

Model
SC15GHH

Sales code:
104G8572

Compressor Data

Refrigerant(s)	R134a / R513A
Refr. charge - tech. limit	1300g / 45.86oz
Weight	13.00 kg / 28.66lbs
Displacement	15.28 cm3 / 0.93cu.in
Compressors on pallet	80



General – Configurations With SC15GHH

-	Conf. 1	Conf. 2	Conf. 3
Motor configuration	CSCR	CSCR	CSCR
Power supply (nominal)	220-240 V/50 Hz	220-240 V/60 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	VDE	VDE
Starting torque	HST	HST	HST
Refrigerant	R134a	R134a	R513A
Application	HBP	HBP	HBP
Hot gas defrost	OK	OK	OK
Long interval pull down	OK	OK	OK

Application Notes

- Compressor with oil cooler.
- Provision for PE Grounding is located at the PE Stamp on the compressor

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Compressor Design

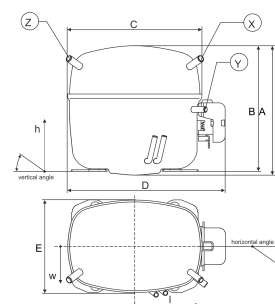
Oil type	POE OC	Winding resistance main	5.13 Ohm
Oil viscosity	22cSt	Winding resistance aux	13.51 Ohm
Oil quantity	449 / 15.18fl.oz	Max. winding temp.	125 °C
Free gas volume comp.	1,540 cm³ / 52.07fl.oz	Max. discharge temp.	140°C / 284°F
Motor protection	internal		

Compressor Dimensions

Housing

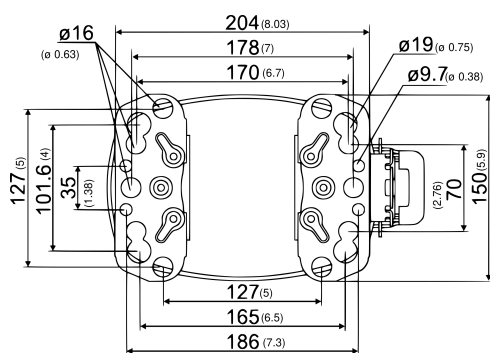
A Height	209mm / 8.23in
B Height	203mm / 7.99in
C Length shell	218mm / 8.58in
D Length w. cover	255mm / 10.04in
E Width	151mm / 5.94in

[Find 3D Model here](#)

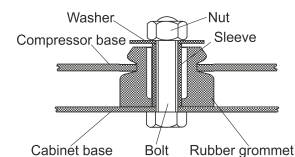


Connectors	Suction X	Discharge Y	Process Z
Diameter [mm]	øi 10.11–10.29 / 0.40–0.41in	øi 8.11–8.29 / 0.32–0.33in	øi 6.11–6.29 / 0.24–0.25in
Material	CU	CU	CU
Horizontal angle ±2°	37°	37°	143°
Vertical angle ±2°	30°	0°	150°
Position l/h/w [mm]	107/183/55 / 4.21/7.20/2.17in	115/100/63 / 4.53/3.94/2.48in	-107/183/55 / -4.21/7.20/2.17in
Straight tube l. [mm]	12 / 0.47in	12 / 0.47in	12 / 0.47in

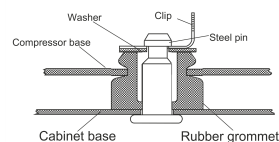
Mounting Accessories



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

Model

SC15GHH

Configuration 1

Sales code:

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Configuration

Motor configuration	CSCR
Power supply (nominal)	220-240 V/50 Hz 1~
Refrigerant	R134a
Application	HBP
Voltage range	198-254 V
Starting torque	HST
Approvals	VDE
Starting device type	relay
Run capacitor	10 μF
Start capacitor	80 μF
LRA (locked rotor amps / 4s/ U(N))	16.2 A
RLA (rated load amps / 1s/ U(N))	3.1 A
Cut in current (U(N))	16.2 A

Ambient/ machine room temperatures minimum /maximum

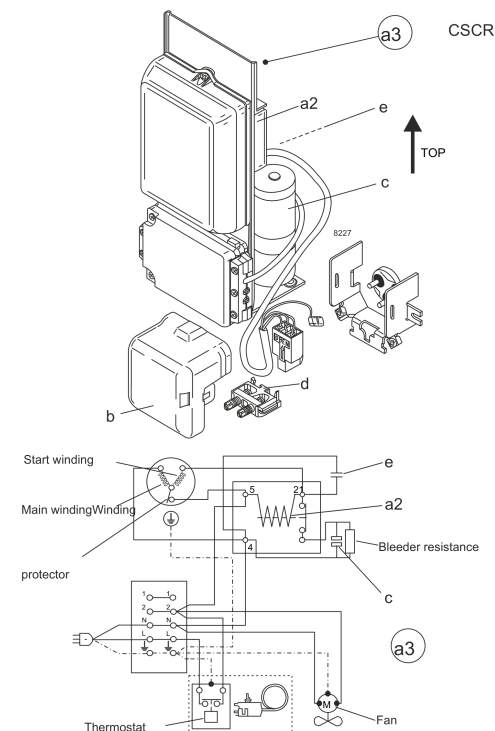
Ambient temperature range: 10 - 43°C / 50 - 109°F

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

System Cooling

oil cooled

Electrical Accessories / Wiring Diagram



[View full size](#)

Components

a3 SC starter kit (550mm) 117-7027

b plastic cover 103N2009

d cord relief 103N1004

Alternative components

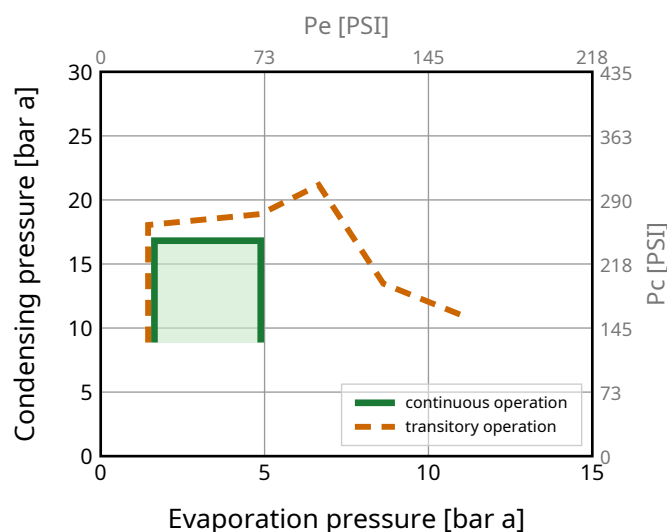
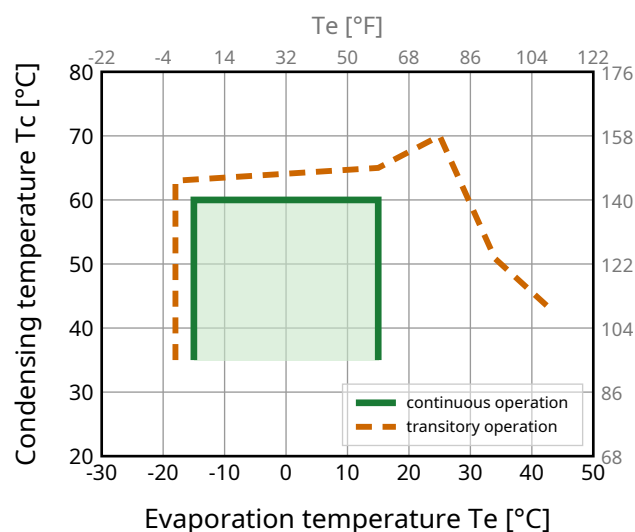
a3 SC starter kit (1000mm) 117-7040

a3 SC starter kit (650mm) 117-7046

c start capacitor (80 μ F) 117U5373

e run capacitor (10 μ F, 6.3mm) 117-7112

Operation Pressure Range



Model

SC15GHH

Configuration 1

Sales code:

104G8572

Standard Conditions

R134a, 220 V/50 Hz, CSCR, oil cooled

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]	
7.2 45	54.4 129.9	35 95	46.1 115	1472	5023	1266	2.56	8.75	574	2.51	32.59	ASHRAE HBP
5 41	55 131	32 89.6	55 131	1207	4117	1038	2.15	7.35	560	2.45	29.64	CECOMAF HBP
5 41	50 122	20 68	50 122	1263	4308	1086	2.41	8.21	524	2.31	31.67	EN12900 HBP
-6.7 20	54.4 129.9	35 95	46.1 115	767	2617	660	1.74	5.93	441	1.95	16.70	ASHRAE MBP
-10 14	55 131	32 89.6	55 131	576	1965	495	1.41	4.81	408	1.81	13.89	CECOMAF MBP
-10 14	45 113	20 68	45 113	684	2336	589	1.79	6.11	382	1.70	15.96	EN12900 MBP

Performance Tables

R134a, 220 V/50 Hz, CSCR, oil cooled

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]
-15	5	539	1839	464	1.57	5.36	343	1.53	11.73
-10	14	709	2419	610	1.85	6.33	382	1.70	15.48
-5	23	910	3106	783	2.16	7.37	421	1.87	19.97
0	32	1148	3918	988	2.52	8.58	456	2.02	25.34
5	41	1429	4875	1229	2.95	10.06	485	2.14	31.73
10	50	1757	5994	1511	3.50	11.93	502	2.21	39.32
15	59	2138	7296	1839	4.22	14.42	506	2.23	48.31

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

-15	5	420	1433	361	1.17	4.00	359	1.59	10.08
-10	14	576	1965	495	1.41	4.81	408	1.81	13.89
-5	23	755	2577	650	1.64	5.60	461	2.03	18.31
0	32	964	3288	829	1.88	6.42	512	2.25	23.50
5	41	1207	4117	1038	2.15	7.35	560	2.45	29.64
10	50	1490	5083	1281	2.48	8.48	600	2.62	36.91
15	59	1818	6203	1563	2.89	9.87	629	2.74	45.50

Model

SC15GHH

Configuration 2

Sales code:

104G8572

Configuration

Motor configuration	CSCR
Power supply (nominal)	220-240 V/60 Hz 1~
Refrigerant	R134a
Application	HBP
Voltage range	198-254 V
Starting torque	HST
Approvals	VDE
Starting device type	relay
Run capacitor	10 μ F
Start capacitor	80 μ F
LRA (locked rotor amps / 4s/ U(N))	16.2 A
RLA (rated load amps / 1s/ U(N))	3.1 A
Cut in current (U(N))	16.2 A

Ambient/ machine room temperatures minimum /maximum

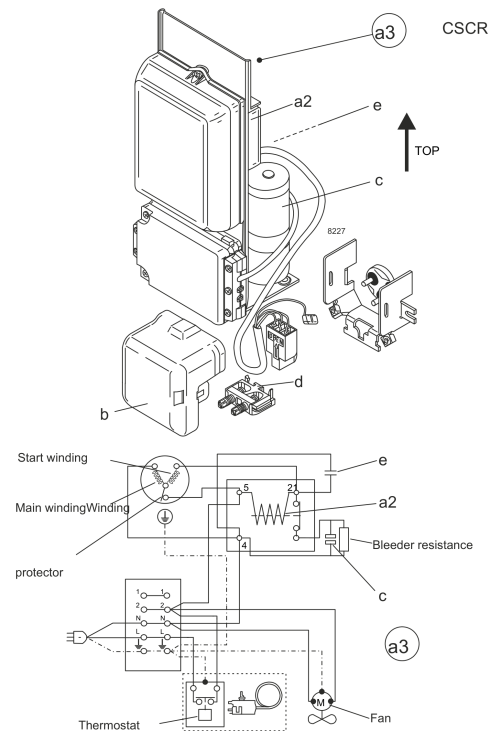
Ambient temperature range: 10 - 43°C / 50 - 109°F

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

System Cooling

oil cooled

Electrical Accessories / Wiring Diagram



[View full size](#)

Components

a3 SC starter kit (550mm) 117-7027

b plastic cover 103N2009

d cord relief 103N1004

Alternative components

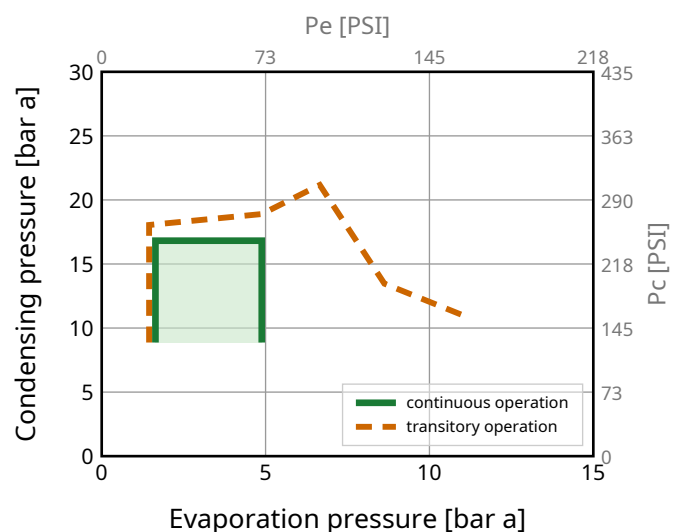
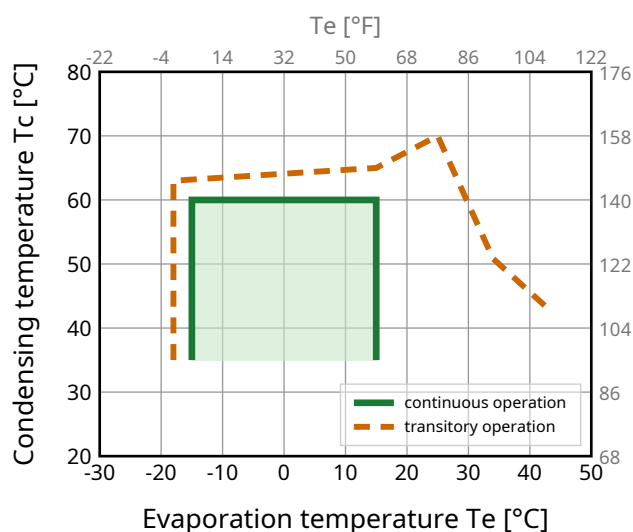
a3 SC starter kit (1000mm) 117-7040

a3 SC starter kit (650mm) 117-7046

c start capacitor (80 μ F) 117U5373

e run capacitor (10 μ F, 6.3mm) 117-7112

Operation Pressure Range



Model

SC15GHH

Configuration 2

Sales code:

104G8572

Standard Conditions

R134a, 220 V/60 Hz, CSCR, oil cooled

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]	
7.2 45	54.4 129.9	35 95	46.1 115	1658	5658	1426	2.72	9.29	609	2.75	36.71	ASHRAE HBP
5 41	55 131	32 89.6	55 131	1363	4651	1172	2.31	7.87	590	2.67	33.48	CECOMAF HBP
5 41	50 122	20 68	50 122	1406	4798	1209	2.47	8.42	570	2.57	35.27	EN12900 HBP
-6.7 20	54.4 129.9	35 95	46.1 115	886	3025	762	1.90	6.47	467	2.13	19.30	ASHRAE MBP
-10 14	55 131	32 89.6	55 131	684	2336	589	1.57	5.34	437	2.00	16.50	CECOMAF MBP
-10 14	45 113	20 68	45 113	765	2611	658	1.81	6.16	424	1.95	17.84	EN12900 MBP

Performance Tables

R134a, 220 V/60 Hz, CSCR, oil cooled

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]
-15	5	587	2003	505	1.49	5.10	393	1.81	12.77
-10	14	792	2704	682	1.87	6.38	424	1.95	17.31
-5	23	1023	3490	880	2.21	7.54	463	2.11	22.44
0	32	1288	4396	1108	2.55	8.70	506	2.30	28.43
5	41	1600	5459	1376	2.93	10.00	546	2.47	35.53
10	50	1967	6712	1692	3.40	11.60	579	2.61	44.03
15	59	2401	8193	2065	4.01	13.69	598	2.71	54.25

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

-15	5	522	1781	449	1.31	4.47	399	1.84	12.53
-10	14	684	2336	589	1.57	5.34	437	2.00	16.50
-5	23	872	2975	750	1.80	6.13	485	2.21	21.13
0	32	1095	3735	941	2.03	6.94	538	2.44	26.69
5	41	1363	4651	1172	2.31	7.87	590	2.67	33.48
10	50	1688	5759	1452	2.65	9.05	637	2.87	41.82
15	59	2079	7095	1788	3.10	10.56	672	3.03	52.05

Model
SC15GHH

Configuration 3

Sales code:
104G8572

Configuration

Motor configuration	CSCR
Power supply (nominal)	220-240 V/50 Hz 1~
Refrigerant	R513A
Application	HBP
Voltage range	198-254 V
Starting torque	HST
Approvals	VDE
Starting device type	relay
Run capacitor	10 μF
Start capacitor	80 μF
RLA (rated load amps / 1s/ U(N))	-/-A

Ambient/ machine room temperatures minimum /maximum

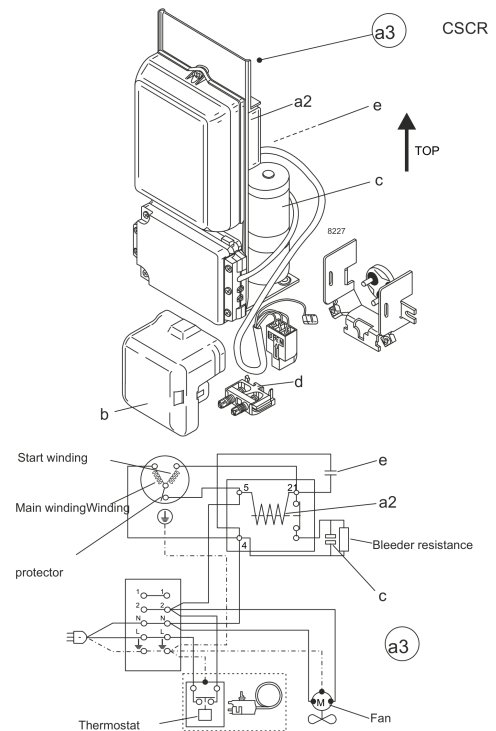
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Machine room temp. compressor: 10 - 48°C / 50 - 118°F

System Cooling

oil cooled

Electrical Accessories / Wiring Diagram



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a3 SC starter kit (550mm) 117-7027

b plastic cover 103N2009

d cord relief 103N1004

Alternative components

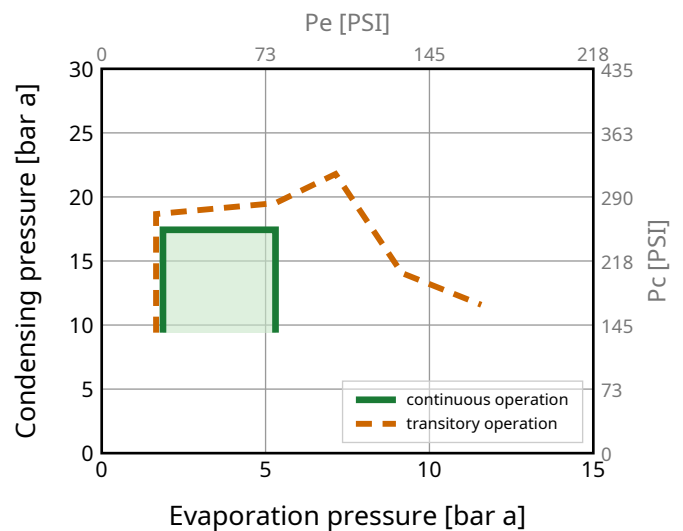
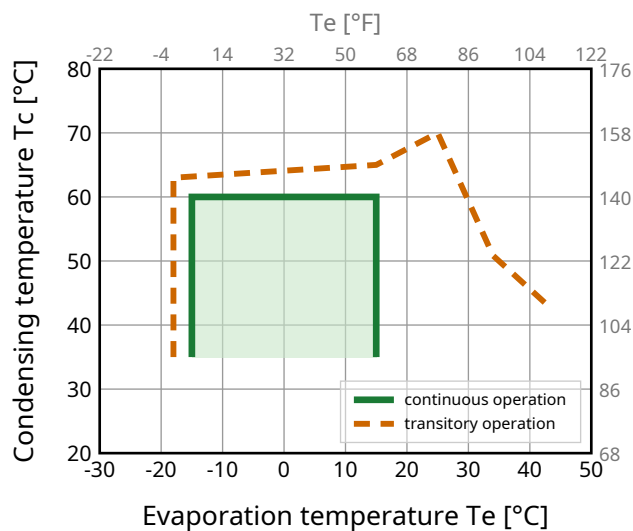
a3 SC starter kit (1000mm) 117-7040

a3 SC starter kit (650mm) 117-7046

c start capacitor (80 μ F) 117U5373

e run capacitor (10 μ F, 6.3mm) 117-7112

Operation Pressure Range



Model
SC15GHH

Configuration 3

Sales code:
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Standard Conditions

R513A, 220 V/50 Hz, CSCR, oil cooled

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]	
7.2 45	54.4 129.9	35 95	46.1 115	1420	4845	1221	2.62	8.92	543	2.55	36.08	ASHRAE HBP
5 41	55 131	32 89.6	55 131	1150	3924	989	2.18	7.43	528	2.49	32.98	CECOMAF HBP
5 41	50 122	20 68	50 122	1180	4025	1015	2.32	7.90	509	2.41	34.78	EN12900 HBP
-6.7 20	54.4 129.9	35 95	46.1 115	776	2648	667	1.82	6.21	426	2.05	19.35	ASHRAE MBP
-10 14	55 131	32 89.6	55 131	593	2023	510	1.48	5.04	402	1.94	16.64	CECOMAF MBP
-10 14	45 113	20 68	45 113	664	2264	571	1.71	5.82	389	1.89	17.97	EN12900 MBP

Performance Tables

R513A, 220 V/50 Hz, CSCR, oil cooled

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]
-15	5	521	1777	448	1.43	4.88	364	1.78	12.97
-10	14	696	2375	599	1.79	6.11	389	1.89	17.43
-5	23	891	3040	766	2.12	7.22	421	2.03	22.43
0	32	1114	3800	958	2.44	8.34	456	2.18	28.21
5	41	1373	4685	1181	2.81	9.59	489	2.32	35.05
10	50	1678	5725	1443	3.26	11.11	515	2.43	43.22
15	59	2037	6949	1751	3.84	13.11	530	2.50	53.02

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

-15	5	457	1560	393	1.23	4.20	371	1.81	12.76
-10	14	593	2023	510	1.48	5.04	402	1.94	16.64
-5	23	748	2552	643	1.70	5.79	441	2.11	21.12
0	32	931	3176	800	1.92	6.55	485	2.30	26.47
5	41	1150	3924	989	2.18	7.43	528	2.49	32.98
10	50	1415	4827	1217	2.50	8.53	566	2.65	40.98
15	59	1733	5913	1490	2.92	9.96	594	2.77	50.81