

# TRIO-PS67/1AC/24DC/10/IPD - Power supply unit



1111664

<https://www.phoenixcontact.com/us/products/1111664>

Please be informed that the data shown in this PDF document is generated from our online catalog. Please find the complete data in the user documentation. Our general terms of use for downloads are valid.



Primary-switched power supply unit TRIO POWER, IPD panel feed-through with Push-in spring connection, Wall mounting, input: 1-phase, output: 24 V DC / 10 A

## Commercial data

Item number	1111664
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	CM08
Product key	CMPF13
GTIN	4063151031428
Weight per piece (including packing)	1,749 g
Weight per piece (excluding packing)	1,326 g
Customs tariff number	85044083
Country of origin	CN

## Technical data

### Input data

#### AC operation

Supply system configuration	Star network (TN, TT, IT (PE))
Nominal input voltage range	100 V AC ... 240 V AC
Input voltage range	100 V AC ... 240 V AC $\pm 10$ %
Switch-on voltage	> 75 V AC
Shut-down voltage	< 70 V AC
Electric strength, max.	$\leq 300$ V AC 15 s
Typical national grid voltage	120 V AC
	230 V AC
Voltage type of supply voltage	AC/DC
Inrush current	$\leq 25$ A (typical)
Inrush current integral ( $I^2t$ )	< 0.5 A <sup>2</sup> s
Inrush current limitation	typ. 25 A (after 1 ms)
AC frequency range	50 Hz ... 60 Hz $\pm 10$ %
Frequency range ( $f_N$ )	50 Hz ... 60 Hz $\pm 10$ %
Mains buffering time	> 15 ms (120 V AC)
	> 15 ms (230 V AC)
Current consumption	2.8 A (100 V AC)
	1.2 A (240 V AC)
Nominal power consumption	285 VA
Protective circuit	Transient surge protection; Varistor
Power factor (cos phi)	> 0.93
Switch-on time	< 1 s
Input fuse	6.3 A (internal (device protection))
Recommended breaker for input protection	6 A ... 16 A (US/CAN: branch circuit protection < 20 A) (Characteristic B, C, D, K or comparable)
Discharge current to PE	< 3.5 mA

#### DC operation

Nominal input voltage range	110 V DC ... 250 V DC
Input voltage range	110 V DC ... 250 V DC $\pm 10$ %
Switch-on voltage	$\geq 95$ V DC
Shut-down voltage	< 95 V DC
Voltage type of supply voltage	AC/DC
Mains buffering time	> 15 ms (230 V AC)
Current consumption	2.4 A (110 V DC)
	1.1 A (250 V DC)

### Output data

Efficiency	typ. 91 % (120 V AC)
------------	----------------------

# TRIO-PS67/1AC/24DC/10/IPD - Power supply unit



1111664

<https://www.phoenixcontact.com/us/products/1111664>

	typ. 93 % (230 V AC)
Nominal output voltage	24 V DC $\pm 1$ %
Nominal output current ( $I_N$ )	10 A
Dynamic Boost ( $I_{Dyn.Boost}$ )	15 A (5 s)
Derating	> 60 °C ... 70 °C (2.5%/K)
Feedback voltage resistance	$\leq 35$ V DC
Protection against overvoltage at the output (OVP)	$\leq 30$ V DC
Control deviation	< 1 % (change in load, static 10 % ... 90 %)
	< 3 % (Dynamic load change 10 % ... 90 %, 10 Hz)
	< 0.1 % (change in input voltage $\pm 10$ %)
Residual ripple	$\leq 10$ mV <sub>PP</sub>
Short-circuit-proof	yes
No-load proof	yes
Output power	240 W
	360 W
Maximum no-load power dissipation	< 10 W (120 V AC)
	< 6 W (230 V AC)
Power loss nominal load max.	< 22 W (120 V AC)
	< 17 W (230 V AC)
Rise time	$\leq 12$ ms ( $U_{OUT}$ (10 % ... 90 %))
Connection in parallel	yes, for redundancy and increased capacity
Connection in series	yes

Signal: DC OK

Maximum switching voltage	30 V AC/DC
Continuous load current	100 mA

Signal relay 13/14

Default	closed
Digital	30 V AC 30 V DC 100 mA

## Connection data

Input

Connection method	IPD panel feed-through with Push-in spring connection
Conductor cross section, rigid min.	0.5 mm <sup>2</sup>
Conductor cross section, rigid max.	2.5 mm <sup>2</sup>
Conductor cross section flexible min.	0.5 mm <sup>2</sup>
Conductor cross section flexible max.	2.5 mm <sup>2</sup>
Single conductor/terminal point, stranded, with ferrule, min.	0.5 mm <sup>2</sup>
Single conductor/terminal point, stranded, with ferrule, max.	2.5 mm <sup>2</sup>
Conductor cross section AWG max.	14
Color-coded	gray
Type of locking	Clip locking
Number of positions	3

# TRIO-PS67/1AC/24DC/10/IPD - Power supply unit



1111664

<https://www.phoenixcontact.com/us/products/1111664>

## Output

Connection method	IPD panel feed-through with Push-in spring connection
Conductor cross section, rigid min.	0.5 mm <sup>2</sup>
Conductor cross section, rigid max.	2.5 mm <sup>2</sup>
Conductor cross section flexible min.	0.5 mm <sup>2</sup>
Conductor cross section flexible max.	2.5 mm <sup>2</sup>
Single conductor/terminal point, stranded, with ferrule, min.	0.5 mm <sup>2</sup>
Single conductor/terminal point, stranded, with ferrule, max.	2.5 mm <sup>2</sup>
Conductor cross section AWG max.	14
Color-coded	black
Type of locking	Clip locking
Number of positions	3

## Signaling

Types of signaling	LED Floating signal contact
Status display	2 x green LEDs

### Signal output: LED status indicator

Signalization designation	AC OK
Status display	LED
Color	green
AC OK	$AC_{In} > 0.55 \times AC_N$ ( $AC_N = 90 \text{ V AC}$ )

### Signal output: LED status indicator

Signalization designation	DC OK
Status display	LED
Color	green
DC OK	$U_{OUT} > 0.9 \times U_N$ ( $U_N = 24 \text{ V DC}$ )

## Electrical properties

Number of phases	1.00
Insulation voltage input/output	3 kV AC (type test) 1.5 kV AC (routine test)

## Product properties

Product type	Power supply
Product family	TRIO POWER
MTBF (IEC 61709, SN 29500)	> 1200000 h (25 °C) > 700000 h (40 °C) > 300000 h (60 °C)

### Insulation characteristics

Protection class	I
Degree of pollution	3

# TRIO-PS67/1AC/24DC/10/IPD - Power supply unit



1111664

<https://www.phoenixcontact.com/us/products/1111664>

## Dimensions

### Item dimensions

Width	136 mm
Height	292 mm
Depth	53 mm

### Drill hole

Diameter	5.6 mm
----------	--------

### Installation dimensions

Installation distance right/left	20 mm / 20 mm
Installation distance top/bottom	50 mm / 100 mm

## Mounting

Mounting type	Wall mounting
Assembly instructions	Alignable: 20 mm horizontally, 50 mm vertically above, 100 mm vertically below
With protective coating	No

## Material specifications

Flammability rating according to UL 94 (housing / terminal blocks)	V0
Housing material	Metal
Type of housing	Aluminum (AlMg3)

## Environmental and real-life conditions

### Ambient conditions

Degree of protection	IP67
Ambient temperature (operation)	-25 °C ... 70 °C (Derating >60°C: 2.5 %/K)
Ambient temperature (storage/transport)	-40 °C ... 85 °C
Ambient temperature (start-up type tested)	-40 °C
Maximum altitude	≤ 4000 m (> 2000 m, Derating: 10 %/1000 m)
Climatic class	4K26 (EN 60721-3-4)
Max. permissible relative humidity (operation)	≤ 100 % (at 25 °C, non-condensing)
Permissible humidity (operation)	≤ 100 % (at 25 °C, non-condensing)
Shock	18 ms, 30g, in each space direction (according to IEC 60068-2-27)
Vibration (operation)	< 15 Hz, amplitude ±2.5 mm (according to IEC 60068-2-6) 15 Hz ... 150 Hz, 4g, 90 min.

## Standards and regulations

### Overvoltage category

EN 61010-1	III (≤ 2000 m)
	II (≤ 4000 m)

# TRIO-PS67/1AC/24DC/10/IPD - Power supply unit



1111664

<https://www.phoenixcontact.com/us/products/1111664>

## Electrical safety

Standard designation	Electrical safety
Standards/specifications	IEC 61010-1

## Protective extra-low voltage

Standard designation	Protective extra-low voltage
Standards/specifications	IEC 61010-1 (SELV)
	IEC 61010-2-201 (PELV)

## Safe isolation

Standard designation	Safe isolation
Standards/specifications	IEC 61558-2-16

## Low-voltage power supplies, DC output

Standard designation	Low-voltage power supplies, DC output
Standards/specifications	EN 61204-3

## Safety requirements for electrical equipment for measurement, control, and laboratory use

Standard designation	Safety requirements for electrical equipment for measurement, control, and laboratory use
Standards/specifications	IEC 61010-1

## Limit values for harmonic currents

Standard designation	Limit values for harmonic currents
Standards/specifications	EN 61000-3-2

## Degrees of protection provided by enclosures (IP code)

Standard designation	Degrees of protection provided by enclosures (IP code)
Standards/specifications	EN/IEC 60529

## Approvals

### UL

Identification	UL/C-UL Listed UL 61010-1
----------------	---------------------------

### UL

Identification	UL/C-UL Listed UL 61010-2-201
----------------	-------------------------------

## EMC data

Low Voltage Directive	Conformance with Low Voltage Directive 2014/35/EC
Interference emission	Interference emission in accordance with EN 61000-6-3 (residential and commercial) and EN 61000-6-4 (industrial)
Noise immunity	Immunity in accordance with EN 61000-6-1 (residential), EN 61000-6-2 (industrial)
Electromagnetic compatibility	Conformance with EMC Directive 2014/30/EU
Conducted noise emission	EN 55016
	EN 61000-6-3 (Class B)
Noise emission	EN 55011 (EN 55022)

# TRIO-PS67/1AC/24DC/10/IPD - Power supply unit



1111664

<https://www.phoenixcontact.com/us/products/1111664>

Noise emission	EN 55016
	EN 61000-6-3 (Class B)
Harmonic currents	
Standards/regulations	EN 61000-3-2
	EN 61000-3-2 (Class A)
Electrostatic discharge	
Standards/regulations	EN 61000-4-2
Electrostatic discharge	
Contact discharge	6 kV (Test Level 3)
Comments	Criterion A
Electromagnetic HF field	
Standards/regulations	EN 61000-4-3
Electromagnetic HF field	
Frequency range	80 MHz ... 1 GHz
Test field strength	10 V/m (Test Level 3)
Frequency range	1 GHz ... 2 GHz
Test field strength	10 V/m (Test Level 3)
Frequency range	2 GHz ... 6 GHz
Test field strength	10 V/m (Test Level 3)
Comments	Criterion A
Fast transients (burst)	
Standards/regulations	EN 61000-4-4
Fast transients (burst)	
Input	4 kV (Test Level 3 - asymmetrical)
Output	2 kV (Test Level 3 - asymmetrical)
Signal	2 kV (Test Level 3 - asymmetrical)
Comments	Criterion A
Surge voltage load (surge)	
Standards/regulations	EN 61000-4-5
Input	2 kV (Test Level 4 - symmetrical)
	4 kV (Test Level 4 - asymmetrical)
Output	1 kV (Test Level 3 - symmetrical)
	2 kV (Test Level 3 - asymmetrical)
Signal	1 kV (Test Level 2 - asymmetrical)
Comments	Criterion A
Conducted interference	
Standards/regulations	EN 61000-4-6
Conducted interference	

Input/Output	asymmetrical
Frequency range	0.15 MHz ... 80 MHz
Comments	Criterion A
Voltage	10 V (Test Level 3)

## Voltage dips

Standards/regulations	EN 61000-4-11
Voltage	230 V AC
Frequency	50 Hz
Voltage dip	70 %
Number of periods	25 periods
Comments	Criterion A
Voltage dip	40 %
Number of periods	10 periods
Comments	Criterion A
Voltage dip	0 %
Number of periods	1 period
Comments	Criterion A

## Emitted interference

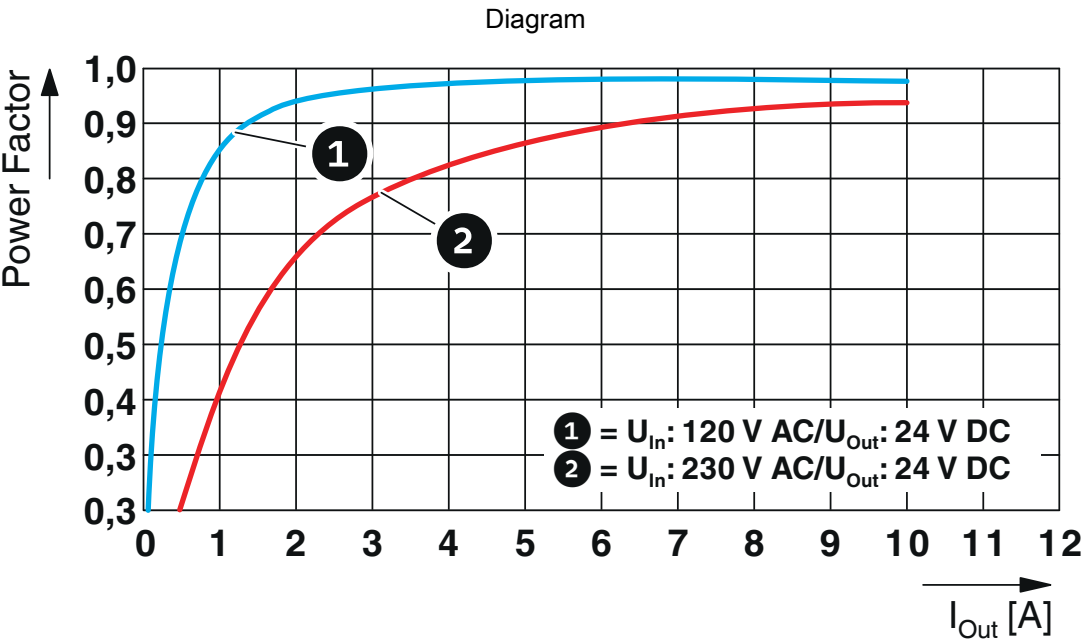
Standards/regulations	EN 61000-6-3
Radio interference voltage in acc. with EN 55011	EN 55011 (EN 55022) Class B, area of application: Industry and residential
Emitted radio interference in acc. with EN 55011	EN 55011 (EN 55022) Class B, area of application: Industry and residential

## Criteria

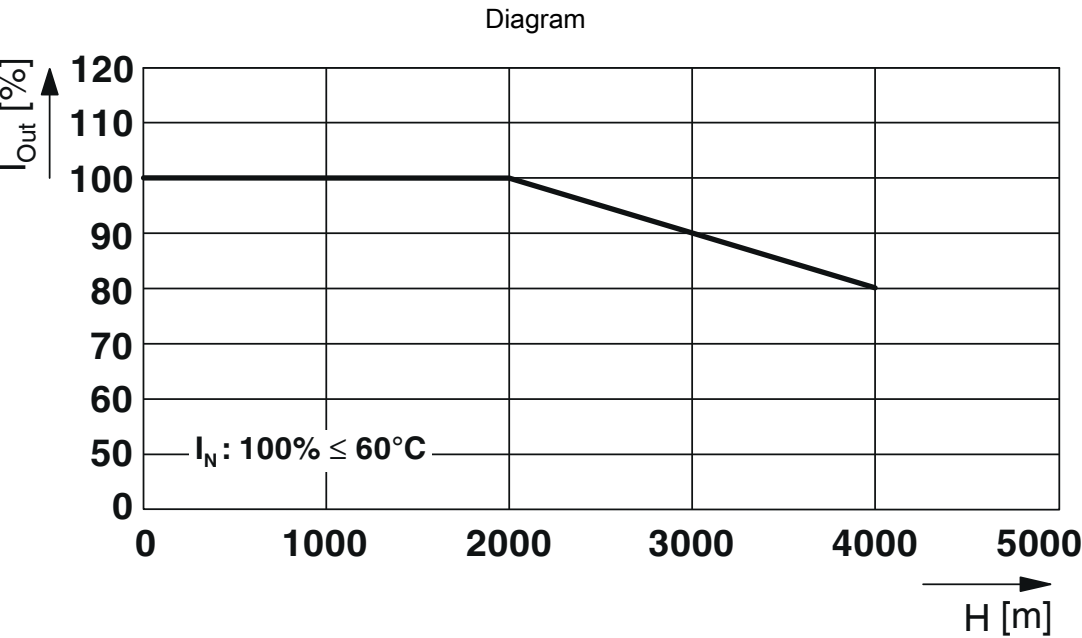
Criterion A	Normal operating behavior within the specified limits.
Criterion B	Temporary impairment to operational behavior that is corrected by the device itself.
Criterion C	Temporary adverse effects on the operating behavior, which the device corrects automatically or which can be restored by actuating the operating elements.



Drawings



Power factor



Output current/installation altitude

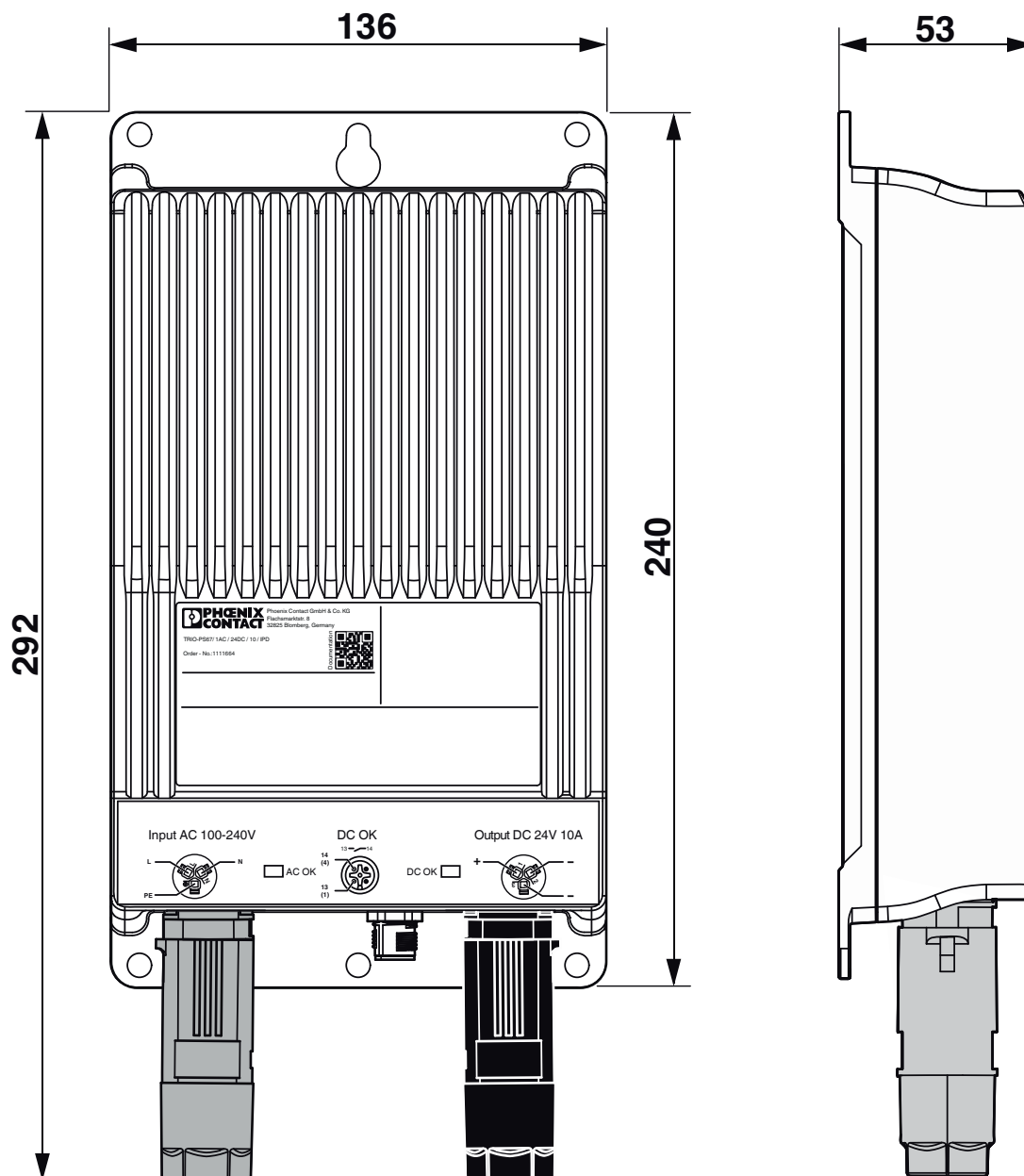
# TRIO-PS67/1AC/24DC/10/IPD - Power supply unit

1111664

<https://www.phoenixcontact.com/us/products/1111664>



Dimensional drawing

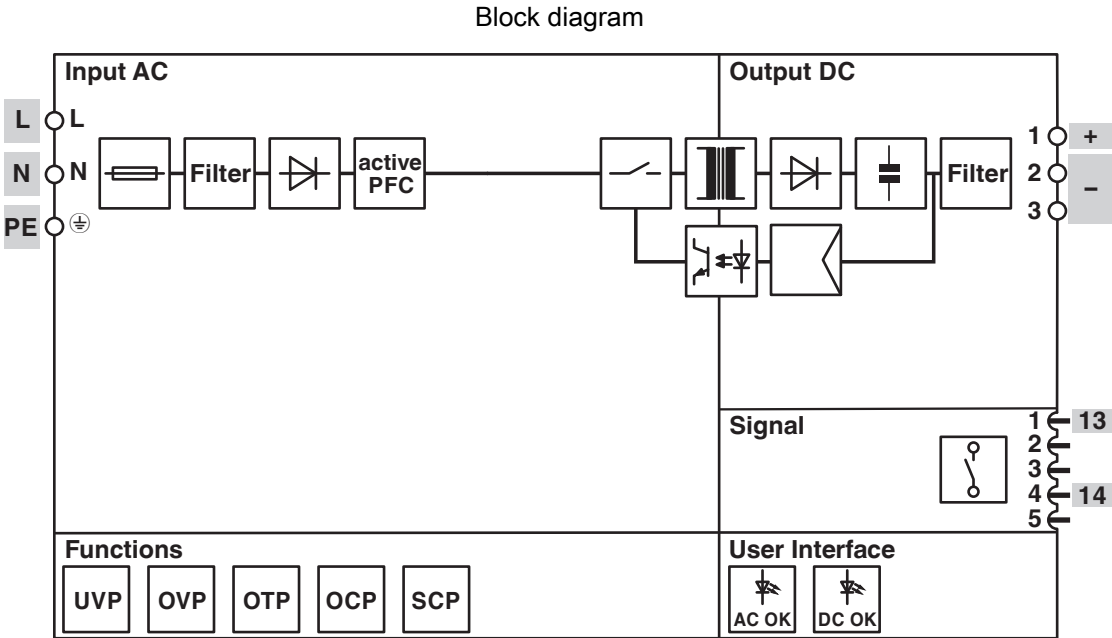


Device dimensions (dimensions in mm)

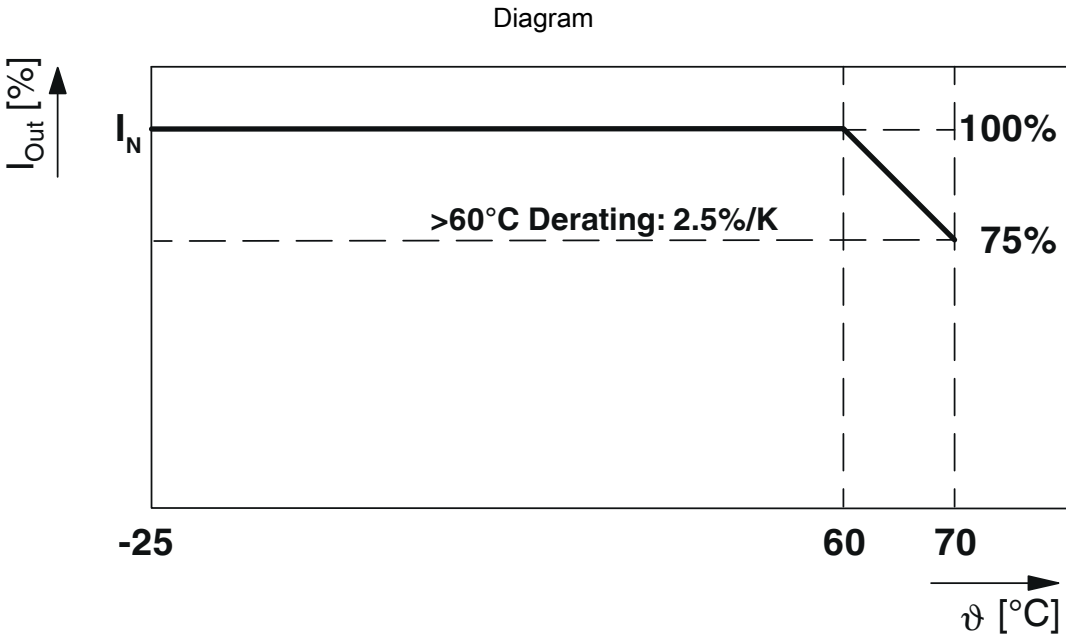
TRIO-PS67/1AC/24DC/10/IPD - Power supply unit



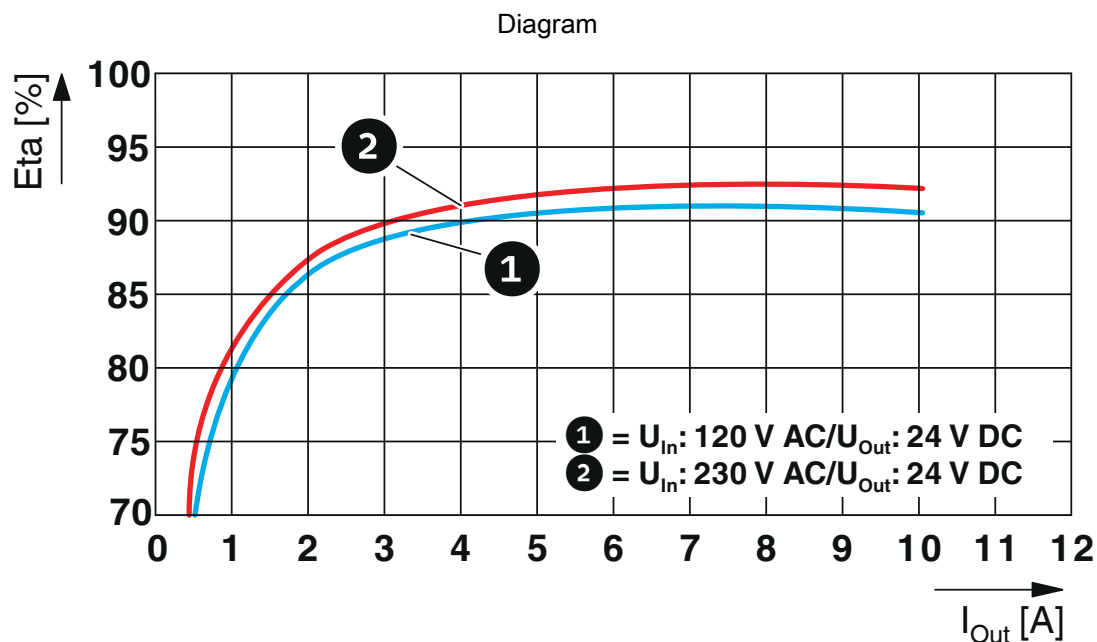
1111664  
<https://www.phoenixcontact.com/us/products/1111664>



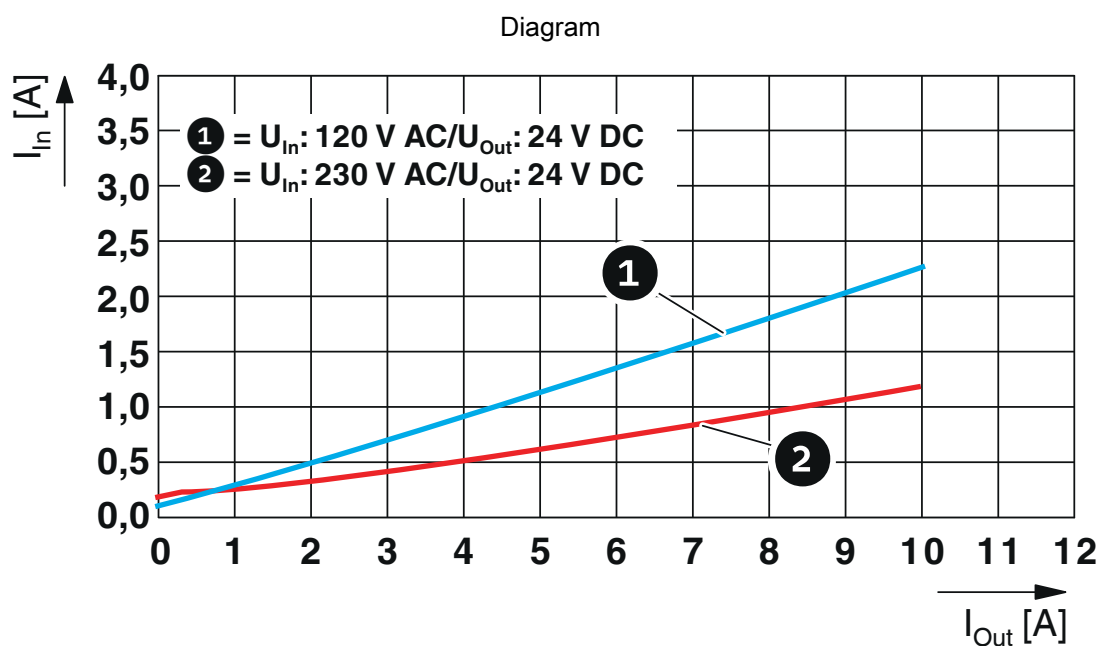
Block diagram



Output current/ambient temperature



Efficiency



Input current/output current

# TRIO-PS67/1AC/24DC/10/IPD - Power supply unit



1111664

<https://www.phoenixcontact.com/us/products/1111664>

## Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/1111664>



### IECEE CB Scheme

Approval ID: DK-135371-A1-UL



### EAC

Approval ID: C-DE.BL08.W.00764/20



### cULus Listed

Approval ID: FILE E 123528

# TRIO-PS67/1AC/24DC/10/IPD - Power supply unit



1111664

<https://www.phoenixcontact.com/us/products/1111664>

## Classifications

### ECLASS

ECLASS-11.0	27040701
ECLASS-12.0	27040701
ECLASS-13.0	27040701

### ETIM

ETIM 8.0	EC002540
----------	----------

### UNSPSC

UNSPSC 21.0	39121000
-------------	----------

Environmental product compliance

REACH SVHC	Lead 7439-92-1
China RoHS	Environmentally Friendly Use Period = 25;
	For information on hazardous substances, refer to the manufacturer's declaration available under "Downloads"

# TRIO-PS67/1AC/24DC/10/IPD - Power supply unit



1111664

<https://www.phoenixcontact.com/us/products/1111664>

## Accessories

### SACC-M12FS-5PL M - Connector

1424652

<https://www.phoenixcontact.com/us/products/1424652>



Connector, Universal, 5-position, unshielded, Socket straight M12, A, Push-lock spring connection, knurl material: Zinc die-cast, nickel-plated, external cable diameter 4 mm ... 8 mm

---

### SAC-5P- 1,5-PUR/M12FS - Sensor/actuator cable

1669822

<https://www.phoenixcontact.com/us/products/1669822>



Sensor/actuator cable, 5-position halogen-free, free cable end, on Socket straight M12, coding: A, cable length: 1.5 m



# TRIO-PS67/1AC/24DC/10/IPD - Power supply unit



1111664

<https://www.phoenixcontact.com/us/products/1111664>

## IPD WD 3P2,5 M20 GY - Panel feed-through

1047319

<https://www.phoenixcontact.com/us/products/1047319>



Panel feed-through, Push-in connection, number of positions: 2+PE, 0.5 mm<sup>2</sup> ... 2.5 mm<sup>2</sup>, 600 V, 20 A, light grey, external cable diameter: 6 mm ... 9 mm and 8 mm ... 13 mm, assembly thread: M20, Push-in connection

## IPD WD 3X2,5 M20 BK - Panel feed-through

1189585

<https://www.phoenixcontact.com/us/products/1189585>



Panel feed-through, Push-in connection, 0.5 mm<sup>2</sup> ... 2.5 mm<sup>2</sup>, 600 V, 15 A, black, external cable diameter: 6 mm ... 9 mm and 8 mm ... 13 mm, Push-in connection

Phoenix Contact 2023 © - all rights reserved  
<https://www.phoenixcontact.com>

Phoenix Contact USA  
586 Fulling Mill Road  
Middletown, PA 17057, United States  
(+717) 944-1300  
[info@phoenixcon.com](mailto:info@phoenixcon.com)