

wipos



 **wieland**

wipos
Power supply units

Pure power















wipos Power supply units

Pure Power. No-Frills.

Power supplies perform a central function in the control cabinet. Their reliability affects the availability of the machine or the process to a great degree. That is why a robust and proven design is very important for a power supply unit. There are no unnecessary frills with the **wipos** family. Instead, these power supply units score with their fundamental features.

wipos satisfies your requirements in the significant disciplines:



 100% power up to 60°C	 Can be connected in parallel (from 5 A) to increase power and redundancy
 Automatic or wide-input voltage range for worldwide use	 High operational reliability due to long hold-up times >30ms
 PFC technology for high functional reliability	 Compensation of voltage drops via adjustable output voltage
 Outdoor installation possible due to wide temperature range	 Easy to commission via LED diagnosis
 Active monitoring with signalling contact	 For mounting on DIN Rail TS 35 / TS 32



wipos P1 Modules

Power supply wipos
P1 24-1.25
P1 24-2.5



Type	Part No.	Part No.
wipos P1 24-1.25	81.000.6110.0	
wipos P1 24-2.5		81.000.6120.0
Technical Data		
Input voltage	85 – 264 V AC, 90 – 375 V DC	
PFC	not necessary	not necessary
Hold up time	> 30 ms at 230 V	> 30 ms at 230 V
Output voltage	24 – 28 V	24 – 28 V
Output current	1.25 A	2.5 A
Parallel operation	no	no
In series connectable	yes	yes
Temperature range	-40 ... +70 °C	-40 ... +70 °C
Derating	>60 °C	> 60 °C
Signal contact	yes	yes
Dimensions (mm) W x H x D	40.5 x 90 x 114	40.5 x 90 x 114
Weight	290 g	360 g
Type of connectors	Screw terminal	Screw terminal
Connector size	0.2 – 2.5 mm ² (AWG 24 – 14)	0.2 – 2.5 mm ² (AWG 24 – 14)
Efficiency	83 – 86 %	86 – 89 %
Approvals	CE, UL 1310 Class 2 Haz. Class I Div.2	CE, UL 1310 Class 2 Haz. Class I Div.2

Power supply wipos
P1 24-3.8
P1 24-5



Type	Part No.	Part No.
wipos P1 24-3.8	81.000.6135.0	
wipos P1 24-5		81.000.6130.0
Technical Data		
Input voltage	115/230V AC auto, 210 – 375V DC	
PFC	yes	yes
Hold up time	> 30 ms at 230 V	> 30 ms at 230 V
Output voltage	22.5 – 24,5 V	22.5 – 28.5 V
Output current	3.8 A	5 A
Parallel operation	no	yes (up to 3)
In series connectable	yes	yes
Temperature range	-35 ... +70 °C	-35 ... +70 °C
Derating	> 60 °C	> 60 °C
Signal contact	yes	yes
Dimensions (mm) W x H x D	64 x 124.5 x 123.6	64 x 124.5 x 123.6
Weight	920 g	920 g
Type of connectors	Screw terminal	Screw terminal
Connector size	0.5 – 6 mm ² (AWG 22 – 10)	0.5 – 6 mm ² (AWG 22 – 10)
Efficiency	83 – 85 %	84 – 86 %
Approvals	CE, UL 1310 Class 2 Haz. Class I Div.2	CE, Haz. Class I Div.2

Power supply wipos
P1 24-10
P1 24-20



Type	Part No.	Part No.
wipos P1 24-10	81.000.6140.0	
wipos P1 24-20		81.000.6150.0
Technical Data		
Input voltage	115/230V AC auto, 210–375V DC	115/230V AC auto 120–370V DC
PFC	yes	yes
Hold up time	> 30 ms at 230 V	> 30 ms at 230 V
Output voltage	22.5 – 28.5 V	22.5 – 28.5 V
Output current	10 A	20A
Parallel operation	yes (up to 3)	yes (up to 3)
In series connectable	yes	yes
Temperature range	-40 ... +70 °C	-40 ... +70 °C
Derating	> 60 °C	> 55 °C
Signal contact	yes	yes
Dimensions (mm) W x H x D	83.5 x 124.5 x 123.6	175.5 x 124.5 x 123.6
Weight	1300 g	1920 g
Type of connectors	Screw terminal	Screw terminal
Connector size	0.5 – 6 mm ² (AWG 22 – 10)	0.5 – 6 mm ² (AWG 22 – 10)
Efficiency	87 – 89 %	86 – 89 %
Approvals	CE, Haz. Class I Div.2	CE, Haz. Class I Div.2

wipos P1 Modules

Power supply *wipos* P1 12-5



Type	Part No.
wipos P1 12-5	81.000.6132.0
Technical Data	
Input voltage	85 – 264 V AC, 90 – 375 V DC
PFC	not necessary
Hold up time	>30 ms at 230 V
Output voltage	12 – 14 V
Output current	5 A
Parallel operation	no
In series connectable	yes
Temperature range	-40 ... +70 °C
Derating	>61 °C
Signal contact	no
Dimensions (mm) W x H x D	40,5 x 90 x 114
Weight	340 g
Type of connectors	Screw terminal
Connector size	0.2 – 2.5 mm ² (AWG 24 – 14)
Efficiency	86 %
Approvals	CE Haz. Class I Div.2

Power supply *wipos* P1 12-10



Type	Part No.
wipos P1 12-10	81.000.6142.0
Technical Data	
Input voltage	115/230V AC auto, 210 – 375 V DC
PFC	not necessary
Hold up time	>30 ms at 230 V
Output voltage	11,4 – 14,5 V
Output current	10 A
Parallel operation	yes (up to 3)
In series connectable	yes
Temperature range	-35 ... +70 °C
Derating	>61 °C
Signal contact	no
Dimensions (mm) W x H x D	64 x 124.5 x 123.6
Weight	920 g
Type of connectors	Screw terminal
Connector size	0.5 – 6 mm ² (AWG 22 – 10)
Efficiency	84 %
Approvals	CE Haz. Class I Div.2

Power supply *wipos* P1 48-5



Type	Part No.
wipos P1 48-5	81.000.6134.0
Technical Data	
Input voltage	115/230 V AC auto, 210 – 375 V DC
PFC	not necessary
Hold up time	>30 ms at 230 V
Output voltage	47 – 56 V
Output current	5 A
Parallel operation	yes (up to 3)
In series connectable	yes
Temperature range	-40 ... +70 °C
Derating	>61 °C
Signal contact	no
Dimensions (mm) W x H x D	83.5 x 124.5 x 123.6
Weight	1380 g
Type of connectors	Screw terminal
Connector size	0.5 – 6 mm ² solid/fine str. (AWG 22 – 10)
Efficiency	90 %
Approvals	CE Haz. Class I Div.2



wipos P3 Modules

Power supply wipos
P3 24-5
P3 24-10



Type	Part No.	Part No.
wipos P3 24-5	81.000.6160.0	
wipos P3 24-10		81.000.6170.0
Technical Data		
Input voltage	340 – 575VAC 480 – 820VDC	340 – 575VAC 480 – 820VDC
PFC	yes (0.55)	yes (0.6)
Hold up time	20 ms	20 ms
Output voltage	22.5 – 28.5 V	22.5 – 28.5 V
Output current	5 A	10 A
Parallel operation	yes (up to 2)	yes (up to 2)
In series connectable	yes	yes
Temperature range	-40 ... +70 °C	-40 ... +70 °C
Derating	>60 °C	>60 °C
Signal contact	yes	yes
Dimensions (mm) W x H x D	75 x 124 x 119	89 x 124 x 119
Weight	800 g	1100 g
Type of connectors	Screw terminal	Screw terminal
Connector size	to 6 mm ² (AWG 10)	to 6 mm ² (AWG 10)
Efficiency	88 – 90 %	88 – 90 %
Approvals	CE Haz. Class I Div.2	CE Haz. Class I Div.2

Power supply wipos
P3 24-20



Type	Part No.
wipos P3 24-20	81.000.6180.0
Technical Data	
Input voltage	340 – 575VAC 480 – 820VDC
PFC	yes (0.7)
Hold up time	20 ms
Output voltage	22.5 – 28.5 V
Output current	20 A
Parallel operation	yes (up to 2)
In series connectable	yes
Temperature range	-30 ... +70 °C
Derating	>60 °C
Signal contact	yes
Dimensions (mm) W x H x D	150 x 124 x 119
Weight	1750 g
Type of connectors	Screw terminal
Connector size	to 6 mm ² (AWG 10)
Efficiency	88 – 90 %
Approvals	CE Haz. Class I Div.2

Power supply wipos
P3 24-40



Type	Part No.
wipos P3 24-40	81.000.6190.0
Technical Data	
Input voltage	340 – 575VAC 480 – 820VDC
PFC	yes (0.7)
Hold up time	15 ms
Output voltage	22.5 – 28.5 V
Output current	40 A
Parallel operation	yes (up to 2)
In series connectable	yes
Temperature range	-40 ... +70 °C
Derating	>60 °C
Signal contact	yes
Dimensions (mm) W x H x D	276 x 127 x 119
Weight	3200 g
Type of connectors	Screw terminal
Connector size	to 6 mm ² (AWG 10)/ output to 16 mm ² (AWG 6)
Efficiency	90 – 92 %
Approvals	CE Haz. Class I Div.2

wipos Modules

Redundancy module *wipos* R20



Type	Part No.
wipos R20	81.000.6200.0
Technical Data	
Input voltage	21 – 28 V DC
Input current	20 A (in total)
Output current	20 A
Typical voltage drop	0.5 V
Temperature range	-40 ... +70 °C
Signal contact	one each for channel A and B
Signal contact	1 A at 30 V DC
Display/Relay OK	Input voltage 20...30 V (+/-5 %)
Display/Relay fail	Input voltage <20 V or >30 V (+/-5 %)
Dimensions (mm) W x H x D	54 x 90 x 114
Weight	210 g
Type of connectors	Screw terminal
Connector size	0.2 – 2.5 mm ² (AWG 24–12)
Connector size for signal contacts	0.2 – 1.5 mm ² (AWG 24–14)
Approvals	CE

Fusing module *wipos* FM 4-10



Type	Part No.
wipos FM 4-10	81.000.6210.0
Technical Data	
Input voltage	18 – 30 V
Output current via all 4 fuses	40 A max.
Output voltage	24 V (equivalent to input voltage)
Number of fusing circuits	4
Nominal current of fuse	max. 10 A (check power losses of fuse)
Fuses	4 x G-fuse holder 5 x 20 mm
LED	one per fuse, LED lights whe fuse is broken
Alarm contact	yes
Temperature range	0 ... +60 °C
Dimensions (mm) W x H x D	48 x 96 x 68
Mounting type	DIN rail mounting
Weight	110 g
Type of connectors	Screw terminal
Connector size input	10 mm ² (AWG 8)
Connector size output	up to 4 mm ² (AWG 12) solid, 2.5 mm ² (AWG 14) fine-stranded
Approvals	CE

Uninterrupted power supply *wipos* UPS 24-30



Type	Part No.
wipos UPS 24-30	81.000.6220.0
Technical Data	
Rated input voltage U _{IN}	24 V DC
Input current	max. 35 A
Rated output voltage U _{OUT}	24 V DC
Output current I _{OUT}	max. 30 A
Output voltage (battery mode)	18.7 – 28.0 V
Output current (battery mode)	max. 30 A
Temperature range	-40 ... +70 °C
Derating	> 51 °C
Signal contact mains or battery current	yes
Signal contact discharge battery	yes
Signal contact broken battery	yes
Battery type	Lead-acid or lead-gel
Battery size	2 ... 12 Ah / 2 x 12 V
Dimensions (mm) W x H x D	54 x 90 x 114
Weight	370 g
Type of connectors	Screw terminal
Connector size	0.2–4 mm ² (AWG 24–12)
Approvals	CE



wipos PB1 Modules

Power supply wipos
PB1 5-1.5
PB1 5-3



Type	Part No.	
wipos PB1 5-1.5	81.000.6321.0	
wipos PB1 5-3	81.000.6331.0	
Technical Data		
Input voltage	90 – 264 V AC, 120 – 375 V DC	90 – 264 V AC, 120 – 375 V DC
PFC	not necessary	not necessary
Hold up time	> 30 ms at 230 V	> 80 ms at 230 V
Output voltage	5 V	5 – 5.5 V
Output current	1.5 A	3 A
Temperature range	-40 ... +70 °C	-40 ... +70 °C
Derating	> 61 °C	> 61 °C
LED display	yes	yes
Dimensions W x H x D	18 x 91 x 57	35 x 91 x 57
Installation dimensions	for junction boxes and flat control panels	for junction boxes and flat control panels
Mounting type	DIN rail mounting	DIN rail mounting
Weight	65 g	130 g
Type of connectors	Screw terminal	Screw terminal
Connector size	0.2 – 2.5 mm ² (AWG 24–14)	0.2 – 2.5 mm ² (AWG 24–14)
Efficiency	74 %	82 %
Approvals	CE UL 1310 Class 2 Haz. Class I Div.2	CE UL 1310 Class 2

Power supply wipos
PB1 12-0.83
PB1 24-0.42



Type	Part No.	
wipos PB1 12-0.83	81.000.6302.0	
wipos PB1 24-0.42	81.000.6300.0	
Technical Data		
Input voltage	90 – 264 V AC, 120 – 375 V DC	90 – 264 V AC, 120 – 375 V DC
PFC	not necessary	not necessary
Hold up time	> 30 ms at 230 V	> 30 ms at 230 V
Output voltage	12 V	24 – 28 V
Output current	0.83 A	0.42 A
Temperature range	-40 ... +70 °C	-25 ... +70 °C
Derating	> 61 °C: 100 %, 70 °C: 75 %	> 60 °C
LED display	yes	yes
Dimensions W x H x D	18 x 91 x 57	18 x 91 x 57
Installation dimensions	for junction boxes and flat control panels	for junction boxes and flat control panels
Mounting type	DIN rail mounting	DIN rail mounting
Weight	65 g	65 g
Type of connectors	Screw terminal	Screw terminal
Connector size	0.2 – 2.5 mm ² (AWG 24–14)	0.2 – 2.5 mm ² (AWG 24–14)
Efficiency	78 %	80 %
Approvals	CE Haz. Class I Div.2	CE UL 1310 Class 2 Haz. Class I Div.2

Power supply wipos
PB1 12-2
PB1 24-1



Type	Part No.	
wipos PB1 12-2	81.000.6322.0	
wipos PB1 24-1	81.000.6310.0	
Technical Data		
Input voltage	90 – 264 V AC, 120 – 375 V DC	90 – 264 V AC, 120 – 375 V DC
PFC	not necessary	not necessary
Hold up time	> 80 ms at 230 V	> 80 ms at 230 V
Output voltage	12 – 14 V	24 – 28 V
Output current	2 A	1 A
Temperature range	-40 ... +70 °C	-25 ... +70 °C
Derating	> 61 °C: 100 %, 70 °C: 75 %	> 60 °C
LED display	yes	yes
Dimensions W x H x D	35 x 91 x 57	35 x 91 x 57
Installation dimensions	for junction boxes and flat control panels	for junction boxes and flat control panels
Mounting type	DIN rail mounting	DIN rail mounting
Weight	130 g	130 g
Type of connectors	Screw terminal	Screw terminal
Connector size	0.2 – 2.5 mm ² (AWG 24–14)	0.2 – 2.5 mm ² (AWG 24–14)
Efficiency	84 %	85 %
Approvals	CE UL 1310 Class 2	CE UL 1310 Class 2

wipos PB1 Modules

Power supply wipos
PB1 12-2.75
PB1 24-1.5



Type	Part No.	Part No.
wipos PB1 12-2.75	81.000.6332.0	
wipos PB1 24-1.5		81.000.6320.0
Technical Data		
Input voltage	90 – 264 V AC, 120 – 375 V DC	90 – 264 V AC, 120 – 375 V DC
PFC	not necessary	not necessary
Hold up time	> 60 ms at 230 V	> 100 ms at 230 V
Output voltage	12 – 14 V	24 – 28 V
Output current	4.5 A	1.5 A
Temperature range	-40 ... +70 °C	-25 ... +70 °C
Derating	> 56 °C	> 56 °C
LED display	yes	yes
Dimensions W x H x D	71 x 91 x 57	53 x 91 x 57
Installation dimensions	for junction boxes and flat control panels	for junction boxes and flat control panels
Mounting type	DIN rail mounting	DIN rail mounting
Weight	250 g	190 g
Type of connectors	Screw terminal	Screw terminal
Connector size	0.2 – 2.5 mm ² (AWG 24–14)	0.2 – 2.5 mm ² (AWG 24–14)
Efficiency	84 %	84 %
Approvals	CE UL 1310 Class 2	CE UL 1310 Class 2

Power supply wipos
PB1 12-4.5
PB1 24-2.5



Type	Part No.	Part No.
wipos PB1 12-4.5	81.000.6342.0	
wipos PB1 24-2.5		81.000.6330.0
Technical Data		
Input voltage	90 – 264 V AC, 120 – 375 V DC	90 – 264 V AC, 120 – 375 V DC
PFC	not necessary	not necessary
Hold up time	> 60 ms at 230 V	> 60 ms at 230 V
Output voltage	12 – 14 V	24 – 28 V
Output current	4.5 A	2.5 A
Temperature range	-40 ... +70 °C	-25 ... +70 °C
Derating	> 56 °C	> 60 °C
LED display	ja	yes
Dimensions W x H x D	71 x 91 x 57	71 x 91 x 57
Installation dimensions	for junction boxes and flat control panels	for junction boxes and flat control panels
Mounting type	DIN rail mounting	DIN rail mounting and screw connection
Weight	250 g	250 g
Type of connectors	Screw terminal	Screw terminal
Connector size	0.2 – 2.5 mm ² (AWG 24–14)	0.2 – 2.5 mm ² (AWG 24–14)
Efficiency	84 %	86 %
Approvals	CE UL 1310 Class 2 Haz. Class I Div.2	CE UL 1310 Class 2 Haz. Class I Div.2

Power supply wipos
PB1 24-4.2



Type	Part No.
wipos PB1 24-4.2	81.000.6340.0
Technical Data	
Input voltage	90 – 264 V AC, 120 – 375 V DC
PFC	not necessary
Hold up time	> 60 ms at 230 V
Output voltage	24 – 28 V
Output current	4.2 A
Temperature range	-40 ... +70 °C
Derating	> 60 °C
LED display	yes
Dimensions W x H x D	90 x 91 x 57
Installation dimensions	for junction boxes and flat control panels
Mounting type	DIN rail mounting and screw connection
Weight	380 g
Type of connectors	Screw terminal
Connector size	0.2 – 2.5 mm ² (AWG 24–14)
Efficiency	89 %
Approvals	CE Haz. Class I Div.2



Hotline – one call is all it takes

Our Technical Service Department is ready to answer your questions about product features, application options and functionality of our products and equipment:

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Industrial technology

Solutions for the control cabinet

- DIN rail terminal blocks
 - Screw, tension spring or push-in connection technology
 - Wire cross sections up to 240 mm²
 - Numerous special functions
 - Software solutions interfacing to CAE systems
- Safety
 - Safe signal acquisition
 - Safety switching devices
 - Modular safety modules
 - Compact safety controllers
 - Application consulting and training
- Network engineering and fieldbus systems
 - Remote maintenance via VPN industrial router and VPN service portal
 - Industrial Ethernet switches
 - PLC and I/O systems, standard and increased environmental conditions
- Interface
 - Power supply units
 - Overvoltage protection
 - Coupling relays, semiconductor switches
 - Timer relays, measuring and monitoring relays
 - Analog coupling and converter modules
 - Passive interfaces

Solutions for field applications

- Decentralized installation and automation technology
 - Electrical installation for wind tower
 - Fieldbus interfaces and motor starters
- Connectors for industrial applications
 - Rectangular and round connectors
 - Aluminum or plastic housings
 - Degree of protection up to IP68
 - Current-carrying capacity up to 100 A
 - Connectors for hazardous areas
 - Modular, application-specific technology

PC board terminals and connectors

- Screw or spring clamp connection technology
- Spacings: 3.5 mm to 10.16 mm
- Reflow or wave soldering process

Building and installation technology

- Building installation systems
 - Main power supply connectors IP20/IP65...IP68
 - Bus connectors
 - Low-voltage connectors
 - Power distribution system with flat cables
 - Distribution systems
 - Bus systems in KNX, LON and wireless technology
 - DIN rail terminal blocks for electrical installations
 - Overvoltage protection

contacts
are
green.