

Model
NLE12.6CNL

Sales code:
105H6378

Compressor Data

Refrigerant(s)	R290
Refr. charge - tech. limit	300g / 10.58oz
Weight	11.80 kg / 26.01lbs
Displacement	12.55 cm3 / 0.77cu.in
Compressors on pallet	80



General – Configurations With NLE12.6CNL

-	Conf. 1	Conf. 2	Conf. 3
Motor configuration	CSIR	eRSIR	eRSCR
Power supply (nominal)	220-240 V/50 Hz	220-240 V/50 Hz	220-240 V/50 Hz
Number of phases	1	1	1
Voltage range	198-254 V	198-254 V	198-254 V
Approvals	VDE, CCC	VDE, CCC	VDE, CCC
Starting torque	HST	LST	LST
Refrigerant	R290	R290	R290
Application	LBP	LBP	LBP
Hot gas defrost	OK	OK	OK
Long interval pull down	OK	OK	-

Application Notes

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

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Compressor Design

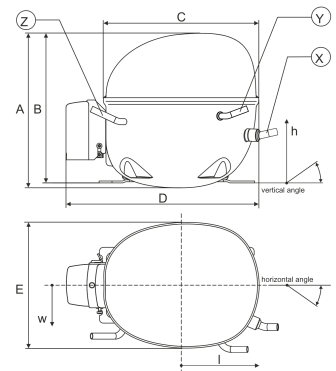
Oil type	POE	Winding resistance main	5.9 Ohm
Oil viscosity	32cSt	Winding resistance aux	10.8 Ohm
Oil quantity	298 / 10.08fl.oz	Max. winding temp.	125 °C
Free gas volume comp.	2,360 cm ³ / 79.80fl.oz	Max. discharge temp.	130°C / 266°F
Motor protection	internal		

Compressor Dimensions

Housing

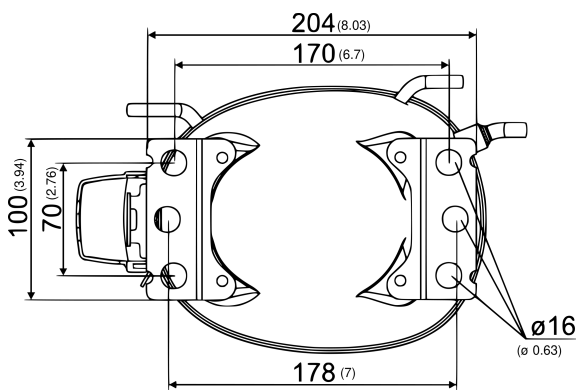
A Height	203mm / 7.99in
B Height	197mm / 7.76in
C Length shell	205mm / 8.07in
D Length w. cover	254mm / 10.00in
E Width	166mm / 6.54in

[Find 3D Model here](#)

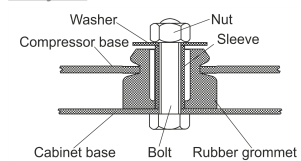


Connectors	Suction X	Discharge Y	Process Z
Diameter [mm]	øi 8.11–8.29 / 0.32–0.33in	øi 6.11–6.29 / 0.24–0.25in	øi 6.11–6.29 / 0.24–0.25in
Material	CU	CU	CU
Horizontal angle ±2°	0°	0°	0°
Vertical angle ±2°	15°	21°	155°
Position l/h/w [mm]	132/68.5/56.7 / 5.20/2.70/2.23in	94/101.7/81 / 3.70/4.00/3.19in	-109.3/94.3/72 / -4.30/3.71/2.83in
Straight tube l. [mm]	12 / 0.47in	12 / 0.47in	12 / 0.47in

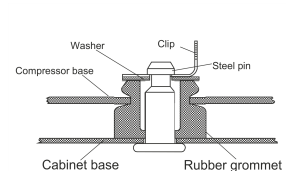
Mounting Accessories



Bolt joint



Snap-on



Dimensions in mm [in]

	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
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Configuration 1

Sales code:

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Configuration

Motor configuration	CSIR
Power supply (nominal)	220-240 V/50 Hz 1~
Refrigerant	R290
Application	LBP
Voltage range	198-254 V
Starting torque	HST
Approvals	VDE, CCC
Starting device type	relay
Run capacitor	-/-
Start capacitor	80 µF
LRA (locked rotor amps / 4s/ U(N))	15.3 A
RLA (rated load amps / 1s/ U(N))	2.7 A
Cut in current (U(N))	19.2 A

Ambient/ machine room temperatures minimum /maximum

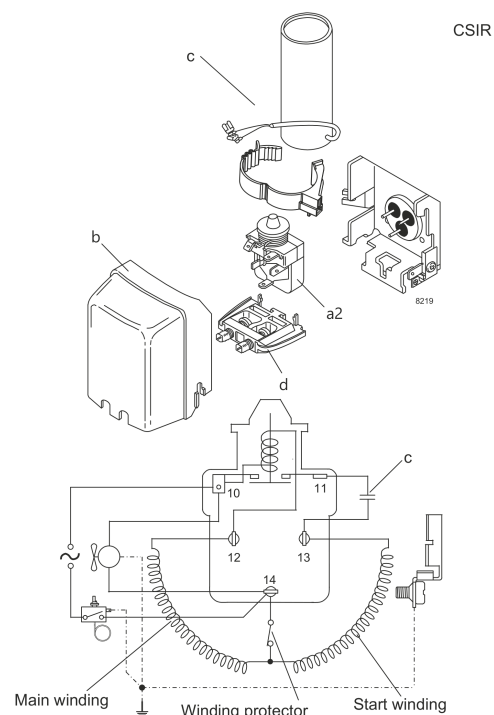
Ambient temperature range: 10 - 43°C / 50 - 109°F

Machine room temp. compressor: 10 - 48°C / 50 - 118°F

System Cooling

fan 3m/s

Electrical Accessories / Wiring Diagram

[View full size](#)

Components

a2 relay 117U7003

c start capacitor (80μF) 117U5015

b plastic cover 103N2010

d cord relief 103N1010

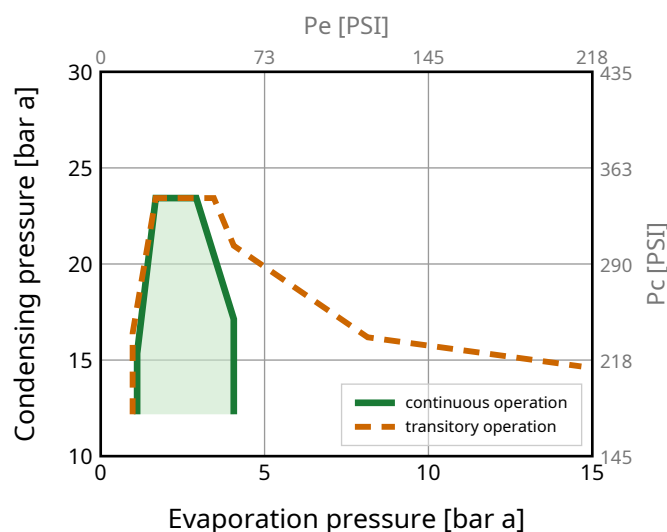
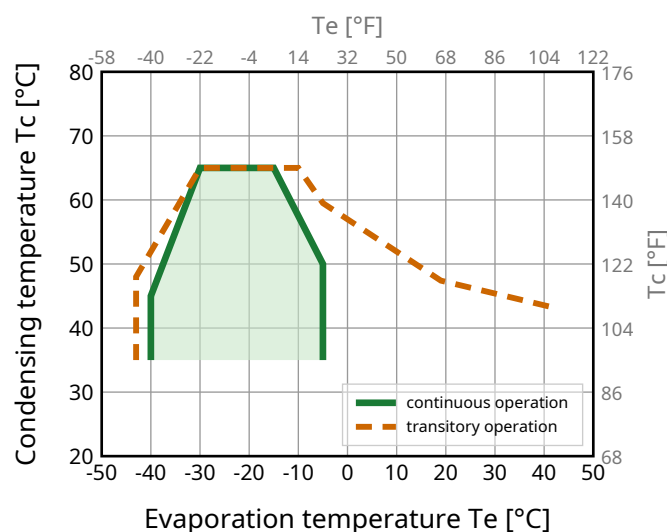
Alternative components

a2 relay 117U7053

c start capacitor (80μF) 117U5079

b plastic cover 103N2011

Operation Pressure Range



Model
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Configuration 1

Sales code:
105H6378

Standard Conditions

R290, 220 V/50 Hz, CSIR, fan 3m/s

pe	pc	RGT	Tliq	Cooling capacity			COP	EER	P	I	m	
[°C] [°F]	[°C] [°F]	[°C] [°F]	[°C] [°F]	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[W]	[A]	[kg/h]	
-23.3 -10	54.4 129.9	32.2 90	32.2 90	613	2092	527	1.63	5.56	376	2.25	6.23	ASHRAE LBP
-25 -13	55 131	32 89.6	55 131	460	1568	395	1.27	4.33	362	2.19	5.76	CECOMAF LBP
-35 -31	40 104	20 68	40 104	354	1209	305	1.33	4.55	266	1.87	4.07	EN12900 LBP
-23.3 -10	48.8 119.8	4.4 39.9	48.8 119.8	496	1693	427	1.37	4.66	363	2.20	6.89	ARI540 LBP
-23.3 -10	40.6 105.1	32.2 90	32.2 90	661	2257	569	1.92	6.54	345	2.13	6.72	AHAM LBP
-35 -31	45 113	32 89.6	45 113	339	1156	291	1.25	4.28	270	1.89	3.82	opt LBP

Performance Tables

R290, 220 V/50 Hz, CSIR, fan 3m/s

pc= 45/113 | RGT= 32/89.6 | Tliq= 45/113 | °C/°F

pe		Cooling capacity			COP	EER	P	I	m
[°C]	[°F]	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[W]	[A]	[kg/h]
-40	-40	259	883	223	1.11	3.78	234	1.78	2.91
-35	-31	339	1156	291	1.25	4.28	270	1.89	3.82
-30	-22	430	1468	370	1.41	4.79	306	2.00	4.86
-25	-13	536	1830	461	1.57	5.35	342	2.12	6.08
-20	-4	662	2257	569	1.75	5.96	379	2.26	7.53
-15	5	809	2761	696	1.94	6.62	417	2.41	9.25
-10	14	984	3356	846	2.15	7.32	458	2.58	11.29
-5	23	1188	4053	1022	2.36	8.06	503	2.78	13.72

pc= 55/131 | RGT= 32/89.6 | Tliq= 55/131 | °C/°F

-40	-40	216	736	186	0.91	3.09	238	1.77	2.68
-35	-31	287	980	247	1.03	3.51	279	1.90	3.58
-30	-22	367	1253	316	1.15	3.91	320	2.04	4.59
-25	-13	460	1568	395	1.27	4.33	362	2.19	5.76
-20	-4	568	1939	489	1.40	4.77	406	2.36	7.15
-15	5	697	2377	599	1.54	5.25	453	2.55	8.81
-10	14	849	2896	730	1.69	5.76	503	2.76	10.79
-5	23	1028	3509	884	1.84	6.29	558	3.00	13.16

Model
NLE12.6CNL

Configuration 2

Sales code:
105H6378

Configuration

Motor configuration	eRSIR
Power supply (nominal)	220-240 V/50 Hz 1~
Refrigerant	R290
Application	LBP
Voltage range	198-254 V
Starting torque	LST
Approvals	VDE, CCC
Starting device type	e-PTC
Run capacitor	-/-
Start capacitor	-/-
RLA (rated load amps / 1s/ U(N))	-/-A

Ambient/ machine room temperatures minimum /maximum

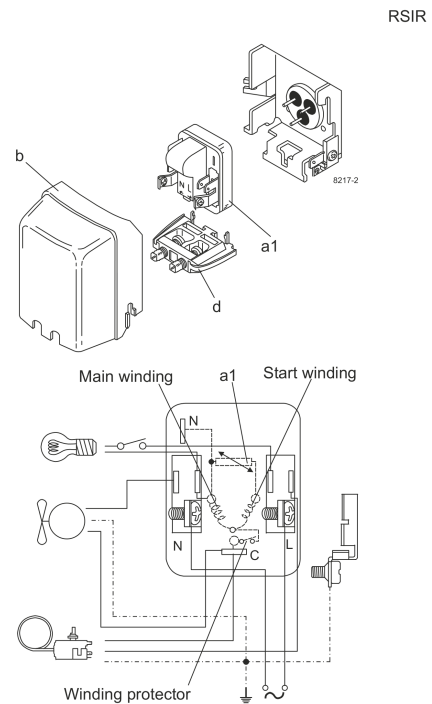
Ambient temperature range: 10 - 43°C / 50 - 109°F

Machine room temp. compressor: 10 - 48°C / 50 - 118°F

System Cooling

fan 3m/s

Electrical Accessories / Wiring Diagram



Components

a1 e-PTC starter (220V, 250Ω, 4.8mm) 103N0050

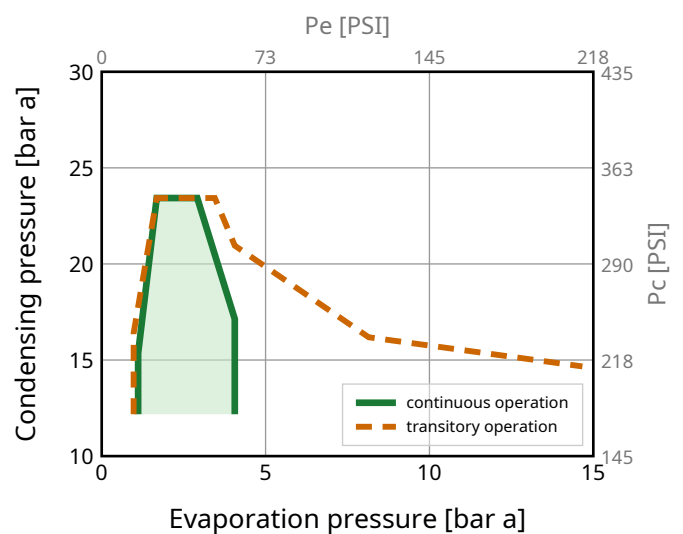
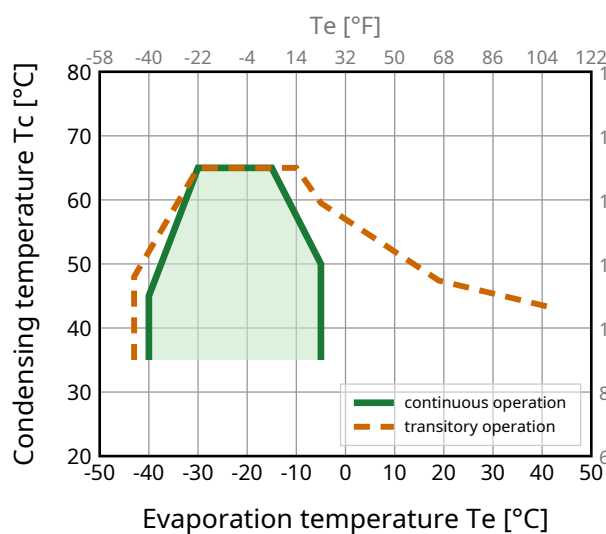
b plastic cover 103N2010

d cord relief 103N1010

Alternative components

b plastic cover 103N2011

Operation Pressure Range



Model
NLE12.6CNL

Configuration 2

Sales code:
105H6378

Standard Conditions

R290, 220 V/50 Hz, eRSIR, fan 3m/s

pe	pc	RGT	Tliq	Cooling capacity			COP	EER	P	I	m	
[°C] [°F]	[°C] [°F]	[°C] [°F]	[°C] [°F]	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[W]	[A]	[kg/h]	
-23.3 -10	54.4 129.9	32.2 90	32.2 90	613	2092	527	1.63	5.56	376	2.25	6.23	ASHRAE LBP
-25 -13	55 131	32 89.6	55 131	460	1568	395	1.27	4.33	362	2.19	5.76	CECOMAF LBP
-35 -31	40 104	20 68	40 104	354	1209	305	1.33	4.55	266	1.87	4.07	EN12900 LBP
-23.3 -10	48.8 119.8	4.4 39.9	48.8 119.8	496	1693	427	1.37	4.66	363	2.20	6.89	ARI540 LBP
-23.3 -10	40.6 105.1	32.2 90	32.2 90	661	2257	569	1.92	6.54	345	2.13	6.72	AHAM LBP
-35 -31	45 113	32 89.6	45 113	339	1156	291	1.25	4.28	270	1.89	3.82	opt LBP

Performance Tables

R290, 220 V/50 Hz, eRSIR, fan 3m/s

pc= 45/113 | RGT= 32/89.6 | Tliq= 45/113 | °C/°F

pe		Cooling capacity			COP	EER	P	I	m
[°C]	[°F]	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[W]	[A]	[kg/h]
-40	-40	259	883	223	1.11	3.78	234	1.78	2.91
-35	-31	339	1156	291	1.25	4.28	270	1.89	3.82
-30	-22	430	1468	370	1.41	4.79	306	2.00	4.86
-25	-13	536	1830	461	1.57	5.35	342	2.12	6.08
-20	-4	662	2257	569	1.75	5.96	379	2.26	7.53
-15	5	809	2761	696	1.94	6.62	417	2.41	9.25
-10	14	984	3356	846	2.15	7.32	458	2.58	11.29
-5	23	1188	4053	1022	2.36	8.06	503	2.78	13.72

pc= 55/131 | RGT= 32/89.6 | Tliq= 55/131 | °C/°F

-40	-40	216	736	186	0.91	3.09	238	1.77	2.68
-35	-31	287	980	247	1.03	3.51	279	1.90	3.58
-30	-22	367	1253	316	1.15	3.91	320	2.04	4.59
-25	-13	460	1568	395	1.27	4.33	362	2.19	5.76
-20	-4	568	1939	489	1.40	4.77	406	2.36	7.15
-15	5	697	2377	599	1.54	5.25	453	2.55	8.81
-10	14	849	2896	730	1.69	5.76	503	2.76	10.79
-5	23	1028	3509	884	1.84	6.29	558	3.00	13.16

Model
NLE12.6CNL

Configuration 3

Sales code:
105H6378

Configuration

Motor configuration	eRSCR
Power supply (nominal)	220-240 V/50 Hz 1~
Refrigerant	R290
Application	LBP
Voltage range	198-254 V
Starting torque	LST
Approvals	VDE, CCC
Starting device type	e-PTC
Run capacitor	4 μF
Start capacitor	-/-
LRA (locked rotor amps / 4s/ U(N))	15.3 A
RLA (rated load amps / 1s/ U(N))	2.7 A
Cut in current (U(N))	19.2 A

Ambient/ machine room temperatures minimum /maximum

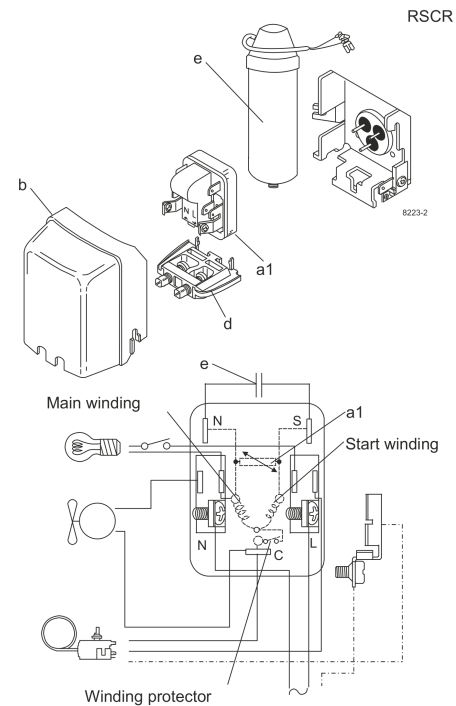
Ambient temperature range: 10 - 43°C / 50 - 109°F

Machine room temp. compressor: 10 - 48°C / 50 - 118°F

System Cooling

fan 3m/s

Electrical Accessories / Wiring Diagram



Components

a1 e-PTC starter (220V, 250hm, 4.8mm) 103N0050

e run capacitor (4 μ F, 4.8mm) 117-7119

b plastic cover 103N2010

d cord relief 103N1010

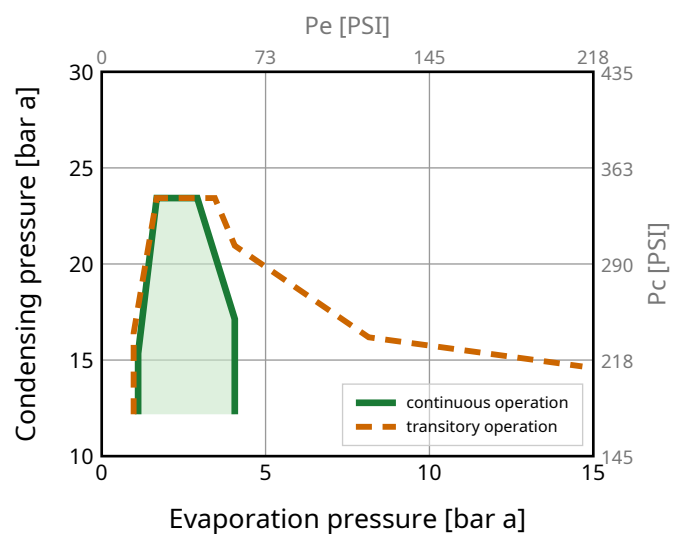
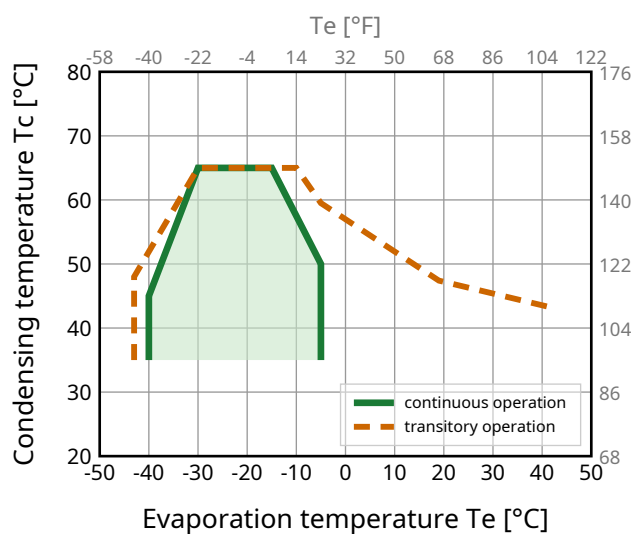
bracket for run capacitor 117-0300

screw M4x8mm 117-0301

Alternative components

b plastic cover 103N2011

Operation Pressure Range



Model
NLE12.6CNL

Configuration 3

Sales code:
105H6378

Standard Conditions

R290, 220 V/50 Hz, eRSCR, fan 3m/s

pe	pc	RGT	Tliq	Cooling capacity			COP	EER	P	I	m	
[°C] [°F]	[°C] [°F]	[°C] [°F]	[°C] [°F]	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[W]	[A]	[kg/h]	
-23.3 -10	54.4 129.9	32.2 90	32.2 90	616	2103	530	1.70	5.79	363	2.17	6.26	ASHRAE LBP
-25 -13	55 131	32 89.6	55 131	462	1577	397	1.32	4.50	350	2.12	5.79	CECOMAF LBP
-35 -31	40 104	20 68	40 104	353	1204	303	1.39	4.76	253	1.79	4.05	EN12900 LBP
-23.3 -10	48.8 119.8	4.4 39.9	48.8 119.8	499	1703	429	1.42	4.85	351	2.13	6.93	ARI540 LBP
-23.3 -10	40.6 105.1	32.2 90	32.2 90	666	2271	572	1.99	6.80	334	2.06	6.76	AHAM LBP
-35 -31	45 113	32 89.6	45 113	338	1152	290	1.31	4.47	258	1.80	3.80	opt LBP

Performance Tables

R290, 220 V/50 Hz, eRSCR, fan 3m/s

pc= 45/113 | RGT= 32/89.6 | Tliq= 45/113 | °C/°F

pe		Cooling capacity			COP	EER	P	I	m
[°C]	[°F]	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[W]	[A]	[kg/h]
-40	-40	256	872	220	1.18	4.02	217	1.66	2.87
-35	-31	338	1152	290	1.31	4.47	258	1.80	3.80
-30	-22	431	1470	371	1.46	4.98	295	1.93	4.87
-25	-13	539	1840	464	1.63	5.56	331	2.05	6.11
-20	-4	666	2273	573	1.82	6.22	366	2.18	7.58
-15	5	815	2781	701	2.03	6.94	401	2.32	9.31
-10	14	990	3376	851	2.26	7.70	438	2.47	11.36
-5	23	1193	4071	1026	2.49	8.50	479	2.65	13.78

pc= 55/131 | RGT= 32/89.6 | Tliq= 55/131 | °C/°F

-40	-40	213	727	183	0.96	3.29	221	1.65	2.65
-35	-31	286	976	246	1.08	3.67	266	1.81	3.56
-30	-22	368	1255	316	1.19	4.07	309	1.97	4.60
-25	-13	462	1577	397	1.32	4.50	350	2.12	5.79
-20	-4	572	1952	492	1.46	4.98	392	2.28	7.20
-15	5	702	2394	603	1.61	5.50	435	2.45	8.87
-10	14	854	2914	735	1.77	6.06	481	2.64	10.86
-5	23	1033	3525	888	1.94	6.63	531	2.86	13.22