

BOSS mini Istruzioni di montaggio / Assembly procedure / Инструкции по монтажу / 装配规程

CAREL

ATTENZIONE

Quest'apparecchiatura deve essere installata esclusivamente da personale di servizio con adeguato addestramento tecnico ed esperienza per essere consapevole dei pericoli a cui può essere esposto in caso di configurazioni erronee. Le operazioni descritte in questo manuale sono ad uso esclusivo del personale di servizio.

WARNING

This appliance must only be installed by service personnel with suitable technical training and experience and who are aware of the dangers they may be exposed to in the event of incorrect configuration. The operations described in this manual are for service personnel only.

Внимание

Монтаж устройства выполняется только квалифицированным персоналом с соответствующим опытом, прошедшим соответствующую подготовку и осознавшим все риски, связанные с неправильной настройкой устройства. Приведенные инструкции предназначены только для технического персонала.

友情提示

本装置只能由满足以下条件的服务人员安装：经过相关技术培训及具有相关经验并且熟知不正确设置时可能导致的危险。

FASI DI MONTAGGIO

Per boss-mini sono possibili 3 modalità d'installazione:

A Installazione orizzontale a tavolo.

B Installazione a parete.

C Installazione guida DIN.

ASSEMBLY PHASES

boss-mini features 3 possible types of installation

Horizontal desktop installation.

Wall mounting.

DIN rail mounting.

СПОСОБЫ МОНТАЖА

Монтаж устройства выполняется одним из трех способов:

горизонтальный (настольный) монтаж.

монтаж на стену.

монтаж на DIN-рейку.

装配步骤

boss-mini有3种可行的安装类型

水平桌面安装

墙面安装

DIN导轨安装

ASSEGNAZIONE IP TEMPORANEO

Per assegnare un IP fisso temporaneo alla porta LAN di boss-mini in modo da potervi accedere in caso di non conoscenza dell'IP di quest'ultimo, procedere come indicato di seguito:

- tenere premuto per più di 2 secondi il "Pulsante «Vernomero IP temporaneo» (11) per 2 seconds
- il LED allarme comincerà a lampeggiare in verde
- da questo momento in poi il boss mini can now be accessed at IP address 172.16.0.33/16 for around one hour, after which the temporary IP will be automatically disabled

TEMPORARY IP ASSIGNMENT

To assign a temporary IP address to the boss mini LAN port for access when the actual IP is not known, proceed as follows:

- нажмите и держите кнопку «Временный IP-адрес» (11) 2 с
- светодиод тревоги начнет мигать зеленым
- теперь к устройству boss mini можно получить доступ в течение часа по адресу 172.16.0.33/16. По истечении этого времени данный временный адрес автоматически удаляется

NB: the temporary IP address is not visible in the boss mini network configuration.

НАЗНАЧЕНИЕ ВРЕМЕННОГО IP-АДРЕСА

Порядок выдачи временного IP-адреса сетевому порту устройства boss mini, когда текущий IP-адрес неизвестен:

- 按住“启用临时IP按钮”(11)持续2秒
- 报警LED灯将开始闪烁绿色
- 现在可以用IP地址172.16.0.33/16访问boss mini大约1小时，之后此临时IP地址将自动失效

临时IP地址分配

在实际IP地址不知道时要给boss mini LAN端口分配一个访问的临时IP地址，步骤如下：

- 按住“启用临时IP按钮”(11)持续2秒
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- 现在可以用IP地址172.16.0.33/16访问boss mini大约1小时，之后此临时IP地址将自动失效

注意：临时IP地址在boss mini网络设置中是看不到的。

NOTE GENERALI

Prima di passare a qualsiasi operazione si raccomanda di controllare che nella scatola di boss-mini siano presenti:

1. il dispositivo stesso;
2. una antenna (nelle versioni con funzione wi-fi a bordo);
3. cavo per connessione uscite digitali;
4. piedini antiscivolo;
5. documentazione tecnica;
6. i morsetti necessari;
7. due resistori per terminazione di linea seriale.

GENERAL NOTE

Before performing any operations, check that the boss-mini contains:

1. the device itself
2. an antenna (in the versions with integrated Wi-Fi);
3. cable for connecting the digital outputs;
4. non-slip feet;
5. technical documents;
6. terminals;
7. two resistors for the end of the serial line.

ОБЩИЕ ЗАМЕЧАНИЯ

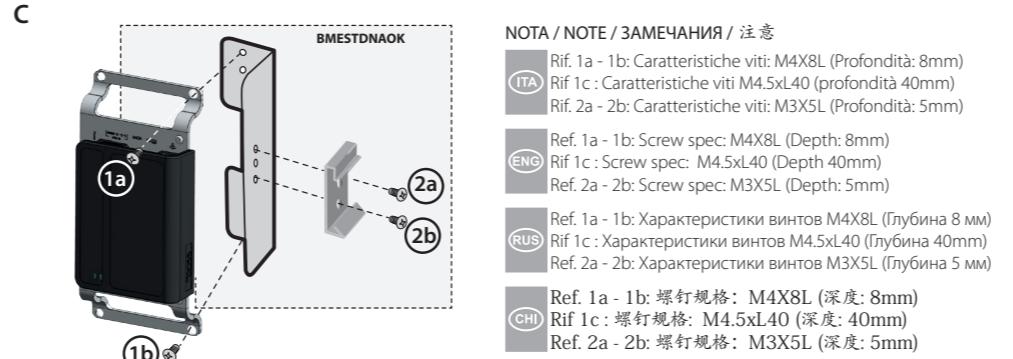
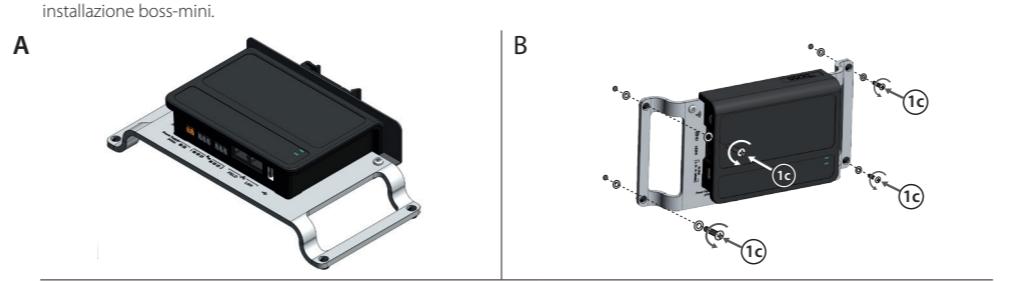
Перед началом работы проверьте комплектность:

1. устройство
2. антenna (в моделях со встроенным Wi-Fi);
3. кабель для подсоединения цифровых выходов;
4. антискользящие ножки;
5. техническая документация;
6. клеммы;
7. два согласующих резистора для линии последовательной передачи данных.

总体说明

在进行任何操作前，请检查是否包含以下部件：

1. boss-mini设备；
2. 天线(仅适用于集成Wi-Fi的型号)；
3. 缆线，用于连接数字输出点；
4. 防滑脚；
5. 技术文档；
6. 端子；
7. 两个用于串行线路末端的电阻。

**NOTA / NOTE / ЗАМЕЧАНИЯ / 注意**

Rif. 1a - 1b: Caratteristiche viti: M4X8L (Profondità: 8mm)
 Rif. 1c: Caratteristiche viti M4.5xL40 (profondità 40mm)
 Rif. 2a - 2b: Caratteristiche viti: M3X5L (Profondità: 5mm)

Ref. 1a - 1b: Screw spec: M4X8L (Depth: 8mm)
 Rif. 1c : Screw spec: M4.5xL40 (Depth 40mm)
 Ref. 2a - 2b: Screw spec: M3X5L (Depth: 5mm)

Ref. 1a - 1b: Характеристики винтов M4X8L (Глубина 8 мм)
 Rif. 1c : Характеристики винтов M4.5xL40 (Глубина 40мм)
 Ref. 2a - 2b: Характеристики винтов M3X5L (Глубина 5 мм)

Ref. 1a - 1b: 螺钉规格: M4X8L (深度: 8mm)
 Rif. 1c : 螺钉规格: M4.5xL40 (深度: 40mm)
 Ref. 2a - 2b: 螺钉规格: M3X5L (深度: 5mm)

ATTENZIONE / WARNING / ПРЕДУПРЕЖДЕНИЕ / 注意

Per tutelare la sicurezza degli operatori e la salvaguardia del dispositivo, prima di effettuare qualsiasi intervento togliere l'alimentazione.

RS485 line 1-2:

- rispettare la polarità (+,-,GND);
- la lunghezza massima non deve superare 1000 m.
- non realizzare biforazioni della linea o collegamenti a stella;
- in corrispondenza del mors. più lontano, inserire un resistore da 120 Ohm 1/4 W (inclusi nel prodotto) tra + e -;
- evitare di posizionare la linea in prossimità delle linee di potenza;
- utilizzare cavo schermato e collegare lo schermo al solo polo GND. CAREL consiglia l'uso di cavi Belden cod. 8761.8762 o equivalenti.

Ethernet: utilizzare cavo schermato Cat.5e SFTP
 Ethernet: 使用屏蔽线缆Cat.5e SFTP

ATTENZIONE / WARNING / ПРЕДУПРЕЖДЕНИЕ / 注意

To safeguard operators and the boards, disconnect power before performing any operations.

RS485 line 1-2:

- observe the polarity (+,-,GND);
- the maximum length must not exceed 1000 m.
- do not make branches in the line or star connections;
- the most distant terminal must be fitted with a 120 Ohm 1/4 W resistor (included with the product) between + and -;
- avoid laying the line near power cables;
- use shielded cable and connect the shield to the GND pole only. CAREL recommends Belden cables code 8761.8762 or equivalent.

Ethernet:
 • 使用屏蔽线缆Cat.5e SFTP
 Сеть Ethernet: используйте экранированный кабель, экран которого должен подключаться только к полюсу GND. Компания CAREL рекомендует кабели производства Belden код. 8761.8762 или аналогичные.

ДЛЯ ОБЕСПЕЧЕНИЯ БЕЗОПАСНОСТИ

Для обеспечения безопасности персонала и предотвращения повреждения плат перед началом работы отключите устройство.

RS485线路1-2:

- 注视极性 (+, -, GND);
- 最长距离不要超过 1000m；
- 线路上勿做分支，请勿作星型连接；
- 距离最近的端子在+和-之间必须安装一个120 Ohm 1/4 W的电阻；
- 避免将线路放置在电源线附近；
- 使用屏蔽线缆并接至GND端。CAREL建议使用代码为8761.8762的Belden线缆或同等线缆

Ethernet:
 • 使用屏蔽线缆Cat.5e SFTP
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FIRST ACCESS PROCEDURE**настройка параметров доступа****FIRST ACCESS PROCEDURE**

The first time you power up your boss-mini, you need to set up its access properties. You can choose to do that in one of three ways:

1. Direttamente da boss-mini collegando mouse, tastiera e monitor al dispositivo (*);
 2. Se boss-mini è collegato ad una rete locale, tramite un PC in rete che possa accedere a boss-mini;
 3. Tramite la connessione Wi-Fi integrata (*);
- (* solo nei modelli con uscita video e wi-fi)

1. Прямой доступ

Collegare mouse, tastiera e schermo al dispositivo ed accenderlo. Dopo qualche istante la procedura guidata di primo accesso comparirà sullo schermo.

2. Accesso tramite rete locale

Assicurarsi che boss-mini sia collegato ad una rete locale e che sia accessibile da un PC collegato alla stessa rete. Accendere boss-mini, attendere qualche istante, quindi aprire un browser nel PC e collegarsi all'indirizzo: https://mboss-nnnn. Le ultime 4 cifre sono riportate sull'adesivo sul lato del dispositivo. Quindi seguire la procedura guidata di primo accesso.

3. Accesso tramite Wi-Fi integrata

Accendere boss-mini, attendere qualche istante, quindi effettuare una ricerca delle reti Wi-Fi disponibili da tablet, telefono o PC. Selezionare la rete mboss-nnnn; la ultime 4 cifre sono riportate sull'adesivo sul lato del dispositivo. La prima volta che si accede alla rete Wi-Fi non sarà necessario inserire alcuna password. Dopo aver effettuato la connessione alla rete Wi-Fi, avviare il browser e collegare all'indirizzo: https://mboss-nnnn e seguire la procedura guidata di primo accesso.

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注意：临时IP地址在boss mini网络设置中是看不到的。

Per installare boss-mini sono necessari:

- un cacciavite punta a taglio e uno a croce;
- viti per fissaggio a parete;

Si raccomanda di alimentare il prodotto con linea UPS o in alternativa disporre di un gruppo di continuità UPS che possa alimentare correttamente l'apparecchiatura senza sbalzi o interruzioni.

The following are required to install boss-mini:

- one screwdriver flat-head and one cross screwdriver;
- screws for mounting the unit on the wall;

The product should be powered using a UPS line or with a UPS device to ensure power is supplied continuously to the device.

Для монтажа устройства необходимо следующий инструмент:

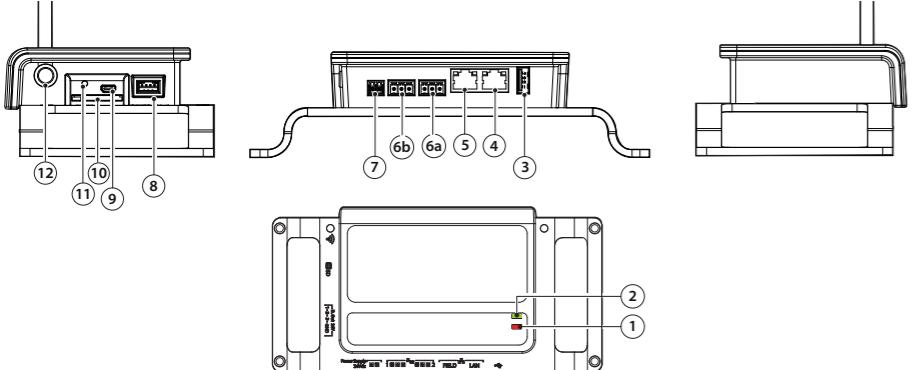
- одна плоская и одна крестовая отвертка;
- винты для монтажа на стену.

Для обеспечения бесперебойного электропитания устройство должно подключаться к ИБП или через ИБП.

安装boss-mini需要以下工具：

- 一把平角螺丝刀和一把十字螺丝刀；
- 将装置安装到墙上的螺丝；

对于确保不间断电源供应，该设备应通过UPS线或通过UPS



IT LEGENDA

- stato LED allarme;
 - stato LED ON/OFF;
 - porta USB host;
 - Ethernet LAN;
 - Ethernet FIELD;
 - a: Seriale RS485 Non Optoisolata;
 - b: Seriale RS485 Optoisolata;
 - alimentazione;
 - uscite digitali +24Vdc (1, 2, 3);
 - porta microHDMI (*);
 - porta SD;
 - pulsante abilitazione IP temporaneo;
 - antenna wi-fi (*).
- (*) solo nei modelli predisposti

⚠ Le uscite sono pre-configure in modalità "safe-mode": per notificare una condizione di allarme il relè viene de-energizzato.

⚠ ATTENZIONE: utilizzare cavi separati per ingressi digitali, relè, connessioni seriali e alimentazione.

⚠ Accertarsi che la presa di alimentazione cui si collega il dispositivo sia facilmente accessibile.

⚠ ATTENZIONE: per ridurre i rischi di incendio, utilizzare solo fili per telecomunic. n. 26 AWG o superiori (ad esempio 24 AWG) listati UL o certificati CSA.

⚠ ATTENZIONE: la temperatura di esercizio delle superficie esterne di mini-boss è di circa (50°C), non deve preoccuparsi la sensazione temperatura elevata percepita al tatto di boss-mini in funzionamento.

⚠ CAUTION:

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules.

These limits are designed to provide reasonable protection against harmful interference in a residential installation.

This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation.

If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

IT COLLEGAMENTI MODULO RELÉ

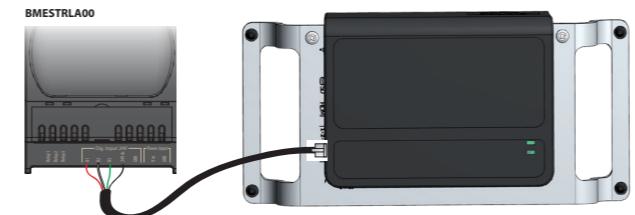
ENG RELAY MODULE CONNECTIONS

RUS СОЕДИНЕНИЯ РЕЛЕЙНОГО МОДУЛЯ

CHI 继电器模块- 连接

Legende:

R1	Red
R2	White
R3	Green
+24 Vdc	Black



ENG LEGENDE

- alarm LED;
 - ON/OFF LED;
 - USB host port;
 - Ethernet LAN;
 - Ethernet FIELD;
 - a: RS485 serial not opto-isolated;
 - b: RS485 serial opto-isolated;
 - power supply;
 - digital outputs +24Vdc (1, 2, 3);
 - microHDMI port (*);
 - SD port;
 - enable temporary IP button;
 - Wi-Fi antenna (*).
- (*) only on models where featured

- 报警LED;
 - ON/OFF LED;
 - USB host端口;
 - Ethernet LAN;
 - Ethernet FIELD;
 - a: RS485串行端口
非光隔离;
 - b: RS485串行端口
光隔离;
 - 电源;
 - 数字输出
+24Vdc (1, 2, 3);
 - microHDMI端口 (*);
 - SD端口;
 - 启用临时IP地址按钮;
 - Wi-Fi天线 (*).
- (*) 只适用于具有该特征的型号

RUS ЛЕГЕНДА

- 报警LED;
 - ON/OFF LED;
 - USB host端口;
 - Ethernet LAN;
 - Ethernet FIELD;
 - a: RS485串行端口
非光隔离;
 - b: RS485串行端口
光隔离;
 - 电源;
 - 数字输出
+24Vdc (1, 2, 3);
 - microHDMI端口 (*);
 - SD端口;
 - 启用临时IP地址按钮;
 - Wi-Fi天线 (*).
- (*) 只适用于具有该特征的型号

CHI 图标

IT MODULI ALIM.

ENG MODULI ALIM.

RUS MODULI ALIM.

CHI MODULI ALIM.

PGTA00TRFO

Power supply DIN



BMESTPWA00

Power supply plug

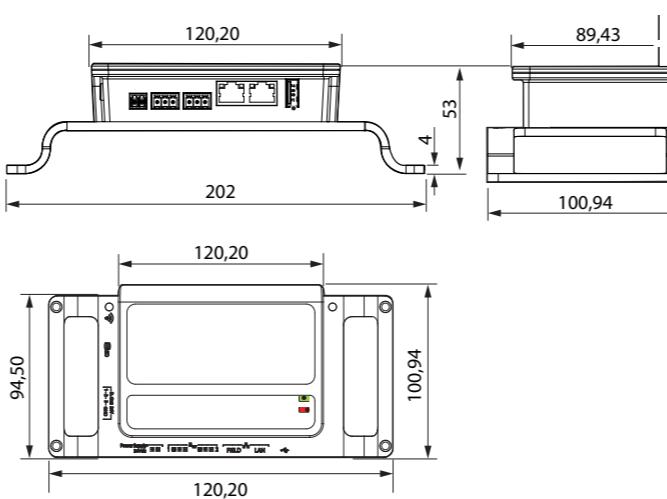
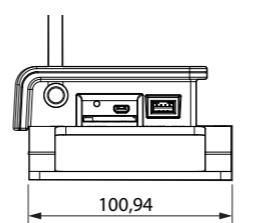


IT DIMENSIONI (mm)

ENG DIMENSIONS (mm)

RUS РАЗМЕРЫ (мм)

CHI 尺寸(mm)



IT SUPPORTO

ENG SUPPORT

RUS ТЕХНИЧЕСКАЯ ПОДДЕРЖКА

CHI 技术支持

⚠ In caso di malfunz. di mancata accensione del dispositivo contattare personale di supporto CAREL.

⚠ In case of malfunction or power on failure contact CAREL customer support.

⚠ При возникновении неисправностей работы или питания устройства обратитесь в службу техподдержки CAREL.

⚠ 如果出现故障或电源问题, 请联络CAREL客户服务人员。

FCC Caution: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

(1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

FCC RF Radiation Exposure Statement:

- This Transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.
- This equipment complies with FCC RF radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 20 centimeters between the radiator and your body.

IT CARATTERISTICHE TECNICHE

Alimentazione boss-mini 24VDC 1,5A max

Cond. di funziona.: da 5 a 40 °C

Cond. di immagazz.: da -20 a 65 °C

3 uscite digitali: 24 Vdc max 20mA

Porte seriali: 1 (porta 1) RS485 Master optoisolata - 1 (porta 2) RS485 Master non optoisolata

Porte USB: 1 porta standard HOST connettore tipo A, sul lato

Batteria interna: batteria al litio 3V/210mAH CR2032

Conformità: Direttiva 2014/35/EU (LVD) - Direttiva 2014/30/EU (EMCD) - Direttiva 2011/65/EU (RoHS)

il sistema composto da boss-mini e misuratori di temperatura Carel conformi alla norma EN13485 è conforme al regolamento CE nr. 37/2005 ed in particolare alla norma EN12830 Registratori di temperatura per il trasporto e la conservazione e la distribuzione di prodotti refrigerati, congelati, surgelati e gelati (UNI EN 12830, S, A, 1 o 2, campo di misura corrispondente alla classe dei dispositivi connessi).

Grado di inquinamento: 2 secondo EN60950-1

Dimensioni: 143 x 100,94 x 30 mm

Grado di protezione: IP20

ENG TECHNICAL SPECIFICATIONS

boss-mini power supply 24VDC 1,5A max

Operating conditions: from 5 to 40 °C

Storage conditions: from -20 to 65 °C

3 digital outputs: 24 Vdc max 20mA

Serial ports: 1 (port 1) RS485 Master optoisolated - 1 (port 2) RS485 Master not optoisolated

USB ports: 1 standard HOST ports with type A connector on side

Internal battery: lithium battery 3V/210mAH CR2032

Compliance: Directive 2014/35/EU (LVD) - Directive 2014/30/EU (EMCD) - Directive 2011/65/EU (RoHS)

the system made up of boss mini and Carel temperature measuring devices compliant with EN13485 meets the requirements of EC regulation 37/2005 and specifically standard EN12830 on temperature recorders for the transport, storage and distribution of chilled, frozen, deep-frozen/quick-frozen food and ice cream (EN 12830, S, A, 1 or 2, range of measurement corresponding to the class of devices connected).

Pollution degree: 2 as per EN60950-1

Chassis material: Chassis made of SEEC (Steel, electrogalvanized, cold-rolled) top and lateral casing in anodized aluminium

Dimensions: 143 x 100,94 x 30 mm

Index of protection: IP20

RUS ТЕХНИЧЕСКИЕ ХАРАКТЕРИСТИКИ

Питание устройства 24 В= 1,5 А макс.

Условия работы: от 5 до 40 °C

Условия хранения: от -20 до 65 °C

3 цифровых выхода: 24 В= макс. 20 мА

Последовательные порты: 1 (порт 1) RS485 Master оптоизолированный – 1 (порт 2) RS485 Master без оптоизоляции

Порты USB: 1 стандартных порта USB-хост типа A на лицевой панели (сул лато)

Внутренняя батарейка: литиевая батарея 3V/210mAH CR2032

Соответствие стандартам: Директива 2014/35/EU (LVD) - Директива 2014/30/EU (EMCD) - Директива 2011/65/EU (RoHS)

Система, включающая в себя данное устройство и измерительное оборудование Carel (согласно EN13485), отвечает требованиям Регламента ЕС 37/2005 и стандарта EN12830 в отношении устройств регистрации температуры, используемых при транспортировке, хранении и распространении охлажденных, замороженных пищевых продуктов, пищевых продуктов глубокой/быстрой заморозки, а также мороженого (EN 12830, S, A, 1 или 2, диапазон измерения зависит от класса подключаемого устройства).

Степень загрязнения: 2, согласно EN60950-1

Материал корпуса: гальванически оцинкованная холоднокатаная сталь, верхняя панель и боковые панели – анодированый алюминий

Габаритные размеры: 143 x 100,94 x 30 mm

Класс защиты: IP20

CHI 技术规格

boss-mini 电源 24VDC 1,5 A 最大

运行条件 5 ~ 40 °C

储存条件 -20 ~ 65 °C

3个数字输出: 24Vdc 最大20mA

串行端口: 1 (端口1) RS485 主, 光隔离-1 (端口2) RS485 主, 非光隔离

USB端口: 1个标准的HOST端口, 在前面有类型A接头 (sul lato)

内置电池: 锂电池 3V/210mAH CR2032

规范: 指令 2014/35/EU (LVD) - 指令 2014/30/EU (EMCD) - 指令 2011/65/EU (RoHS)

组成boss-mini的系统和Carel温度测量装置符合EN13485, 满足EC规范37/2005的要求, 特别是对运输、储存和配送冷冻、冷冻、深冻/速冻食品及冰淇淋产品(EN 12830,S,A,1或2,测量范围, 所连接设备的对应等级)的标准EN12830。

污染等级: 2级, 根据EN60950-1

材料类别: SEEC制品等级(不锈钢, 镀锌, 冷轧)顶部和侧面为阳极氧化铝外壳

尺寸: 143 x 100,94 x 30 mm

防护等级: IP20

ENG CAUTION:

- This product is intended to be supplied by an UL certified power supply or dc source suitable for use at minimum Tma 50 °C whose output meets SELV or ES1 and is rated 24Vdc, 1.5A min., if need further assistance, please contact CAREL INDUSTRIES SPA for further information
- "CAUTION"** Risk of explosion if the battery is replaced by an incorrect type
- Never open the equipment. For safety reasons, the equipment should be opened only by qualified skilled person
- Ensure to connect the power cord to a socket-outlet with earthing connection

FRE AVERTISSEMENT:

- Ce produit doit être alimenté par une source d'alimentation certifiée UL ou par une source c.c. adaptée pour une utilisation à 50 °C TMA minimum, dont la sortie répond à la TBTS ou à ES1 avec tension nominale de 24 V.c.c et 1,5