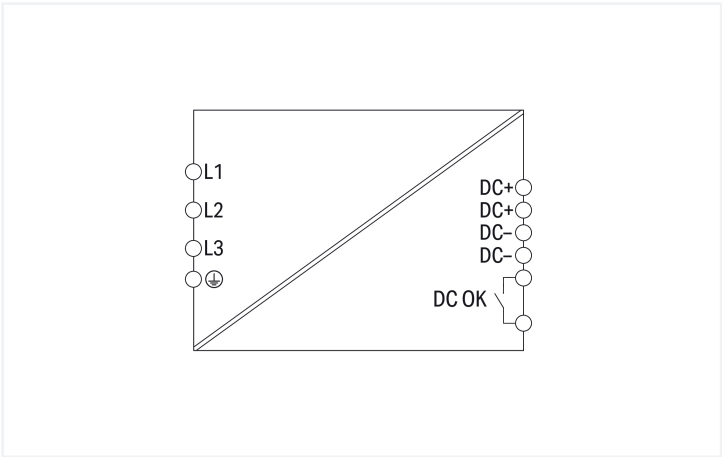




Features:

- 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

Technical data			
Input		Output	
Phases	2 / 3	Nominal output voltage $U_{o\,nom}$	24 VDC (SELV)
Nominal input voltage $U_{i\,nom}$	(2 / 3) x 400 ... 500 VAC	Output voltage range	23 ... 28.5 VDC (adjustable)
Input voltage range	(2 / 3) x 320 ... 575 VAC; 450 ... 800 VDC	Default Setting	24 VDC
Nominal mains frequency range	47 ... 63 Hz; 0 Hz	Nominal output current $I_{o\,nom}$	40 A (24 VDC)
Input current I_i	$\leq 3 \times 2.15\text{ A}$ (400 VAC); $\leq 3 \times 1.82\text{ A}$ (500 VAC)	Nominal output power	960 W
Discharge current	$\leq 1\text{ mA}$	Deviation	$\leq 1\%$
Inrush current	$\leq 30\text{ A}$ (NTC)	Residual ripple	$\leq 30\text{ mV}$ (peak-to-peak)
Power factor correction (PFC)	Passive	Current limitation	$1.1 \times I_{o\,nom}$ (typ.)
Mains failure hold-up time	$\geq 25\text{ ms}$ (500 VAC); $\geq 15\text{ ms}$ (400 VAC)	Overload behavior	Constant current

Signaling and Communication	
Signaling	1 x DC OK LED (green) 1 x DC OK contact (make contact; max. 30 VAC/DC; 1 A)
Operation status indicator	Green LED (U_o)

Efficiency/Power Losses	
Power loss P_I	$\leq 4.2\text{ W}$; $\leq 83.9\text{ W}$ (400 VAC; nominal load)
Power loss (max.) $P_{I\,(max.)}$	83.9 W (500 VAC / 24 VDC; 40 A)
Efficiency (typ.)	92 %



Circuit Protection	
Internal fuse	No
Pre-fuse (required)	3 x Circuit breaker: 6 A, 10 A, 16 A; Trip-ping characteristic: B or C, 20 A (max.) Alternative: motor circuit breaker An external DC fuse is required for the DC input voltage.

Safety and protection	
Isolation voltage (pri.-sec.)	4.242 kVDC
Isolation voltage (pri.-PE)	2.2 kVDC
Isolation voltage (sec.-PE)	0.7 kVDC
Protection class	I
Protection type	IP20; per EN 60529
Resistance to reverse feed	≤ 35 VDC
Overvoltage category	II
Pollution degree	2
Transient suppression (primary)	Varistor
Overvoltage protection; secondary	Internal protective circuit ≤ 40 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 1		Connection 2	
Connection type	Input/signaling	Connection type	Output
Connection technology	CAGE CLAMP®	Connection technology	Push-in CAGE CLAMP®
WAGO connector	WAGO 721 Series	WAGO connector	WAGO 831 Series
Solid conductor	0.08 ... 2.5 mm² / 28 ... 12 AWG	Solid conductor	0.5 ... 10 mm² / 20 ... 8 AWG
Fine-stranded conductor	0.08 ... 2.5 mm² / 28 ... 12 AWG	Fine-stranded conductor	0.5 ... 10 mm² / 20 ... 8 AWG
Strip length	8 ... 9 mm / 0.31 ... 0.35 inches	Strip length	13 ... 15 mm / 0.51 ... 0.59 inches

Physical data	
Width	126 mm / 4.96 inches
Height	127 mm / 5 inches
Depth from upper-edge of DIN-rail	198 mm / 7.795 inches

Mechanical data	
Mounting type	DIN-35 rail



Material data		
Fire load		0.914 MJ
Weight		2800 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		
PU (SPU)		1 pcs
Packaging type		Box
Country of origin		DE
GTIN		4055143259187
Customs tariff number		85044083900

Product Classification		
UNSPSC		39121004
eCl@ss 10.0		27-04-07-01
eCl@ss 9.0		27-04-07-01
ETIM 9.0		EC002540
ETIM 10.0		EC002540
ECCN		NO US CLASSIFICATION

Environmental Product Compliance		
RoHS Compliance Status		Compliant, No Exemption

Approvals / Certificates

General approvals			Declarations of conformity and manufacturer's declarations		
  			Approval	Standard	Certificate Name
EAC	TP TC 004/2011	EAC CoC 03078	EU-Declaration of Confor- mity WAGO GmbH & Co. KG	-	-
GZO Almaty Standart			MFD for SEMI F47 WAGO GmbH & Co. KG	-	-
EAC	TP TC 020/2011	EAC CoC 03081	UK-Declaration of Confor- mity WAGO GmbH & Co. KG	-	-
GZO Almaty Standart					
UL	UL 508	E255817			
Underwriters Laboratories Inc.					
UR	UL 60950-1	E255815			
Underwriters Laboratories Inc.					



Approvals for marine applications



Approval	Standard	Certificate Name
DNV DNV Germany GmbH	DNV-CG-0339,Aug.2021	TAA00000KT

Downloads

Environmental Product Compliance

Compliance Search
Environmental Product Compliance 787-1644



Documentation

Bid Text			
787-1644	04.07.2019	xml 7.36 KB	
787-1644	13.06.2019	docx 21.63 KB	

Instruction Leaflet			
Primär getaktete Stromversorgungen CLASSIC	pdf 166.24 KB		

CAD/CAE-Data

CAD data	
2D/3D Models 787-1644	

CAE data	
EPLAN Data Portal 787-1644	
WSCAD Universe 787-1644	
ZUKEN Portal 787-1644	

Engineering-Software

Configuration and Commissioning Software			
WAGO Line Length Cal- culation	1.3.5 09.12.2019	exe 329.50 KB	



1 Compatible Products

1.1 Optional Accessories

1.1.1 Marking

1.1.1.1 Marker



Item No.: 2009-145
Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; white



Item No.: 248-501
Mini-WSB marking card; as card; not stretchable; plain; snap-on type; white



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



Item No.: 793-501
WMB marking card; as card; not stretchable; plain; snap-on type; white



Item No.: 2009-115
WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; white

1.1.1.2 Marking strip



Item No.: 2009-110
Marking strips; for Smart Printer; on reel; not stretchable; plain; snap-on type; white



Item No.: 210-831
Marking strips; on reel; 2.3 mm wide; plain; Self-adhesive; white



Item No.: 210-832
Marking strips; on reel; 3 mm wide; plain; Self-adhesive; white

1.1.2 Mounting adapter

1.1.2.1 DIN-rail adapter



Item No.: 787-897/000-010
Carrier rail adapter made of zinc die-cast; horizontal mounting of 787-16xx (TS35)

1.1.3 Tool

1.1.3.1 Operating tool



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



Item No.: 210-721
Operating tool; Blade: 5.5 x 0.8 mm; with a partially insulated shaft; multicoloured



Item No.: 210-769
SCREWDRIVER; green