

公司简介

ABOUT US

新基业汽车电子创立于1991年，作为中国车用环境控制产品研发与生产的中坚力量，多年来新基业秉承“专注、专心、专一”的经营理念，扎根汽车电子行业，深度研发车用环境控制技术，为各种高水平车用环境及电气控制产品及技术的国际推广和国内应用做出了卓越贡献，尤其是在汽车行业，新基业公司赢得了国内外广大车用空调相关企业的同声赞誉，各种先进的技术和设备在厂家取得了良好的应用，并取得数十项国内外专利，在一定程度上提高了中国车用环控产业的技术水平和竞争实力。

Zhengzhou Newbase Auto Electronics Co., Ltd. is established in 1991. For over 20 years, NEWBASE has developed advanced technology strength, strong production capacity and talents of technology development team. Adhering to the company philosophy Focus, Attention, Professional, NEWBASE devote to leading the vehicle climate control industry. We have made fabulous contribution to the climate control technology development domestic and abroad, while getting high approval from HVAC manufacturer and related enterprises. NEWBASE would be keep going to offer more advance technology and excellent product.

主旨：车用环境控制产品的专业配套和OEM供应；

配套客户：大冷王、SAFKAR、康唯特、电装、新同创、劲达、太昌空调、博格思众、贝尔、三电、松芝、宇通客车、金龙客车、三一重工、福田、小金龙、中通客车、神钢、TATA、M&M等。

Main purport: Supply the excellent Vehicle environment control product and advance technology

Partners: Thermo king; SAFKAR; Konvekta; Denso; NTCAC; Kingtech; OPAT; Bergstrom; BEHR; SANDEN; SONGZI; YUTONG BUS; KINGLONG BUS; SANY; FOTON; HIGER; ZHONGTONG PASSENGER CAR; KOBELCO; TATA; Mahindra, etc.

快速的交货与服务：新基业公司的产品透过各级分公司和派出机构向世界各地辐射销售。由熟知客户需求的专业工程师直接面对客户，根据客户的设计要求，和客户一起对产品进行设计和选型，同时有针对性的向客户推荐各种适宜的配套产品。确保用户以最合理的性价比达到最完美的效果。

Fast delivery and service

NEWBASE set the branch office or sales agent around the world. Our engineers would offer you professional technology support. According to the specification of AC system, technical people would help you with model-selection or design suggestion. It helps you to get the most suitable product.

AE技术支持：我们的应用工程师帮助您将您所选用的产品良好的设计和应用到您的系统工程中；同时，他们又具有广泛的汽车产品研发、调试的知识和经验，可以帮助您解决大量的实际设计和应用过程中技术问题。

AE technology support:

Newbase technology support engineers help you to install and test the system, with adequate knowledge and experience in HVAC system, they could help you with kinds of questions about AC system

良好的售后服务：新基业公司良好的技术支持和售后服务，将有助于我们的客户免除任何的后顾之忧；所有的技术支持和售后服务人员都经过严格的专业培训，足以为客户提供各种技术方案，产品选型，技术安装调试，客户培训等服务。

After sale service:

NEWBASE offer super technical support for after sales.

All the after sales technical people are required to take regular technical training. They are knowledgeable enough to release you from the after-sales trouble.

长度-LENGTH

(S/m)	Mm	In	Ft	Yd
Mm	1	0.039	3.281X10 ⁻³	1.094X10 ⁻³
In	25.4	1	0.083	0.028
Ft	304.8	12	1	0.333
Yd	914.4	36	3	1

流速-VELOCITY

(S/m/g)	M/s	Ft/s	Km/h	MI/h
M/s	1	3.281	3.6	2.237
Ft/s	0.305	1	1.097	0.682
Km/h	0.278	0.911	1	0.621
MI/h	0.447	1.467	1.609	1

体积-VOLUME

(S/m)	Dm ³ (L)	In ³	Ft ³	Gal (USA)
Dm ³ (L)	1	61.024	0.035	0.264
In ³	0.016	1	5.787X10 ⁻⁴	4.329X10 ⁻³
Ft ³	28.317	1728	1	7.481
Gal (USA)	3.785	231	0.134	1

质量-MASS

(S/kg)	Kg	Oz	lb	St
Kg	1	35.274	2.205	0.157
Oz	0.028	1	0.062	4.464X10 ⁻³
lb	0.454	16	1	0.071
St	6.350	224	14	1

管径-TREADING

		3/8"	1/2"	3/4"	1"	1 1/2"	2"
直径	DN	10	15	20	25	32	40
	mm	9.525	12.700	19.05	25.4	31.75	38.1
		2"	2 1/2"	3"	4"	5"	6"
直径	DN	50	65	80	100	125	150
	mm	50.80	63.50	76.20	101.60	127.00	152.4

压力-FORCE

(S/N)	1N	1kgf	1lbf
1N	1	0.102	0.225
1kgf	9.807	1	2.205
1lbf	4.484	0.454	1

扭矩-TOQUE

	Nm	Ncm	Gf.cm	Kgf.cm	Kgf.m	ozf.in	lbf.in	lbf.ft
1Nm		100	10200	10.19	0.1009	142	8.852	0.7375
Gf.cm	0.0000981	0.00981		0.001	0.00001	0.0139	0.00888	0.0000723
Kgf.cm	0.0981	9.81	1000		0.01	13.9	0.888	0.072
Kgf.m	9.8066	981	100000	100		1390	86.8	7.233
ozf.in	0.113	11.3	1150	1.152	0.0115	16		0.083
lbf.in	1.355	136	13800	13.83	0.138	192	12	
lbf.ft	0.00706	0.706	72	0.072	0.00072		0.0652	0.00521

功率-POWER

(S/W)	Kw	Kcal/h	CV	BTU/h
Kw	1	859.845	1.36	3412.142
Kcal/h	1.163X10 ⁻³	1	1.581X10 ⁻³	3.968
CV	0.735	632.416	1	2509.630
BTU/h	2.931X10 ⁻⁴	0.252	3.965X10 ⁻⁴	1

热功-ENERGY

(S/J)	MJ	kcal	BTU	kwh
MJ	1	238.846	947.817	0.278
kcal	4.187X10 ⁻³	1	3.968	1.163X10 ⁻³
BTU	1.055X10 ⁻³	0.252	1	2.931X10 ⁻⁴
kwh	3.6	860	3412.142	1

压强-PRESSURE

(S/pa)	Pa	Bar	Psi	Mpa
Pa	1	10 ⁻⁵	1.450X10 ⁻⁴	10 ⁻⁶
Bar	100000	1	14.504	0.1
Psi	6894.757	0.069	1	6.895X10 ⁻³
Mpa	10 ⁶	10	145000	1

流量-FLOW RATE

(S/m/s)	M ³ /s	Dm ³ /h (l/h)	Gal (USA)/h	Ft ³ /h
M ³ /s	1	3600000	951019	127132
Dm ³ /h (l/h)	2.778X10 ⁻⁷	1	0.264	0.035
Gal (USA)/h	1.052X10 ⁻⁶	3.785	1	0.134
Ft ³ /h	7.866X10 ⁻⁶	28.317	7.481	1

制冷剂-REFRIGERANT

	R12	R22	R134A	R407C	R410A
沸点℃	-29.8	-40.8	-26.3	-43.6	-51.6
临界温度℃	112.2	96.2	101.1	87.3	72.13
临界压力Mpa	4.12	4.75	4.07	4.82	4.82
最大容积/L/kg	0.15	0.31	1.51	1.51	1.78
最大容积/kg/m ³	0.82	0.05	0	0	0
全球变暖系数GWP	0	1700	1300	1700	1975

温度-TEMPERATURE

摄氏温度	-20	-10	0	5	10	15	20	25	30	35	40
华氏温度	-4	14	32	41	50	59	68	77	86	95	104
华氏温度—摄氏温度 °C=(F-32)/1.8											
摄氏温度—华氏温度 °F=°C X1.8+32											



Chapter 6

冷藏车控制器

Transport refrigeration unit controller

CL 200201 冷藏车控制器/CL 200201 Refrigeration Unit Controller



★功能说明 Function

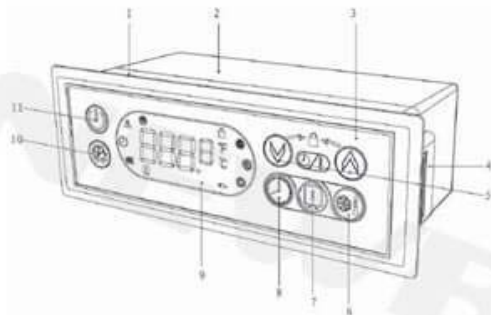
CL 200201冷藏车空调控制器适用于需要冷冻储藏的冷藏车空调和集装箱空调等空调系统中。面板采用LED显示，能够为用户显示冷藏温度及除霜温度。本控制器有自动、冷冻、冷藏、化霜、加热、按键锁等功能。用户只需设定温度和化霜周期，控制器就可以自动进行制冷和自动化霜，并维持用户所需的温度。

CL 200201 controller applies to refrigeration & freezing control system for truck & trailer container.

Main functions: LED display, auto control, error alarm, key guard, etc. Users set the temp and defrost cycle, the controller would work on cooling and defrost automatically as setting.

★应用实例 Application

漯河昌宇
CHANGYU CHINA



- 1、前板
- 2、后壳
- 3、贴膜
- 4、卡扣
- 5、设定温度/除霜周期调节键
- 6、冷冻选择键
- 7、保鲜选择键
- 8、除霜周期设定键
- 9、LED显示屏
- 10、手动除霜键
- 11、电源开关键

- 1、Front cover
- 2、Back cover
- 3、PET cover
- 4、Retaining clip
- 5、Set temp/ defrost cycle
- 6、Freezing switch
- 7、Refreshing switch
- 8、Defrost cycle setting switch
- 9、LED display
- 10、Manual defrost switch
- 11、Power switch

★技术参数 Technical data

电源 Power supply DC24V/DC12V

功耗 Power 3W

外形尺寸 Dimension 142X50X67mm

使用温度范围 Ambient temperature -40℃~80℃5%~95%RH non-condensing

存储温度范围 Storage temperature -10℃~70℃5%~95%RH non-condensing

显示 Display LED

面板保护等级 Protection IP 43

EMC等级 EMC EN50081&EN50082-2

重量 Weight 165g

基本输入 Input

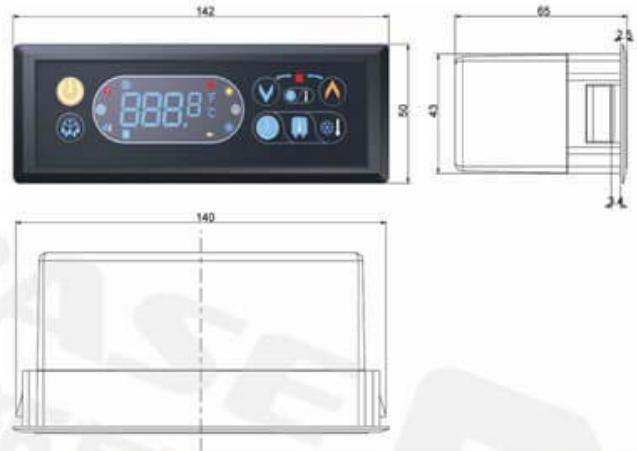
- 1) 回风口温度传感器 Air inlet temp sensor
- 2) 出风口温度传感器 Air outlet temp sensor
- 3) 除霜传感器 Defrost sensor
- 4) 电源缺相、逆向信号输入
Power shortage & reversal signal input ;
- 5) 备电监测信号输入 Stand-by power signal input ;
- 6) 汽车电源 ACC Power (battery) ;
- 7) 冷凝压力输入 Condenser fan pressure input ;
- 8) 压力开关 Pressure switch

基本输出 Output

- 1) 蒸发风机 Evaporator fan (Max.0.3A)
- 2) 冷凝风机 Condenser fan (Max.0.3A)
- 3) 压缩机离合器 Compressor control output (Max.0.3A)
- 4) 除霜控制输出 Defrost control output (Max.0.3A)
- 5) 加热控制输出 Heating output (Max.0.3A)
- 6) 备电控制输出 Stand-by power output (Max.0.3A)

备注 Memo

CZ200202-a冷藏车控制器/CZ200202-a Refrigeration Unit Controller



★功能说明 Function

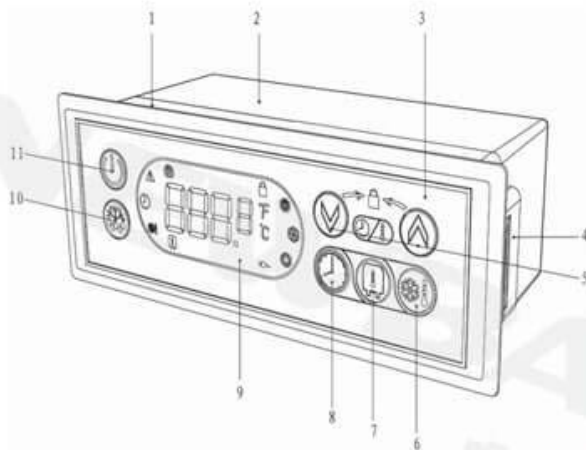
Cz200202-a冷藏车空调控制器适用于需要冷冻储藏的冷藏车空调和集装箱空调等空调系统中。面板采用LED显示，能够为用户显示冷藏温度及除霜温度。本控制器有自动、冷冻、冷藏、化霜、加热、按键锁等功能。用户只需设定温度和化霜周期，控制器就可以自动进行制冷和自动化霜，并维持用户所需的温度。

CZ200202-a controller applies to refrigeration & freezing control system for truck & trailer container.

Main functions: LED display, auto control, error alarm, key guard, etc. Users set the temp and defrost cycle, the controller would work on cooling and defrost automatically as setting.

★应用实例 Application

出口泰国
Tailand



- 1、前板
- 2、后壳
- 3、贴膜
- 4、卡扣
- 5、设定温度/除霜周期调节键
- 6、冷冻选择键
- 7、保鲜选择键
- 8、除霜周期设定键
- 9、LED显示屏
- 10、手动除霜键
- 11、电源开关键

- 1、Front cover
- 2、Back cover
- 3、PET cover
- 4、Retaining clip
- 5、Set temp/ defrost cycle
- 6、Freezing switch
- 7、Refreshing switch
- 8、Defrost cycle setting switch
- 9、LED display
- 10、Manual defrost switch
- 11、Power switch

★技术参数 Technical data

电源 Power supply DC24V/DC12V

功耗 Power 3W

外形尺寸 Dimension 142X50X67mm

使用温度范围 Ambient temperature -40℃~80℃5%~95%RH non-condensing

存储温度范围 Storage temperature -10℃~70℃5%~95%RH non-condensing

显示 Display LED

面板保护等级 Protection IP 43

EMC等级 EMC EN50081&EN50082-2

重量 Weight 165g

基本输入 Input

- 1) 回风口温度传感器 Air inlet temp sensor
- 2) 出风口温度传感器 Air outlet temp sensor
- 3) 除霜传感器 Defrost sensor
- 4) 电源缺相、逆向信号输入
Power shortage & reversal signal input ;
- 5) 备电监测信号输入 Stand-by power signal input ;
- 6) 汽车电源 ACC Power (battery) ;
- 7) 冷凝压力输入 Condenser fan pressure input (GND) ;
- 8) 压力开关 Pressure switch

基本输出 Output

- 1) 蒸发风机 Evaporator fan (Max.0.3A)
- 2) 冷凝风机 Condenser fan (Max.0.3A)
- 3) 压缩机离合器 Compressor control output (Max.0.3A)
- 4) 除霜控制输出 Defrost control output (Max.0.3A)
- 5) 加热控制输出 Heating output (Max.0.3A)
- 6) 备电控制输出 Stand-by power output (Max.0.3A)

备注 Memo

CL 200201-a 全电单温区控制器冷藏车控制器 CL 200201-a DC Power Refrigeration Unit (one chamber) Controller



★功能说明 Function

CL200201-a 型控制器是为全电冷藏车设计的控制面板。面板采用LED显示，能够为用户显示冷藏温度及除霜温度。本控制器有自动、冷冻、冷藏、化霜、加热、按键锁等功能。用户只需设定温度和化霜周期，控制器就可以自动进行制冷和自动化霜，并维持用户所需的温度。

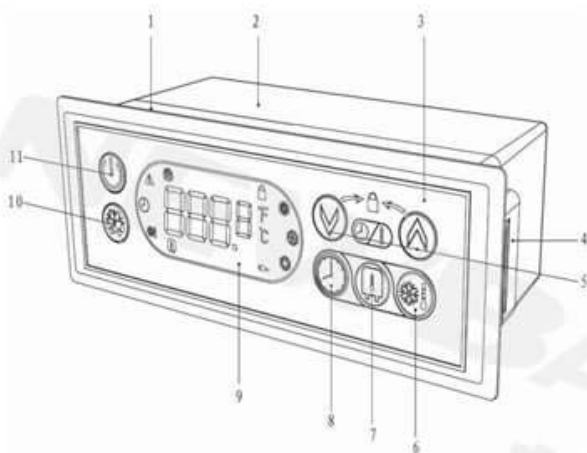
CL200201-a controller is specially designed for DC powered refrigeration unit

Main function: refrigerate, refresh, defrosting, error alarm, key guard, etc.

User set the temp and defrost cycle, the controller would work on cooling and defrost automatically as setting.

★应用实例 Application

博阳冷藏车
Boyang refrigeration truck



- | | |
|----------------|--|
| 1、前板 | 1. Front cover |
| 2、后壳 | 2. Back cover |
| 3、贴膜 | 3. PET cover |
| 4、卡扣 | 4. Retaining clip |
| 5、设定温度/除霜周期调节键 | 5. Temp setting/defrost cycle regulation |
| 6、冷冻选择键 | 6. Freezing switch |
| 7、保鲜选择键 | 7. Refreshing switch |
| 8、除霜周期设定键 | 8. Defrost cycle setting |
| 9、LED显示屏 | 9. LED display |
| 10、手动除霜键 | 10. Manual defrost switch |
| 11、电源开关 | 11. Power switch |

★技术参数 Technical data

电源 Power supply DC24V/DC12V

功耗 Power 3W

外形尺寸 Dimension 142X50X67mm

使用温度范围 Ambient temperature -40°C~80°C 5%~95%RH non-condensing

存储温度范围 Storage temperature -10°C~70°C 5%~95%RH non-condensing

显示 Display LED

面板保护等级 Protection IP 43

EMC等级 EMC EN50081&EN50082-2

重量 Weight 165g

基本输入 Input

- 1) 箱内制冷温度传感器 Interior refrigerating temp. Sensor
- 2) 蓄冷温度传感器 Cold accumulation temp. sensor
- 3) 压力检测输入 Pressure detection input
- 4) 汽车电源 (蓄电池) ACC (battery)
- 5) 背光灯电源 Backlight power

基本输出 Output

- 1) 蒸发风机控制输出 Evaporator fan control (含蓄冷切换)(including switch of cold accumulation)
- 2) 冷凝风机控制输出 Condenser fan control
- 3) 压缩机控制输出 Compressor control
- 4) 除霜控制输出 Defrosting control
- 5) 蓄冷控制输出 Cold accumulation control

备注 Memo

CL 200203-b 全电双温区冷藏车控制器 CL 200203-b DC Power Refrigeration Unit (two chambers) Controller



★功能说明 Function

CL 200203-b 型控制器主要用在需要两个温区独立的全电冷藏车控制系统中

主要功能: 控制器为全电冷藏车双温区设计的, 可以实现两个温区独立的温度控制、自动除霜功能、压缩机调速功能、并有温度校准功能、电量显示和报警功能。

CL200203-b controller is applied for the DC power refrigeration unit which has two separated chambers.

Main function: independent temperature control for two chambers, auto defrost, compressor speed regulation, temperature correction, power volume display, error alarm.

★应用实例 Application

博阳冷藏车

Boyang refrigeration truck

★技术参数 Technical data

电源 Power supply DC24V/DC12V

功耗 Power 3W

外形尺寸 Dimension 137X54X56mm

使用温度范围 Ambient temperature -40°C-80°C 5%~95%RH non-condensing

存储温度范围 Storage temperature -10°C-70°C 5%~95%RH non-condensing

显示 Display LED

面板保护等级 Protection IP 43

EMC等级 EMC EN50081&EN50082-2

重量 Weight 270g

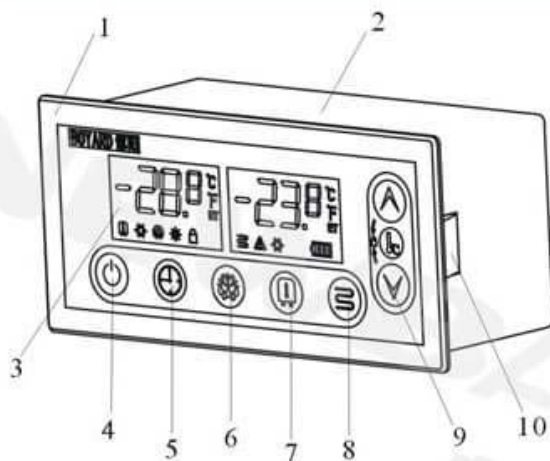
基本输入 Input

- 1) 箱内制冷温度传感器
Refrigerate chamber temp. sensor
- 2) 蓄冷温度传感器 Cold accumulation temp. sensor
- 3) 压力检测输入 Pressure detection input
- 4) 汽车电源 (蓄电池) ACC (battery)
- 5) 背光灯电源 Backlight power
- 6) 压缩机温度检测 Compressor temperature detection
- 7) 压缩机开启检测输入 Compressor detection

基本输出 Output

- 1) 蒸发风机控制输出 (含蓄冷切换)
Evaporator fan control (including switch of cold accumulation)
- 2) 冷凝风机控制输出 Condenser fan control
- 3) 压缩机控制输出 Compressor control
- 4) 除霜控制输出 Defrosting control
- 5) 蓄冷控制输出 Cold accumulation control

备注 Memo



- | | |
|----------------|-------------------------------------|
| 1、前壳 | 1、Front cover |
| 2、后壳 | 2、Back cover |
| 3、LED显示屏 | 3、LED display |
| 4、电源开关 | 4、On/off switch |
| 5、除霜周期设定键 | 5、Defrost cycle setting switch |
| 6、手动除霜键 | 6、Manual defrost switch |
| 7、冷冻选择键 | 7、Freezing switch |
| 8、蓄冷控制键 | 8、Cold accumulation control switch |
| 9、设定温度/除霜周期调节键 | 9、Temp/defrost cycle setting switch |
| 10、卡扣 | 10、Retaining clip |

CL200203-a 双温区冷藏车控制器
CL 200203-a Refrigeration Unit (two chambers) Controller

★功能说明 Function

CL 200203-a 型控制器主要用在需要两个温区独立的冷藏车控制系统中。

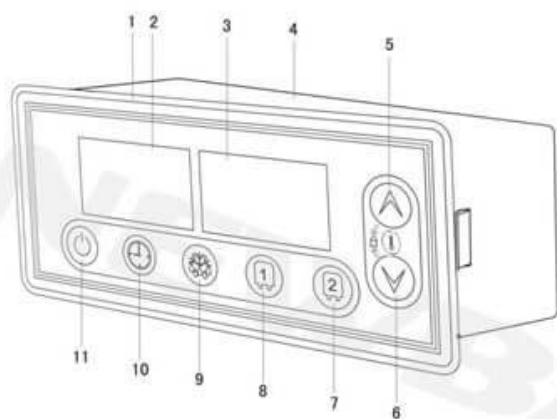
主要功能：控制器为冷藏车双温区设计的，可以实现两个温区独立的温度控制、自动除霜功能、并有温度校准功能、故障报警功能等。

CL200203-a controller is applied for the refrigeration unit which has two separated chambers.

Main function: independent temperature control for two chambers, auto defrost, temperature correction, error alarm.

★应用实例 Application

出口马来西亚
Malaysia



- 1、前壳
- 2、温区1显示屏
- 3、温区2显示屏
- 4、后壳
- 5、参数上调键
(温度、除霜周期等)
- 6、参数下调键
(温度、除霜周期等)
- 7、温区2制冷键
- 8、温区1制冷键
- 9、手动除霜键
- 9、除霜时间设定键
- 10、电源开关

- 1、Front cover
- 2、Chamber 1 display
- 3、Chamber 2 display
- 4、Back cover
- 5、Parameter setting +
(setting temp, defrost period, etc)
- 6、Parameter setting -
(setting temp, defrost period, etc)
- 7、Chamber 2 freezing switch
- 8、Chamber 1 freezing switch
- 9、Defrost cycle setting switch
- 10、Power switch

★技术参数 Technical data

电源 Power supply DC24V/DC12V

功耗 Power 3W

外形尺寸 Dimension 137X54X56mm

使用温度范围 Ambient temperature -40℃~80℃5%~95%RH non-condensing

存储温度范围 Storage temperature -10℃~70℃5%~95%RH non-condensing

显示 Display LED

面板保护等级 Protection IP 43

EMC等级 EMC EN50081&EN50082-2

重量 Weight 270g

基本输入 Input

- 1) 箱内温度传感器1
Refrigerate chamber temp. sensor1
- 2) 箱内温度传感器2
Refrigerate chamber temp. sensor2
- 3) 除霜温度传感器 Defrost sensor
- 4) 压力检测输入 Pressure detection input
- 5) 汽车电源 (蓄电池) ACC (battery)
- 6) 背光灯电源 Backlight power

基本输出 Output

- 1) 蒸发风机控制输出1
Evaporator fan control 1
- 2) 蒸发风机控制输出2
Evaporator fan control 2
- 3) 冷凝风机控制输出 Condenser fan control
- 4) 压缩机离合器 Compressor clutch
- 5) 除霜控制输出 Defrosting control

备注 Memo

Guangzhou Office:

Room 806, Tianjun International Plaza, Tianhe Road #365,Guangzhou,China

Tel: +86(20)-3880 3574, 3880 3584

Fax: +86(20)-3880 3547

Website: www.newbasecn.com

Zhengzhou Office:

No.8, Hongnan Road, Long Ding Business Center,Zhengzhou, China

Tel: +86(371)-6799 9595,6799 9696

Fax: +86(371)-6799 9393

Email: info@newbasecn.com

Website: www.newbasecn.com

