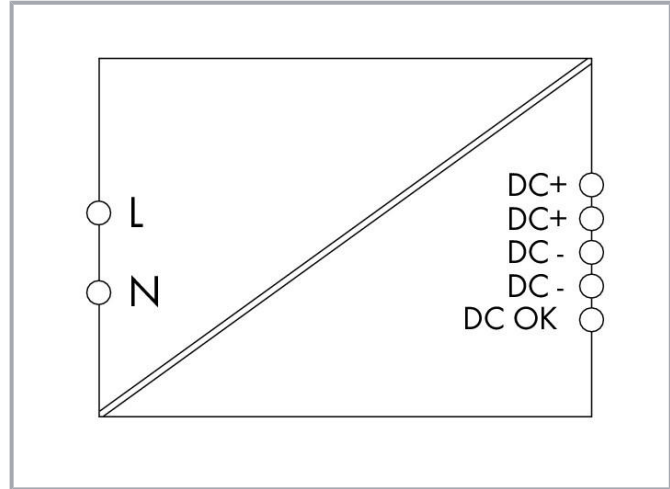


**Data sheet | Item number: 787-1606**

Switched-mode power supply; Classic; 1-phase; 24 VDC output voltage; 2 A output current; NEC Class 2; DC OK signal



[www.wago.com/787-1606](http://www.wago.com/787-1606)



Subject to changes. Please also observe the further product documentation!

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We are always happy to take your call at +49 (571) 887-44222.



## Item description

### Features:

- Switched-mode power supply
- Natural convection cooling when horizontally mounted
- Encapsulated for use in control cabinets
- Limited Power Source (LPS) per NEC Class 2
- Bounce-free switching signal (DC OK)
- Suitable for both parallel and series operation
- Electrically isolated output voltage (SELV) per EN 60950-1/UL 60950-1; PELV per EN 60204
- GL approval, also suitable for EMC 1 in conjunction with 787-980 Filter Module

Subject to changes. Please also observe the further product documentation!

## Data

## Technical data

Power loss $P_I$	$\leq 1$ W (230 VAC; no load); $\leq 6$ W (230 VAC; nominal load)
Power loss (max.) $P_{I(max.)}$	7 W (100 VAC / 24 VDC; 2 A)
Efficiency (typ.)	89 %
Nominal output voltage $U_{o nom}$	DC 24 V (SELV)
Output voltage range	DC 23 ... 28.5 V (adjustable)
Default setting	DC 24 V
Nominal output current $I_{o nom}$	2 A (24 VDC); 2.2 A (< 40 °C)
Nominal output power	48 W
Control deviation	$\leq 1$ %
Residual ripple	$\leq 20$ mV (peak-to-peak)
Current limitation	$1.1 \times I_{o nom}$ (typ.)
Overload behavior	Constant current
Isolation voltage (Pri.-Sec.)	DC 4.242 kV
Protection class	II
Protection type	IP20 (per EN 60529)
Resistance to reverse feed	$\leq$ DC 35 V
Overvoltage category	II
Pollution degree	2
Transient suppression (primary)	Varistor
Overvoltage protection; secondary	Internal protective circuit $\leq 37$ VDC (in the event of a fault)
Short-circuit-protected	Yes
Open-circuit-proof	Yes
Parallel operation	Yes
Series operation	Yes
MTBF	> 500,000 h (per IEC 61709)
Internal fuse	T 4 A / 250 VAC
Required backup fusing	An external DC fuse is required for the DC input voltage.
Recommended backup fusing	Circuit breaker: 6 A, 10 A, 16 A; Tripping characteristic: B or C
Phases	1
Nominal input voltage $U_{i nom}$	1 x AC 100 ... 240 V
Input voltage range	AC 85 ... 264 V; DC 120 ... 372 V
Input voltage derating	-2.5 %/V (< 95 VAC)
Nominal mains frequency range	44 ... 66 Hz; 0 Hz

Subject to changes. Please also observe the further product documentation!



Input current $I_i$	$\leq 0.48$ A (240 VAC); $\leq 0.82$ A (100 VAC)
Discharge current	$\leq 0.25$ mA
Inrush current	$\leq 30$ A
Power factor correction (PFC)	Passive
Mains failure hold-up time	$\geq 120$ ms (230 VAC); $\geq 20$ ms (100 VAC)
Signaling	1 x LED DC OK (green) 1 x Active signal output DC OK (24 VDC; 20 mA)
Operation status indicator	Green LED ( $U_o$ )

### Connection data

Connection type (1)	Input/Output/Signaling
Connection technology	CAGE CLAMP®
WAGO Connector	WAGO 721 Series
Solid conductor	0.08 ... 2.5 mm <sup>2</sup> / 28 ... 12 AWG
Fine-stranded conductor	0.08 ... 2.5 mm <sup>2</sup> / 28 ... 12 AWG
Strip length	8 ... 9 mm / 0.31 ... 0.35 inch

### Physical data

Width	45 mm / 1.772 inch
Height	90 mm / 3.543 inch
Depth from upper edge of DIN-rail	107.5 mm / 4.232 inch

### Mechanical data

Mounting type	DIN-35 rail
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### Material data

Weight	210 g
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### Environmental requirements

Surrounding air temperature (operation)	-25 ... 70 °C (Device starts at -40 °C (type-tested))
Surrounding air temperature (storage)	-25 ... 85 °C
Relative humidity	5 ... 96 % (no condensation permissible)
Derating	-3 %/K (> 50 °C)

Subject to changes. Please also observe the further product documentation!

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## Standards and specifications

Conformity marking	CE
Standards/Specifications	EN 61010-1 EN 61010-2-201 EN 61204-3 EN 60335-1 UL 60950-1 UL 508 GL

## Commercial data



Product Group	6 (Interface Electronics)
PU (SPU)	1 Stück
Packaging type	box
Country of origin	DE
GTIN	4055143060431
Customs tariff number	85044082900

## Approvals / Certificates

### Ship Approvals

Logo	Approval	Additional Approval Text	Certificate name
	<b>DNV</b> DNV Germany GmbH	DNVGL-CG-339,Dec.2019	TAA00002YC

### UL-Approvals

Logo	Approval	Additional Approval Text	Certificate name
	<b>UL</b> Underwriters Laboratories Inc.	UL 508	E255817
	<b>UL</b> Underwriters Laboratories Inc.	UL 60950-1	E255815

Subject to changes. Please also observe the further product documentation!

## Optional accessories

### Marking accessories

#### Marking strip



**Item no.: 2009-110**

Marking strips; for Smart Printer; on reel; not stretchable; plain; snap-on type; white

[www.wago.com/2009-110](http://www.wago.com/2009-110)



**Item no.: 210-831**

Marking strips; on reel; 2.3 mm wide; plain; Self-adhesive; white

[www.wago.com/210-831](http://www.wago.com/210-831)



**Item no.: 210-832**

Marking strips; on reel; 3 mm wide; plain; Self-adhesive; white

[www.wago.com/210-832](http://www.wago.com/210-832)

#### Marker



**Item no.: 2009-115**

WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; white

[www.wago.com/2009-115](http://www.wago.com/2009-115)



**Item no.: 793-501**

WMB marking card; as card; not stretchable; plain; snap-on type; white

[www.wago.com/793-501](http://www.wago.com/793-501)



**Item no.: 793-5501**

WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type; white

[www.wago.com/793-5501](http://www.wago.com/793-5501)

### Ferrule

#### Ferrule



**Item no.: 216-203**

Ferrule; Sleeve for 1 mm<sup>2</sup> / AWG 18; insulated; electro-tin plated; red

[www.wago.com/216-203](http://www.wago.com/216-203)



**Item no.: 216-202**

Ferrule; Sleeve for 0.75 mm<sup>2</sup> / 18 AWG; insulated; electro-tin plated; gray

[www.wago.com/216-202](http://www.wago.com/216-202)



**Item no.: 216-204**

Ferrule; Sleeve for 1.5 mm<sup>2</sup> / AWG 16; insulated; electro-tin plated; black

[www.wago.com/216-204](http://www.wago.com/216-204)



**Item no.: 216-201**

Ferrule; Sleeve for 0.5 mm<sup>2</sup> / 20 AWG; insulated; electro-tin plated; white

[www.wago.com/216-201](http://www.wago.com/216-201)



**Item no.: 216-223**

Ferrule; Sleeve for 1 mm<sup>2</sup> / AWG 18; insulated; electro-tin plated; red

[www.wago.com/216-223](http://www.wago.com/216-223)



**Item no.: 216-241**

Ferrule; Sleeve for 0.5 mm<sup>2</sup> / 20 AWG; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; white

[www.wago.com/216-241](http://www.wago.com/216-241)



**Item no.: 216-242**

Ferrule; Sleeve for 0.75 mm<sup>2</sup> / 18 AWG; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; gray

[www.wago.com/216-242](http://www.wago.com/216-242)



**Item no.: 216-222**

Subject to changes. Please also observe the further product documentation!

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Ferrule; Sleeve for 0.75 mm<sup>2</sup> / 18 AWG; insulated; electro-tin plated; gray


[www.wago.com/216-222](http://www.wago.com/216-222)

 **Item no.: 216-221**  
Ferrule; Sleeve for 0.5 mm<sup>2</sup> / 20 AWG; insulated; electro-tin plated; white


[www.wago.com/216-221](http://www.wago.com/216-221)

 **Item no.: 216-224**  
Ferrule; Sleeve for 1.5 mm<sup>2</sup> / AWG 16; insulated; electro-tin plated; black


[www.wago.com/216-224](http://www.wago.com/216-224)

 **Item no.: 216-243**  
Ferrule; Sleeve for 1 mm<sup>2</sup> / AWG 18; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; red


[www.wago.com/216-243](http://www.wago.com/216-243)

 **Item no.: 216-244**  
Ferrule; Sleeve for 1.5 mm<sup>2</sup> / AWG 16; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; black


[www.wago.com/216-244](http://www.wago.com/216-244)

 **Item no.: 216-263**  
Ferrule; Sleeve for 1 mm<sup>2</sup> / AWG 18; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; red


[www.wago.com/216-263](http://www.wago.com/216-263)

 **Item no.: 216-264**  
Ferrule; Sleeve for 1.5 mm<sup>2</sup> / AWG 16; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; black


[www.wago.com/216-264](http://www.wago.com/216-264)

 **Item no.: 216-284**  
Ferrule; Sleeve for 1.5 mm<sup>2</sup> / AWG 16; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; black


[www.wago.com/216-284](http://www.wago.com/216-284)

 **Item no.: 216-262**  
Ferrule; Sleeve for 0.75 mm<sup>2</sup> / 18 AWG; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; gray


[www.wago.com/216-262](http://www.wago.com/216-262)

 **Item no.: 216-301**  
Ferrule; Sleeve for 0.25 mm<sup>2</sup> / AWG 24; insulated; electro-tin plated; yellow

[www.wago.com/216-301](http://www.wago.com/216-301)

 **Item no.: 216-321**  
Ferrule; Sleeve for 0.25 mm<sup>2</sup> / AWG 24; insulated; electro-tin plated; yellow

[www.wago.com/216-321](http://www.wago.com/216-321)

 **Item no.: 216-322**  
Ferrule; Sleeve for 0.34 mm<sup>2</sup> / 22 AWG; insulated; electro-tin plated; green

[www.wago.com/216-322](http://www.wago.com/216-322)

 **Item no.: 216-302**  
Ferrule; Sleeve for 0.34 mm<sup>2</sup> / 22 AWG; insulated; electro-tin plated; green


[www.wago.com/216-302](http://www.wago.com/216-302)

**Tool**

Operating tool

 **Item no.: 210-769**  
SCREWDRIVER; green

[www.wago.com/210-769](http://www.wago.com/210-769)

 **Item no.: 210-720**  
Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft; multicoloured

[www.wago.com/210-720](http://www.wago.com/210-720)

Subject to changes. Please also observe the further product documentation!



## Downloads

### Documentation

#### Bid Text

787-1606 X81 - Datei	2019. 7. 4.	xml 7.1 kB	Download
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787-1606 docx - Datei	2019. 6. 4.	docx 21.0 kB	Download
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#### Instruction Leaflet

Primär getaktete Stromversorgungen CLASSIC DC 24 V, 2 A	2021. 5. 17.	pdf 1.7 MB	Download
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#### Additional Information

Disposal; Electrical and electronic equipment, Packaging	V 1.0.0	pdf 265.8 kB	Download
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## CAD/CAE-Data

### CAD data

2D/3D Models 787-1606	URL	Download
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### CAE data

ZUKEN Portal 787-1606	URL	Download
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EPLAN Data Portal 787-1606	URL	Download
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WSCAD Universe 787-1606	URL	Download
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## Environmental Product Compliance

### Compliance Search

Environmental Product Compliance 787-1606 Switched-mode power supply; Classic; 1-phase; 24 VDC output voltage; 2 A output current; NEC Class 2; DC OK signal	URL	Download
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## Installation Notes

## Product family

EPSITRON CLASSIC Power

EPSITRON® CLASSIC POWER: The Robust Power Supply – with Integrated TopBoost (Optional)

[Show all products from the family](#)

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