

# Fieldbus Power Hub, Compact Power Supply Module



### HCD2-FBPS-1.500

- Output: 28 ... 30 V/500 mA
- High-power trunk for high device count and long cable lengths
- With galvanic isolation
- Installation in Zone 2/Class I, Div. 2
- For FOUNDATION Fieldbus H1 and PROFIBUS PA
- Highest efficiency, lowest heat dissipation for highest packing
- Hot swappable in redundant configuration
- Module exchange without tools during operation









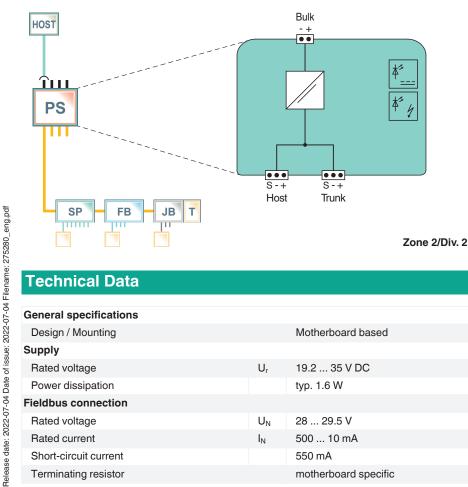
#### **Function**

This Power Supply Module is a system component for the FieldConnex® Power Hub and can be plugged into the motherboard. It adapts current and voltage for the supply of fieldbus segments and field devices.

This power supply features the highest output power and allows for maximum cable lengths and highest number of devices in hazardous areas with the High-Power Trunk concept.

Reliability of communication is enhanced through galvanic isolation between segment and bulk power supply. Two LEDs indicate power and status. In redundant configuration two modules are connected in parallel via simple circuits ensuring seamless operation.

#### Connection



#### **Technical Data**

General specifications		
Design / Mounting		Motherboard based
Supply		
Rated voltage	$U_{r}$	19.2 35 V DC
Power dissipation		typ. 1.6 W
Fieldbus connection		
Rated voltage	$U_N$	28 29.5 V
Rated current	$I_N$	500 10 mA
Short-circuit current		550 mA
Terminating resistor		motherboard specific

LED ERR

LED PWR

**Galvanic** isolation

**Directive conformity** 

Degree of protection

Fieldbus standard

Shock resistance

Vibration resistance **Ambient conditions** Ambient temperature

Storage temperature Relative humidity

Shock resistance

Vibration resistance

Indicators/operating means

Fieldbus segment/Supply

Directive 2014/30/EU Standard conformity

Electromagnetic compatibility

Electromagnetic compatibility

Pollution degree corosion resistance acc. to ISA-S71.04-1985, severity level G3  Mechanical specifications  Connection type motherboard specific Core cross section motherboard specific Housing material Polycarbonate Housing height 12.5 mm Housing height 128 mm Degree of protection IP20  Mass approx. 150 g Mounting motherboard mounting  Data for application in connection with hazardous areas  Outputs  Voltage U₀ 30 V Certificate TÜV 10 ATEX 555761X  Marking 0 II 3G Ex nA IIC T4 Gc  Directive conformity Directive 2014/34/EU EN 60079-0:2012 , EN 60079-11:2012 , EN 60079-15:2010  International approvals  FM approval IECEx approval IECEx certificate ECEX TUN 13.0037X IECEX marking Execution is execution in accounting in ECEX TUN 13.0037X IECEX marking EXECT IN 15.0037 (Continuation)  BON A-14038  General Information  Observe the certificates, declarations of conformity, instruction manuals, and manuals where applicable. For information see www.pepperl-fuchs.com.	Corrosion resistance Mechanical specifications Connection type Core cross section Housing material Housing width Housing height Housing depth		acc. to ISA-S71.04-1985, severity level G3  motherboard specific motherboard specific Polycarbonate 12.5 mm
Mechanical specifications   Connection type   motherboard specific	Mechanical specifications Connection type Core cross section Housing material Housing width Housing height Housing depth		motherboard specific motherboard specific Polycarbonate 12.5 mm
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	efer to "General Notes Relating to Pepperl+Fuchs Product Info	ormation".	

red flashing: short-circuit or undervoltage at output

functional insulation acc. to IEC 62103, rated insulation voltage 250 V AC

green if  $U_{out} > 28 \text{ V}$ 

EN 61326-1:2013

NE 21:2011

IEC 60529

IEC 61158-2 EN 60068-2-27

EN 60068-2-6

15 g 11 ms

1 g , 10 ... 150 Hz

-40 ... 70 °C (-40 ... 158 °F) -40 ... 85 °C (-40 ... 185 °F)

< 95 % non-condensing

### **Assembly**





## **Matching System Components**

MBHC-FB-8R.IOM	Fieldbus Power Hub, Compact Motherboard, Common Interface
FBTA-228-BPFB-R-8R	Compact Fieldbus Power Hub Motherboard for Invensys FBM 228
MBHC-FB-4*	Compact Fieldbus Power Hub Motherboard with Common Interface
MBHC-FB-4R*	Compact Fieldbus Power Hub Motherboard with Common Interface
MBHC-FB-4R.YO*	Compact Fieldbus Power Hub Motherboard for Yokogawa ALF111
MBHC-FB-4.YO*	Compact Fieldbus Power Hub Motherboard for Yokogawa ALF111
MBHC-FB-8R*	Compact Fieldbus Power Hub Motherboard with Common Interface
MBHC-FB-8R.HSC*	Compact Fieldbus Power Hub Motherboard with Host System Connectors
MBHC-FB-8R.RH*	Compact Fieldbus Power Hub Motherboard with Redundant Host Terminals
MBHC-FB-8R.YO*	Compact Fieldbus Power Hub Motherboard for Yokogawa ALF111