FP200

BENDER
The Power in Electrical Safety©

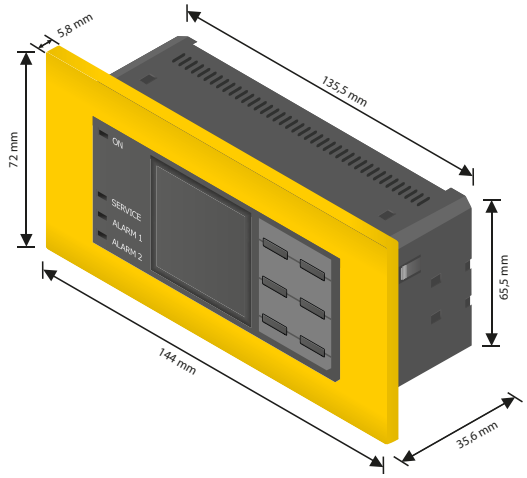
前面板
用于 ISOMETER® iso685-S 系列

CN

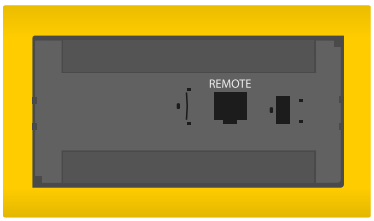
Front panel for
ISOMETER® iso685-S variants

EN

尺寸 / Dimensions



后视图 / Back view



使用目的

前面板 FP200 是一款用于 ISOMETER® iso685 操作的显示和操作单元。 它的安装方式类似于前面板。只能与 ISOMETER® iso685-S 系列结合使用。

安装

危险

电击危险！
在安装设备前，请确保整个系统已经断电。否则，你可能会受到电击。 此外，电气装置可能会被损坏，设备可能会被破坏。

警告

财产损失的风险！
当连接到线路电缆时，确保主要设备电源关闭。

警告

财产损失的风险！
当安装 FP200W 时， 请确保使用螺丝旋紧固定，因为当有过重的机械负载时设备可能会松开。

有两种方式可以把 FP200 安装在你的柜子中。 一种是把 ISOMETER® iso685-S 版本设备安装在 FP200 的前面板导轨上，或者连接 FP200 到 ISOMETER® iso685-S 系列远程界面。

使用电缆远程安装方式

警告

财产损失的风险！
不要太过扭曲电缆，这样可能到造成电缆损坏。确保在柜子门后至少有 60mm 的距离用于 FP200 和跳线。

Intended use

The FP200 front panel is a display and operator unit for the ISOMETER® iso685. It is installed as a front panel. The FP200 can only be used together with the ISOMETER® iso685-S variant.

Mounting

DANGER

Risk of electric shock!
Before installing the unit, make sure the complete system is powered off. Otherwise you may get an electric shock. Furthermore, the electrical installation may be damaged and the device may be destroyed.

CAUTION

Risk of damage to property!
Make sure the main unit is powered down while it is being connected to the patch cable.

CAUTION

Risk of damage to property!
When mounting the FP200W it is necessary to secure the screws with thread-locking fluid since they could loosen when suffering high mechanical load.

There are two ways in which the FP200 can be installed in your cabinet. Either click the ISOMETER® iso685-S variant device onto the front panel rail of the FP200 or connect the FP200 to the ISOMETER® iso685-S variant REMOTE interface.

Remote mounting using a patch cable

CAUTION

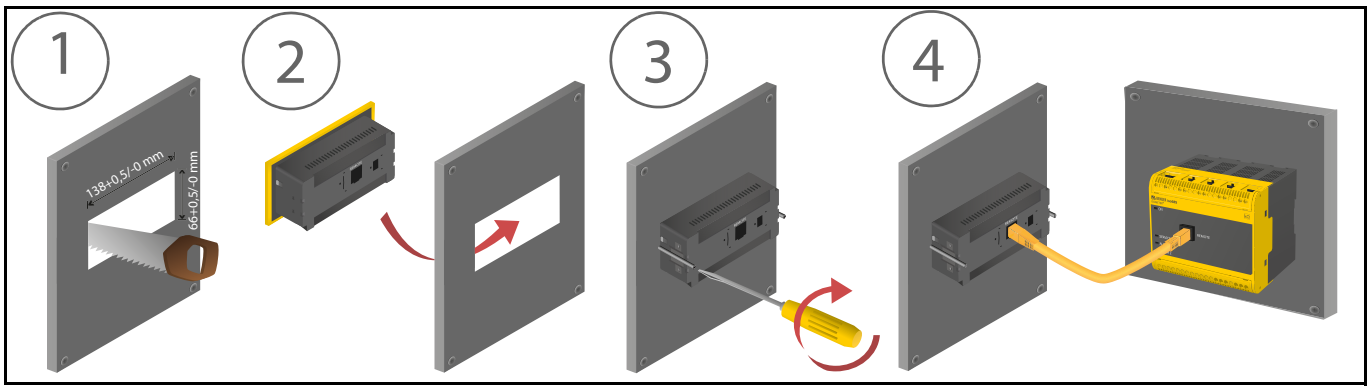
Risk of damage to property!
Do not bend the patch cable too much as this may damage the cable. Ensure that a space of at least 60 mm exists at the back of the cabinet door for the FP200 and patch cord.

该电缆有特殊的温度范围 0…60 ° C，FP200 的温度范围是 -40…+70 ° C。

1. 在柜子中，截取足够的空间用于安装 FP200 前面板。
2. 把 FP200 放到开孔中。
3. 从外壳后面插入安装的螺丝紧固件。旋紧螺丝，这样 FP200 可以很牢固的安装在前面板上。
4. 插入电缆 RJ45，连接到 FP200 背面的远程连接插孔。插入另一个 RJ45 连接器到 ISOMETER® iso685-S 系列前面的远程连接插孔。

The patch cable is specified for a temp-erature range of 0…60 °C while the FP200 has been approved for the range -40…+70 °C.

1. In the cabinet, cut out a section large enough for the FP200 front panel to slide in.
2. Place the FP200 into the cutout
3. Insert the enclosed screw fasteners from behind the enclosure. Tighten the screws with a screwdriver so that the the FP200 is secured on the front panel.
4. Insert one of the patch cable RJ45 connectors into the REMOTE socket on the back of the FP200. Insert the other RJ45 connector into the REMOTE socket on the front of the ISOMETER® iso685-S variant.

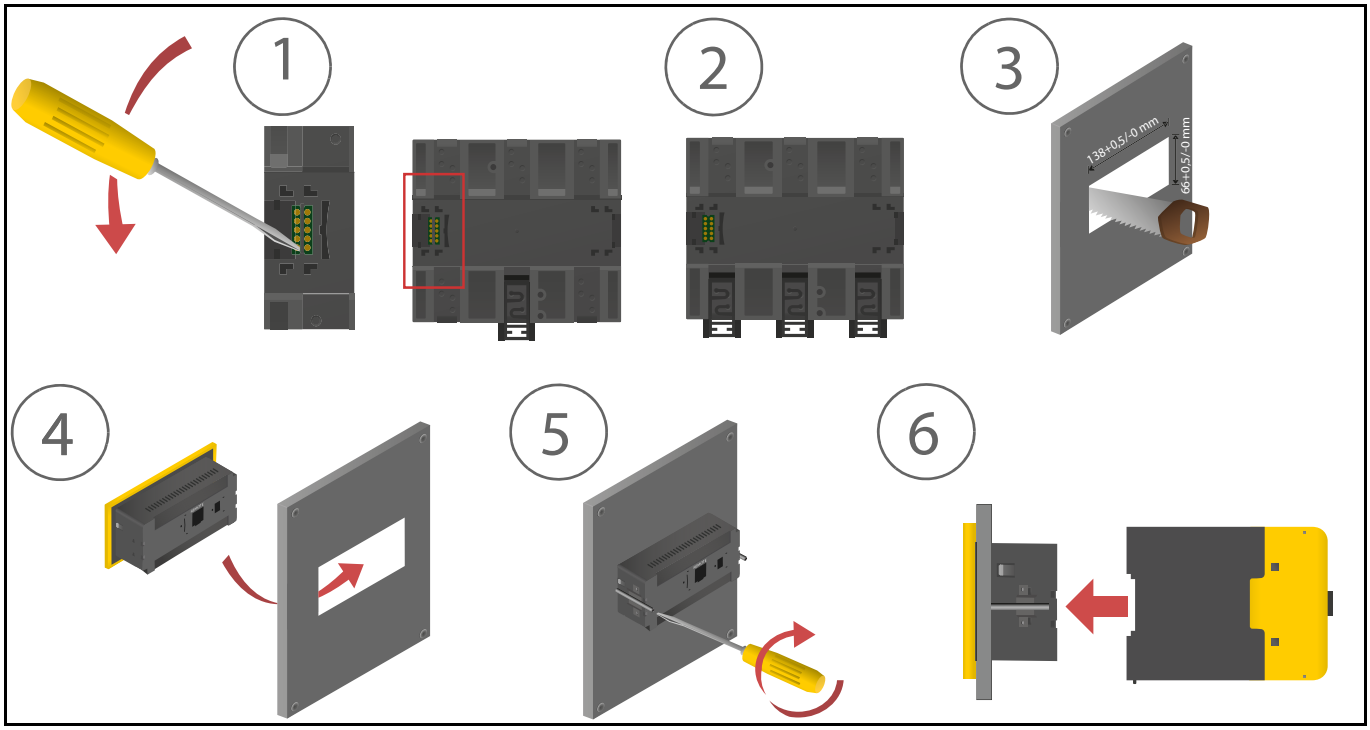


直接安装在 iso685-S 上

1. 小心的拆除 ISOMETER® iso685-S 系列后面的接触盖板，把接触器暴露在外面。
2. 手动或者使用工具固定随货一起发送的 3 个安装夹（其中 2 个是独立包装的），如下图所示在 ISOMETER® iso685-S 版本的背面
3. 在柜子中，截取足够的空间用于安装 FP200 前面板。
4. 把 FP200 放到开孔中。
5. 旋紧 FP200 至合适的位置。
6. 把 ISOMETER® iso685-S 系列设备放到 FP200 的 DIN 导轨。

Direct mounting with iso685-S

1. Carefully remove the contact cover on the back of the ISOMETER® iso685-S variant to expose the contacts.
2. Fix the three mounting clips delivered with the device (two of them packed separately) manually or using a tool, as illustrated below at the back side of the ISOMETER® iso685-S variant.
3. In the cabinet, cut out a section large enough for the FP200 front panel to slide in.
4. Place the FP200 into the cutout.
5. Screw the FP200 securely into place.
6. Click the ISOMETER® iso685-S variant onto the DIN rail of the FP200.



调试设备

警告

财产损失的风险！
安装不当！
连接前面板到合适的传感器中。 故障或不正确的连接会可能导致严重的故障或整个的前面板和传感器故障 .

FP200 只能和 ISOMETER® iso685-S 系列产品配套使用。调试和操作的详细说明和介绍可以在 ISOMETER® 手册中找到。

技术参数

( )* = 出厂设置

绝缘协调性 (IEC 60664-1/IEC 60664-3)

额定电压 ..... 50 V
过电压类别 (OVC) III
额定脉冲电压 ..... 800 V
额定绝缘电压 ..... 50 V
污染等级 用于设备外壳 3 的户外接触部分

电源电压

电源电压 U_s 通过 iso685-S

显示

液晶显示 ..... 127 x 127 像素 , 40 x 40 mm

LEDs

LED "On" (工作 LED 灯) ..... 绿色
SERVICE ..... 黄色
ALARM 1 ..... 黄色
ALARM 2 ..... 黄色

接口

接口 / 协议 ..... 本德尔内部接口
电缆长度 ..... ≤ 5 m
远程控制电缆 ..... 线路电缆至少是 CAT5e

环境 /EMC

EMC ..... IEC 61326-2-4; EN 50121-3-2; EN 50121-4

环境温度

工作 ..... -40 . . . +70 °C
运输 ..... -40 . . . +85 °C
存储 ..... -25 . . . +70 °C
气候条件分类符合 IEC 60721:
固定使用 (IEC 60721-3-3) ..... 3K5 (除冰和冰水化合物)
运输 (IEC 60721-3-2) 2K3
长期存储 (IEC 60721-3-1) 1K4
机械条件分类符合 IEC 60721:
固定使用 (IEC 60721-3-3) 3M4
运输 (IEC 60721-3-2) 2M2
长期存储 (IEC 60721-3-1) 1M3
应用区域 ..... ≤3000 m NN

连接

连接类型 ..... 插头连接器

其它

工作模式 ..... 连续工作
安装 ..... 面向显示 , 冷却槽必须垂直通风
防护等级，内置组件 (DIN EN 60529) IP40
防护等级，端子 (DIN EN 60529) IP20
透明前盖板的防护等级 IP65
面板开孔 ..... 138x66 mm
面板开孔的允许公差 ..... +0.5 /–0
螺丝安装 ..... 带安装支架
安装螺钉的扭矩 ..... 0,3 Nm ±10 %
外壳材料 ..... 塑料
燃烧等级 UL94V-0
尺寸 (W x H x D) ..... 144 x 72 x 35.6 mm
重量 ..... < 180 g

Commissioning the device

CAUTION

Risk of damage to property!
Improper installation!
Connect the front panel to suitable sensor variants only. A faulty or improper connection can result in either serious malfunctions or complete front panel and sensor variant failure.

The FP200 can only be used together with an ISOMETER® iso685-S variant. Commissioning details and operating instructions can be found in the respective ISOMETER® manual.

Technical data

( )* = factory setting

Insulation co-ordination (IEC 60664-1/IEC 60664-3)

Rated voltage ..... 50 V
Overvoltage category (OVC) III
Rated impulse voltage ..... 800 V
Rated insulation voltage ..... 50 V
Pollution degree for accessible parts on the outside of the device housing 3

Supply voltage

Supply voltage U_s ..... via iso685-S

Display

Graphic display ..... 127 x 127 pixel, 40 x 40 mm

LEDs

LED "On" (operation LED) ..... green
SERVICE ..... yellow
ALARM 1 ..... yellow
ALARM 2 ..... yellow

Interfaces

Interface/protocol ..... Internal Bender
Cable length ..... ≤ 5 m
REMOTE Cable ..... Patch cable at least CAT5e

Environment/EMC

EMC ..... IEC 61326-2-4; EN 50121-3-2; EN 50121-4

Ambient temperatures

Operation ..... -40 . . . +70 °C
Transport ..... -40 . . . +85 °C
Storage ..... -25 . . . +70 °C
Classification of climatic conditions acc. to IEC 60721:
Stationary use (IEC 60721-3-3) ..... 3K5 (except condensation and formation of ice)
Transport (IEC 60721-3-2) 2K3
Long-time storage (IEC 60721-3-1) 1K4
Classification of mechanical conditions acc. to IEC 60721:
Stationary use (IEC 60721-3-3) 3M4
Transportation (IEC 60721-3-2) 2M2
Long-term storage (IEC 60721-3-1) 1M3
Area of application ..... ≤3000 m NN

Connection

Connection type ..... plug connectors

Other

Operating mode ..... continuous operation
Mounting ..... display oriented, cooling slots must be ventilated vertically
Degree of protection, built-in components (DIN EN 60529) IP40
Degree of protection, terminals (DIN EN 60529) IP20
Degree of protection with transparent cover IP65
Panel cut-out ..... 138x66 mm
Permissible tolerance of panel cut-out ..... +0.5 /–0
Screw mounting ..... with mounting brackets
Torque screw mounting ..... 0,3 Nm ±10 %
Enclosure material ..... polycarbonate
Flammability class UL94V-0
Dimensions (W x H x D) ..... 144 x 72 x 35.6 mm
Weight ..... < 180 g

带 "W" 选项 与标准版本的差别
(仅用于远程安装)
气候条件分类符合 IEC 60721:
固定使用 (IEC 60721-3-3)..... 3K5 (允许冰和冰水化合物)
机械条件分类符合 IEC 60721:
固定使用 (IEC 60721-3-3)..... 3M7

带 "W" 选项
设备带 "W" 后缀增加冲击和振动的特性。由于特殊上光，电子部件更好的保护防止机械载荷和湿度。

Option "W" data different from the standard version
(Only for remote mounting)
Classification of climatic conditions acc. to IEC 60721:
Stationary use (IEC 60721-3-3)..... 3K5 (condensation and formation of ice possible)
Classification of mechanical conditions acc. to IEC 60721:
Stationary use (IEC 60721-3-3).....3M7

Option "W"
The devices with the ending "W" provide increased shock and vibration resistance. Due to a special varnishing, the electronic parts are better protected against mechanical loads and humidity.

订货信息

型号	订货号
FP200	B91067904
FP200W	B91067904W

附件

定义	订货号
FP200 机械配件包括： 2 组螺丝附件	B91067907
透明盖板 144x72 （用于 IP65）	B98060005
连接电缆 CAT5e （无 UL， 温度范围 0…+60 ° C） 包括运输中	B91067906
FP200 适配器用于 前面板安装 IRDH575	B91067905
透明盖板 144x96 （用于 IP65）	B98060007

Ordering details

Type	Art. No.
FP200	B91067904
FP200W	B91067904W

Accessories

Definition	Art. No.
FP200 Mechanical accessories comprising: 2 screw attachments	B91067907
Transparent cover 144x72 (for IP65)	B98060005
Patche cabel CAT5e (without UL, Temperature range 0…+60 °C) included in the delivery	B91067906
FP200 adapter for front panel mounting IRDH575	B91067905
Transparent cover 144x96 (for IP65)	B98060007

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