wieland

wipos



wipos
Power supply units

Pure power






wieland



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 >30 ms
- **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 mm² (AWG 24–14)	0.2 – 2.5 mm² (AWG 24–14)
Efficiency	83 – 86 %	86 – 89 %
Approvals	CE cULus UL 1310 Class 2 Haz. cULus Class I Div.2	CE cULus UL 1310 Class 2 Haz. cULus 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	115/230 V AC auto, 210 – 375 V 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 mm² (AWG 22–10)	0.5 – 6 mm² (AWG 22–10)
Efficiency	83 – 85 %	84 – 86 %
Approvals	CE cULus UL 1310 Class 2 Haz. cULus Class I Div.2	CE cULus Haz. cULus 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	115/230 V AC auto, 210–375 V DC	115/230 V AC auto 120–370 V 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	20 A
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 mm² (AWG 22–10)	0.5 – 6 mm² (AWG 22–10)
Efficiency	87 – 89 %	86 – 89 %
Approvals	CE cULus Haz. cULus Class I Div.2	CE cULus Haz. cULus 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 mm² (AWG 24 – 14)
Efficiency	86 %
Approvals	CE cULus Haz. cULus 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	115/230 V 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 mm² (AWG 22 – 10)
Efficiency	84 %
Approvals	CE cULus Haz. cULus 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 mm² solid/fine str. (AWG 22 – 10)
Efficiency	90 %
Approvals	CE cULus Haz. cULus 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 – 575 VAC 480 – 820 VDC	340 – 575 VAC 480 – 820 VDC
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 mm² (AWG 10)	to 6 mm² (AWG 10)
Efficiency	88 – 90 %	88 – 90 %
Approvals	CE cULus Haz. cULus Class I Div.2	CE cULus Haz. cULus 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 – 575 VAC 480 – 820 VDC
PFC	yes (0.7)
Hold up time	20 ms
Output voltage	22.5 – 28.5 V
Output current	20 A
Parallel operation	yes (up to2)
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 mm² (AWG 10)
Efficiency	88 – 90 %
Approvals	CE cULus Haz. cULus 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 – 575 VAC 480 – 820 VDC
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 mm² (AWG 10)/ output to 16 mm² (AWG 6)
Efficiency	90 – 92 %
Approvals	CE cULus Haz. cULus 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 mm² (AWG 24–12)
Connector size for signal contacts	0.2 – 1.5 mm² (AWG 24–14)
Approvals	CE cULus

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 mm² (AWG 8)
Connector size output	up to 4 mm² (AWG 12) solid,2.5 mm² (AWG 14) fine-stranded
Approvals	CE cULus

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 mm² (AWG 24–12)
Approvals	CE cULus

wipos PB1 Modules

Power supply *wipos* PB1 5-1.5 PB1 5-3



Type	Part No.	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 mm² (AWG 24–14)	0.2 – 2.5 mm² (AWG 24–14)
Efficiency	74 %	82 %
Approvals	CE cULus UL 1310 Class 2 Haz. cULus Class I Div.2	CE cULus 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 mm² (AWG 24–14)	0.2 – 2.5 mm² (AWG 24–14)
Efficiency	78 %	80 %
Approvals	CE cULus Haz. cULus Class I Div.2	CE cULus UL 1310 Class 2 Haz. cULus 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 mm² (AWG 24–14)	0.2 – 2.5 mm² (AWG 24–14)
Efficiency	84 %	85 %
Approvals	CE cULus UL 1310 Class 2	CE cULus 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 mm² (AWG 24 – 14)	0.2 – 2.5 mm² (AWG 24 – 14)
Efficiency	84 %	84 %
Approvals	CE cULus UL 1310 Class 2	CE cULus 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 mm² (AWG 24 – 14)	0.2 – 2.5 mm² (AWG 24 – 14)
Efficiency	84 %	86 %
Approvals	CE cULus UL 1310 Class 2 Haz. cULus Class I Div.2	CE cULus UL 1310 Class 2 Haz. cULus 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 mm² (AWG 24 – 14)
Efficiency	89 %
Approvals	CE cULus Haz. cULus 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 IP 68
  - 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 IP 20/IP 65 ... IP 68
  - 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.

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