

## Data sheet | Item number: 787-1640

Switched-mode power supply; Classic; 3-phase; 24 VDC output voltage; 10 A output current; TopBoost; DC OK contact

[www.wago.com/787-1640](http://www.wago.com/787-1640)



### Item description

#### Features:

- Switched-mode power supply with TopBoost, enabling secondary-side protection via circuit breakers
- Natural convection cooling when horizontally mounted
- Encapsulated for use in control cabinets
- DC OK contact

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

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- Suitable for both parallel and series operation
- Electrically isolated output voltage (SELV) per UL 60950-1; PELV per EN 60204

## Data

### Technical data

#### Input

Phases	2 / 3
Nominal input voltage $U_{i\text{ nom}}$	(2 / 3) x AC 400 ... 500 V
Input voltage range	(2 / 3) x AC 320 ... 575 V; DC 450 ... 800 V
Nominal mains frequency range	47 ... 63 Hz; 0 Hz
Input current $I_i$	$\leq 3 \times 0.73 \text{ A}$ (400 VAC); $\leq 3 \times 0.66 \text{ A}$ (500 VAC)
Inrush current	$\leq 30 \text{ A}$ (NTC)
Power factor correction (PFC)	Passive
Mains failure hold-up time	$\geq 50 \text{ ms}$ (500 VAC); $\geq 21 \text{ ms}$ (400 VAC)

#### Output

Nominal output voltage $U_{o\text{ nom}}$	DC 24 V (SELV)
Output voltage range	DC 23 ... 28.5 V (adjustable)
Default setting	DC 24 V
Nominal output current $I_{o\text{ nom}}$	10 A (24 VDC)
Nominal output power	240 W
Deviation	$\leq 1 \%$
Residual ripple	$\leq 50 \text{ mV}$ (peak-to-peak)
Current limitation	$1.1 \times I_{o\text{ nom}}$ (typ.)
Overload behavior	Constant current

#### Signaling and Communication

Signaling	1 x LED DC OK (green)
Operation status indicator	Green LED ( $U_o$ )

#### Efficiency/power losses

Power loss $P_l$	$\leq 2.1 \text{ W}$ ; $\leq 27.9 \text{ W}$ (400 VAC; nominal load)
	28.3 W (500 VAC / 24 VDC; 10 A)

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

Power loss (max.)  $P_{I(max)}$ 

Efficiency (typ.) 90 %

### Circuit protection

Internal fuse No

Backup fusing (required) Alternative: motor circuit breaker  
An external DC fuse is required for the DC input voltage.

### Safety and protection

Isolation voltage (sec.-PE) DC 0.7 kV

Protection class I

Protection type IP20; per EN 60529

Overvoltage category II

Pollution degree 2

Transient suppression (primary) Varistor

Overvoltage protection; secondary Internal protective circuit  
≤ 41 VDC (in the event of a fault)

Short-circuit-protected Yes

Open-circuit-proof Yes

Parallel operation Yes

Series operation Yes

MTBF &gt; 500,000 h (per IEC 61709)

### 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 AWGFine-stranded conductor 0.08 ... 2.5 mm<sup>2</sup> / 28 ... 12 AWG

Strip length 8 ... 9 mm / 0.31 ... 0.35 inches

### Physical data

Width 55 mm / 2.165 inches

Height 127 mm / 5 inches

Depth from upper-edge of DIN-rail 171 mm / 6.732 inches

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## Mechanical Data

Mounting type	DIN-35 rail
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## Material Data

Fire load	0.417 MJ
Weight	1000 g

## Environmental requirements

Ambient temperature (operation)	-25 ... +70 °C (Device starts at -40 °C (type-tested))
Ambient temperature (storage)	-25 ... +85 °C
Relative humidity	5 ... 96 % (no condensation permissible)
Derating	-2.5 %/K (> 55 °C)

## Standards and specifications

Conformity marking	CE
Standards/specifications	EN 61010-1 EN 61010-2-201 EN 61204-3 UL 60950-1 UL 508 DNV SEMI F47

## Commercial data

eCl@ss 10.0	27-04-07-01
eCl@ss 9.0	27-04-07-01
ETIM 8.0	EC002540
ETIM 7.0	EC002540
Recupel Type	
PU (SPU)	1 pcs
Packaging type	box
Country of origin	DE
GTIN	4055143259163
Customs tariff number	85044083900

## Environmental Product Compliance

RoHS Compliance Status	Compliant, No Exemption
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Subject to changes. Please also observe the further product documentation!



## Approvals / Certificates

### General approvals

Logo	Approval	Additional Approval Text	Certificate name
	<b>EAC</b> Brjansker Zertifizierungsstelle	TP TC 004/2011, TP TC 020/2011	EAC RU C-DE.AM02.B.00089_19
	<b>UL</b> Underwriters Laboratories Inc.	UL 508	E255817
	<b>UL</b> Underwriters Laboratories Inc.	UL 60950-1	E255815

### Declarations of conformity and manufacturer's declarations

Logo	Approval	Additional Approval Text	Certificate name
	<b>EU-Declaration of Conformity</b> WAGO GmbH & Co. KG	-	-
	<b>MFD with product reference</b> WAGO GmbH & Co. KG	-	-

### Approvals for marine applications

Logo	Approval	Additional Approval Text	Certificate name
	<b>DNV</b> DNV Germany GmbH	DNV-CG-0339, Aug. 2021	TAA00000KT

## Optional accessories

### Mounting adapter

DIN-rail adapter

**Item no.: 787-897/000-010**

Carrier rail adapter made of zinc die-cast; horizontal mounting of 787-16xx (TS35)

[www.wago.com/787-897/000-010](http://www.wago.com/787-897/000-010)

### 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**

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

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


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**Marker**


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**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)


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**Tool**


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## 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)**Downloads****Documentation****Bid Text**

787-1640 X81 - Datei	2019 年7月4日	xml 7.4 kB	Download
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787-1640 docx - Datei	2019 年6月13日	docx 21.9 kB	Download
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**Instruction Leaflet**

Primär getaktete Stromversorgungen CLASSIC DC 24 V, 10 A		pdf 170.2 kB	Download
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**Additional Information**

Disposal and Recycling Electrical and electronic equipment, Batteries, Packaging	V 1.1.0 2022 年8月18日	pdf 2.2 MB	Download
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**Engineering-Software****Configuration and Commissioning Software**

WAGO Line Length Calculation	1.3.5	exe	Download
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Die WAGO Leitungslaengenrechnung hilft bei der Planung der sekundärseitigen Absicherung von Leitungen an WAGO Stromversorgungen Pro (787-8xx) und Classic (787-16xx). Nach Auswahl eines Netzgerätes kann der gewünschte Leitungsquerschnitt und der zugehörige Leitungsschutzschalter ausgewählt werden. Das Software-Werkzeug berechnet dann die maximale Leitungslänge, bei der die Absicherung unter Berücksichtigung der Leitungs- und Übergangswiderstände ordnungsgemäß funktioniert. Die Auswahl einer Grundlast kann vom Anwender vorgenommen werden.

2019 年12 月9 日

337.4 kB

## CAD/CAE-Data

### CAD data

2D/3D Models 787-1640	<a href="#">URL</a>	<a href="#">Download</a>
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### CAE data

EPLAN Data Portal 787-1640	<a href="#">URL</a>	<a href="#">Download</a>
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ZUKEN Portal 787-1640	<a href="#">URL</a>	<a href="#">Download</a>
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WSCAD Universe 787-1640	<a href="#">URL</a>	<a href="#">Download</a>
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## Environmental Product Compliance

### Compliance Search

Environmental Product Compliance 787-1640	<a href="#">URL</a>	<a href="#">Download</a>
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## Installation Notes

## Product family

### Classic

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

[Show all products from the family](#)

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