					90					131																																																																																									
[°C]					-35					40					20					40					90,5					309					77,9					1,31					4,48					1,13					69,0					0,32					1,10					EN12900 LBP																																							
[°F]					-31					104					68					104																																																																																									
[°C]					-23					49					4,4					49					124,2					424					106,9					1,39					4,73					1,19					89,6					0,47					1,81					ARI540 LBP																																							
[°F]					-10					120					40					120																																																																																									
[°C]					-23					41					32					32					161,5					551					138,9					1,90					6,47					1,63					85,2					0,45					1,73					AHAM LBP																																							
[°F]					-10					105					90					90																																																																																									
[°C]					-35					45					32					45					87,9					300					75,7					1,25					4,27					1,08					70,3					0,31					1,04					opt																																							
[°F]					-31					113					90					113																																																																																									

Performance tables

R600a, 200V/50Hz, RSIR, static, VDE

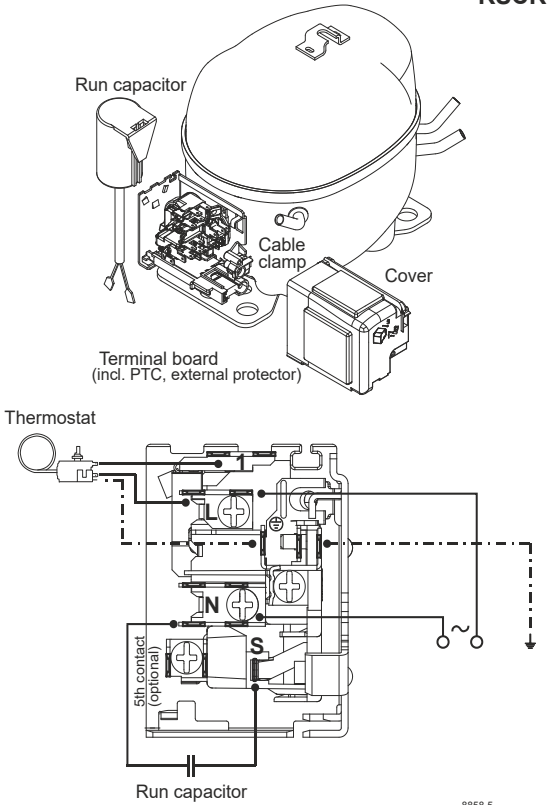
	pe		Cooling capacity			COP	EER		P1	I	m
	[°C]	[°F]	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[kcal/Wh]	[W]	[A]	[kg/h]
[°C / °F]	-35	-31	87,9	300	75,7	1,25	4,27	1,08	70,3	0,31	1,04
cond. pressure	-30	-22	105,3	360	90,6	1,38	4,70	1,19	76,4	0,39	1,25
pc= 45/113	-25	-13	132,4	452	114,0	1,57	5,35	1,35	84,5	0,44	1,58
return gas temp.	-23	-10	143,8	491	123,7	1,64	5,60	1,41	87,6	0,46	1,71
RGT= 32/90	-20	-4	168,7	576	145,2	1,79	6,13	1,54	94,1	0,49	2,01
liquid temp	-15	5	213,4	729	183,7	2,04	6,98	1,76	104,5	0,53	2,55
Tliq= 45/113	-10	14	265,8	908	228,7	2,30	7,87	1,98	115,3	0,58	3,18
[°C / °F]	-35	-31	72,2	246	62,1	1,03	3,50	0,88	70,4	0,26	0,94
cond. pressure	-30	-22	90,1	308	77,5	1,15	3,91	0,99	78,7	0,37	1,17
pc= 55/131	-25	-13	115,9	396	99,7	1,31	4,46	1,12	88,7	0,45	1,51
return gas temp	-23	-10	126,3	431	108,7	1,37	4,67	1,18	92,5	0,48	1,65
RGT= 32/90	-20	-4	148,8	508	128,1	1,49	5,08	1,28	100,1	0,52	1,94
liquid temp	-15	5	188,2	643	161,9	1,68	5,73	1,44	112,2	0,57	2,46
Tliq= 55/131	-10	14	233,2	797	200,7	1,87	6,39	1,61	124,6	0,62	3,06

Model				
Designation	HXK87AT	208-230V/60Hz	Conf. 3	Sales code: 16408900

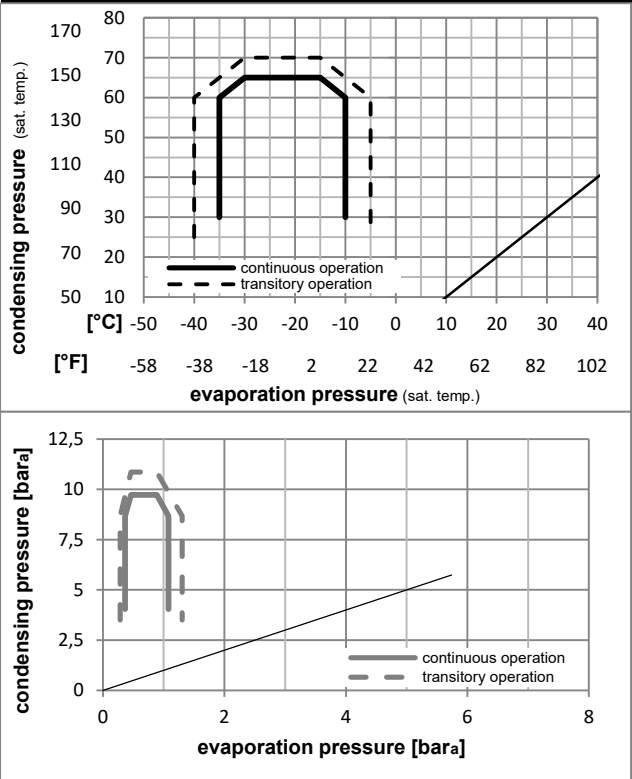
Configuration	Electrical accessories / wiring diagram			
Motor configuration	RSCR	RSCR		
Power supply (nominal)	208-230V/60Hz 1~			
Refrigerant	R600a			
Application	LBP			
Voltage range	198-253V			
Starting torque	LST			
Approvals	VDE			

Ambient/ machine room temperatures minimum /maximum

Ambient temperature range:	10 - 43°C / 50 - 110°F
Machine room temperature range:	10 - 48°C / 50 - 119°F
Compressor cooling:	static



Operation pressure range



Components		
.	terminal board (PTC, 6.3mm)	16413200
.	run capacitor (4μF, 6.3mm)	15186801
b	cover terminal board	10636401
.	cable clamp	16058100
.	screw - uni6954	10636000
.	screw - uni6954	10636200

Alternative components		
.	screw uni en iso 4757	10641201

Model

Designation **HXK87AT** **208-230V/60Hz** Conf. 3 Sales code: **16408900**

Optimization + standard conditions

R600a, 220V/60Hz, RSCR, static, VDE

Evaporating pressure (saturation temperature)					Condensing pressure (saturation temperature)						Power consumption																				
Return gas temp.					Current consumption						Ref. mass flow																				
Liquid temp.					Cooling capacity						COP				EER				P1				I				ṁ				
pe		pc		RGT		Tliq		[W]		[Btu/h]		[kcal/h]		[W/W]		[Btu/Wh]		[kcal/Wh]		[W]		[A]		[kg/h]							
[°C]		-23		54		32		32		183,6		627		158,0		1,77		6,04		1,52		103,9		0,54		1,97		ASHRAE LBP			
[°F]		-10		130		90		90																							
[°C]		-25		55		32		55		138,5		473		119,2		1,38		4,73		1,19		100,0		0,51		1,81		cecomaf LBP			
[°F]		-13		131		90		131																							
[°C]		-35		40		20		40		106,9		365		92,0		1,38		4,70		1,18		77,7		0,36		1,30		EN12900 LBP			
[°F]		-31		104		68		104																							
[°C]		-23		49		4,4		49		147,8		505		127,2		1,46		5,00		1,26		101,0		0,53		2,16		ARI540 LBP			
[°F]		-10		120		40		120																							
[°C]		-23		41		32		32		190,7		651		164,1		1,99		6,78		1,71		96,0		0,51		2,05		AHAM LBP			
[°F]		-10		105		90		90																							
[°C]		-35		45		32		45		104,5		357		90,0		1,32		4,51		1,14		79,2		0,35		1,24		opt			
[°F]		-31		113		90		113																							

Performance tables

R600a, 220V/60Hz, RSCR, static, 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	104,5	357	90,0	1,32	4,51	1,14	79,2	0,35	1,24
cond. pressure	-30	-22	124,9	426	107,5	1,45	4,95	1,25	86,2	0,43	1,48
pc= 45/113	-25	-13	157,0	536	135,1	1,65	5,63	1,42	95,3	0,50	1,87
return gas temp.	-23	-10	170,4	582	146,6	1,72	5,89	1,48	98,8	0,52	2,03
RGT= 32/90	-20	-4	199,9	683	172,1	1,89	6,44	1,62	106,0	0,55	2,38
liquid temp	-15	5	253,0	864	217,7	2,15	7,34	1,85	117,8	0,60	3,02
Tliq= 45/113	-10	14	315,2	1076	271,2	2,42	8,28	2,09	130,0	0,65	3,77
[°C / °F]	-35	-31	87,0	297	74,9	1,10	3,75	0,94	79,3	0,30	1,13
cond. pressure	-30	-22	108,0	369	93,0	1,22	4,16	1,05	88,7	0,42	1,41
pc= 55/131	-25	-13	138,5	473	119,2	1,38	4,73	1,19	100,0	0,51	1,81
return gas temp	-23	-10	150,9	515	129,8	1,45	4,94	1,25	104,2	0,54	1,97
RGT= 32/90	-20	-4	177,6	606	152,8	1,57	5,38	1,35	112,8	0,58	2,32
liquid temp	-15	5	224,4	766	193,1	1,77	6,06	1,53	126,5	0,64	2,94
Tliq= 55/131	-10	14	278,2	950	239,4	1,98	6,76	1,70	140,5	0,70	3,65