Frontpanel FP200(W)

前面板用于 ISOMETER® iso685-S 系列产品

Front panel for ISOMETER® iso685-S variants

前面板用于 ISOMETER® iso685-S系列产品

本快速入门指南适用于:

定义	订货号
FP200	B91067904
FP200W	B91067904W
辅料	
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 ℃) 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

* 当使用 „前盖144x72透明（IP65)" 时，控制柜的开孔高度必须从 66 毫米增加到 68 毫米（+0.7/-0毫米）。

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

⚠ **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

⚠ **抬头！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。当安装 FP200(W) 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。

⚠ **抬头! 财产损失的风险!** 仅将前面板连接到合适的传感器变体。错误的或不适当的连接会导致严重的故障或完全的前面板和传感器变体故障。

ⓘ 该电缆有特殊的温度范围0...60 ℃, FP200(W) 的温度范围是-40...+70 ℃。

Front panel for ISOMETER® iso685-S variants

This quick-start guide is valid for:

Type	Art.-No.
FP200	B91067904
FP200W	B91067904W
Accessories	
2 screw attachments	B91067907
Transparent cover 144x72(IP65) *	B98060005
Patche cabel CAT5e (without UL, Temperature range 0…+60 ℃) included in the delivery	B91067906
FP200 adapter for front panel mounting IRDH575	B91067905
Transparent cover 144x96 (IP65)*	B98060007

* If the "transparent front cover 144x72 (IP65)" is used, the cutout in the control cabinet must be increased in height from 66 mm to 68 mm (+ 0.7 / -0 mm).

Intended use

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

Safety instructions

⚠ **DANGER! Electric shock!** *Before installing the unit, make sure thecomplete 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! Damage to property due to incorrect installation!** *Make sure the main unit is powered down while it is being connected to the patch cable. When mounting the FP200(W) it is necessary to secure the screws with thread-locking fluid since they could loosen when suffering high mechanical load.*

⚠ **CAUTION! Damage to property due to incorrect 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 patch cable is specified for a temperature range of 0…60 ℃ while the FP200(W) has been approved for the range -40…+70 ℃.*

Montage

Mounting

Maße / Dimensions

5,8 mm

135,5 mm

72 mm

65,5 mm

144 mm

35,6 mm

ON

SERVICE
ALARM 1
ALARM 2
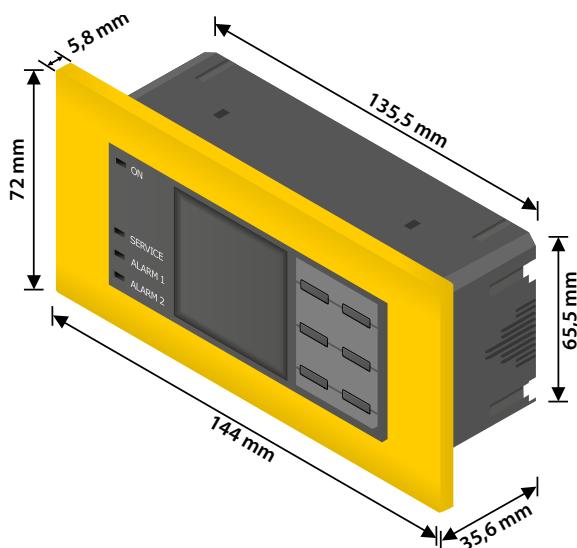
Frontansicht / Front view
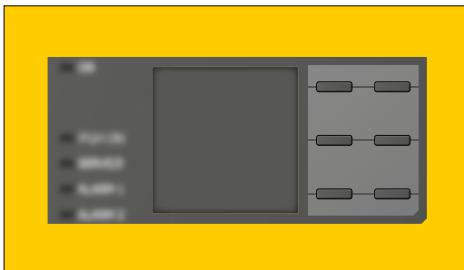
Rückansicht / Back view

BENDER

在控制柜中安装 FP200(W) 并与 iso685-S-x 设备连接

第一个选择。

将 ISOMETER®s iso685-S-x设备安装在顶帽导轨上，用跳线（RJ45）与FP200(W) 连接

⚠️ **头!** 材**料损坏!** 不要强烈弯曲跳线，因为这可能会损坏电缆。确保在控制柜门的后面有至少 60 毫米的空间供FP200(W) 和跳线使用。

Installation of an FP200(W) in a control cabinet and the connection to an iso685-S-x device

Option 1:

Mounting of the ISOMETER® iso685-S-x device on a DIN rail in the control cabinet and connection to the FP200(W) with a patch cable (RJ45).

⚠️ *Cᴀᴜᴛɪᴏɴ 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.*

1.1 135,5 mm 65,5 mm
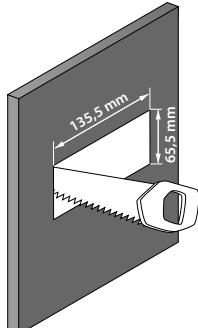
1.2
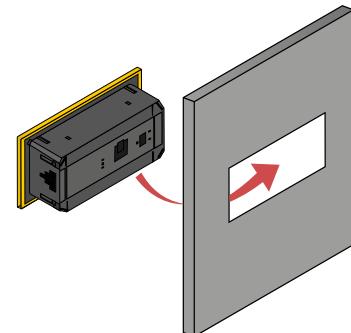
1.3
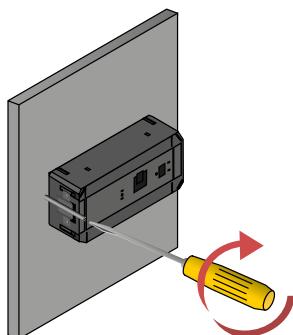
1.4
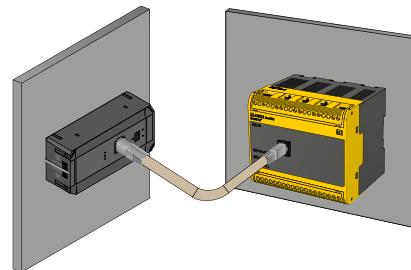
1. 在柜子中，截取足够的空间用于安装FP200 前面板。

2. 把 FP200(W) 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(W) 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。

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.

可能性2:

将 ISOMETER® iso685-S-x设备直接安装在 FP200(W) 前面板上。通过BB-Bus连接。

Option 2:

Mounting of the ISOMETER® iso685-S-x device directly on the FP200(W) front panel. Connection via BB bus.

2.1

2.2

2.3

2.4

135,5 mm

65,5 mm

2.5

2.6

2.7

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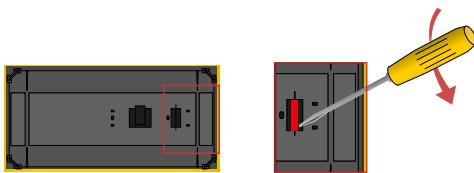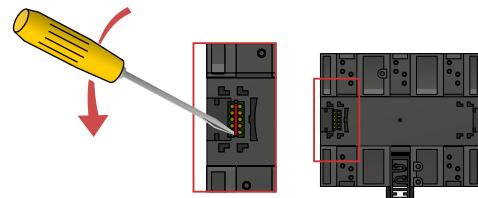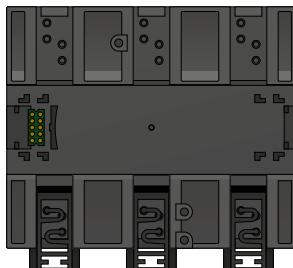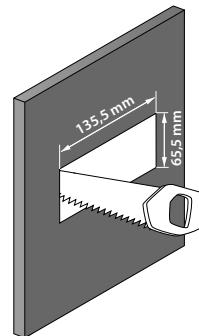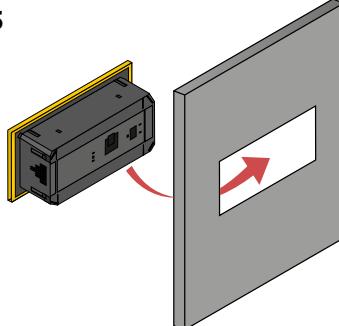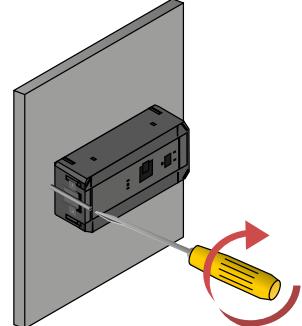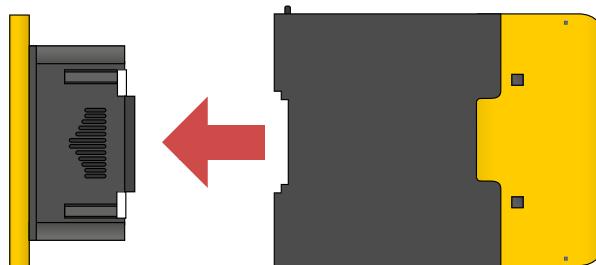
1. 小心的拆除 FP200(W) 系列后面的接触盖板，把接触器暴露在外面。
2. 小心的拆除 ISOMETER® iso685-S 系列后面的接触盖板，把接触器暴露在外面。
3. 手动或者使用工具固定随货一起发送的 3 个安装夹(其中2个是独立包装的) , 如下图所示在 ISOMETER® iso685-S 版本
4. 的背面。在柜子中，截取足够的空间用于安装 FP200(W) 前面板。
5. 把 FP200(W) 放到开孔中。
6. 旋紧 FP200(W) 至合适的位置。
7. 把ISOMETER® iso685-S 系列设备放到FP200的DIN导轨。

运作

关于操作和菜单导航的描述，可以在相应的 ISOMETER® iso685-S 型号的手册中找到。

技术参数

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 的户外接触部分 3

电源电压
电源电压Us ....DC 24V(通过 iso685-S 版本)
功耗 ....1.2 W
显示
液晶显示 ....127 x 127像素, 40 x 40 mm

LED灯
ON (工作LED灯) ....绿色
SERVICE, ALARM 1, 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
工作温度 ....-25...+55 ℃
运输 .... -40...+85 ℃
长期存储 ....-40...+70 ℃

---

1. Remove the contact cover on the back of the FP200(W) to expose the contacts.
2. Remove the contact cover on the back of the ISOMETER® iso685-S variant to expose the contacts.
3. 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.
4. In the cabinet, cut out a section large enough for the FP200(W) front panel to slide in.
5. Place the FP200(W) into the cutout.
6. Mount the screw attachment to the FP200(W) using a screwdriver.
7. Click the ISOMETER® iso685-S variant onto the DIN rail of the FP200(W).

Operation

The description of the operation and menu navigation can be found in the manual of the corresponding ISOMETER® iso685-S variant.

Technical data

Insulation co-ordination (IEC 60664-1/IEC 60664-3)
Rated voltge ....50 V
Overvoltage category (OVC)...III
Rated impulse voltage (IEC 60664-1) ....800 V
Rated insulation voltage (IEC 60664-1) ....50 V
Degree of Pollution 3

Supply voltage
Supply voltage Us ....DC 24 V (via iso685-S variant)
Power consumption..1.2 W

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

LEDs
ON (operation LED) ....green
SERVICE, ALARM 1, 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
Operating temperature ....-25…+55 ℃
Transport ....-40…+85 ℃
Long-term storage ....-40…+70 ℃

气候条件分类符合IEC 60721：

固定使用 (IEC 60721-3-3)..3K23

....(除冰和冰水化合物)

运输 (IEC 60721-3-2)..2K11

长期存储 (IEC 60721-3-1) 1K22

机械条件分类符合IEC 60721：

固定使用 (IEC 60721-3-3) 3M11

运输 (IEC 60721-3-2) 2M4

长期存储 (IEC 60721-3-1) 1M12

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 (0°) ....面向显示

....冷却槽必须垂直通[1]

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

[1] 推荐：0 °时设备安装 (面向显示，冷却槽必须垂直通风)。在
 设备安装角度 ≠ 0°，"W"版本的设备最大工作温度可以减少
 10°C。

带"W" 选项

设备带"W" 后缀增加冲击和振动的特性。The devices with the
ending „W" provide increased shock and vibration resistan-
ce. 由于特殊 上光，电子部件更好的保护防止机械载荷和湿
度。

环境温度。

工作温度 ....-40...+70 °C

运输 .... -40...+85 °C

长期存储 ....-40...+70 °C

气候条件分类符合IEC 60721：

固定使用 (IEC 60721-3-3).................3K23 (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)... 3M12

服务

info@bender-service.com • www.bender.de

Classification of climatic conditions acc. to IEC 60721:

Stationary use (IEC 60721-3-3) 3K23

....(except condensation and formation of ice)

Transport (IEC 60721-3-2) 2K11

Long-time storage (IEC 60721-3-1) 1K22

Classification of mechanical conditions acc. to IEC 60721:

Stationary use (IEC 60721-3-3) 3M11

Transportation (IEC 60721-3-2) 2M4

Long-term storage (IEC 60721-3-1) 1M12

Area of application... ≤ 3000 m NN

Connection

Connection type...plug connectors

Other

Operating mode.. continuous operation

Mounting (0°)... display oriented,

.... cooling slots must be ventilated vertically [1]

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

[1] Recommendation: Devices mounted at 0 ° (display-oriented, cooling slots
 must be ventilated vertically). For devices mounted at an angle ≠ 0°, the
 max. working temperature is reduced by 10 °C for devices with a „W" in the
 device name.

Option „W"

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

Ambient temperatures:

Operating temperature ....-40…+70 °C

Transport ....-40…+85 °C

Long-term storage ....-40…+70 °C

Classification of climatic conditions acc. to IEC 60721-3-3:

Stationary use ....3k23 (condensation and formation of ice possible)

Classification of mechanical conditions acc. to IEC 60721-3-3:

Stationary use 3M12

Service

Service hotline: 0700-BenderHelp (Tel. and Fax)
Carl-Benz-Straße 8 • 35305 Grünberg • Germany
Tel: +49 6401 807-760 • Fax: +49 6401 807-629
E mail: info@bender-service.com • www.bender.de

⚡ BENDER
The Power in Electrical Safety©

Bender GmbH & Co. KG
Postfach 1161 • 35301 Grünberg • Deutschland
Londorfer Str. 65 • 35305 Grünberg • Deutschland
电话: +49 6401 807-0 • 传真: +49 6401 807-259
电子邮件: info@bender.de • www.bender.de

Bender GmbH & Co. KG
PO Box 1161 • 35301 Grünberg • Germany
Londorfer Str. 65 • 35305 Grünberg • Germany
Tel.: +49 6401 807-0 • Fax: +49 6401 807-259
E-Mail: info@bender.de • www.bender.de