

Model
NLE8.8CN

Sales code:
105H6094

Compressor Data

Refrigerant(s)	R290
Refr. charge - tech. limit	400g / 14.11oz
Weight	10.90 kg / 24.03lbs
Displacement	8.76 cm³ / 0.53cu.in
Compressors on pallet	80



General - Configurations With NLE8.8CN

-	Conf. 1	Conf. 2	Conf. 3
Motor configuration	CSIR	RSIR	eRSCR
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

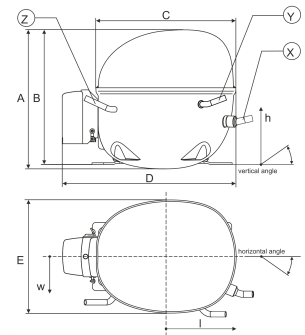
Oil type	32 cSt POE RL32DR	Winding resistance main	1.600 Ohm
Oil viscosity	32cSt	Winding resistance aux	5.10 Ohm
Oil quantity	260 / 8.79fl.oz	Max. winding temp.	125 °C
Free gas volume comp.	2,360 cm³ / 79.80fl.oz	Max. discharge temp.	120°C / 248°F
Motor protection	internal		

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](#)



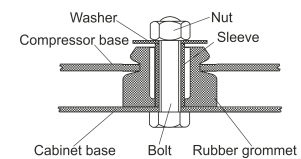
Connectors	Suction X	Discharge Y	Process Z
Diameter [mm]	øi 8.11–8.29 / 0.32–0.33in	øi 6.41–6.59 / 0.25–0.26in	øi 6.41–6.59 / 0.25–0.26in
Material	CU	CU	CU
Horizontal angle ±2°	0°	0°	0°
Vertical angle ±2°	15°	21°	155°
Position l/h/w [mm]	132/68.5/56.7 / 5.20/2.70/2.23in	94/101.7/81 / 3.70/4.00/3.19in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

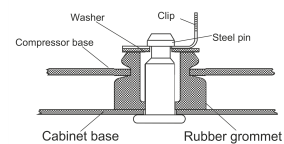


Dimensions in mm [in]

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	280 µF
LRA (locked rotor amps / 4s/ U(N))	32.01 A
RLA (rated load amps / 1s/ U(N))	5.33 A
Cut in current (U(N))	32.01 A

Ambient/ machine room temperatures minimum /maximum

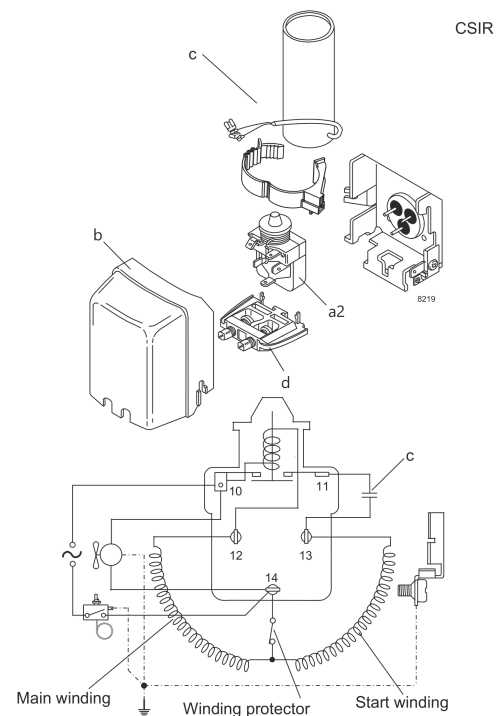
Ambient temperature range: 10 - 43°C / 50 - 109°F

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

System Cooling

fan 3m/s

Electrical Accessories / Wiring Diagram



[View full size](#)

Components

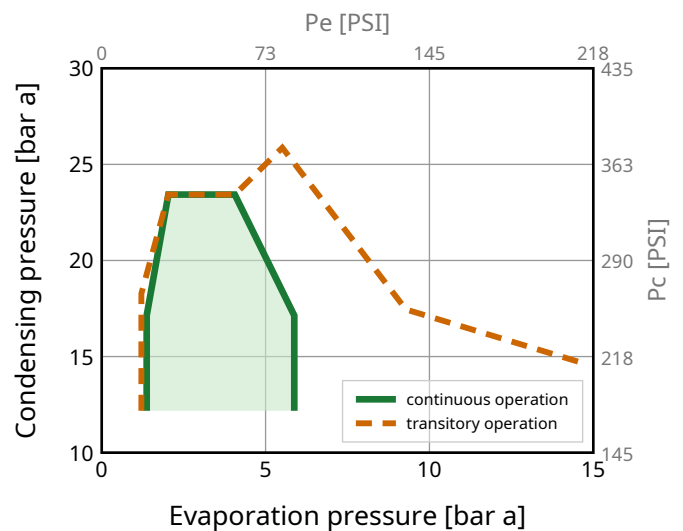
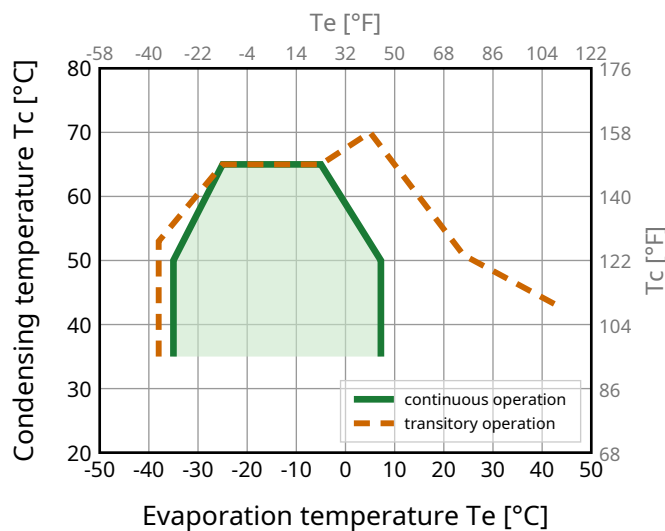
a2 current relay 117U7014

c start capacitor (280µF) 117U5025

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	515	1759	443	1.58	5.39	326	4.24	5.24	ASHRAE LBP
-25 -13	55 131	32 89.6	55 131	384	1312	331	1.22	4.16	316	4.18	4.82	CECOMAF LBP
-35 -31	40 104	20 68	40 104	304	1039	262	1.26	4.30	242	3.80	3.49	EN12900 LBP
-6.7 20	54.4 129.9	35 95	46.1 115	915	3122	787	2.08	7.11	439	5.00	10.48	ASHRAE MBP
-10 14	55 131	32 89.6	55 131	728	2484	626	1.75	5.97	416	4.83	9.26	CECOMAF MBP
-10 14	45 113	20 68	45 113	809	2760	696	2.08	7.11	388	4.64	9.95	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	289	986	248	1.18	4.02	246	3.83	3.25
-30	-22	365	1246	314	1.34	4.56	273	3.96	4.13
-20	-4	568	1939	489	1.74	5.93	327	4.25	6.47
-10	14	841	2869	723	2.17	7.39	388	4.64	9.65
0	32	1185	4044	1019	2.53	8.64	468	5.20	13.78
7.2	45	1479	5047	1272	2.72	9.29	543	5.74	17.40

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

-35	-31	239	817	206	0.97	3.31	247	3.83	2.98
-30	-22	304	1036	261	1.08	3.67	282	4.00	3.79
-20	-4	482	1644	414	1.38	4.72	348	4.37	6.07
-10	14	728	2484	626	1.75	5.97	416	4.83	9.26
0	32	1045	3565	899	2.10	7.18	497	5.45	13.47
7.2	45	1318	4497	1134	2.32	7.91	569	6.04	17.22

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Configuration 2

Sales code:
105H6094

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))	32.01 A
RLA (rated load amps / 1s/ U(N))	5.33 A
Cut in current (U(N))	32.01 A

Ambient/ machine room temperatures minimum /maximum

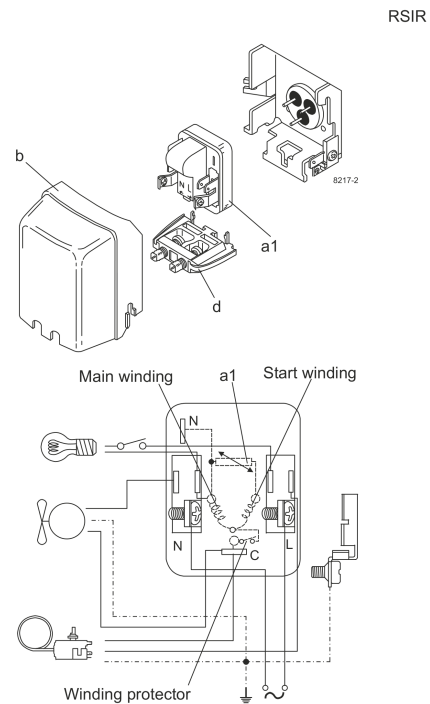
Ambient temperature range: 10 - 43°C / 50 - 109°F

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

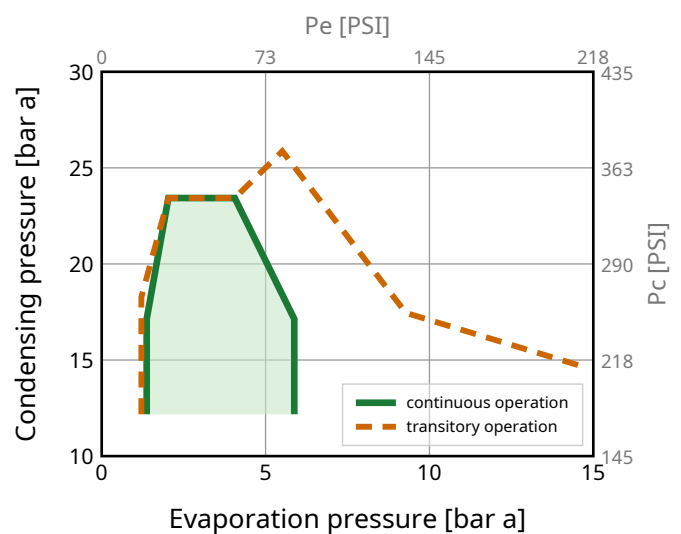
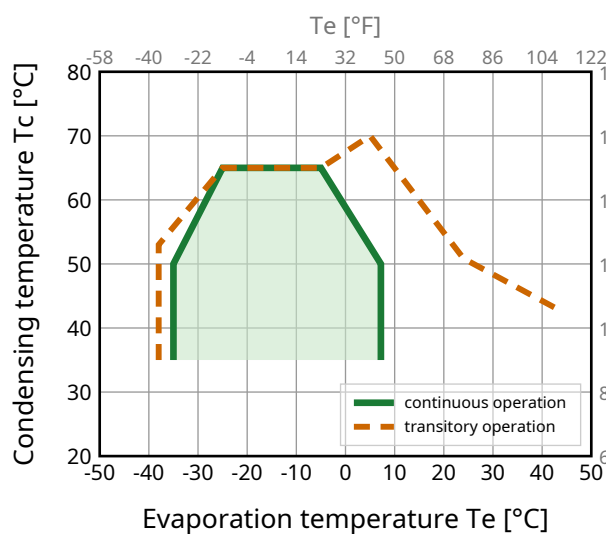
b plastic cover 103N2011

d cord relief 103N1010

Alternative components

a1 e-PTC starter 103N0058

Operation Pressure Range



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Configuration 2

Sales code:
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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	515	1759	443	1.58	5.39	326	4.24	5.24	ASHRAE LBP
-25 -13	55 131	32 89.6	55 131	384	1312	331	1.22	4.16	316	4.18	4.82	CECOMAF LBP
-35 -31	40 104	20 68	40 104	304	1039	262	1.26	4.30	242	3.80	3.49	EN12900 LBP
-6.7 20	54.4 129.9	35 95	46.1 115	915	3122	787	2.08	7.11	439	5.00	10.48	ASHRAE MBP
-10 14	55 131	32 89.6	55 131	728	2484	626	1.75	5.97	416	4.83	9.26	CECOMAF MBP
-10 14	45 113	20 68	45 113	809	2760	696	2.08	7.11	388	4.64	9.95	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	289	986	248	1.18	4.02	246	3.83	3.25
-30	-22	365	1246	314	1.34	4.56	273	3.96	4.13
-20	-4	568	1939	489	1.74	5.93	327	4.25	6.47
-10	14	841	2869	723	2.17	7.39	388	4.64	9.65
0	32	1185	4044	1019	2.53	8.64	468	5.20	13.78
7.2	45	1479	5047	1272	2.72	9.29	543	5.74	17.40

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

-35	-31	239	817	206	0.97	3.31	247	3.83	2.98
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7.2	45	1318	4497	1134	2.32	7.91	569	6.04	17.22

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Configuration 3

Sales code:
105H6094

Configuration

Motor configuration	eRSCR
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	e-PTC
Run capacitor	23.5 μF
Start capacitor	-/-
LRA (locked rotor amps / 4s/ U(N))	32.01 A
RLA (rated load amps / 1s/ U(N))	5.33 A
Cut in current (U(N))	32.01 A

Ambient/ machine room temperatures minimum /maximum

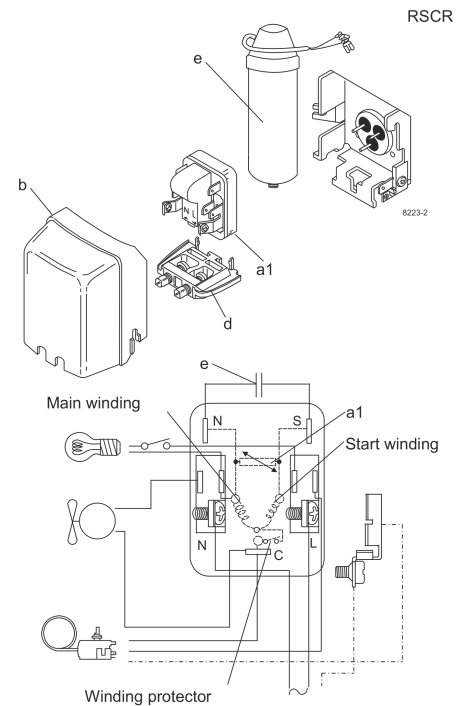
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Machine room temp. compressor: 10 - 48°C / 50 - 118°F

System Cooling

fan 3m/s

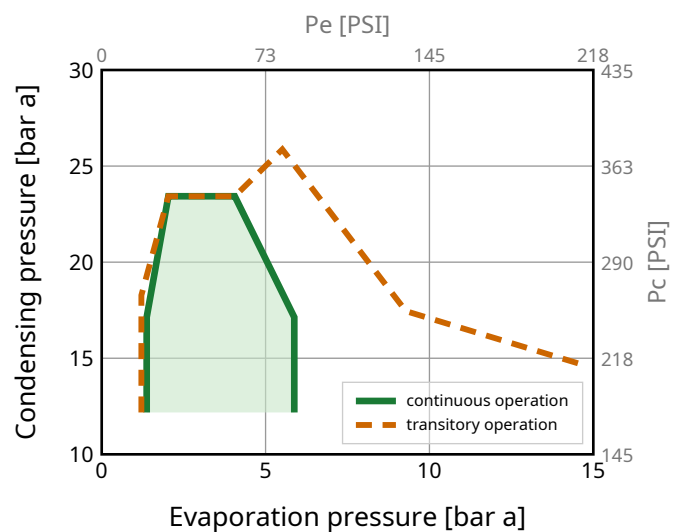
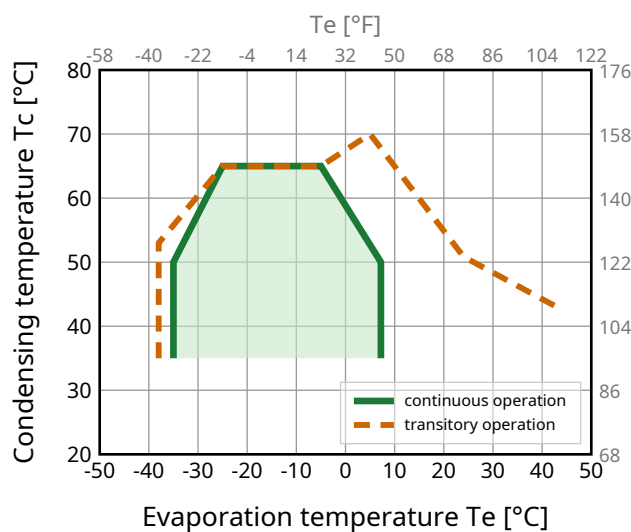
Electrical Accessories / Wiring Diagram



Components

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

Operation Pressure Range



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Configuration 3

Sales code:
105H6094

Standard Conditions

R290, 115 V/60 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	523	1783	449	1.68	5.75	310	4.03	5.31	ASHRAE LBP
-25 -13	55 131	32 89.6	55 131	390	1331	335	1.30	4.43	300	3.97	4.89	CECOMAF LBP
-35 -31	40 104	20 68	40 104	306	1045	263	1.41	4.80	218	3.53	3.52	EN12900 LBP
-6.7 20	54.4 129.9	35 95	46.1 115	926	3160	796	2.25	7.66	412	4.66	10.60	ASHRAE MBP
-10 14	55 131	32 89.6	55 131	737	2514	634	1.89	6.43	391	4.51	9.37	CECOMAF MBP
-10 14	45 113	20 68	45 113	820	2796	705	2.25	7.66	365	4.33	10.09	EN12900 MBP

Performance Tables

R290, 115 V/60 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]
-35	-31	290	991	250	1.32	4.50	220	3.52	3.27
-30	-22	369	1259	317	1.45	4.96	254	3.73	4.17
-20	-4	576	1965	495	1.86	6.34	310	4.03	6.55
-10	14	852	2907	733	2.33	7.96	365	4.33	9.78
0	32	1201	4097	1033	2.75	9.39	436	4.86	13.96
7.2	45	1499	5116	1289	2.95	10.08	508	5.51	17.64

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

-35	-31	243	830	209	1.06	3.61	230	3.48	3.03
-30	-22	309	1053	265	1.15	3.93	268	3.75	3.85
-20	-4	488	1666	420	1.48	5.04	331	4.15	6.15
-10	14	737	2514	634	1.89	6.43	391	4.51	9.37
0	32	1058	3609	910	2.27	7.75	466	5.07	13.64
7.2	45	1336	4557	1149	2.48	8.46	539	5.72	17.45