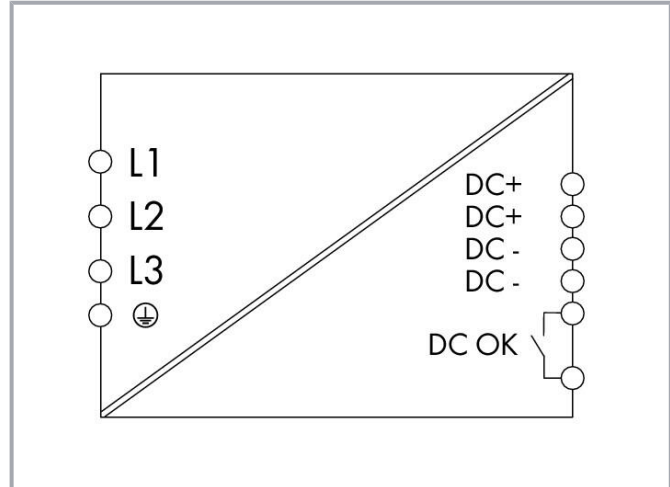


Data sheet | Item number: 787-1640

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



www.wago.com/787-1640



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
- 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

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

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Do you have any questions about our products?

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



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)
Nominal output current $I_{o\text{nom}}$	10 A (24 VDC)
Nominal output power	240 W
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)
Power loss (max.) $P_{l(\text{max})}$	28.3 W (500 VAC / 24 VDC; 10 A)
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

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



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	> 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 ² / 28 ... 12 AWG
Fine-stranded conductor	0.08 ... 2.5 mm ² / 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

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)

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

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
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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Approvals / Certificates

General approvals


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

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


Underwriters Laboratories Inc.



Declarations of conformity and manufacturer's declarations


Logo	Approval	Additional Approval Text	Certificate name
	EU-Declaration of Conformity WAGO GmbH & Co. KG	-	-

Approvals for marine applications

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

Optional accessories









Ferrule



Ferrule		
	Item no.: 216-203 Ferrule; Sleeve for 1 mm ² / AWG 18; insulated; electro-tin plated; red	www.wago.com/216-203
	Item no.: 216-202 Ferrule; Sleeve for 0.75 mm ² / 18 AWG; insulated; electro-tin plated; gray	www.wago.com/216-202
	Item no.: 216-204 Ferrule; Sleeve for 1.5 mm ² / AWG 16; insulated; electro-tin plated; black	www.wago.com/216-204
	Item no.: 216-201 Ferrule; Sleeve for 0.5 mm ² / 20 AWG; insulated; electro-tin plated; white	www.wago.com/216-201
	Item no.: 216-223 Ferrule; Sleeve for 1 mm ² / AWG 18; insulated; electro-tin plated; red	www.wago.com/216-223
	Item no.: 216-241 Ferrule; Sleeve for 0.5 mm ² / 20 AWG; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; white	www.wago.com/216-241
	Item no.: 216-242 Ferrule; Sleeve for 0.75 mm ² / 18 AWG; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; gray	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 mm² / 18 AWG; insulated; electro-tin plated; graywww.wago.com/216-222

Item no.: 216-221
 Ferrule; Sleeve for 0.5 mm² / 20 AWG; insulated; electro-tin plated; white
www.wago.com/216-221

Item no.: 216-224
 Ferrule; Sleeve for 1.5 mm² / AWG 16; insulated; electro-tin plated; black
www.wago.com/216-224

Item no.: 216-243
 Ferrule; Sleeve for 1 mm² / AWG 18; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; red
www.wago.com/216-243

Item no.: 216-244
 Ferrule; Sleeve for 1.5 mm² / AWG 16; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; black
www.wago.com/216-244

Item no.: 216-263
 Ferrule; Sleeve for 1 mm² / AWG 18; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; red
www.wago.com/216-263

Item no.: 216-264
 Ferrule; Sleeve for 1.5 mm² / AWG 16; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; black
www.wago.com/216-264

Item no.: 216-284
 Ferrule; Sleeve for 1.5 mm² / AWG 16; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; black
www.wago.com/216-284

Item no.: 216-262
 Ferrule; Sleeve for 0.75 mm² / 18 AWG; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; gray
www.wago.com/216-262

Item no.: 216-301
 Ferrule; Sleeve for 0.25 mm² / AWG 24; insulated; electro-tin plated; yellow
www.wago.com/216-301

Item no.: 216-321
 Ferrule; Sleeve for 0.25 mm² / AWG 24; insulated; electro-tin plated; yellow
www.wago.com/216-321

Item no.: 216-322
 Ferrule; Sleeve for 0.34 mm² / 22 AWG; insulated; electro-tin plated; light turquoise
www.wago.com/216-322

Item no.: 216-302
 Ferrule; Sleeve for 0.34 mm² / 22 AWG; insulated; electro-tin plated; light turquoise
www.wago.com/216-302**Tool**

Operating tool


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

DIN-rail adapter

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



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

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



Item no.: 210-831

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

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

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



Item no.: 793-501

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

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

Downloads

Documentation

Bid Text

787-1640 X81 - Datei	2019 Jul 4	xml 7.4 kB	Download
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787-1640 docx - Datei	2019 Jun 13	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	V 1.1.0	pdf	Download
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Engineering-Software

Configuration and Commissioning Software

WAGO Line Length Calculation	1.3.5	exe	Download
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 Dec 9	337.4 kB	

CAD/CAE-Data

CAD data

2D/3D Models 787-1640	URL	Download
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CAE data

EPLAN Data Portal 787-1640	URL	Download
ZUKEN Portal 787-1640	URL	Download
WSCAD Universe 787-1640	URL	Download

Environmental Product Compliance

Compliance Search

Environmental Product Compliance 787-1640	URL	Download
Switched-mode power supply; Classic; 3-phase; 24 VDC output voltage; 10 A output current; TopBoost; DC OK contact		

Installation Notes

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



Product family

Classic

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

[Show all products from the family](#)

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