

Model
NLE8.0CN

Sales code:
105H6093

Compressor Data

Refrigerant(s)	R290
Refr. charge - tech. limit	400g / 14.11oz
Weight	10.95 kg / 24.14lbs
Displacement	7.96 cm³ / 0.49cu.in
Compressors on pallet	80



General – Configurations With NLE8.0CN

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

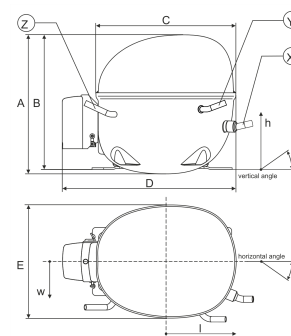
Oil type	32 cSt POE RL32DR	Winding resistance main	1.99 Ohm
Oil viscosity	32cSt	Winding resistance aux	6.22 Ohm
Oil quantity	268 / 9.06fl.oz	Max. winding temp.	125 °C
Free gas volume comp.	2,360 cm3 / 79.80fl.oz	Max. discharge temp.	120°C / 248°F
Motor protection	internal		

Compressor Dimensions

Housing

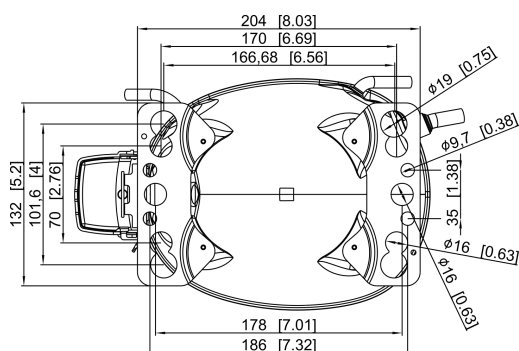
A Height	203mm / 7.99in
B Height	197mm / 7.76in
C Length shell	205mm / 8.07in
D Length w. cover	254mm / 10.00in
E Width	166mm / 6.54in

[Find 3D Model here](#)



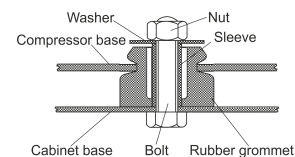
Connectors	Suction X	Discharge Y	Process Z
Diameter [mm]	øi 8.11–8.29 / 0.32–0.33in	øi 6.41–6.59 / 0.25–0.26in	øi 6.41–6.59 / 0.25–0.26in
Material	CU	CU	CU
Horizontal angle ±2°	0°	0°	0°
Vertical angle ±2°	15°	21°	155°
Position l/h/w [mm]	132/68.5/56.7 / 5.20/2.70/2.23in	94/101.7/81 / 3.70/4.00/3.19in	-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

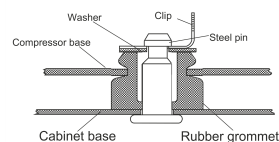


Dimensions in mm [in]

Bolt joint



Snap-on



	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

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Configuration 1

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Configuration

Motor configuration	CSIR
Power supply (nominal)	115 V/60 Hz 1~
Refrigerant	R290
Application	LBP+MBP
Voltage range	95-135 V
Starting torque	HST
Approvals	UL, CCC
Starting device type	relay
Run capacitor	-/-
Start capacitor	240 µF
LRA (locked rotor amps / 4s/ U(N))	23.1 A
RLA (rated load amps / 1s/ U(N))	4.3 A
Cut in current (U(N))	23.1 A

Ambient/ machine room temperatures minimum /maximum

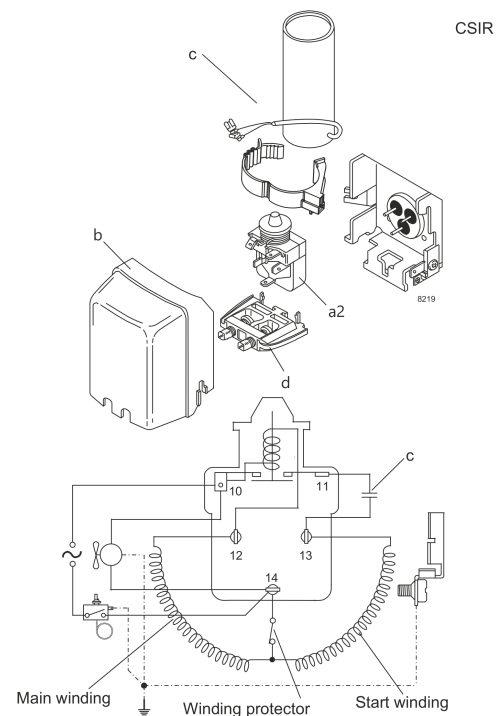
Ambient temperature range: 10 - 43°C / 50 - 109°F

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

System Cooling

fan 3m/s

Electrical Accessories / Wiring Diagram



[View full size](#)

Components

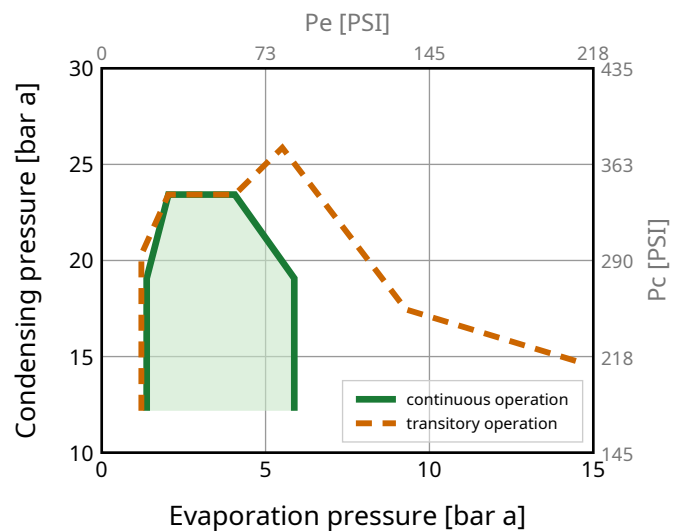
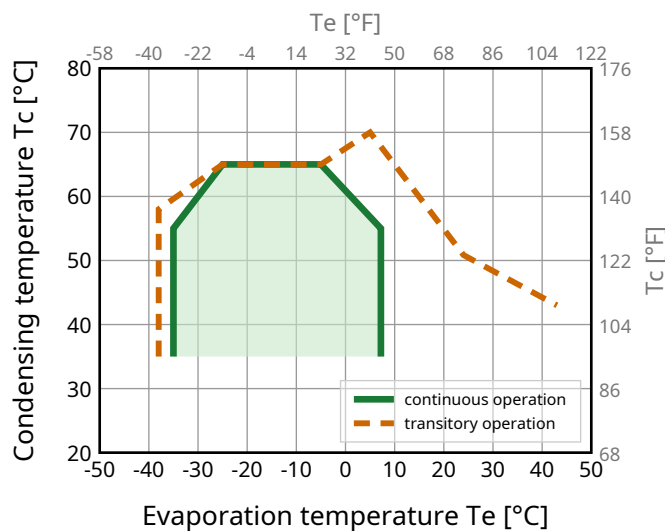
a2 relay 117U7013

c start capacitor (240µF, 6,3mm) 117U5073

b plastic cover 103N2011

d cord relief 103N1010

Operation Pressure Range



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Configuration 1

Sales code:
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Standard Conditions

R290, 115 V/60 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	455	1553	392	1.58	5.38	289	3.52	4.62	ASHRAE LBP
-25 -13	55 131	32 89.6	55 131	339	1157	292	1.22	4.16	278	3.45	4.25	CECOMAF LBP
-35 -31	40 104	20 68	40 104	268	914	230	1.24	4.24	216	3.12	3.08	EN12900 LBP
-6.7 20	54.4 129.9	35 95	46.1 115	807	2754	694	2.07	7.08	389	4.26	9.24	ASHRAE MBP
-10 14	55 131	32 89.6	55 131	640	2183	550	1.72	5.87	372	4.12	8.14	CECOMAF MBP
-10 14	45 113	20 68	45 113	719	2454	619	2.10	7.17	342	3.92	8.85	EN12900 MBP

Performance Tables

R290, 115 V/60 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]
-35	-31	252	861	217	1.16	3.97	217	3.12	2.84
-30	-22	324	1107	279	1.33	4.54	244	3.26	3.67
-20	-4	503	1717	433	1.71	5.82	295	3.58	5.72
-10	14	748	2551	643	2.19	7.46	342	3.92	8.59
0	32	1081	3689	930	2.82	9.63	383	4.23	12.57
7.2	45	1390	4743	1195	3.41	11.63	408	4.41	16.35

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

-35	-31	196	669	169	0.92	3.14	213	3.07	2.44
-30	-22	264	900	227	1.07	3.66	246	3.25	3.29
-20	-4	425	1449	365	1.37	4.67	310	3.67	5.35
-10	14	640	2183	550	1.72	5.87	372	4.12	8.14
0	32	933	3182	802	2.17	7.42	429	4.57	12.03
7.2	45	1205	4110	1036	2.58	8.82	466	4.87	15.74

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Configuration 2

Sales code:
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Configuration

Motor configuration	RSIR
Power supply (nominal)	115 V/60 Hz 1~
Refrigerant	R290
Application	LBP+MBP
Voltage range	95-135 V
Starting torque	LST
Approvals	UL, CCC
Starting device type	PTC
Run capacitor	-/-
Start capacitor	-/-
LRA (locked rotor amps / 4s/ U(N))	23.1 A
RLA (rated load amps / 1s/ U(N))	4.3 A
Cut in current (U(N))	23.1 A

Ambient/ machine room temperatures minimum /maximum

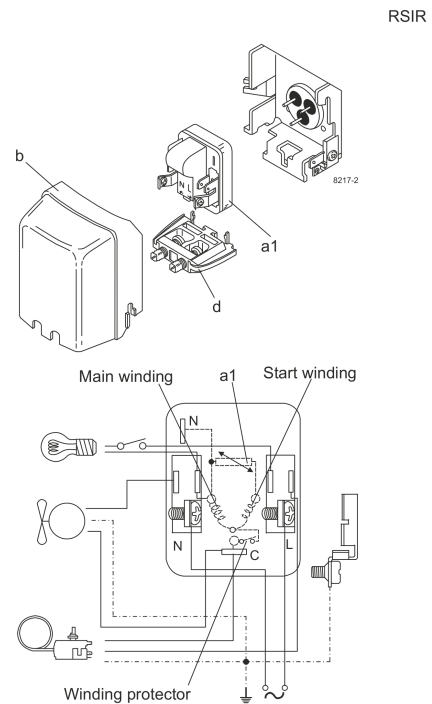
Ambient temperature range: 10 - 43°C / 50 - 109°F

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

System Cooling

fan 3m/s

Electrical Accessories / Wiring Diagram



Components

a1 e-PTC starter (115V, 50hm, 6.3mm, 4.8-cap) 103N0057

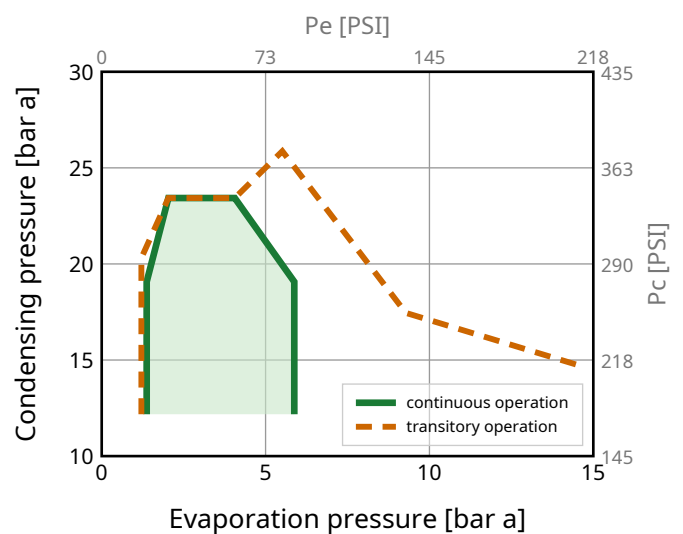
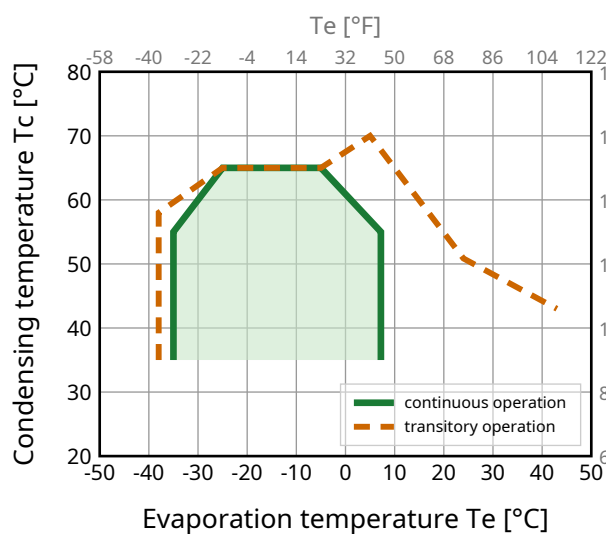
b plastic cover 103N2011

d cord relief 103N1010

Alternative components

a1 e-PTC starter 103N0058

Operation Pressure Range



Model
NLE8.0CN

Configuration 2

Sales code:
105H6093

Standard Conditions

R290, 115 V/60 Hz, RSIR, 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	455	1553	392	1.58	5.38	289	3.52	4.62	ASHRAE LBP
-25 -13	55 131	32 89.6	55 131	339	1157	292	1.22	4.16	278	3.45	4.25	CECOMAF LBP
-35 -31	40 104	20 68	40 104	268	914	230	1.24	4.24	216	3.12	3.08	EN12900 LBP
-6.7 20	54.4 129.9	35 95	46.1 115	807	2754	694	2.07	7.08	389	4.26	9.24	ASHRAE MBP
-10 14	55 131	32 89.6	55 131	640	2183	550	1.72	5.87	372	4.12	8.14	CECOMAF MBP
-10 14	45 113	20 68	45 113	719	2454	619	2.10	7.17	342	3.92	8.85	EN12900 MBP

Performance Tables

R290, 115 V/60 Hz, RSIR, 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]
-35	-31	252	861	217	1.16	3.97	217	3.12	2.84
-30	-22	324	1107	279	1.33	4.54	244	3.26	3.67
-20	-4	503	1717	433	1.71	5.82	295	3.58	5.72
-10	14	748	2551	643	2.19	7.46	342	3.92	8.59
0	32	1081	3689	930	2.82	9.63	383	4.23	12.57
7.2	45	1390	4743	1195	3.41	11.63	408	4.41	16.35

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

-35	-31	196	669	169	0.92	3.14	213	3.07	2.44
-30	-22	264	900	227	1.07	3.66	246	3.25	3.29
-20	-4	425	1449	365	1.37	4.67	310	3.67	5.35
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7.2	45	1205	4110	1036	2.58	8.82	466	4.87	15.74

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Configuration 3

Sales code:
105H6093

Configuration

Motor configuration	RSCR
Power supply (nominal)	115 V/60 Hz 1~
Refrigerant	R290
Application	LBP+MBP
Voltage range	95-135 V
Starting torque	LST
Approvals	UL, CCC
Starting device type	PTC
Run capacitor	20 μF
Start capacitor	-/-
LRA (locked rotor amps / 4s/ U(N))	23.1 A
RLA (rated load amps / 1s/ U(N))	4.3 A
Cut in current (U(N))	23.1 A

Ambient/ machine room temperatures minimum /maximum

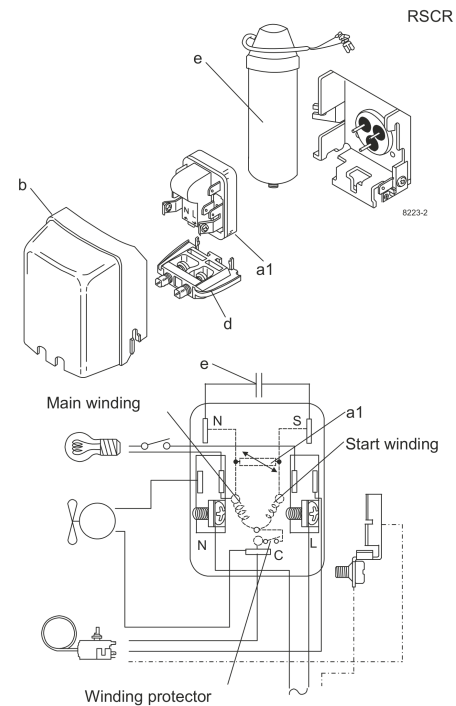
Ambient temperature range: 10 - 43°C / 50 - 109°F

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

System Cooling

fan 3m/s

Electrical Accessories / Wiring Diagram



Components

a1 e-PTC starter 103N0058

e run capacitor (20 μ F, 6.3mm) 117-7147

b plastic cover 103N2011

d cord relief 103N1010

bracket for run capacitor 117-0300

screw M4x8mm 117-0301

Alternative components

a1 e-PTC starter (115V, 50 Ω , 6.3mm, 4.8-cap) 103N0057

e run capacitor (20 μ F, 4.8mm) 117-7146

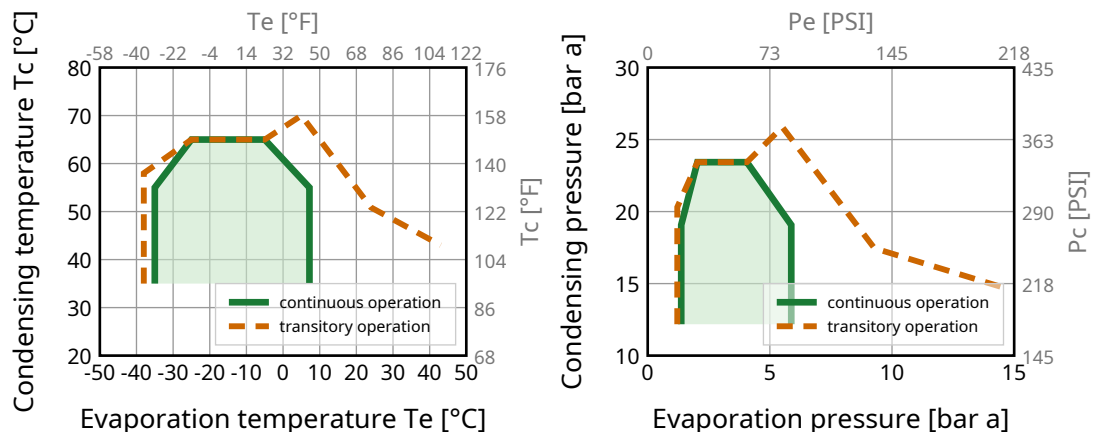
b plastic cover 103N2011

d cord relief 103N1010

bracket for run capacitor 117-0300

screw M4x8mm 117-0301

Operation Pressure Range



Model
NLE8.0CN

Configuration 3

Sales code:
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Standard Conditions

R290, 115 V/60 Hz, RSCR, 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	466	1590	401	1.71	5.83	273	3.33	4.73	ASHRAE LBP
-25 -13	55 131	32 89.6	55 131	347	1183	298	1.32	4.50	263	3.26	4.35	CECOMAF LBP
-35 -31	40 104	20 68	40 104	272	929	234	1.32	4.52	206	2.97	3.12	EN12900 LBP
-6.7 20	54.4 129.9	35 95	46.1 115	823	2809	708	2.27	7.74	363	3.97	9.43	ASHRAE MBP
-10 14	55 131	32 89.6	55 131	654	2231	562	1.88	6.41	348	3.86	8.31	CECOMAF MBP
-10 14	45 113	20 68	45 113	735	2507	632	2.29	7.83	320	3.67	9.04	EN12900 MBP

Performance Tables

R290, 115 V/60 Hz, RSCR, 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]
-35	-31	256	875	221	1.24	4.23	207	2.97	2.89
-30	-22	331	1130	285	1.43	4.89	231	3.09	3.74
-20	-4	515	1758	443	1.85	6.32	278	3.37	5.86
-10	14	764	2606	657	2.39	8.14	320	3.67	8.77
0	32	1099	3749	945	3.10	10.57	355	3.92	12.78
7.2	45	1405	4795	1209	3.76	12.83	374	4.04	16.53

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

-35	-31	199	680	171	0.98	3.35	203	2.93	2.48
-30	-22	269	919	232	1.15	3.94	233	3.09	3.36
-20	-4	435	1484	374	1.49	5.08	292	3.46	5.47
-10	14	654	2231	562	1.88	6.41	348	3.86	8.31
0	32	948	3233	815	2.39	8.14	397	4.24	12.22
7.2	45	1218	4155	1047	2.85	9.71	428	4.46	15.91