

Model

Designation	NLE8.8CN	115-127V/60Hz 1~	Sales code:	105H6094
-------------	-----------------	------------------	-------------	-----------------

Compressor design

Oil type	Polyolester	Refrigerant(s)	R290
Oil viscosity	32cSt	Displacement	8,76cm ³ / 0,53cu.in
Oil quantity	260cm ³ / 8,8fl.oz	Compressors on pallet	80
Refr. charge - tech. limit	400g / 14,1oz		
Free gas volume comp.	2360cm ³ / 79,8fl.oz		
Weight	10,9kg / 24lbs		
Motor protection	1# internal		
Winding resistance main	1,6Ω (at 25°C)		
Winding resistance aux	5,1Ω (at 25°C)		
Max. winding temp.	125°C / 257°F		
Max. discharge temp.	120°C / 248°F		



General - Configurations with NLE8.8CN

	Conf. 1	Conf. 2	Conf. 3
Motor configuration	CSIR	RSIR	eRSCR
Power supply (nominal)	115V/60Hz	115V/60Hz	115V/60Hz
Number of phases	1	1	1
Voltage range	95-135V	95-135V	95-135V
Approvals	UL, CCC	UL, CCC	UL, CCC
Starting torque	HST	LST	LST
Note	- / -		

Applications with NLE8.8CN

	Conf. 1	Conf. 2	Conf. 3
Refrigerant	R290	R290	R290
Application	LBP+MBP	LBP+MBP	LBP+MBP
System cooling	fan 3m/s	fan 3m/s	fan 3m/s
Hot gas defrost	OK	OK	OK
Long interval pull down	OK	OK	OK

Electrical data - Configurations with NLE8.8CN

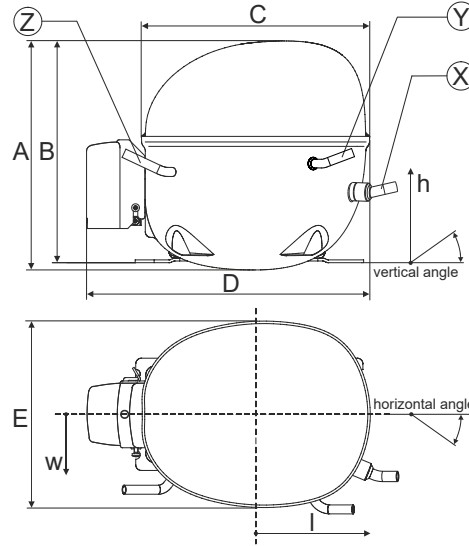
	Conf. 1	Conf. 2	Conf. 3
Starting device type	relay	PTC	e-PTC
Run capacitor	-/-	-/-	23,5μF
Start capacitor	280μF	-/-	-/-
LRA (locked rotor amps / 4s/ U(N))	32,01A	27,36A	27,36A
RLA (rated load amps / 1s/ U(N))	5,33A	5,33A	5,33A
Cut in current (U(N))	32,01A	32,5A	32,53A

Model

Designation	NLE8.8CN	115-127V/60Hz 1~	Sales code:	105H6094
-------------	-----------------	------------------	-------------	-----------------

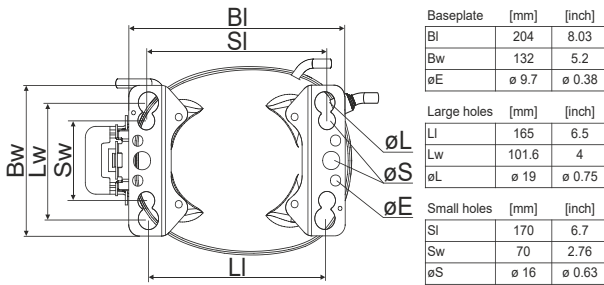
Compressor dimensions

Housing	A Height	203mm / 7,99in
	B Height	197mm / 7,76in
	C Length shell	205mm / 8,07in
	D Length w. cover	254mm / 10in
	E Width	166mm / 6,54in

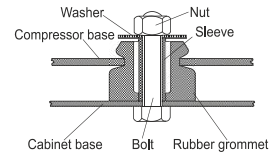


Connectors		Suction	Discharge	Process
		X	Y	Z
Diameter	[mm]	ø 8,11-8,29	ø 6,41-6,59	ø 6,41-6,59
(i:inside, o:outside)	[in]	ø 0,32-0,33	ø 0,25-0,26	ø 0,25-0,26
Material		copper	copper	copper
Horizontal angle	±2°	0°	0°	0°
Vertical angle	±2°	15°	21°	155°
Position l/h/w	[mm]	132/69/57	94/102/81	-109/94/72
	[in]	5,2/2,7/2,2	3,7/4/3,2	-4,3/3,7/2,8
Straight tube l.	[mm]	12	12	12
	[in]	0,5	0,5	0,5

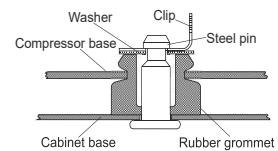
Compressor fixation



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	
Bolt joint ø1/4" ø19mm	118-1949	
Snap-on ø7,3 ø16mm	118-1947	118-1919

Application notes

Provision for PE Grounding is located at the PE Stamp on the compressor

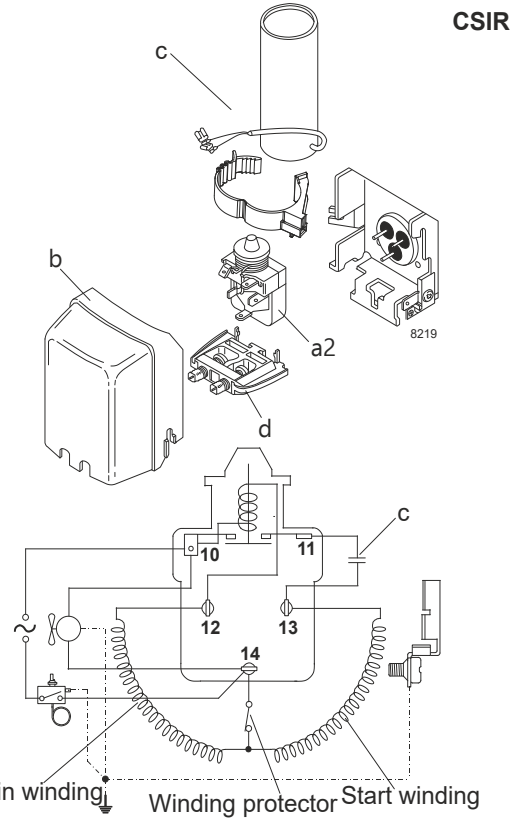
Model

Designation	NLE8.8CN	115V/60Hz	Conf. 1	Sales code:	105H6094
-------------	-----------------	------------------	----------------	-------------	-----------------

Configuration

Motor configuration	CSIR	
Power supply (nominal)	115V/60Hz 1~	
Refrigerant	R290	
Application	LBP+MBP	
Voltage range	95-135V	
Starting torque	HST	
Approvals	UL	SA3693
	CCC	

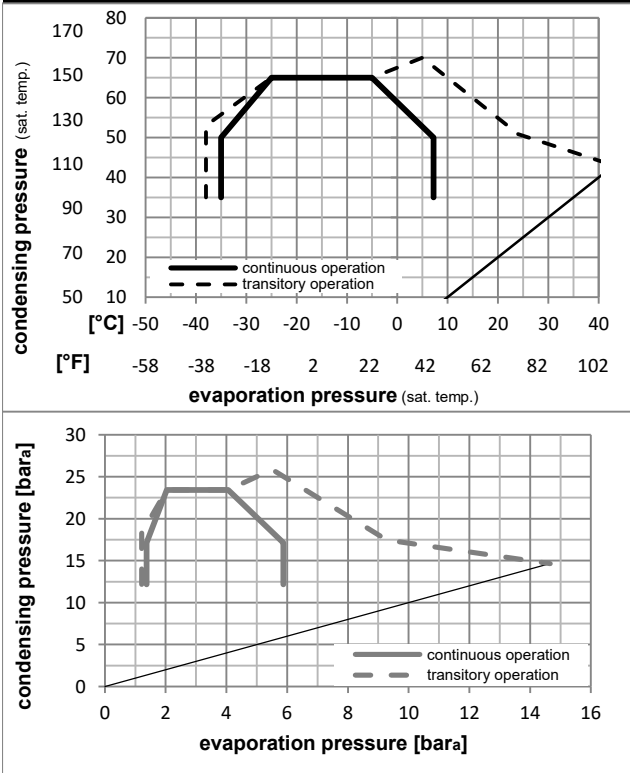
Electrical accessories / wiring diagram



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:	fan 3m/s

Operation pressure range



Components

a2	current relay	117U7014
c	start capacitor (280µF)	117U5025
b	plastic cover	103N2011
d	cord relief	103N1010

Model

Designation **NLE8.8CN** **115V/60Hz** Conf. 1 Sales code: **105H6094**

Optimization + standard conditions

R290, 115V/60Hz, CSIR, fan 3m/s, UL, CCC

	pe	pc	RGT	Tliq	Cooling capacity	COP	EER	P1	I	Ref. mass flow				
	[°C]	[°C]		[°C]	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[kcal/Wh]	[W]	[A]	[kg/h]	
	[°F]	[°F]		[°F]										
ASHRAE LBP	-23	54	32	32	512,6	1751	441,2	1,57	5,37	1,35	325,8	4,24	5,19	
cecomaf LBP	-25	55	32	55	384,4	1313	330,8	1,22	4,16	1,05	315,7	4,18	4,79	
EN12900 LBP	-35	40	20	40	304,3	1039	261,9	1,26	4,30	1,08	241,7	3,80	3,48	
ASHRAE MBP	-7	54	35	46	915,3	3126	787,7	2,08	7,11	1,79	439,5	5,00	10,44	
cecomaf MBP	-10	55	32	55	728,1	2486	626,6	1,75	5,98	1,51	416,1	4,83	9,21	
EN12900 MBP	-10	45	20	45	807,7	2758	695,1	2,08	7,10	1,79	388,3	4,64	9,92	

Performance tables

R290, 115V/60Hz, CSIR, fan 3m/s, UL, CCC

	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]	-23	-10	493,0	1684	424,3	1,60	5,46	1,37	308,7	4,15	5,57
cond. pressure	-23	-10	493,0	1684	424,3	1,60	5,46	1,37	308,7	4,15	5,57
pc= 45/113	-15	5	695,8	2376	598,8	1,95	6,68	1,68	356,0	4,43	7,92
return gas temp.	-9	15	858,1	2931	738,5	2,19	7,47	1,88	392,1	4,67	9,82
RGT= 32/90	-4	25	1042,6	3561	897,3	2,40	8,20	2,07	434,1	4,96	12,02
liquid temp	0	32	1185,3	4048	1020,1	2,53	8,65	2,18	468,0	5,20	13,75
Tliq= 45/113	7,2	45	1480,2	5055	1273,8	2,72	9,31	2,34	543,2	5,74	17,39
[°C / °F]	-23	-10	415,0	1417	357,2	1,27	4,34	1,09	326,6	4,24	5,17
cond. pressure	-23	-10	415,0	1417	357,2	1,27	4,34	1,09	326,6	4,24	5,17
pc= 55/131	-15	5	596,3	2036	513,2	1,56	5,34	1,35	381,3	4,59	7,50
return gas temp	-9	15	743,8	2540	640,1	1,77	6,05	1,52	420,2	4,86	9,42
RGT= 32/90	-4	25	913,1	3118	785,8	1,97	6,73	1,70	463,2	5,19	11,65
liquid temp	0	32	1044,9	3568	899,2	2,10	7,18	1,81	496,7	5,45	13,42
Tliq= 55/131	7,2	45	1319,0	4505	1135,2	2,32	7,92	2,00	569,0	6,04	17,18

Model

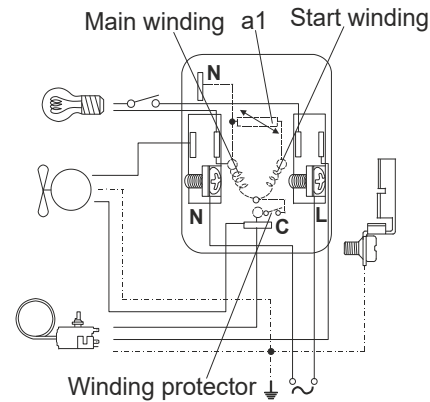
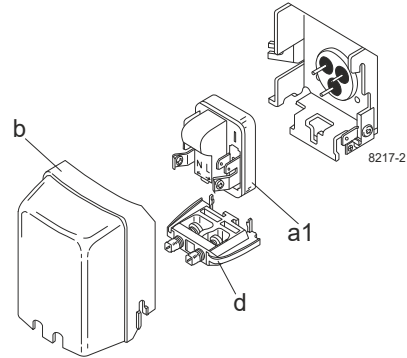
Designation	NLE8.8CN	115V/60Hz	Conf. 2	Sales code:	105H6094
-------------	-----------------	------------------	----------------	-------------	-----------------

Configuration

Motor configuration	RSIR	
Power supply (nominal)	115V/60Hz 1~	
Refrigerant	R290	
Application	LBP+MBP	
Voltage range	95-135V	
Starting torque	LST	
Approvals	UL	SA3693
	CCC	

Electrical accessories / wiring diagram

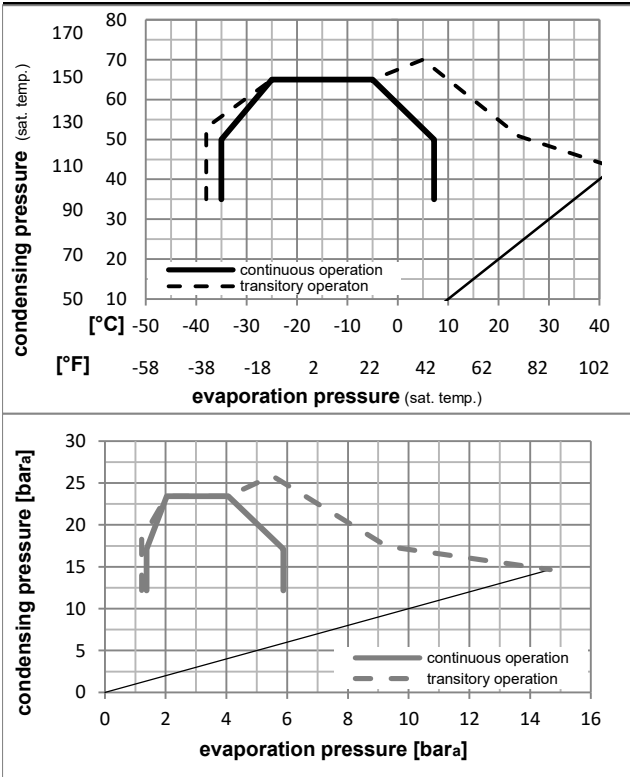
RSIR



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:	fan 3m/s

Operation pressure range



Components

a1	e-PTC starter (115V, 50hm, 6.3mm, 4.8-	103N0057
b	plastic cover	103N2011
d	cord relief	103N1010

Alternative components

a1	e-PTC starter	103N0058
b	plastic cover	103N2011
d	cord relief	103N1010

Model

Designation **NLE8.8CN** **115V/60Hz** Conf. 2 Sales code: **105H6094**

Optimization + standard conditions

R290, 115V/60Hz, RSIR, fan 3m/s, UL, CCC

	Evaporating pressure (saturation temperature)				Cooling capacity			COP	EER	P1	Power consumption		Ref. mass flow	
	pe	pc	RGT	Tliq	[W]	[Btu/h]	[kcal/h]				I	m		
	[°C]	[°F]	[°C]	[°F]	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[kcal/Wh]	[W]	[A]	[kg/h]	
ASHRAE LBP	-23	54	32	32	512,6	1751	441,2	1,57	5,37	1,35	325,8	4,24	5,19	
	-10	130	90	90										
cecomaf LBP	-25	55	32	55	384,4	1313	330,8	1,22	4,16	1,05	315,7	4,18	4,79	
	-13	131	90	131										
EN12900 LBP	-35	40	20	40	304,3	1039	261,9	1,26	4,30	1,08	241,7	3,80	3,48	
	-31	104	68	104										
ASHRAE MBP	-7	54	35	46	915,3	3126	787,7	2,08	7,11	1,79	439,5	5,00	10,44	
	20	130	95	115										
cecomaf MBP	-10	55	32	55	728,1	2486	626,6	1,75	5,98	1,51	416,1	4,83	9,21	
	14	131	90	131										
EN12900 MBP	-10	45	20	45	807,7	2758	695,1	2,08	7,10	1,79	388,3	4,64	9,92	
	14	113	68	113										

Performance tables

R290, 115V/60Hz, RSIR, fan 3m/s, UL, CCC

	pe		Cooling capacity			COP	EER	P1	I	m	
	[°C]	[°F]	[W]	[Btu/h]	[kcal/h]						
[°C / °F]	-35	-31	288,9	987	248,6	1,18	4,02	1,01	245,5	3,83	3,24
cond. pressure	-23	-10	493,0	1684	424,3	1,60	5,46	1,37	308,7	4,15	5,57
pc= 45/113	-15	5	695,8	2376	598,8	1,95	6,68	1,68	356,0	4,43	7,92
return gas temp.	-9	15	858,1	2931	738,5	2,19	7,47	1,88	392,1	4,67	9,82
RGT= 32/90	-4	25	1042,6	3561	897,3	2,40	8,20	2,07	434,1	4,96	12,02
liquid temp	0	32	1185,3	4048	1020,1	2,53	8,65	2,18	468,0	5,20	13,75
Tliq= 45/113	7,2	45	1480,2	5055	1273,8	2,72	9,31	2,34	543,2	5,74	17,39
[°C / °F]	-35	-31	239,4	818	206,0	0,97	3,32	0,84	246,6	3,83	2,96
cond. pressure	-23	-10	415,0	1417	357,2	1,27	4,34	1,09	326,6	4,24	5,17
pc= 55/131	-15	5	596,3	2036	513,2	1,56	5,34	1,35	381,3	4,59	7,50
return gas temp	-9	15	743,8	2540	640,1	1,77	6,05	1,52	420,2	4,86	9,42
RGT= 32/90	-4	25	913,1	3118	785,8	1,97	6,73	1,70	463,2	5,19	11,65
liquid temp	0	32	1044,9	3568	899,2	2,10	7,18	1,81	496,7	5,45	13,42
Tliq= 55/131	7,2	45	1319,0	4505	1135,2	2,32	7,92	2,00	569,0	6,04	17,18

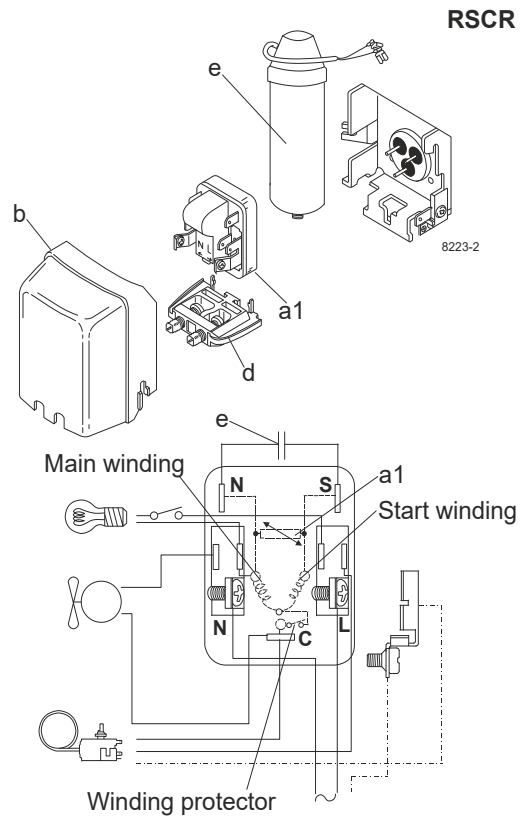
Model

Designation	NLE8.8CN	115V/60Hz	Conf. 3	Sales code:	105H6094
-------------	-----------------	------------------	----------------	-------------	-----------------

Configuration

Motor configuration	eRSCR	
Power supply (nominal)	115V/60Hz 1~	
Refrigerant	R290	
Application	LBP+MBP	
Voltage range	95-135V	
Starting torque	LST	
Approvals	UL	SA3693
	CCC	

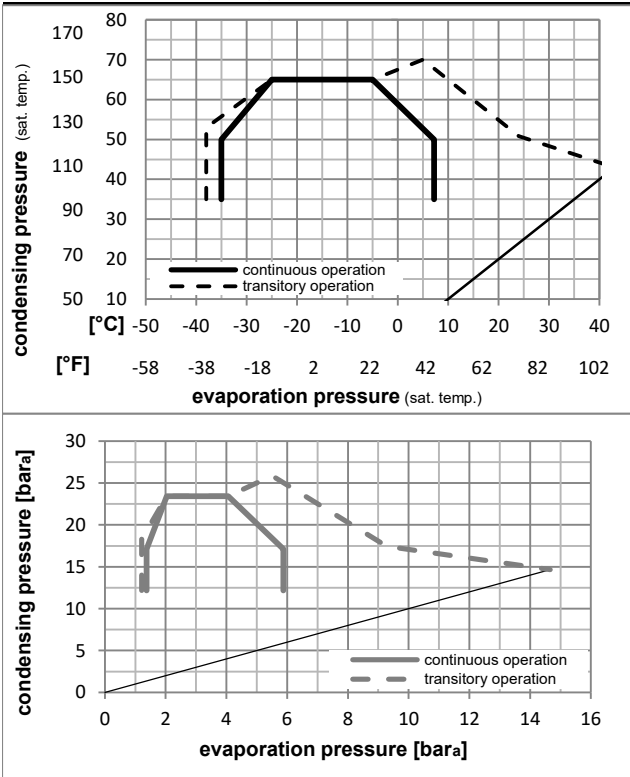
Electrical accessories / wiring diagram



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:	fan 3m/s

Operation pressure range



Components

a1	e-PTC starter	103N0058
e	run capacitor (23,5μF, 6.3mm)	117-7114
b	plastic cover	103N2011
d	cord relief	103N1010
	bracket for run capacitor	117-0300
	screw M4x8mm	117-0301

Model

Designation **NLE8.8CN** **115V/60Hz** Conf. 3 Sales code: **105H6094**

Optimization + standard conditions

R290, 115V/60Hz, eRSCR, fan 3m/s, UL, CCC

	Evaporating pressure (saturation temperature)				Condensing pressure (saturation temperature)			COP	EER	Power consumption			ASHRAE LBP	
	pe	pc	RGT	Tliq	[W]	[Btu/h]	[kcal/h]			P1	I	m		
	[°C]	[°F]	[°C]	[°F]	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[kcal/Wh]	[W]	[A]	[kg/h]	
	-23	54	32	32	519,9	1775	447,4	1,68	5,72	1,44	310,2	4,03	5,26	ASHRAE LBP
	-10	130	90	90										
	-25	55	32	55	390,1	1332	335,7	1,30	4,43	1,12	300,5	3,97	4,86	cecomaf LBP
	-13	131	90	131										
	-35	40	20	40	306,2	1046	263,5	1,41	4,80	1,21	217,9	3,53	3,50	EN12900 LBP
	-31	104	68	104										
	-7	54	35	46	926,3	3163	797,2	2,24	7,67	1,93	412,7	4,66	10,57	ASHRAE MBP
	20	130	95	115										
	-10	55	32	55	736,7	2516	634,0	1,88	6,44	1,62	390,9	4,51	9,32	cecomaf MBP
	14	131	90	131										
	-10	45	20	45	818,4	2795	704,3	2,24	7,66	1,93	365,0	4,33	10,05	EN12900 MBP
	14	113	68	113										

Performance tables

R290, 115V/60Hz, eRSCR, fan 3m/s, UL, CCC

	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	290,4	992	249,9	1,32	4,50	1,13	220,2	3,52	3,25
cond. pressure	-23	-10	499,4	1706	429,8	1,71	5,84	1,47	292,1	3,94	5,64
pc= 45/113	-15	5	705,0	2408	606,8	2,10	7,16	1,80	336,5	4,17	8,02
return gas temp.	-9	15	869,4	2969	748,2	2,36	8,06	2,03	368,4	4,35	9,95
RGT= 32/90	-4	25	1056,3	3607	909,1	2,60	8,89	2,24	405,6	4,61	12,18
liquid temp	0	32	1200,9	4101	1033,5	2,75	9,40	2,37	436,4	4,86	13,93
Tliq= 45/113	7,2	45	1500,3	5124	1291,1	2,95	10,09	2,54	507,9	5,51	17,63
[°C / °F]	-35	-31	243,4	831	209,5	1,06	3,61	0,91	230,1	3,48	3,01
cond. pressure	-23	-10	420,9	1437	362,2	1,35	4,63	1,17	310,8	4,03	5,25
pc= 55/131	-15	5	603,7	2062	519,5	1,68	5,73	1,44	360,0	4,32	7,59
return gas temp	-9	15	752,6	2570	647,7	1,91	6,51	1,64	394,6	4,54	9,53
RGT= 32/90	-4	25	924,0	3156	795,2	2,13	7,27	1,83	434,0	4,82	11,79
liquid temp	0	32	1057,7	3612	910,2	2,27	7,75	1,95	466,0	5,07	13,58
Tliq= 55/131	7,2	45	1336,6	4565	1150,3	2,48	8,47	2,13	539,2	5,72	17,41