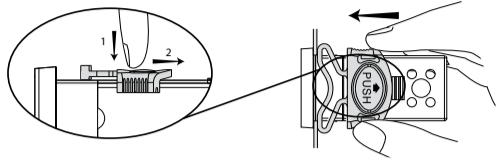


ir33+ 宽面板型, ir33+ 宽面板小型 / ir33+ wide, ir33+ small wide - 电子控制器, 用于控制独立式制冷装置 / electronic controller for stand-alone refrigerating units



面板安装 / Panel mounting



背面(用2个快速安装的侧支架) / Rear (with 2 quick-fit side brackets)

Fig. 1

ir33+ wide 尺寸 (mm) / Dimensions ir33+ wide (mm)

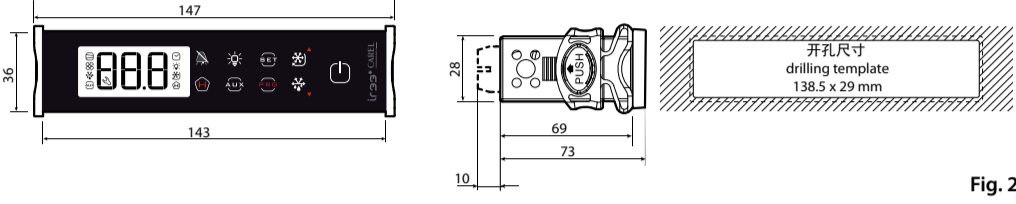


Fig. 2

ir33+ small wide 尺寸 (mm) / Dimensions ir33+ small wide (mm)

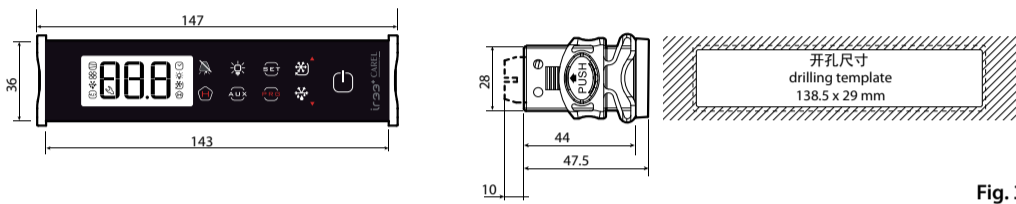


Fig. 3

报警和信号表: 显示屏, 蜂鸣器和继电器 / Table of alarms and signals: display, buzzer and relay

代码 / Code	显示屏上的图标 / Icon on the display	报警继电器 / Alarm relay	蜂鸣器 / Buzzer	复位 / Reset	说明 / Description
'rE'	闪烁 / flashing	ON	ON	自动的 / automatic	虚拟控制传感器故障 / virtual control probe fault
'E0'	闪烁 / flashing	OFF	OFF	自动的 / automatic	房间传感器S1故障 / room probe S1 fault
'E1'	闪烁 / flashing	OFF	OFF	自动的 / automatic	除霜传感器S2故障 / defrost probe S2 fault
'E2'-3-4'	闪烁 / flashing	OFF	OFF	自动的 / automatic	传感器S3-4-5故障 / probe S3-4-5 fault
'LO'	闪烁 / flashing	ON	ON	自动的 / automatic	低温报警 / low temperature alarm
'HI'	闪烁 / flashing	ON	ON	自动的 / automatic	高温报警 / high temperature alarm
'AF'	闪烁 / flashing	ON	ON	手动的 / manual	防冻报警 / antifreeze alarm
'IA'	闪烁 / flashing	ON	ON	自动的 / automatic	外部触点的即时报警 / immediate alarm from external contact
'dA'	闪烁 / flashing	ON	ON	自动的 / automatic	外部触点的延时报警 / delayed alarm from external contact
'dE'	亮 / ON	OFF	OFF	自动的 / automatic	除霜进行中 / defrost running
'Ed1'-2'	否 / no	OFF	OFF	自动的 / 手动的 / automatic/manual	蒸发器1-2的除霜因超时而终止 / defrost on evaporator 1-2 ended by timeout
'Pd'	闪烁 / flashing	ON	ON	自动的 / 手动的 / automatic/manual	泵极报警的最长时间 / maximum time pump-down alarm
'LP'	闪烁 / flashing	ON	ON	自动的 / 手动的 / automatic/manual	低压报警 / low pressure alarm
'AtS'	闪烁 / flashing	ON	ON	自动的 / 手动的 / automatic/manual	泵极中自动启动 / autostart in pump-down
'cht'	否 / no	OFF	OFF	自动的 / 手动的 / automatic/manual	高冷凝温度预报警 / high condenser temperature pre-alarm
'CHT'	闪烁 / flashing	ON	ON	手动的 / manual	高冷凝温度报警 / high condenser temperature alarm
'dor'	闪烁 / flashing	ON	ON	自动的 / automatic	因门打开时间太长而报警 / door open for too long alarm
'EtC'	闪烁 / flashing	OFF	OFF	自动的 / 手动的 / automatic/manual	实时钟故障 / real time clock fault
'EE'	闪烁 / flashing	OFF	OFF	自动的 / automatic	Eeprom故障, 机组参数 / EEPROM error, unit parameters
'EF'	闪烁 / flashing	OFF	OFF	自动的 / automatic	Eeprom故障, 运行参数 / EEPROM error, operating parameters
'HA'	闪烁 / flashing	OFF	OFF	手动的 / manual	HACCP报警, 'HA'类型 / HACCP alarm, type 'HA'
'HF'	闪烁 / flashing	OFF	OFF	手动的 / manual	HACCP报警, 'HF'类型 / HACCP alarm, type 'HF'
'rC'	信号 / signal				通过远程控制启用装置而进行编辑(对ir33+ wide无效) / Instrument enabled for programming from the remote control (not available on ir33+ wide)
'Add'	信号 / signal				自动分配地址进行中 / Automatic address assignment procedure in progress
'LrH'	信号 / signal				低相对湿度程序的启用 / Activation of the low relative humidity procedure
'HrH'	信号 / signal				高相对湿度程序的启用 / Activation of the high relative humidity procedure
'ccb'	信号 / signal				请求开始连续循环 / Request to start continuous cycle
'ccE'	信号 / signal				请求结束连续循环 / Request to end continuous cycle
'dFb'	信号 / signal				请求开始除霜 / Request to start defrost
'dFE'	信号 / signal				请求结束除霜 / Request to end defrost
'On'	信号 / signal				开启 / Switch ON
'OFF'	信号 / signal				关闭 / Switch OFF
'rES'	信号 / signal				通过手动方式复位报警: 复位HACCP报警; 恢复温度监控 / Reset alarms with manual reset; Reset HACCP alarms; Reset temperature monitoring
'n1...n6'	闪烁 / flashing	ON	ON	自动的 / automatic	表明网络内存在的装置1...6有报警 / Indicates an alarm on unit 1 to 6 present in the network
'dn1'	信号 / signal				下载进行中 / Download in progress
'd1...d6'	闪烁 / flashing	OFF	OFF		装置1...6上的下载出现错误

注意: 蜂鸣器是启用的, 如果已经通过参数'H4'启用。 / NOTE: The buzzer is enabled if enabled by the parameter 'H4'

显示屏上的信号 / Signals on the display

图标 / Icon	功能 / Function	常规操作 / Normal operation	启动 / Startup
	压缩机 / COMPRESSOR	压缩机开启 / compressor ON 压缩机关闭 / compressor OFF	闪烁 / blink 请求压缩机运行 / compressor required
	风扇 / FAN	风扇开启 / fan ON 风扇关闭 / fan OFF	请求风扇运行 / fan required
	除霜 / DEFROST	除霜中 / defrost in progress 无除霜请求 / defrost not required	请求除霜 / defrost required
	AUX	辅助输出AUX是启用的 / auxiliary output AUX active 辅助输出AUX未启用 / auxiliary output AUX not active	防露加热功能是启用的 / anti-sweat heater function active
	报警 / ALARM	外部报警延迟(在时间'A7'到期前) / delayed external alarm (before the expiry of the time 'A7')	报警和故障 / alarms and malfunctions
	时钟 / CLOCK	至少已经设定了一个定时除霜 / at least one timed defrost has been set	时钟报警 / clock alarm 如果存在RTC则是开始的 / ON if RTC present
	灯光 / LIGHT	辅助灯光输出是启用的 / auxiliary output LIGHT active 辅助灯光输出未启用 / auxiliary output LIGHT not active	防露加热功能是启用的 / anti-sweat heater function active
	服务 / SERVICE	无故障 / no malfunctions	故障(例如EEPROM或传感器故障) / malfunction (es. EEPROM error or probe fault)
	HACCP	功能未被启用 / function not enabled 功能被启用(HA和/或HF) / function enabled (HA and/or HF)	HACCP报警被启用 / HACCP alarm enabled
	连续循环 / CONTINUOUS CYCLE	功能被启用 / function enabled 功能未被启用 / function not enabled	请求执行功能 / function required

产品处理 / Product disposal

必须按照当地关于废品处理的强制法规单独处理本装置(或本产品)。
The appliance (or the product) must be disposed of separately in accordance with the local waste disposal legislation in force.

说明 / Description

ir33+ 宽面板型, 是一个带LED显示屏的微处理器控制器系列, 用于独立式制冷装置的控制。
ir33+ wide represent a range of electronic microprocessor controllers with LED display developed for the management of stand-alone refrigerating units.

小键盘上的按钮 / Buttons on the keypad

按钮 / Button	常规操作 / Normal operation	启动 / Start-up	请求自动分配 / Request automatic assignment
	单独按下这个按钮 / Pressing the button alone 按下至少5秒钟后, 进入设定"F"类(常用)的参数的菜单 / pressed for more than 5 s accesses the menu for setting type "F" (frequent) parameters	与其它按钮一起按下 / Pressing together with other buttons PRG+SET: 一起按下至少5秒钟后, 进入设定"C"类(配置)参数或下载参数的菜单 / if pressed together for more than 5 s access the menu for setting the type "C" (configuration) or downloading the parameters	如果在启动时按下超过5秒, 则将启动默认参数设定 / if pressed for more than 5 s at start-up, starts the default parameter setting 如果按下持续1秒, 则进入自动分配地址程序 / if pressed for 1 s enters the automatic serial address assigning procedure
	将报警调为静音(蜂鸣器)和禁用报警继电器 / silences the audible alarm (buzzer) and disables the alarm relay	MUTE+UP/CC: 如果同时按下超过5秒, 则将手动复位任何报警。 / if pressed together for more than 5 s reset any alarm with manual reset	
	按下至少5秒钟后, 启用/禁用装置 / if pressed for more than 5 s, enables/disables the unit		
	按下至少5秒钟后, 启用/禁用辅助输出点 / if pressed for more than 5 s, enables/disables the auxiliary output		
	按下至少5秒钟后, 启用/禁用一个手动除霜 / if pressed for more than 5 s, enables/disables a manual defrost		
	按下至少5秒钟后, 启用/禁用一个连续循环 / if pressed for more than 5 s, enables/disables a continuous cycle	UP/CC+MUTE: 如果同时按下超过5秒, 则将手动复位任何报警。 / if pressed together for more than 5 s reset any alarm with manual reset UP/CC+SET: 如果同时按下超过5秒, 则将显示除霜温度(传感器2) / if pressed together for more than 5 s display the defrost temperature (probe 2)	
	按下至少1秒钟后, 显示/设定设点 / if pressed for more than 1 s, displays/sets the set point	SET+PRG: 如果同时按下超过5秒, 则将进入设定"C"类(配置)参数或下载参数的菜单 / if pressed together for more than 5 s access the menu for setting the type "C" (configuration) or downloading the parameters SET+UP/CC: 如果同时按下超过5秒, 则将显示除霜温度(传感器2) / if pressed together for more than 5 s display the defrost temperature (probe 2)	
	按下至少5秒钟后, 启用/禁用辅助输出点2 / if pressed for more than 5 s, enables/disables the auxiliary output no. 2		
	进入菜单, 以显示和删除HACCP报警 / enters the menu to display and delete the HACCP alarms		

技术规格 / Technical characteristics

电源 / power supply	型号 / Model	电压 / Voltage	功率 / Power
PBEVxxExxxx	230 V~ (+10...-15%), 50/60 Hz	230 V~ (+10...-10%), 50/60 Hz (vers. 16 A, 8 A, 8 A)	3 VA, 25 mA~ max.
	115 V~ (+10...-10%), 50/60 Hz	115 V~ (+10...-10%), 50/60 Hz (vers. 16 A, 8 A, 8 A)	3 VA, 50 mA~ max.
PBEVxxHxxxx	115...230 V~ (switching) (+10...-15%), 50/60 Hz	12 V~ (+10...-15%), 50/60 Hz	6 VA, 50 mA~ max. 3 VA, 300 mA~ / mAdc max.
PBEVxxDxxxx	12 Vdc, 12...18 Vdc		仅使用SELV电源 / Use only SELV power supply
由电源保证的绝缘 / Insulation guaranteed by the power supply	PBEVxxExxxx	与超低压部件的绝缘 / insulation in reference to very low voltage parts	加强的, 6 mm间隙, 8 mm爬电距离, 3750 V绝缘 / reinforced, 6 mm clearance, 8 mm creepage, 3750 V insulation
	PBEVxxAxxxx	与继电器输出点的绝缘 / insulation from relay outputs	基础的, 3 mm间隙, 4 mm爬电距离, 1250 V绝缘 / basic, 3 mm clearance, 4 mm creepage, 1250 V insulation
PBEVxxHxxxx	与超低压部件的绝缘 / insulation in reference to very low voltage parts	由安全变压器从外部确保(SELV) / externally guaranteed by safety transformer (SELV power supply)	
	与继电器输出点的绝缘 / insulation from relay outputs	基础的, 3 mm间隙, 4 mm爬电距离, 1250 V绝缘 / reinforced, 3 mm clearance, 4 mm creepage, 1250 V insulation	
输入点 / Inputs	S1 (传感器1) / S1 (probe 1) NTC或PTC, 取决于控制器型号 / NTC or PTC according to the model	S2 (传感器2) / S2 (probe 2) NTC或PTC, 取决于控制器型号 / NTC or PTC according to the model	
	D12	无源触点, 触点阻抗 < 10 Ω, 闭合电流 6 mA, 接触电阻 < 10 Ω, 闭合电流 6 mA	
传感器类型 / Probe type	标准的CAREL NTC传感器 NTC std. CAREL	10 kΩ, at 25 °C, range -50T90 °C / 在 25 °C 时为 10 kΩ, 量程 -50~90 °C	1 °C, at range -50T50 °C / 量程 -50~50 °C, 为 1 °C 3 °C, at range 50T90 °C / 量程 -50~90 °C, 为 3 °C
	NTC 高温 / NTC high temperature	50 kΩ a 25 °C, range -40T150 °C	1.5 °C, at range -20T115 °C / 量程 -20~115 °C, 为 1.5 °C 4 °C, at range -20T115 °C / 量程 -20~115 °C, 为 4 °C
继电器输出	标准的CAREL PTC传感器 PTC std. CAREL (特殊型号 / specific model)	985 Ω a 25 °C, range -50T150 °C	2 °C, at range -50T50 °C / 量程 -50~50 °C, 为 2 °C 4 °C, at range 50T150 °C / 量程 -50~150 °C, 为 4 °C
	取决于控制器型号 / depending on the model		
连接 / Connections	继电器 / relay	250 V~	动作次数 / operating cycles
	EN60730-1	UL873	
PBEVxx(E,A)(P,S,V,Y)xxx	5 A (*)	5(1) A	100000
	8 A (*)	8(4) A N.O. 6(4) A N.C. 2(2) A N.O./N.C.	100000
PBEVxx(E,A)(P,S,V,Y)xxx	16 A (*)	10(4) A N.O. (fino a 60°C) 12(2) A N.O./N.C.	100000
	2 Hp	10(10) A	100000
与超低压部件的绝缘 / insulation in reference to very low voltage parts	加强的, 6 mm间隙, 8 mm爬电距离, 3750 V绝缘 / reinforced, 6 mm clearance, 8 mm creepage, 3750 V insulation	基础的, 3 mm间隙, 4 mm爬电距离, 1250 V绝缘 / basic, 3 mm clearance, 4 mm creepage, 1250 V insulation	
	独立的继电器输出点之间的绝缘 / insulation between the relay outputs independent		
工作温度 / Operating temperature	-10~65 °C 适用于所有型号 / -10T65 °C for all versions	-20~70 °C	
	<90% r.H. 无凝露 / <90% r.H. non-condensing	<90% r.H. 无凝露 / <90% r.H. non-condensing	
工作湿度 / Operating humidity	存储湿度 / Storage humidity	前面板防护等级 / Front panel degree of protection	
	2 (正常情况) / 2 (normal situation)	绝缘材料的PTI / PTI of the insulating material	
绝缘材料的PTI / PTI of the insulating material	印刷电路板为250, 绝缘的材料为175 / printed circuit board 250, insulation 175	耐热和耐火类别 / Heat and fire resistance category	
	D类和B类 (UL 94-V0) / category D and category B (UL 94-V0)	抗电击等级 / Class of protection against voltage surges	
抗电击等级 / Class of protection against voltage surges	II类 / category II	断开或中断连接类型 / Type of disconnection or interruption	
	1.8 继电器触点(微型开关) / 1.8 relay contacts (micro-disconnection)	控制设备的结构 / Construction of control	
控制设备的结构 / Construction of control	与电控板设备合在一起 / incorporated control, electronically	防触电等级 / Classification according to protection against electric shock	
	通过适当的组合, 可用于II类设备中 / Class II, by appropriate incorporation	远程显示屏与接口之间的最长距离 / Maximum distance between interface and display	
编程 / Programming	10 m	所有型号的产品都可以使用 / available on all models	
	安全标准: 符合欧洲相关标准。 / Safety standards: compliant with the European reference standards.		

友情提示: 请将传感器和开关量输入信号线与带电感负荷的线缆和电源线尽可能分开, 以避免可能产生的电磁干扰。

不要将电源线(包括电控板接线)和信号线放在同一个管内。
WARNING: separate as much as possible the probe and digital input signal cables from the cables carrying inductive loads and power cables to avoid possible electromagnetic disturbance. Never run power cables (including the electrical panel wiring) and signal cables in the same conduits.

操作参数汇总 (U.M. = 测量单位, DEF= 默认值) /

Summary of operating parameters (UOM = Unit of measure; Def. = Default value).

Table with columns: Symbol, Code, Parameter, Models, UOM, Type, Min., Max., Def. It lists various operational parameters such as Password, Measurement stability, Temperature display response, and defrost settings.

Table with columns: Symbol, Code, Parameter, Models, UOM, Type, Min., Max., Def. It lists parameters related to fan management, alarm settings, and defrost cycles, including fan start temperature, alarm output, and defrost timing.

重要提示: 设置时钟后, 要想使设置的时钟值立即可运行, 需要必须将装置关机后再重启。 Important: for the set times to become immediately operational, the instrument must be turned off and on again.

重要说明:

CAREL产品是先进的产品, 其操作方法和在随附的技术文件中有所说明, 您甚至可以在购买前从www.carel.com网站上下载。为了达到特定的最终装置和/或设备的预期效果, 客户(最终设备的制造商、开发商或工程师)可以对本产品进行配置, 但与此相关的所有责任和风险由客户承担。

IMPORTANT WARNINGS

The CAREL product is a state-of-the-art device, whose operation is specified in the technical documentation supplied with the product or can be downloaded, even prior to purchase, from the website www.carel.com. The customer (manufacturer, developer or installer of the final equipment) accepts all liability and risk relating to the configuration of the product in order to reach the expected results in relation to the specific final installation and/or equipment.



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