



## Power Supply PS1000-A6-24.5

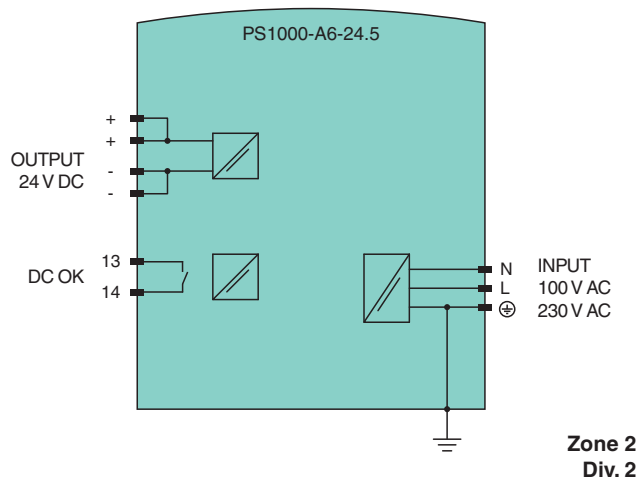
- 100 V AC to 240 V AC wide-range input
- Output 24 V DC, 5 A, 120 W, 1-phase
- Housing width 32 mm
- Efficiency up to 94.3 %
- Minimal inrush current surge
- DC OK relay contact
- Suitable for Zone 2/Div. 2 mounting



### Function

The device is used to supply field devices with 24 V DC and 5 A.  
The device has a power reserve of 20 % included, which may even be used continuously at temperatures up to +45 °C.  
The output voltage can be adjusted via a potentiometer. The device status is indicated by an LED.  
The device has a relay contact output for remote monitoring.  
The device is mounted on a 35 mm DIN mounting rail according to EN 60715.

### Connection



### Technical Data

#### Electrical specifications

Efficiency	93.6 % at 120 V AC 94.3 % at 230 V AC
Power dissipation	8.2 W at 120 V AC 7.3 W at 230 V AC

#### Input

Voltage range	100 ... 240 V AC (-15 %/+10 %), 50 ... 60 Hz (±6 %) 110 ... 150 V DC (±20 %)
Current	1.09 A at 120 V AC 0.6 A at 230 V AC 1.21 A at 110 V DC for lower output currents see technical information

## Technical Data

Inrush current		5 A peak at 120 V AC and ambient temperature 40 °C (104 °F) 6 A peak at 230 V AC and ambient temperature 40 °C (104 °F) or ambient temperature 25 °C (77 °F)
Capacity factor		0.98 at 120 V AC 0.91 at 230 V AC
<b>Output</b>		
Rated voltage	$U_r$	24 V DC
Voltage range		24 ... 28 V DC factory setting: 24.1 V
Rated current	$I_r$	5 A
Current		6 ... 5.1 A at ambient temperature < 45 °C (113 °F) 5 ... 4.3 A at ambient temperature 60 °C (140 °F) 3.8 ... 3.2 A at ambient temperature 70 °C (158 °F) linear power derating see technical information
Power		120 W
Ripple		max. 50 mV <sub>pp</sub>
Retention time/hold time		35 ms at 120 V AC 35 ms at 230 V AC
Overload behavior		continuous current at output voltage > 13 V DC Hiccup behaviour at output voltage < 13 V DC
Short-circuit current		typ. 15 A for 12 ms or 3 A <sub>rms</sub> continuous current
Voltage limitation		typ. 30.5 V DC max. 32 V DC
<b>Fault indication output</b>		
Connection		terminals 13, 14
Output type		relay contact DC OK - contact is closed if the output voltage is > 90 % of the adjusted output voltage
Contact loading		max. 60 V DC/0.3 A ; 30 V DC/1 A ; 30 V AC/0.5 A resistive load min. 1 mA at 5 V DC
<b>Galvanic isolation</b>		
Input/Output		SELV/PELV
<b>Indicators/settings</b>		
Display elements		LED green: status DC OK - LED lights up if the output voltage is > 90 % of the adjusted output voltage
Control elements		potentiometer
Configuration		setting of the output voltage via potentiometer
<b>Directive conformity</b>		
Electromagnetic compatibility		
Directive 2014/30/EU		IEC/EN 61000-6-1 , IEC/EN 61000-6-2 , IEC/EN 61000-6-3 , IEC/EN 61000-6-4 , IEC/EN 61000-3-2 , IEC/EN 61000-3-3
Low voltage		
Directive 2014/35/EU		EN 61010-1
RoHS		
Directive 2011/65/EU (RoHS)		IEC/EN 63000:2019
<b>Conformity</b>		
Degree of protection		EN 60529
Shock resistance		EN 60068-2-27
Vibration resistance		EN 60068-2-6
<b>Ambient conditions</b>		
Ambient temperature		-25 ... 70 °C (-13 ... 158 °F) , see technical information
Storage temperature		-40 ... 85 °C (-40 ... 185 °F)
Relative humidity		5 ... 95 % , noncondensing
Shock resistance		20 g , 11 ms or 30 g , 6 ms
Vibration resistance		2 ... 17.8 Hz : ± 1.6 mm , 17.8 ... 500 Hz : 2 g
<b>Mechanical specifications</b>		
Housing material		aluminum alloy , galvanized steel
Degree of protection		IP20

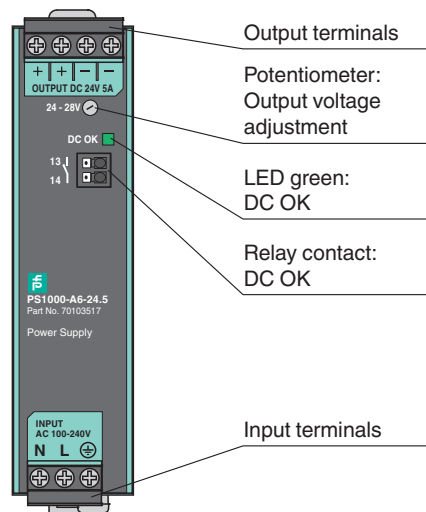
Release date: 2021-12-20 Date of issue: 2021-12-20 Filename: 70103517\_eng.pdf

## Technical Data

<b>Connection</b>		
Input/Output		screw terminals conductor cross section: max. 6 mm <sup>2</sup> (AWG 20-10) cable diameter: max. 2.8 mm, wire end ferrules included stripped insulation length: 7 mm tightening torque: max. 1 Nm
Relay contact output		spring terminals with push-in connection technology conductor cross section: max. 1.5 mm <sup>2</sup> (AWG 24-16) cable diameter: max. 1.6 mm, wire end ferrules included stripped insulation length: 7 mm
Mass		approx. 440 g
Dimensions		32 x 124 x 102 mm (W x H x D) , without DIN mounting rail
Mounting		on 35 mm DIN mounting rail acc. to EN 60715:2001
<b>Data for application in connection with hazardous areas</b>		
ATEX approval		
ATEX certificate		EPS 19 ATEX 1201 X
ATEX marking		Ⓔ II 3G Ex ec nC II T4 Gc
Directive conformity		
Directive 2014/34/EU		EN 60079-0:2018 , EN 60079-7:2015+A1:2018 , EN 60079-15:2010
<b>International approvals</b>		
UL approval		E350173 , E223176
IECEx approval		
IECEx certificate		IECEx EPS 20.0058X
IECEx marking		Ex ec nC IIC T4 Gc
Standards		IEC 60079-0:2017 , IEC 60079-7:2017 , IEC 60079-15:2017
<b>General information</b>		
Supplementary information		Observe the certificates, declarations of conformity, instruction manuals, and manuals where applicable. For information see <a href="http://www.pepperl-fuchs.com">www.pepperl-fuchs.com</a> .

## Assembly

### Front view



## Installation Conditions

Mount the device on the DIN mounting rail so that the input terminals are located on the bottom of the device.










This device is designed for convection cooling and does not require an external ventilator. Do not obstruct airflow. Do not cover the ventilation grid by more than 15 %, e. g. cable ducts.

If you load the device with more than 50 % of the rated power permanently keep the following mounting distances:

- 40 mm above
- 20 mm below
- 5 mm on the left and right side

Increase this distance to 15 mm if the adjacent device is a heat source, e. g. another power supply.

## Accessories

	<b>IQC21-50 25pcs</b>	Data carrier
	<b>IQC21-F125</b>	Data carrier
	<b>V15L-G-2M-PUR-U</b>	Female cordset single-ended M12 straight L-coded, 5-pin, PUR cable grey, UL approved
	<b>V45-G-C5-GN1M-PUR-E1S-V45-G</b>	Ethernet bus cable RJ45 to RJ45 PROFINET-coded, 4-pin, PUR cable green, Cat5e, shielded, UL approved, drag chain suitable
	<b>ICE2-8IOL-G65L-V1D</b>	EtherNet/IP IO-Link master with 8 inputs/outputs
	<b>ICRL-U-5RJ45-DIN-NT</b>	Ethernet unmanaged switch with 5 RJ45 ports and port alarm
	<b>IQT1-F61-IO-V1</b>	HF read/write station with IO-Link in accordance with ISO 15693
	<b>NRB4-12GS40-E2-IO-V1</b>	Inductive sensor
	<b>OMT550-R200-2EP-IO-V1</b>	Distance sensor



## Power Supply PS1000-A6-12.16

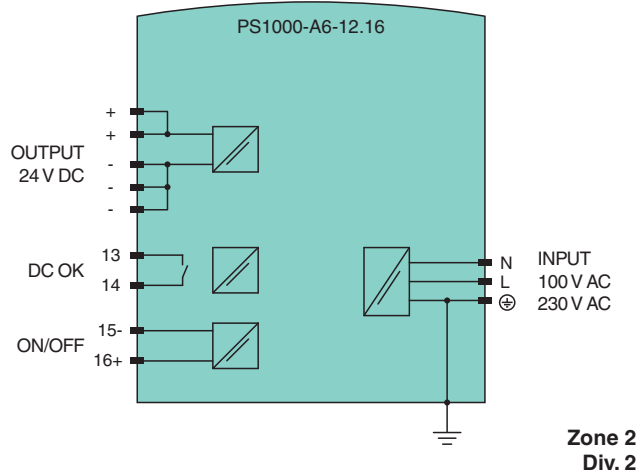
- 100 V AC to 240 V AC wide-range input
- Output 12 V DC, 16 A, 192 W, 1-phase
- Housing width 39 mm
- Efficiency up to 94.3 %
- Minimal inrush current surge
- Remote control for ON/OFF
- DC OK relay contact
- Suitable for Zone 2/Div. 2 mounting



### Function

The device is used to supply field devices with 12 V DC and 16 A.  
The device has a power reserve of 20 % included, which may even be used continuously at temperatures up to +45 °C.  
The output voltage can be adjusted via a potentiometer. The device status is indicated by an LED.  
The device has a relay contact output for remote monitoring.  
The device has a connection for switching off the device via a remote control.  
The device is mounted on a 35 mm DIN mounting rail according to EN 60715.

### Connection



### Technical Data

#### Electrical specifications

Efficiency	92.8 % at 120 V AC 94.3 % at 230 V AC
Power dissipation	14.9 W at 120 V AC 11.6 W at 230 V AC
<b>Input</b>	
Current	1.74 A at 120 V AC 0.92 A at 230 V AC 1.9 A at 110 V DC for lower output currents see technical information
Inrush current	6 A peak at 120 V AC and ambient temperature 40 °C (104 °F) 9 A peak at 230 V AC and ambient temperature 40 °C (104 °F)

Refer to "General Notes Relating to Pepperl+Fuchs Product Information".

Pepperl+Fuchs Group  
www.pepperl-fuchs.com

USA: +1 330 486 0002  
pa-info@us.pepperl-fuchs.com

Germany: +49 621 776 2222  
pa-info@de.pepperl-fuchs.com

Singapore: +65 6779 9091  
pa-info@sg.pepperl-fuchs.com

**PEPPERL+FUCHS**

## Technical Data

Voltage		100 ... 240 V AC (-15 %/+10 %), 50 ... 60 Hz (±6 %) 110 ... 150 V DC (±20 %)
Capacity factor		0.99 at 120 V AC 0.96 at 230 V AC
Remote control		terminals 15-, 16+ remote control for ON/OFF
<b>Output</b>		
Rated voltage	U <sub>r</sub>	12 V DC
Voltage range		12 ... 15 V DC factory setting: 12 V
Rated current	I <sub>r</sub>	16 A
Current		19.2 ... 15.4 A at ambient temperature < 45 °C (113 °F) 16 ... 12.8 A at ambient temperature 60 °C (140 °F) 12 ... 9.6 A at ambient temperature 70 °C (158 °F) linear power derating see technical information
Power		192 W
Ripple		max. 50 mV <sub>pp</sub>
Retention time/hold time		50 ms at 120 V AC 50 ms at 230 V AC
Overload behavior		continuous current : output voltage > 6.5 V DC intermittent current : output voltage < 6.5 V DC
Short-circuit current		typ. 55 A for up to 12 ms, load impedance < 30 mΩ
Voltage limitation		typ. 18.2 V DC max. 19 V DC
<b>Fault indication output</b>		
Connection		terminals 13, 14
Output type		relay contact DC OK - contact is closed if the output voltage is > 90 % of the adjusted output voltage
Contact loading		max. 60 V DC/0.3 A ; 30 V DC/1 A ; 30 V AC/0.5 A resistive load min. 1 mA at 5 V DC
<b>Galvanic isolation</b>		
Input/Output		SELV/PELV
<b>Indicators/settings</b>		
Display elements		LED green: status DC OK - LED lights up if the output voltage is > 90 % of the adjusted output voltage
Control elements		potentiometer
Configuration		setting of the output voltage via potentiometer
<b>Directive conformity</b>		
Electromagnetic compatibility		
Directive 2014/30/EU		IEC/EN 61000-6-1 , IEC/EN 61000-6-2 , IEC/EN 61000-6-3 , IEC/EN 61000-6-4 , IEC/EN 61000-3-2 , IEC/EN 61000-3-3
Low voltage		
Directive 2014/35/EU		EN 61010-1
RoHS		
Directive 2011/65/EU (RoHS)		IEC/EN 63000:2019
<b>Conformity</b>		
Degree of protection		EN 60529
Shock resistance		EN 60068-2-27
Vibration resistance		EN 60068-2-6
<b>Ambient conditions</b>		
Ambient temperature		-25 ... 70 °C (-13 ... 158 °F) , see technical information
Storage temperature		-40 ... 85 °C (-40 ... 185 °F)
Relative humidity		5 ... 95 % , noncondensing
Shock resistance		20 g , 11 ms or 30 g , 6 ms
Vibration resistance		2 ... 17.8 Hz : ± 1.6 mm , 17.8 ... 500 Hz : 2 g
<b>Mechanical specifications</b>		
Housing material		aluminum alloy , galvanized steel
Degree of protection		IP20

Release date: 2021-12-20 Date of issue: 2021-12-20 Filename: 70103519\_eng.pdf

Refer to "General Notes Relating to Pepperl+Fuchs Product Information".

Pepperl+Fuchs Group  
www.pepperl-fuchs.com

USA: +1 330 486 0002  
pa-info@us.pepperl-fuchs.com

Germany: +49 621 776 2222  
pa-info@de.pepperl-fuchs.com

Singapore: +65 6779 9091  
pa-info@sg.pepperl-fuchs.com

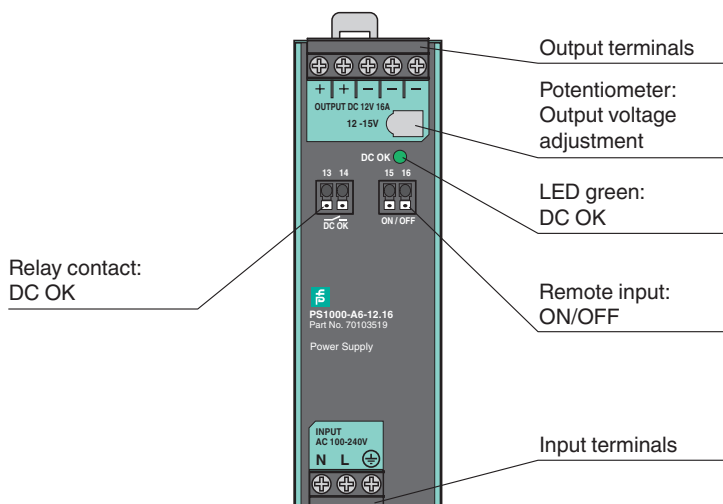
 **PEPPERL+FUCHS**

## Technical Data

Connection		
Input/Output		screw terminals conductor cross section: max. 6 mm <sup>2</sup> (AWG 20-10) cable diameter: max. 2.8 mm, wire end ferrules included stripped insulation length: 7 mm tightening torque: max. 1 Nm
Relay contact output		spring terminals conductor cross section: max. 1.5 mm <sup>2</sup> (AWG 24-16) cable diameter: max. 1.6 mm, wire end ferrules included stripped insulation length: 7 mm
Remote control		spring terminals conductor cross section: max. 1.5 mm <sup>2</sup> (AWG 24-16) cable diameter: max. 1.6 mm, wire end ferrules included stripped insulation length: 7 mm
Mass		approx. 600 g
Dimensions		39 x 124 x 117 mm (W x H x D) , without DIN mounting rail
Mounting		on 35 mm DIN mounting rail acc. to EN 60715:2001
<b>Data for application in connection with hazardous areas</b>		
ATEX approval		
ATEX certificate		EPS 15 ATEX 1101 X
ATEX marking		Ⓔ II 3G Ex ec nC II T4 Gc
Directive conformity		
Directive 2014/34/EU		EN 60079-0:2012+A11:2013 , EN 60079-7:2015+A1:2018 , EN 60079-15:2010
<b>International approvals</b>		
UL approval		E223176
IECEX approval		
IECEX certificate		IECEX EPS 20.0055X
IECEX marking		Ex ec nC IIC T4 Gc
Standards		IEC 60079-0:2017 , IEC 60079-7:2017 , IEC 60079-15:2017
<b>General information</b>		
Supplementary information		Observe the certificates, declarations of conformity, instruction manuals, and manuals where applicable. For information see <a href="http://www.pepperl-fuchs.com">www.pepperl-fuchs.com</a> .

## Assembly

### Front view



Release date: 2021-12-20 Date of issue: 2021-12-20 Filename: 70103519\_eng.pdf

Installation Conditions

Mount the device on the DIN mounting rail so that the input terminals are located on the bottom of the device.

This device is designed for convection cooling and does not require an external ventilator. Do not obstruct airflow. Do not cover the ventilation grid by more than 15 %, e. g. cable ducts.

If you load the device with more than 50 % of the rated power permanently keep the following mounting distances:

- 40 mm above
- 20 mm below
- 5 mm on the left and right side

Increase this distance to 15 mm if the adjacent device is a heat source, e. g. another power supply.

Configuration

The remote control input allows to switch off the device output with a signal switch or transistor. To switch off the device, connect pins 15 and 16 with a plug-in jumper. Pin 15 is related to the (-) output voltage.

The open circuit voltage between pin 15 and pin 16 can be up to 18 V. The maximum current in the remote OFF mode can be up to 2.5 mA. The output shutdown threshold is typically 5 V. The threshold for switching the output on is typically 9 V.

If multiple devices are connected in parallel, pin 15 and pin 16 may also be connected in parallel. This allows all devices to be controlled by the same signal switch or transistor. Observe that the shutdown function is not a safety function.

Accessories

	<b>PS1000-D2-24.40.RM</b>	Redundancy Module
---	---------------------------	-------------------

Release date: 2021-12-20 Date of issue: 2021-12-20 Filename: 70103519\_eng.pdf





## Power Supply PS1000-A6-24.10

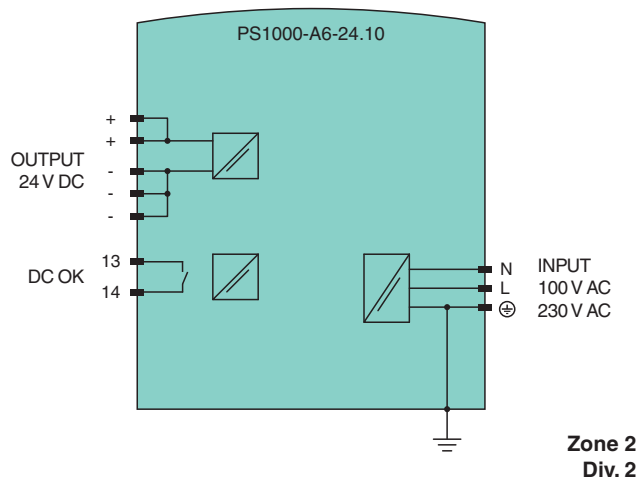
- 100 V AC to 240 V AC wide-range input
- Output 24 V DC, 10 A, 240 W, 1-phase
- Housing width 39 mm
- Efficiency up to 95.2 %
- Minimal inrush current surge
- DC OK relay contact
- Suitable for Zone 2/Div. 2 mounting



### Function

The device is used to supply field devices with 24 V DC and 10 A.  
The device has a power reserve of 20 % included, which may even be used continuously at temperatures up to +45 °C.  
The output voltage can be adjusted via a potentiometer. The device status is indicated by an LED.  
The device has a relay contact output for remote monitoring.  
The device is mounted on a 35 mm DIN mounting rail according to EN 60715.

### Connection



### Technical Data

#### Electrical specifications

Efficiency	93.6 % at 120 V AC 95.2 % at 230 V AC
Power dissipation	16.4 W at 120 V AC 12.1 W at 230 V AC

#### Input

Voltage range	100 ... 240 V AC (-15 %/+10 %), 50 ... 60 Hz (±6 %) 110 ... 150 V DC (±20 %)
Current	2.15 A at 120 V AC 1.13 A at 230 V AC 2.35 A at 110 V DC for lower output currents see technical information
Inrush current	6 A peak at 120 V AC and ambient temperature 40 °C (104 °F) 9 A peak at 230 V AC and ambient temperature 40 °C (104 °F)

Refer to "General Notes Relating to Pepperl+Fuchs Product Information".

Pepperl+Fuchs Group  
www.pepperl-fuchs.com

USA: +1 330 486 0002  
pa-info@us.pepperl-fuchs.com

Germany: +49 621 776 2222  
pa-info@de.pepperl-fuchs.com

Singapore: +65 6779 9091  
pa-info@sg.pepperl-fuchs.com

**PEPPERL+FUCHS**

## Technical Data

Capacity factor		0.99 at 120 V AC 0.97 at 230 V AC
<b>Output</b>		
Rated voltage	$U_r$	24 V DC
Voltage range		24 ... 28 V DC factory setting: 24.1 V
Rated current	$I_r$	10 A
Current		12 ... 10.3 A at ambient temperature < 45 °C (113 °F) 10 ... 8.6 A at ambient temperature 60 °C (140 °F) 7.5 ... 6.5 A at ambient temperature 70 °C (158 °F) linear power derating see technical information
Power		240 W
Ripple		max. 50 mV <sub>pp</sub>
Retention time/hold time		37 ms at 120 V AC 37 ms at 230 V AC
Overload behavior		continuous current at output voltage > 13 V DC Hiccup behaviour at output voltage < 13 V DC
Short-circuit current		typ. 30.5 A for up to 12 ms, load impedance < 45 mΩ max. 5 A <sub>rms</sub> average continuous current, load impedance 50 mΩ
Voltage limitation		typ. 30.5 V DC max. 32 V DC
<b>Fault indication output</b>		
Connection		terminals 13, 14
Output type		relay contact DC OK - contact is closed if the output voltage is > 90 % of the adjusted output voltage
Contact loading		max. 60 V DC/0.3 A ; 30 V DC/1 A ; 30 V AC/0.5 A resistive load min. 1 mA at 5 V DC
<b>Galvanic isolation</b>		
Input/Output		SELV/PELV
<b>Indicators/settings</b>		
Display elements		LED green: status DC OK - LED lights up if the output voltage is > 90 % of the adjusted output voltage
Control elements		potentiometer
Configuration		setting of the output voltage via potentiometer
<b>Directive conformity</b>		
Electromagnetic compatibility		
Directive 2014/30/EU		IEC/EN 61000-6-1 , IEC/EN 61000-6-2 , IEC/EN 61000-6-3 , IEC/EN 61000-6-4 , IEC/EN 61000-3-2 , IEC/EN 61000-3-3
Low voltage		
Directive 2014/35/EU		EN 61010-1
RoHS		
Directive 2011/65/EU (RoHS)		IEC/EN 63000:2019
<b>Conformity</b>		
Degree of protection		EN 60529
Shock resistance		EN 60068-2-27
Vibration resistance		EN 60068-2-6
<b>Ambient conditions</b>		
Ambient temperature		-25 ... 70 °C (-13 ... 158 °F) , see technical information
Storage temperature		-40 ... 85 °C (-40 ... 185 °F)
Relative humidity		5 ... 95 % , noncondensing
Shock resistance		20 g , 11 ms or 30 g , 6 ms
Vibration resistance		2 ... 17.8 Hz : ± 1.6 mm , 17.8 ... 500 Hz : 2 g
<b>Mechanical specifications</b>		
Housing material		aluminum alloy , galvanized steel
Degree of protection		IP20
Connection		

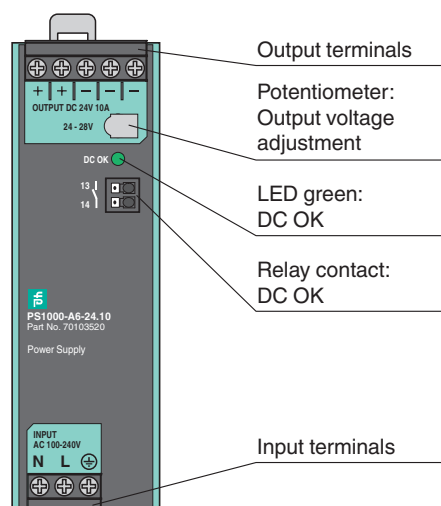
Release date: 2021-12-20 Date of issue: 2021-12-20 Filename: 70103520\_eng.pdf

## Technical Data

Input/Output	screw terminals conductor cross section: max. 6 mm <sup>2</sup> (AWG 20-10) cable diameter: max. 2.8 mm, wire end ferrules included stripped insulation length: 7 mm tightening torque: max. 1 Nm
Relay contact output	spring terminals with push-in connection technology conductor cross section: max. 1.5 mm <sup>2</sup> (AWG 24-16) cable diameter: max. 1.6 mm, wire end ferrules included stripped insulation length: 7 mm
Mass	approx. 600 g
Dimensions	39 x 124 x 117 mm (W x H x D) , without DIN mounting rail
Mounting	on 35 mm DIN mounting rail acc. to EN 60715:2001
<b>Data for application in connection with hazardous areas</b>	
ATEX approval	
ATEX certificate	EPS 15 ATEX 1101 X
ATEX marking	Ⓔ II 3G Ex ec nC II T4 Gc
Directive conformity	
Directive 2014/34/EU	EN 60079-0:2012+A11:2013 , EN 60079-7:2015+A1:2018 , EN 60079-15:2010
<b>International approvals</b>	
UL approval	E350173 , E223176
IECEx approval	
IECEx certificate	IECEx EPS 20.0055X
IECEx marking	Ex ec nC IIC T4 Gc
Standards	IEC 60079-0:2017 , IEC 60079-7:2017 , IEC 60079-15:2017
<b>General information</b>	
Supplementary information	Observe the certificates, declarations of conformity, instruction manuals, and manuals where applicable. For information see <a href="http://www.pepperl-fuchs.com">www.pepperl-fuchs.com</a> .

## Assembly

### Front view



## Installation Conditions

Mount the device on the DIN mounting rail so that the input terminals are located on the bottom of the device.

This device is designed for convection cooling and does not require an external ventilator. Do not obstruct airflow. Do not cover the ventilation grid by more than 15 %, e. g. cable ducts.

Refer to "General Notes Relating to Pepperl+Fuchs Product Information".

Pepperl+Fuchs Group  
[www.pepperl-fuchs.com](http://www.pepperl-fuchs.com)

USA: +1 330 486 0002  
[pa-info@us.pepperl-fuchs.com](mailto:pa-info@us.pepperl-fuchs.com)

Germany: +49 621 776 2222  
[pa-info@de.pepperl-fuchs.com](mailto:pa-info@de.pepperl-fuchs.com)

Singapore: +65 6779 9091  
[pa-info@sg.pepperl-fuchs.com](mailto:pa-info@sg.pepperl-fuchs.com)

**PEPPERL+FUCHS**

If you load the device with more than 50 % of the rated power permanently keep the following mounting distances:

- 40 mm above
- 20 mm below
- 5 mm on the left and right side

Increase this distance to 15 mm if the adjacent device is a heat source, e. g. another power supply.



## Power Supply PS1000-A6-24.10.R

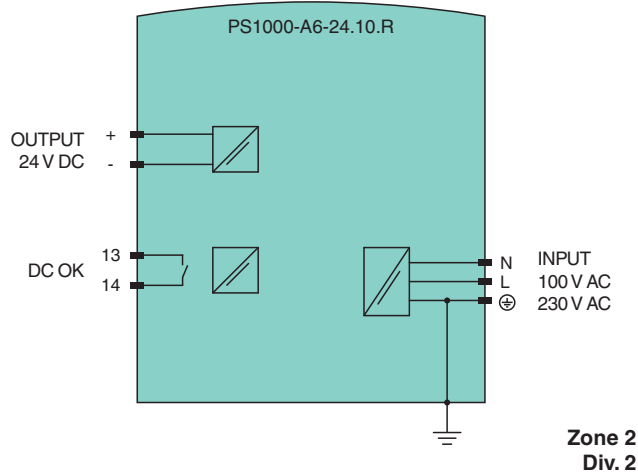
- 100 V AC to 240 V AC wide-range input
- Output 24 V DC, 10 A, 240 W, 1-phase
- Housing width 39 mm
- Built-in decoupling mosfet for 1+1 and N+1 redundancy
- Efficiency up to 94.7 %
- Minimal inrush current surge
- DC OK relay contact
- Current sharing for parallel use
- Suitable for Zone 2/Div. 2 mounting



### Function

The device is used to supply field devices with 24 V DC and 10 A.  
The device includes a decoupling MOSFET for building 1+1 or n+1 redundant power supply systems.  
To achieve current sharing between power supplies connected in parallel, the device is permanently factory-set to "parallel use" operating mode.  
The device status is indicated by an LED.  
The device has a relay contact output for remote monitoring.  
The device is mounted on a 35 mm DIN mounting rail according to EN 60715.

### Connection



### Technical Data

#### Electrical specifications

Efficiency	93 % at 120 V AC 94.7 % at 230 V AC
Power dissipation	18.1 W at 120 V AC 13.4 W at 230 V AC
<b>Input</b>	
Current	2.17 A at 120 V AC 1.14 A at 230 V AC 2.35 A at 110 V DC for lower output currents see technical information
Inrush current	6 A peak at 120 V AC and ambient temperature 40 °C (104 °F) 9 A peak at 230 V AC and ambient temperature 40 °C (104 °F)

Refer to "General Notes Relating to Pepperl+Fuchs Product Information".

Pepperl+Fuchs Group  
www.pepperl-fuchs.com

USA: +1 330 486 0002  
pa-info@us.pepperl-fuchs.com

Germany: +49 621 776 2222  
pa-info@de.pepperl-fuchs.com

Singapore: +65 6779 9091  
pa-info@sg.pepperl-fuchs.com

**PEPPERL+FUCHS**

## Technical Data

Voltage		100 ... 240 V AC (-15 %/+10 %), 50 ... 60 Hz (±6 %) 110 ... 150 V DC (±20 %)
Capacity factor		0.99 at 120 V AC 0.97 at 230 V AC
<b>Output</b>		
Rated voltage	U <sub>r</sub>	24 V DC
Voltage range		23.8 ... 25.2 V DC factory setting: 24.1 V
Rated current	I <sub>r</sub>	10 A
Current		12 A at ambient temperature < 45 °C (113 °F) 10 A at ambient temperature 60 °C (140 °F) 7.5 A at ambient temperature 70 °C (158 °F) linear power derating see technical information
Power		240 W
Ripple		max. 50 mV <sub>pp</sub>
Retention time/hold time		37 ms at 120 V AC 37 ms at 230 V AC
Overload behavior		continuous current : output voltage > 13 V DC intermittent current : output voltage < 13 V DC
Short-circuit current		typ. 14 A , intermitted current peak value for typ. 2 s, load impedance < 10 mΩ
Voltage limitation		typ. 30.5 V DC max. 32 V DC
<b>Fault indication output</b>		
Connection		terminals 13, 14
Output type		relay contact DC OK - contact is closed if the output voltage is > 90 % of the adjusted output voltage
Contact loading		max. 60 V DC/0.3 A ; 30 V DC/1 A ; 30 V AC/0.5 A resistive load min. 1 mA at 5 V DC
<b>Galvanic isolation</b>		
Input/Output		SELV/PELV
<b>Indicators/settings</b>		
Display elements		LED green: status DC OK - LED lights up if the output voltage is > 90 % of the adjusted output voltage
<b>Directive conformity</b>		
Electromagnetic compatibility		
Directive 2014/30/EU		IEC/EN 61000-6-1 , IEC/EN 61000-6-2 , IEC/EN 61000-6-3 , IEC/EN 61000-6-4 , IEC/EN 61000-3-2 , IEC/EN 61000-3-3
Low voltage		
Directive 2014/35/EU		EN 61010-1
RoHS		
Directive 2011/65/EU (RoHS)		IEC/EN 63000:2019
<b>Conformity</b>		
Degree of protection		EN 60529
Shock resistance		EN 60068-2-27
Vibration resistance		EN 60068-2-6
<b>Ambient conditions</b>		
Ambient temperature		-25 ... 70 °C (-13 ... 158 °F) , see technical information
Storage temperature		-40 ... 85 °C (-40 ... 185 °F)
Relative humidity		5 ... 95 % , noncondensing
Shock resistance		20 g , 11 ms or 30 g , 6 ms
Vibration resistance		2 ... 17.8 Hz : ± 1.6 mm , 17.8 ... 500 Hz : 2 g
<b>Mechanical specifications</b>		
Housing material		aluminum alloy , galvanized steel
Degree of protection		IP20
Connection		

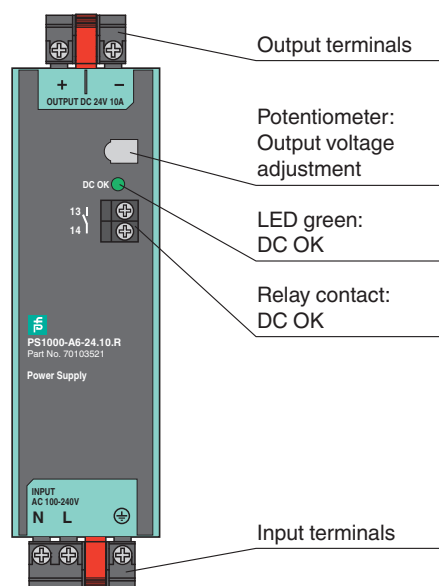
Release date: 2021-12-20 Date of issue: 2021-12-20 Filename: 70103521\_eng.pdf

## Technical Data

Input/Output	plug-in connector with screw terminals conductor cross section: max. 4 mm <sup>2</sup> (AWG 20-12) cable diameter: max. 2.4 mm, wire end ferrules included stripped insulation length: 7 mm tightening torque: max. 0.5 Nm
Relay contact output	plug-in connector with screw terminals conductor cross section: max. 1.5 mm <sup>2</sup> (AWG 26-14) cable diameter: max. 1.8 mm, wire end ferrules included stripped insulation length: 6 mm tightening torque: max. 0.8 Nm
Mass	approx. 600 g
Dimensions	39 x 124 x 117 mm (W x H x D) , without plugs and without DIN mounting rail
Mounting	on 35 mm DIN mounting rail acc. to EN 60715:2001
<b>Data for application in connection with hazardous areas</b>	
ATEX approval	
ATEX certificate	EPS 15 ATEX 1101 X
ATEX marking	Ⓔ II 3G Ex ec nC II T4 Gc
Directive conformity	
Directive 2014/34/EU	EN 60079-0:2012+A11:2013 , EN 60079-7:2015+A1:2018 , EN 60079-15:2010
<b>International approvals</b>	
UL approval	E350173 , E223176
IECEX approval	
IECEX certificate	IECEX EPS 20.0055X
IECEX marking	Ex ec nC IIC T4 Gc
Standards	IEC 60079-0:2017 , IEC 60079-7:2017 , IEC 60079-15:2017
<b>General information</b>	
Supplementary information	Observe the certificates, declarations of conformity, instruction manuals, and manuals where applicable. For information see <a href="http://www.pepperl-fuchs.com">www.pepperl-fuchs.com</a> .

## Assembly

Front view



## Installation Conditions

Mount the device on the DIN mounting rail so that the input terminals are located on the bottom of the device.

This device is designed for convection cooling and does not require an external ventilator. Do not obstruct airflow. Do not cover the ventilation grid by more than 15 %, e. g. cable ducts.

If you load the device with more than 50 % of the rated power permanently keep the following mounting distances:

- 40 mm above
- 20 mm below
- 5 mm on the left and right side

Increase this distance to 15 mm if the adjacent device is a heat source, e. g. another power supply.





## Power Supply PS1000-A6-48.5

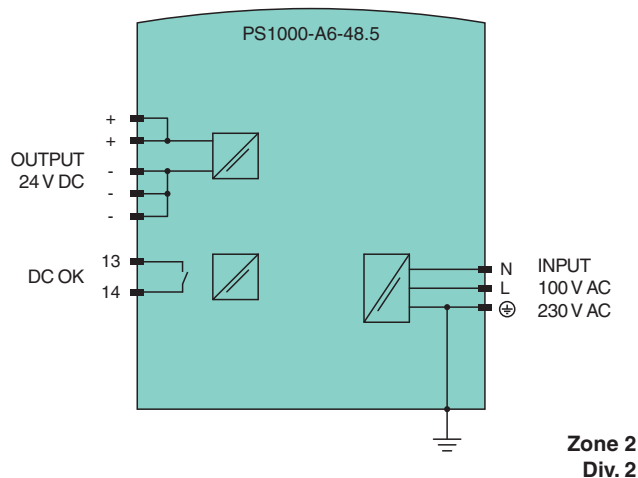
- 100 V AC to 240 V AC wide-range input
- Output 48 V DC, 5.4 A, 260 W, 1-phase
- Housing width 39 mm
- Efficiency up to 95.5 %
- Minimal inrush current surge
- DC OK relay contact
- Suitable for Zone 2/Div. 2 mounting



### Function

The device is used to supply field devices with 48 V DC and 5.4 A.  
The device has a power reserve of 20 % included, which may even be used continuously at temperatures up to +45 °C.  
The output voltage can be adjusted via a potentiometer. The device status is indicated by an LED.  
The device has a relay contact output for remote monitoring.  
The device is mounted on a 35 mm DIN mounting rail according to EN 60715.

### Connection



### Technical Data

#### Electrical specifications

Efficiency	93.8 % at 120 V AC 95.5 % at 230 V AC
Power dissipation	17.2 W at 120 V AC 12.3 W at 230 V AC
<b>Input</b>	
Current	2.32 A at 120 V AC 1.2 A at 230 V AC 2.51 A at 110 V DC for lower output currents see technical information
Inrush current	6 A peak at 120 V AC and ambient temperature 40 °C (104 °F) 9 A peak at 230 V AC and ambient temperature 40 °C (104 °F)
Voltage	100 ... 240 V AC (-10 %/+10 %), 50 ... 60 Hz (±6 %) 110 ... 150 V DC (±20 %)

Refer to "General Notes Relating to Pepperl+Fuchs Product Information".

Pepperl+Fuchs Group  
www.pepperl-fuchs.com

USA: +1 330 486 0002  
pa-info@us.pepperl-fuchs.com

Germany: +49 621 776 2222  
pa-info@de.pepperl-fuchs.com

Singapore: +65 6779 9091  
pa-info@sg.pepperl-fuchs.com

**PEPPERL+FUCHS**

## Technical Data

Capacity factor	0.99 at 120 V AC 0.98 at 230 V AC	
Output		
Rated voltage	U <sub>r</sub>	48 V DC
Voltage range		48 ... 56 V DC factory setting: 48 V
Rated current	I <sub>r</sub>	5 A
Current		6 ... 5.2 A at ambient temperature < 45 °C (113 °F) 5.4 ... 4.6 A at ambient temperature 60 °C (140 °F) 4 ... 3.4 A at ambient temperature 70 °C (158 °F) linear power derating see technical information
Power		260 W
Ripple		max. 50 mV <sub>pp</sub>
Retention time/hold time		34 ms at 120 V AC 34 ms at 230 V AC
Overload behavior		continuous current : output voltage > 26 V DC intermittent current : output voltage < 26 V DC
Short-circuit current		typ. 16 A for up to 12 ms, load impedance < 90 mΩ
Voltage limitation		typ. 58.5 V DC max. 60 V DC
Fault indication output		
Connection		terminals 13, 14
Output type		relay contact DC OK - contact is closed if the output voltage is > 90 % of the adjusted output voltage
Contact loading		max. 60 V DC/0.3 A ; 30 V DC/1 A ; 30 V AC/0.5 A resistive load min. 1 mA at 5 V DC
Galvanic isolation		
Input/Output		SELV/PELV
Indicators/settings		
Display elements		LED green: status DC OK - LED lights up if the output voltage is > 90 % of the adjusted output voltage
Control elements		potentiometer
Configuration		setting of the output voltage via potentiometer
Directive conformity		
Electromagnetic compatibility		
Directive 2014/30/EU		IEC/EN 61000-6-1 , IEC/EN 61000-6-2 , IEC/EN 61000-6-3 , IEC/EN 61000-6-4 , IEC/EN 61000-3-2 , IEC/EN 61000-3-3
Low voltage		
Directive 2014/35/EU		EN 61010-1
RoHS		
Directive 2011/65/EU (RoHS)		IEC/EN 63000:2019
Conformity		
Degree of protection		EN 60529
Shock resistance		EN 60068-2-27
Vibration resistance		EN 60068-2-6
Ambient conditions		
Ambient temperature		-25 ... 70 °C (-13 ... 158 °F) , see technical information
Storage temperature		-40 ... 85 °C (-40 ... 185 °F)
Relative humidity		5 ... 95 % , noncondensing
Shock resistance		20 g , 11 ms or 30 g , 6 ms
Vibration resistance		2 ... 17.8 Hz : ± 1.6 mm , 17.8 ... 500 Hz : 2 g
Mechanical specifications		
Housing material		aluminum alloy , galvanized steel
Degree of protection		IP20
Connection		

Release date: 2021-12-20 Date of issue: 2021-12-20 Filename: 70103522\_eng.pdf

Refer to "General Notes Relating to Pepperl+Fuchs Product Information".

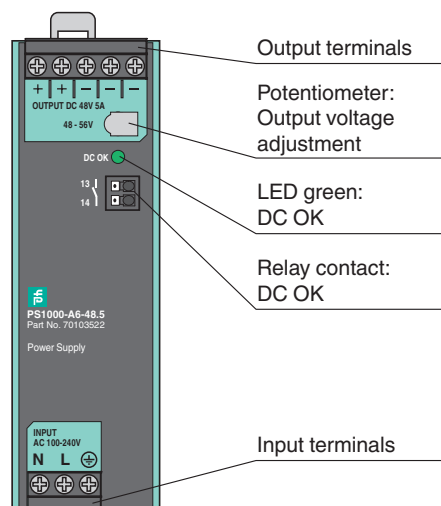
Pepperl+Fuchs Group  
www.pepperl-fuchs.comUSA: +1 330 486 0002  
pa-info@us.pepperl-fuchs.comGermany: +49 621 776 2222  
pa-info@de.pepperl-fuchs.comSingapore: +65 6779 9091  
pa-info@sg.pepperl-fuchs.com
 **PEPPERL+FUCHS**

## Technical Data

Input/Output	screw terminals conductor cross section: max. 6 mm <sup>2</sup> (AWG 20-10) cable diameter: max. 2.8 mm, wire end ferrules included stripped insulation length: 7 mm tightening torque: max. 1 Nm
Relay contact output	spring terminals with push-in connection technology conductor cross section: max. 1.5 mm <sup>2</sup> (AWG 24-16) cable diameter: max. 1.6 mm, wire end ferrules included stripped insulation length: 7 mm
Mass	approx. 600 g
Dimensions	39 x 124 x 117 mm (W x H x D) , without DIN mounting rail
Mounting	on 35 mm DIN mounting rail acc. to EN 60715:2001
<b>Data for application in connection with hazardous areas</b>	
ATEX approval	
ATEX certificate	EPS 15 ATEX 1101 X
ATEX marking	Ⓔ II 3G Ex ec nC II T4 Gc
Directive conformity	
Directive 2014/34/EU	EN 60079-0:2012+A11:2013 , EN 60079-7:2015+A1:2018 , EN 60079-15:2010
<b>International approvals</b>	
UL approval	E350173 , E223176
IECEx approval	
IECEx certificate	IECEx EPS 20.0055X
IECEx marking	Ex ec nC IIC T4 Gc
Standards	IEC 60079-0:2017 , IEC 60079-7:2017 , IEC 60079-15:2017
<b>General information</b>	
Supplementary information	Observe the certificates, declarations of conformity, instruction manuals, and manuals where applicable. For information see <a href="http://www.pepperl-fuchs.com">www.pepperl-fuchs.com</a> .

## Assembly

### Front view



## Installation Conditions

Mount the device on the DIN mounting rail so that the input terminals are located on the bottom of the device.

This device is designed for convection cooling and does not require an external ventilator. Do not obstruct airflow. Do not cover the ventilation grid by more than 15 %, e. g. cable ducts.

Refer to "General Notes Relating to Pepperl+Fuchs Product Information".

Pepperl+Fuchs Group  
[www.pepperl-fuchs.com](http://www.pepperl-fuchs.com)

USA: +1 330 486 0002  
[pa-info@us.pepperl-fuchs.com](mailto:pa-info@us.pepperl-fuchs.com)

Germany: +49 621 776 2222  
[pa-info@de.pepperl-fuchs.com](mailto:pa-info@de.pepperl-fuchs.com)

Singapore: +65 6779 9091  
[pa-info@sg.pepperl-fuchs.com](mailto:pa-info@sg.pepperl-fuchs.com)

**PEPPERL+FUCHS**

If you load the device with more than 50 % of the rated power permanently keep the following mounting distances:

- 40 mm above
- 20 mm below
- 5 mm on the left and right side

Increase this distance to 15 mm if the adjacent device is a heat source, e. g. another power supply.



## Power Supply PS1000-A6-24.20

- 100 V AC to 240 V AC wide-range input
- Output 24 V DC, 20 A, 480 W, 1-phase
- Housing width 48 mm
- Efficiency up to 95.6 %
- Minimal inrush current surge
- DC OK relay contact
- Current sharing for parallel use
- Suitable for Zone 2/Div. 2 mounting



### Function

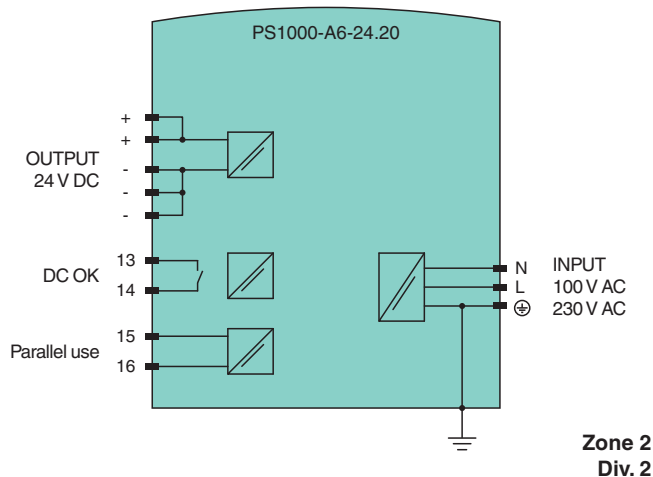
The device is used to supply field devices with 24 V DC and 20 A.  
It is possible to select between the operating modes "parallel use" and "single use". Plug in the plug-in jumper to set the operating mode "parallel use". Do not plug in the plug-in jumper to set the operating mode "single use".  
The device status is indicated by an LED.  
The device has a relay contact output for remote monitoring.  
The device is mounted on a 35 mm DIN mounting rail according to EN 60715.

### Application

#### Parallel Use

Link the two terminal poles when power supplies are connected in parallel. In order to achieve a sharing of the load current between the individual power supplies, the "parallel use" regulates the output voltage in such a manner that the voltage at no load is approx. 4 % higher than at nominal load.

### Connection



### Technical Data

#### Electrical specifications

Efficiency	94.2 % at 120 V AC 95.6 % at 230 V AC
Power dissipation	29.6 W at 120 V AC 22.1 W at 230 V AC

## Technical Data

<b>Input</b>			
Current			4.26 A at 120 V AC 2.23 A at 230 V AC 4.64 A at 110 V DC for lower output currents see technical information
Inrush current			10 A peak at 120 V AC, temperature independent 4.5 A peak at 230 V AC, temperature independent
Voltage			100 ... 240 V AC (-15 %/+10 %), 50 ... 60 Hz (±6 %) 110 ... 150 V DC (±20 %)
Capacity factor			0.99 at 120 V AC 0.98 at 230 V AC
<b>Output</b>			
Rated voltage	U <sub>r</sub>		24 V DC
Voltage range			24 ... 28 V DC factory setting: 24.1 V
Rated current	I <sub>r</sub>		20 A
Current			24 ... 20.6 A at ambient temperature < 45 °C (113 °F) 20 ... 17.1 A at ambient temperature 60 °C (140 °F) 15 ... 13 A at ambient temperature 70 °C (158 °F) linear power derating see technical information
Power			480 W
Ripple			max. 50 mV <sub>pp</sub>
Retention time/hold time			32 ms at 120 V AC 32 ms at 230 V AC
Overload behavior			continuous current : output voltage > 13 V DC intermittent current : output voltage < 13 V DC
Short-circuit current			typ. 29 A intermitted current peak value for typ. 2 s
Voltage limitation			typ. 30.5 V DC max. 32 V DC
<b>Fault indication output</b>			
Connection			terminals 13, 14
Output type			relay contact DC OK - contact is closed if the output voltage is > 90 % of the adjusted output voltage
Contact loading			max. 60 V DC/0.3 A ; 30 V DC/1 A ; 30 V AC/0.5 A resistive load min. 1 mA at 5 V DC
<b>Galvanic isolation</b>			
Input/Output			SELV/PELV
<b>Indicators/settings</b>			
Display elements			LED green: status DC OK - LED lights up if the output voltage is > 90 % of the adjusted output voltage
Control elements			potentiometer , plug-in jumper
Configuration			setting of the output voltage via potentiometer setting of the operating mode - plug-in jumper plugged in: "parallel use" operating mode - plug-in jumper not plugged in: "single use" operating mode
<b>Directive conformity</b>			
Electromagnetic compatibility			
Directive 2014/30/EU			IEC/EN 61000-6-1 , IEC/EN 61000-6-2 , IEC/EN 61000-6-3 , IEC/EN 61000-6-4 , IEC/EN 61000-3-2 , IEC/EN 61000-3-3
Low voltage			
Directive 2014/35/EU			EN 61010-1
RoHS			
Directive 2011/65/EU (RoHS)			IEC/EN 63000:2019
<b>Conformity</b>			
Degree of protection			EN 60529
Shock resistance			EN 60068-2-27
Vibration resistance			EN 60068-2-6
<b>Ambient conditions</b>			
Ambient temperature			-25 ... 70 °C (-13 ... 158 °F) , see technical information
Storage temperature			-40 ... 85 °C (-40 ... 185 °F)

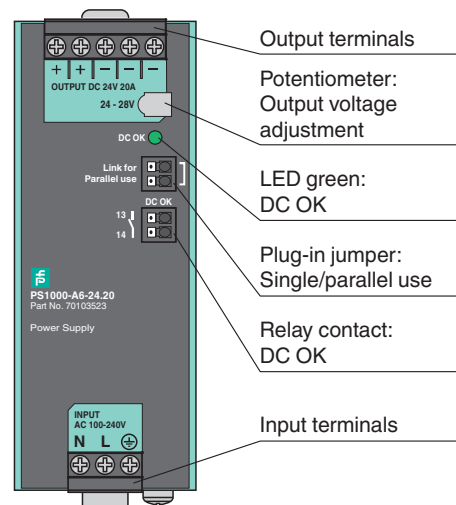
Release date: 2021-12-20 Date of issue: 2021-12-20 Filename: 70103523\_eng.pdf

## Technical Data

Relative humidity	5 ... 95 %, noncondensing
Shock resistance	20 g , 11 ms or 30 g , 6 ms
Vibration resistance	2 ... 17.8 Hz : ± 1.6 mm , 17.8 ... 500 Hz : 2 g
<b>Mechanical specifications</b>	
Housing material	aluminum alloy , galvanized steel
Degree of protection	IP20
<b>Connection</b>	
Input/Output	screw terminals conductor cross section: max. 6 mm <sup>2</sup> (AWG 20-10) cable diameter: max. 2.8 mm, wire end ferrules included stripped insulation length: 7 mm tightening torque: max. 1 Nm
Relay contact output	spring terminals with push-in connection technology conductor cross section: max. 1.5 mm <sup>2</sup> (AWG 24-16) cable diameter: max. 1.6 mm, wire end ferrules included stripped insulation length: 7 mm
Mass	approx. 830 g
Dimensions	48 x 124 x 127 mm , without plugs and without DIN mounting rail
Mounting	on 35 mm DIN mounting rail acc. to EN 60715:2001
<b>Data for application in connection with hazardous areas</b>	
ATEX approval	
ATEX certificate	EPS 17 ATEX 1 089 X
ATEX marking	Ⓔ II 3G Ex ec nC II T4 Gc
<b>Directive conformity</b>	
Directive 2014/34/EU	EN 60079-0:2012+A11:2013 , EN 60079-7:2015 , EN 60079-15:2010
<b>International approvals</b>	
UL approval	E350173 , E223176
<b>IECEx approval</b>	
IECEx certificate	IECEx EPS 20.0056X
IECEx marking	Ex ec nC IIC T4 Gc
Standards	IEC 60079-0:2011 , IEC 60079-7:2015 , IEC 60079-15:2010
<b>General information</b>	
Supplementary information	Observe the certificates, declarations of conformity, instruction manuals, and manuals where applicable. For information see <a href="http://www.pepperl-fuchs.com">www.pepperl-fuchs.com</a> .

## Assembly

### Front view



## Installation Conditions

Mount the device on the DIN mounting rail so that the input terminals are located on the bottom of the device.

This device is designed for convection cooling and does not require an external ventilator. Do not obstruct airflow. Do not cover the ventilation grid by more than 15 %, e. g. cable ducts.

If you load the device with more than 50 % of the rated power permanently keep the following mounting distances:

- 40 mm above
- 20 mm below
- 5 mm on the left and right side

Increase this distance to 15 mm if the adjacent device is a heat source, e. g. another power supply.





## Power Supply PS1000-A6-24.20.R

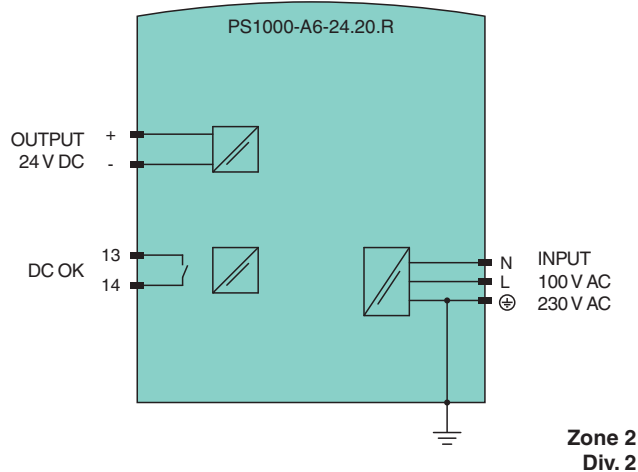
- 100 V AC to 240 V AC wide-range input
- Output 24 V DC, 20 A, 480 W, 1-phase
- Housing width 48 mm
- Built-in decoupling mosfet for 1+1 and N+1 redundancy
- Efficiency up to 95.2 %
- Minimal inrush current surge
- DC OK relay contact
- Current sharing for parallel use
- Suitable for Zone 2/Div. 2 mounting



### Function

The device is used to supply field devices with 24 V DC and 20 A.  
The device includes a decoupling MOSFET for building 1+1 or n+1 redundant power supply systems.  
To achieve current sharing between power supplies connected in parallel, the device is permanently factory-set to "parallel use" operating mode.  
The device status is indicated by an LED.  
The device has a relay contact output for remote monitoring.  
The device is mounted on a 35 mm DIN mounting rail according to EN 60715.

### Connection



### Technical Data

#### Electrical specifications

Efficiency	93.8 % at 120 V AC 95.2 % at 230 V AC
Power dissipation	31.7 W at 120 V AC 24.2 W at 230 V AC
<b>Input</b>	
Current	4.28 A at 120 V AC 2.25 A at 230 V AC 4.64 A at 110 V DC for lower output currents see technical information
Inrush current	10 A peak at 120 V AC, temperature independent 4.5 A peak at 230 V AC, temperature independent

## Technical Data

Voltage		100 ... 240 V AC (-15 %/+10 %), 50 ... 60 Hz (±6 %) 110 ... 150 V DC (±20 %)
Capacity factor		0.99 at 120 V AC 0.98 at 230 V AC
<b>Output</b>		
Rated voltage	U <sub>r</sub>	24 V DC
Voltage range		23.8 ... 25.2 V DC factory setting: 24.1 V
Rated current	I <sub>r</sub>	20 A
Current		24 A at ambient temperature < 45 °C (113 °F) 20 A at ambient temperature 60 °C (140 °F) 15 A at ambient temperature 70 °C (158 °F) linear power derating see technical information
Power		480 W
Ripple		max. 100 mV <sub>pp</sub>
Retention time/hold time		32 ms at 120 V AC 32 ms at 230 V AC
Overload behavior		continuous current : output voltage > 13 V DC intermittent current : output voltage < 13 V DC
Short-circuit current		typ. 29 A , intermitted current peak value for typ. 2 s
Voltage limitation		typ. 30.5 V DC max. 32 V DC
<b>Fault indication output</b>		
Connection		terminals 13, 14
Output type		relay contact DC OK - contact is closed if the output voltage is > 90 % of the adjusted output voltage
Contact loading		max. 60 V DC/0.3 A ; 30 V DC/1 A ; 30 V AC/0.5 A resistive load min. 1 mA at 5 V DC
<b>Galvanic isolation</b>		
Input/Output		SELV/PELV
<b>Indicators/settings</b>		
Display elements		LED green: status DC OK - LED lights up if the output voltage is > 90 % of the adjusted output voltage
<b>Directive conformity</b>		
Electromagnetic compatibility		
Directive 2014/30/EU		IEC/EN 61000-6-1 , IEC/EN 61000-6-2 , IEC/EN 61000-6-3 , IEC/EN 61000-6-4 , IEC/EN 61000-3-2 , IEC/EN 61000-3-3
Low voltage		
Directive 2014/35/EU		EN 61010-1
RoHS		
Directive 2011/65/EU (RoHS)		IEC/EN 63000:2019
<b>Conformity</b>		
Degree of protection		EN 60529
Shock resistance		EN 60068-2-27
Vibration resistance		EN 60068-2-6
<b>Ambient conditions</b>		
Ambient temperature		-40 ... 70 °C (-40 ... 158 °F) , see technical information
Storage temperature		-40 ... 85 °C (-40 ... 185 °F)
Relative humidity		5 ... 95 % , noncondensing
Shock resistance		20 g , 11 ms or 30 g , 6 ms
Vibration resistance		2 ... 17.8 Hz : ± 1.6 mm , 17.8 ... 500 Hz : 2 g
<b>Mechanical specifications</b>		
Housing material		aluminum alloy , galvanized steel
Degree of protection		IP20
Connection		

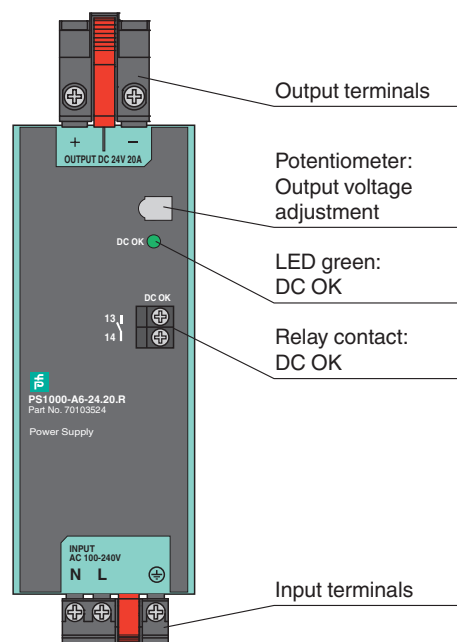
Release date: 2021-12-20 Date of issue: 2021-12-20 Filename: 70103524\_eng.pdf

## Technical Data

Input	plug-in connector with screw terminals conductor cross section: max. 4 mm <sup>2</sup> (AWG 20-12) cable diameter: max. 2.4 mm, wire end ferrules included stripped insulation length: 7 mm tightening torque: max. 0.5 Nm
Output	plug-in connector with screw terminals conductor cross section: max. 6 mm <sup>2</sup> (AWG 24-10) cable diameter: max. 3.2 mm, wire end ferrules included stripped insulation length: 12 mm tightening torque: max. 0.6 Nm
Relay contact output	plug-in connector with screw terminals conductor cross section: max. 1.5 mm <sup>2</sup> (AWG 26-14) cable diameter: max. 1.8 mm, wire end ferrules included stripped insulation length: 6 mm tightening torque: max. 0.8 Nm
Mass	approx. 850 g
Dimensions	48 x 124 x 127 mm (W x H x D) , without plugs and without DIN mounting rail
Mounting	on 35 mm DIN mounting rail acc. to EN 60715:2001
<b>Data for application in connection with hazardous areas</b>	
ATEX approval	
ATEX certificate	EPS 17 ATEX 1 089 X
ATEX marking	Ⓔ II 3G Ex ec nC II T4 Gc
Directive conformity	
Directive 2014/34/EU	EN 60079-0:2012+A11:2013 , EN 60079-7:2015 , EN 60079-15:2010
<b>International approvals</b>	
UL approval	E350173 , E223176
IECEX approval	
IECEX certificate	IECEX EPS 20.0056X
IECEX marking	Ex ec nC IIC T4 Gc
Standards	IEC 60079-0:2011 , IEC 60079-7:2015 , IEC 60079-15:2010
<b>General information</b>	
Supplementary information	Observe the certificates, declarations of conformity, instruction manuals, and manuals where applicable. For information see <a href="http://www.pepperl-fuchs.com">www.pepperl-fuchs.com</a> .

## Assembly

### Front view



## Installation Conditions

Mount the device on the DIN mounting rail so that the input terminals are located on the bottom of the device.

This device is designed for convection cooling and does not require an external ventilator. Do not obstruct airflow. Do not cover the ventilation grid by more than 15 %, e. g. cable ducts.

If you load the device with more than 50 % of the rated power permanently keep the following mounting distances:

- 40 mm above
- 20 mm below
- 5 mm on the left and right side

Increase this distance to 15 mm if the adjacent device is a heat source, e. g. another power supply.



## Power Supply PS1000-A9-24.40

- 380 V AC to 480 V AC wide-range inputs
- Output 24 V DC, 40 A, 960 W, 3-phase
- Housing width 110 mm
- Efficiency up to 95.3 %
- Minimal inrush current surge
- Shutdown input
- Remote control for ON/OFF
- DC OK relay contact
- Current sharing for parallel use



### Function

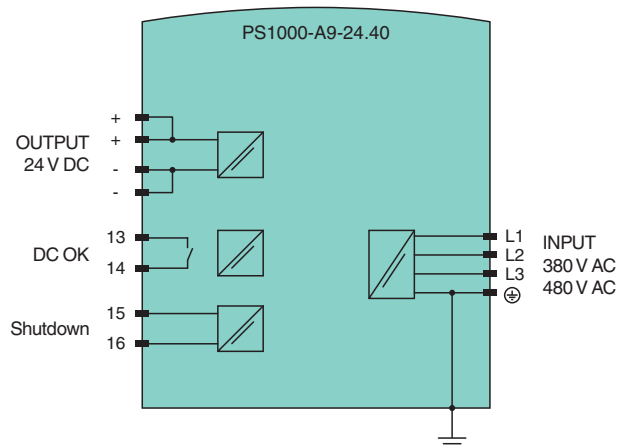
The device is used to supply field devices with 24 V DC and 40 A.  
The device has a large power reserve of 150 % for up to 4 s to support the starting of heavy loads such as DC motors or capacitive loads.  
The output voltage can be adjusted via a potentiometer. Device status and overload are indicated by LEDs.  
The device has a relay contact output for remote monitoring.  
The device has a connection for switching off the device via a switch or an external voltage.  
The device is mounted on a 35 mm DIN mounting rail according to EN 60715.

### Application

#### Parallel Use

Link the two terminal poles when power supplies are connected in parallel. In order to achieve a sharing of the load current between the individual power supplies, the "parallel use" regulates the output voltage in such a manner that the voltage at no load is approx. 4 % higher than at nominal load.

### Connection



### Technical Data

#### Electrical specifications

Efficiency	95.3 % at 3 x 400 V AC 95.2 % at 3 x 480 V AC
Power dissipation	47.3 W at 3 x 400 V AC 48.4 W at 3 x 480 V AC

## Technical Data

<b>Input</b>		
Current		1.65 A at 3 x 400 V AC 1.35 A at 3 x 480 V AC for lower output currents see technical information
Inrush current		4.5 A peak at 3 x 400 V AC, temperature-independent 4.5 A peak at 3 x 480 V AC, temperature-independent
Voltage		3 x 380 ... 480 V AC (-15 %/+20 %), 50 ... 60 Hz (±6 %)
Capacity factor		0.88 at 3 x 400 V AC 0.9 at 3 x 480 V AC
Remote control		terminals 15, 16 remote control for ON/OFF and shutdown input
<b>Output</b>		
Rated voltage	$U_r$	24 V DC
Voltage range		24 ... 28 V DC factory setting: 24.1 V
Rated current	$I_r$	40 A
Current		continuous: 40 ... 34.3 A short-term up to 4 s: 60 ... 51.5 A linear power derating see technical information
Power		960 W
Ripple		max. 100 mV <sub>pp</sub>
Retention time/hold time		25 ms at 3 x 400 V AC 25 ms at 3 x 480 V AC
Overload behavior		constant current mode
Short-circuit current		typ. 46 A continuous, load impedance < 10 mΩ
Voltage limitation		typ. 30.5 V DC max. 32 V DC
<b>Fault indication output</b>		
Connection		terminals 13, 14
Output type		relay contact DC OK - contact is closed if the output voltage is > 90 % of the adjusted output voltage
Contact loading		max. 60 V DC/0.3 A ; 30 V DC/1 A ; 30 V AC/0.5 A resistive load min. 1 mA at 5 V DC
<b>Galvanic isolation</b>		
Input/Output		SELV/PELV
<b>Indicators/settings</b>		
Display elements		LED green: status DC OK - LED lights up if the output voltage is > 90 % of the adjusted output voltage LED red: overload - LED lights up if the output voltage is < 90 % of the adjusted output voltage or in case of short circuit - flashes if the shutdown has been activated or if the device has shut down due to overtemperature
Control elements		potentiometer, plug-in jumper
Configuration		setting of the output voltage via potentiometer setting of the operating mode - plug-in jumper plugged in: "parallel use" operating mode - plug-in jumper not plugged in: "single use" operating mode setting of the shutdown input: - plug-in jumper plugged in: device switches off
<b>Directive conformity</b>		
Electromagnetic compatibility		
Directive 2014/30/EU		IEC/EN 61000-6-1, IEC/EN 61000-6-2, IEC/EN 61000-6-3, IEC/EN 61000-6-4, IEC/EN 61000-3-2, IEC/EN 61000-3-3
Low voltage		
Directive 2014/35/EU		EN 61010-1
RoHS		
Directive 2011/65/EU (RoHS)		IEC/EN 63000:2019
<b>Conformity</b>		
Degree of protection		EN 60529

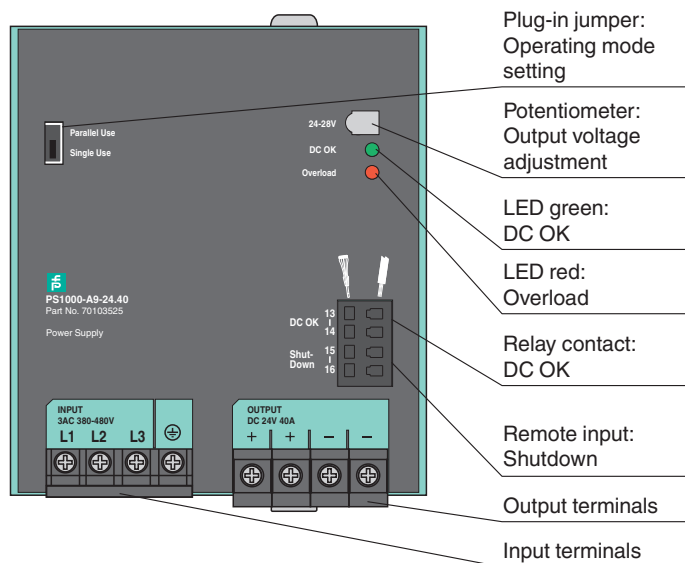
Release date: 2021-12-20 Date of issue: 2021-12-20 Filename: 70103525\_eng.pdf

## Technical Data

Shock resistance	EN 60068-2-27
Vibration resistance	EN 60068-2-6
<b>Ambient conditions</b>	
Ambient temperature	-25 ... 70 °C (-13 ... 158 °F) , see technical information
Storage temperature	-40 ... 85 °C (-40 ... 185 °F)
Relative humidity	5 ... 95 %, noncondensing
Shock resistance	15 g , 6 ms or 10 g , 11 ms
Vibration resistance	2 ... 17.8 Hz : ± 1.6 mm , 17.8 ... 500 Hz : 1 g
<b>Mechanical specifications</b>	
Housing material	aluminum alloy , galvanized steel
Degree of protection	IP20
Connection	
Input	screw terminals conductor cross section: max. 6 mm <sup>2</sup> (AWG 20-10) cable diameter: max. 2.8 mm, wire end ferrules included stripped insulation length: 7 mm tightening torque: max. 1 Nm
Output	screw terminals conductor cross section: max. 16 mm <sup>2</sup> (AWG 22-8) cable diameter: max. 5.2 mm, wire end ferrules included stripped insulation length: 12 mm tightening torque: max. 2.3 Nm
Relay contact output	spring terminals conductor cross section: max. 1.5 mm <sup>2</sup> (AWG 24-16) cable diameter: max. 1.6 mm, wire end ferrules included stripped insulation length: 7 mm
Remote control/shutdown input	spring terminals conductor cross section: max. 1.5 mm <sup>2</sup> (AWG 24-16) cable diameter: max. 1.6 mm, wire end ferrules included stripped insulation length: 7 mm
Mass	approx. 1500 g
Dimensions	110 x 124 x 127 mm (W x H x D) , without DIN mounting rail
Mounting	on 35 mm DIN mounting rail acc. to EN 60715:2001
<b>International approvals</b>	
UL approval	E223176
<b>General information</b>	
Supplementary information	Observe the certificates, declarations of conformity, instruction manuals, and manuals where applicable. For information see <a href="http://www.pepperl-fuchs.com">www.pepperl-fuchs.com</a> .

## Assembly

### Front view



## Installation Conditions

Mount the device on the DIN mounting rail so that the input terminals are located on the bottom of the device.

This device is designed for convection cooling and does not require an external ventilator. Do not obstruct airflow. Do not cover the ventilation grid by more than 15 %, e. g. cable ducts.

If you load the device with more than 50 % of the rated power permanently keep the following mounting distances:

- 40 mm above
- 20 mm below
- 5 mm on the left and right side

Increase this distance to 15 mm if the adjacent device is a heat source, e. g. another power supply.

## Indication

Mode of operation	Red LED overload	Green LED status DC OK	Relay contact DC OK
Normal operation	OFF	ON	closed
Overload ( $V_{out} < 0\%$ )	ON	OFF	open
Output short circuit	ON	OFF	open
Temperature shutdown	flashing	OFF	open
Active shutdown input	flashing	OFF	open
No input power	OFF	OFF	open