

Model
NLE12.6MN

Sales code:
105H6377

Compressor Data

Refrigerant(s)	R290
Refr. charge - tech. limit	300g / 10.58oz
Weight	12.10 kg / 26.68lbs
Displacement	12.55 cm3 / 0.77cu.in
Compressors on pallet	80



General – Configurations With NLE12.6MN

-	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, EAC	VDE, CCC, EAC	VDE, CCC, EAC
Starting torque	HST	LST	LST
Refrigerant	R290	R290	R290
Application	LBP+MBP	LBP+MBP	LBP+MBP
Hot gas defrost	OK	OK	OK
Long interval pull down	OK	OK	OK

Application Notes

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

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Compressor Design

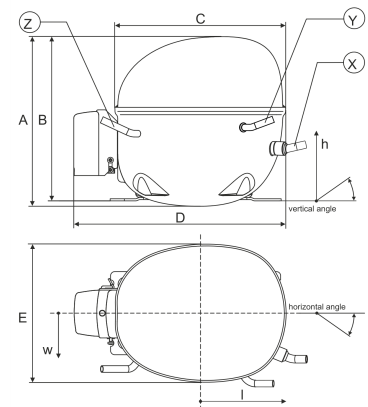
Oil type	POE	Motor protection	internal
Oil viscosity	32cSt	Max. winding temp.	125 °C
Oil quantity	298 / 10.08fl.oz	Max. discharge temp.	130°C / 266°F
Free gas volume comp.	2,360 cm3 / 79.80fl.oz		

Compressor Dimensions

Housing

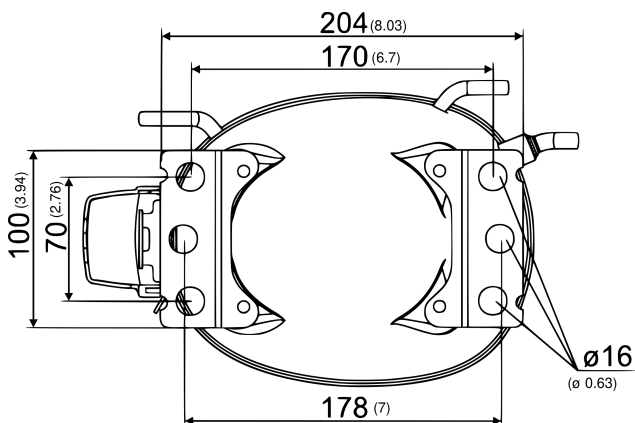
A Height	203mm / 7.99in
B Height	197mm / 7.76in
C Length shell	205mm / 8.07in
D Length w. cover	254mm / 10.00in
E Width	166mm / 6.54in

[Find 3D Model here](#)

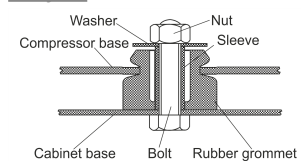


Connectors	Suction X	Discharge Y	Process Z
Diameter [mm]	øi 8.11–8.29 / 0.32–0.33in	øi 6.11–6.29 / 0.24–0.25in	øi 6.11–6.29 / 0.24–0.25in
Material	CU	CU	CU
Horizontal angle ±2°	0°	0°	0°
Vertical angle ±2°	15°	21°	155°
Position l/h/w [mm]	132/68.5/56.7 / 5.20/2.70/2.23in	94/101.7/81 / 3.70/4.00/3.19in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

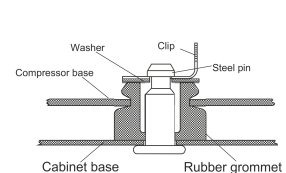
Mounting Accessories



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

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Configuration

Motor configuration	CSIR
Power supply (nominal)	220-240 V/50 Hz 1~
Refrigerant	R290
Application	LBP+MBP
Voltage range	198-254 V
Starting torque	HST
Approvals	VDE, CCC, EAC
Starting device type	relay
Run capacitor	-/-
Start capacitor	80 µF
LRA (locked rotor amps / 4s/ U(N))	15.6 A
RLA (rated load amps / 1s/ U(N))	2.7 A
Cut in current (U(N))	21.2 A

Ambient/ machine room temperatures minimum /maximum

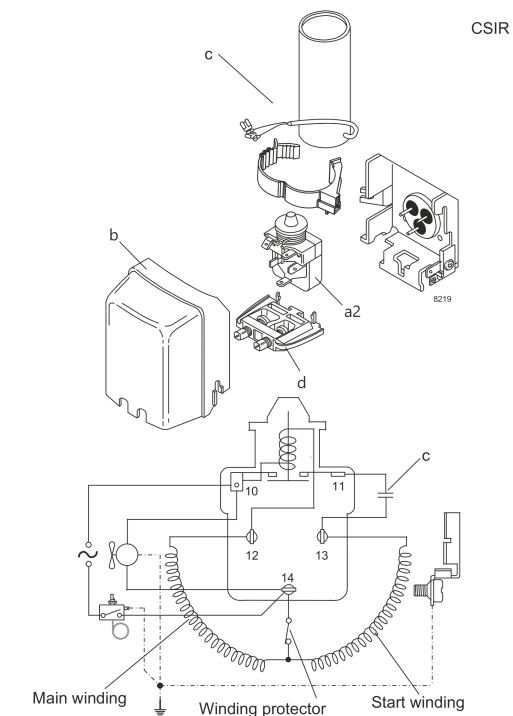
Ambient temperature range: 10 - 43°C / 50 - 109°F

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 117U7011

c start capacitor (80µF) 117U5015

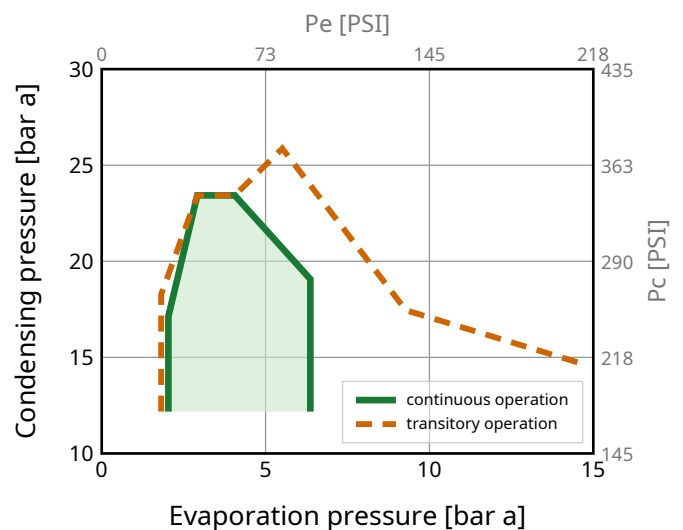
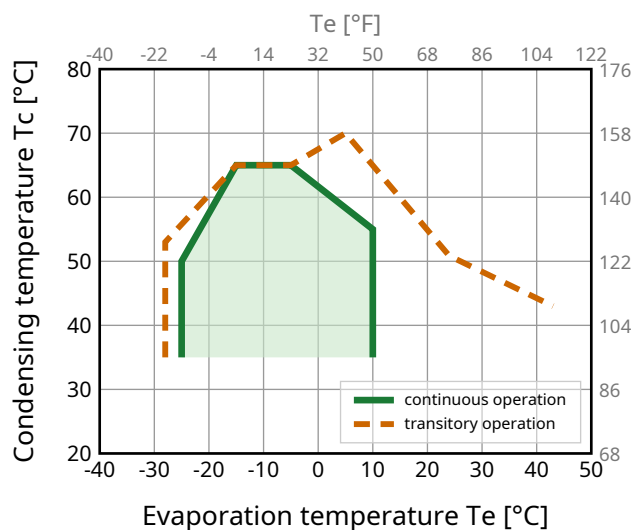
b plastic cover 103N2010

d cord relief 103N1010

Alternative components

b plastic cover 103N2011

Operation Pressure Range



Model
NLE12.6MN

Configuration 1

Sales code:
105H6377

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	604	2060	519	1.57	5.34	386	2.54	6.13	ASHRAE LBP
-25 -13	55 131	32 89.6	55 131	452	1541	388	1.21	4.14	373	2.49	5.66	CECOMAF LBP
-35 -31	40 104	20 68	40 104	362	1237	312	1.33	4.54	272	2.14	4.16	EN12900 LBP
-6.7 20	54.4 129.9	35 95	46.1 115	1061	3619	912	1.98	6.74	537	3.10	12.14	ASHRAE MBP
-10 14	55 131	32 89.6	55 131	843	2875	725	1.66	5.66	508	2.99	10.72	CECOMAF MBP
-10 14	45 113	20 68	45 113	950	3242	817	2.06	7.01	462	2.77	11.70	EN12900 MBP

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]
-25	-13	536	1830	461	1.53	5.21	352	2.41	6.08
-20	-4	663	2262	570	1.71	5.83	388	2.52	7.54
-15	5	813	2774	699	1.91	6.52	425	2.65	9.29
-10	14	988	3371	850	2.14	7.29	462	2.77	11.34
-5	23	1190	4059	1023	2.38	8.13	499	2.91	13.74
0	32	1420	4844	1221	2.65	9.06	535	3.06	16.51
5	41	1680	5731	1445	2.96	10.08	568	3.22	19.69
10	50	1972	6728	1696	3.29	11.22	600	3.39	23.32

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

-25	-13	452	1541	388	1.21	4.14	373	2.49	5.66
-20	-4	562	1916	483	1.35	4.62	415	2.65	7.07
-15	5	691	2359	595	1.50	5.13	460	2.81	8.74
-10	14	843	2875	725	1.66	5.66	508	2.99	10.72
-5	23	1017	3470	875	1.83	6.23	557	3.18	13.02
0	32	1216	4150	1046	2.00	6.83	608	3.39	15.69
5	41	1442	4921	1240	2.19	7.47	659	3.61	18.76
10	50	1696	5788	1459	2.39	8.15	710	3.85	22.29

Model

NLE12.6MN

Configuration 2

Sales code:

105H6377

Configuration

Motor configuration	eRSIR
Power supply (nominal)	220-240 V/50 Hz 1~
Refrigerant	R290
Application	LBP+MBP
Voltage range	198-254 V
Starting torque	LST
Approvals	VDE, CCC, EAC
Starting device type	e-PTC
Run capacitor	-/-
Start capacitor	-/-
LRA (locked rotor amps / 4s/ U(N))	15.6 A
RLA (rated load amps / 1s/ U(N))	2.7 A
Cut in current (U(N))	21.2 A

Ambient/ machine room temperatures minimum /maximum

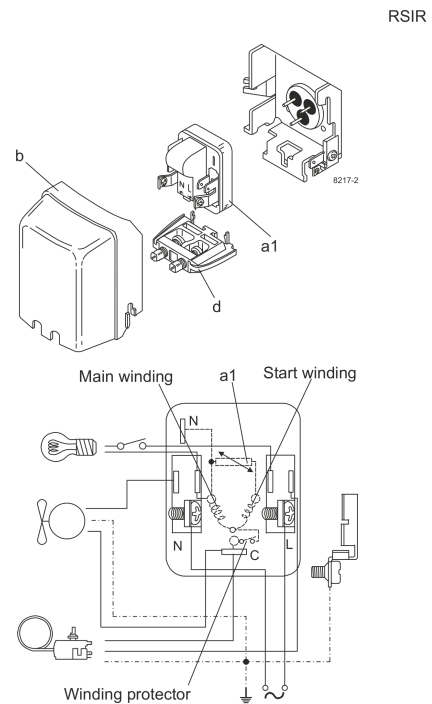
Ambient temperature range: 10 - 43°C / 50 - 109°F

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

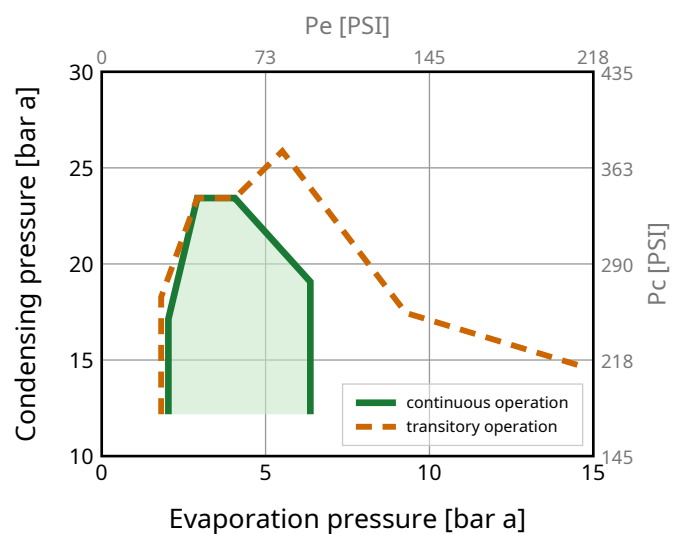
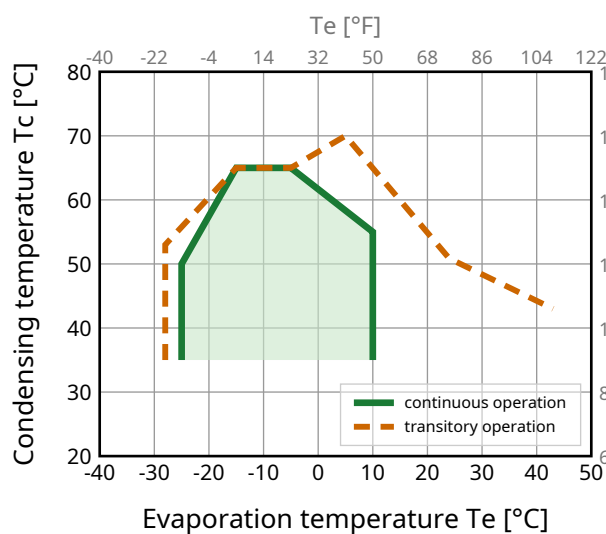
b plastic cover 103N2010

d cord relief 103N1010

Alternative components

b plastic cover 103N2011

Operation Pressure Range



Model
NLE12.6MN

Configuration 2

Sales code:
105H6377

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	604	2060	519	1.57	5.34	386	2.54	6.13	ASHRAE LBP
-25 -13	55 131	32 89.6	55 131	452	1541	388	1.21	4.14	373	2.49	5.66	CECOMAF LBP
-35 -31	40 104	20 68	40 104	362	1237	312	1.33	4.54	272	2.14	4.16	EN12900 LBP
-6.7 20	54.4 129.9	35 95	46.1 115	1061	3619	912	1.98	6.74	537	3.10	12.14	ASHRAE MBP
-10 14	55 131	32 89.6	55 131	843	2875	725	1.66	5.66	508	2.99	10.72	CECOMAF MBP
-10 14	45 113	20 68	45 113	950	3242	817	2.06	7.01	462	2.77	11.70	EN12900 MBP

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]
-25	-13	536	1830	461	1.53	5.21	352	2.41	6.08
-20	-4	663	2262	570	1.71	5.83	388	2.52	7.54
-15	5	813	2774	699	1.91	6.52	425	2.65	9.29
-10	14	988	3371	850	2.14	7.29	462	2.77	11.34
-5	23	1190	4059	1023	2.38	8.13	499	2.91	13.74
0	32	1420	4844	1221	2.65	9.06	535	3.06	16.51
5	41	1680	5731	1445	2.96	10.08	568	3.22	19.69
10	50	1972	6728	1696	3.29	11.22	600	3.39	23.32

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

-25	-13	452	1541	388	1.21	4.14	373	2.49	5.66
-20	-4	562	1916	483	1.35	4.62	415	2.65	7.07
-15	5	691	2359	595	1.50	5.13	460	2.81	8.74
-10	14	843	2875	725	1.66	5.66	508	2.99	10.72
-5	23	1017	3470	875	1.83	6.23	557	3.18	13.02
0	32	1216	4150	1046	2.00	6.83	608	3.39	15.69
5	41	1442	4921	1240	2.19	7.47	659	3.61	18.76
10	50	1696	5788	1459	2.39	8.15	710	3.85	22.29

Model

NLE12.6MN

Configuration 3

Sales code:

105H6377

Configuration

Motor configuration	eRSCR
Power supply (nominal)	220-240 V/50 Hz 1~
Refrigerant	R290
Application	LBP+MBP
Voltage range	198-254 V
Starting torque	LST
Approvals	VDE, CCC, EAC
Starting device type	e-PTC
Run capacitor	4 μF
Start capacitor	-/-
LRA (locked rotor amps / 4s/ U(N))	15.6 A
RLA (rated load amps / 1s/ U(N))	2.7 A
Cut in current (U(N))	21.2 A

Ambient/ machine room temperatures minimum /maximum

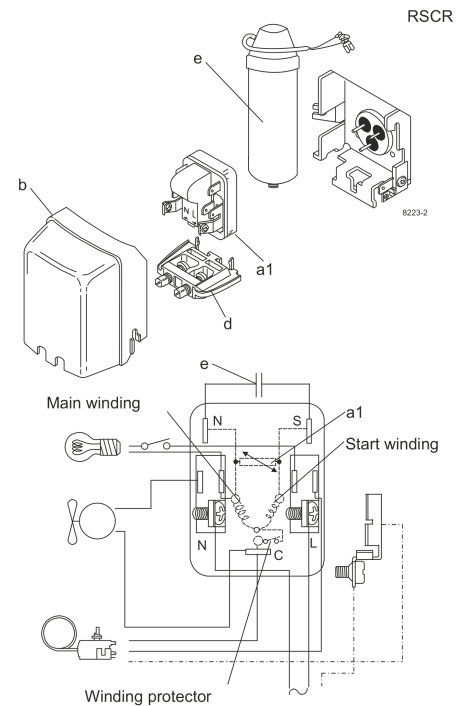
Ambient temperature range: 10 - 43°C / 50 - 109°F

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

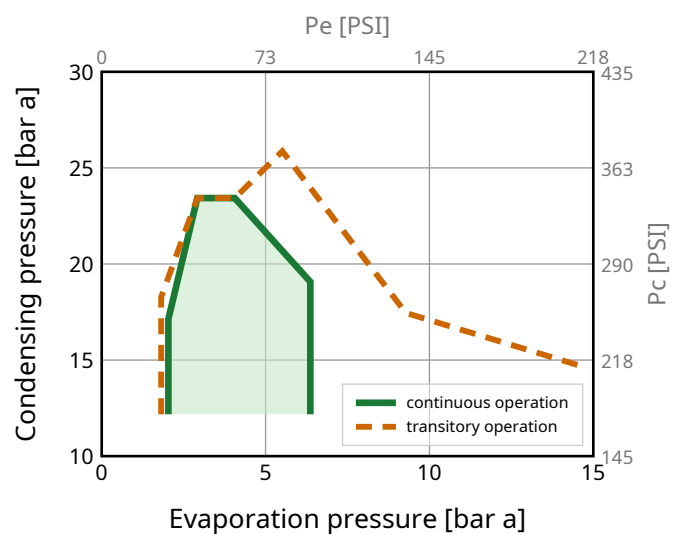
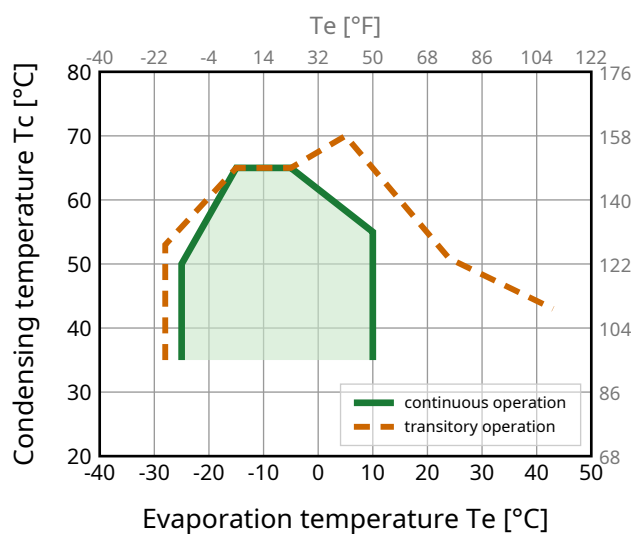
bracket for run capacitor 117-0300

screw M4x8mm 117-0301

Alternative components

b plastic cover 103N2011

Operation Pressure Range



Model
NLE12.6MN

Configuration 3

Sales code:
105H6377

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	607	2072	522	1.64	5.61	370	2.21	6.17	ASHRAE LBP
-25 -13	55 131	32 89.6	55 131	454	1549	391	1.27	4.34	357	2.17	5.69	CECOMAF LBP
-35 -31	40 104	20 68	40 104	364	1243	313	1.41	4.81	258	1.83	4.18	EN12900 LBP
-6.7 20	54.4 129.9	35 95	46.1 115	1070	3652	920	2.09	7.12	513	2.78	12.25	ASHRAE MBP
-10 14	55 131	32 89.6	55 131	850	2899	731	1.75	5.97	486	2.67	10.81	CECOMAF MBP
-10 14	45 113	20 68	45 113	958	3269	824	2.17	7.39	442	2.49	11.79	EN12900 MBP

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]
-25	-13	539	1840	464	1.60	5.46	337	2.10	6.11
-20	-4	667	2277	574	1.79	6.12	372	2.22	7.59
-15	5	819	2795	704	2.01	6.86	408	2.35	9.36
-10	14	996	3399	857	2.25	7.68	442	2.49	11.44
-5	23	1200	4095	1032	2.52	8.59	477	2.62	13.86
0	32	1433	4890	1232	2.81	9.60	509	2.76	16.66
5	41	1696	5787	1459	3.14	10.71	540	2.89	19.88
10	50	1991	6795	1713	3.50	11.95	569	3.01	23.55

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

-25	-13	454	1549	391	1.27	4.34	357	2.17	5.69
-20	-4	565	1929	486	1.42	4.85	398	2.32	7.12
-15	5	697	2377	599	1.58	5.39	441	2.49	8.81
-10	14	850	2899	731	1.75	5.97	486	2.67	10.81
-5	23	1026	3502	883	1.93	6.58	532	2.86	13.14
0	32	1228	4190	1056	2.12	7.24	579	3.06	15.84
5	41	1456	4970	1253	2.33	7.94	626	3.27	18.95
10	50	1714	5846	1474	2.55	8.69	673	3.49	22.52