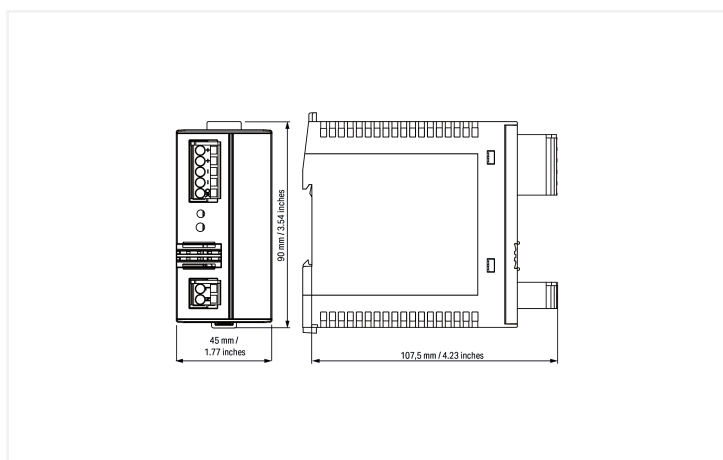
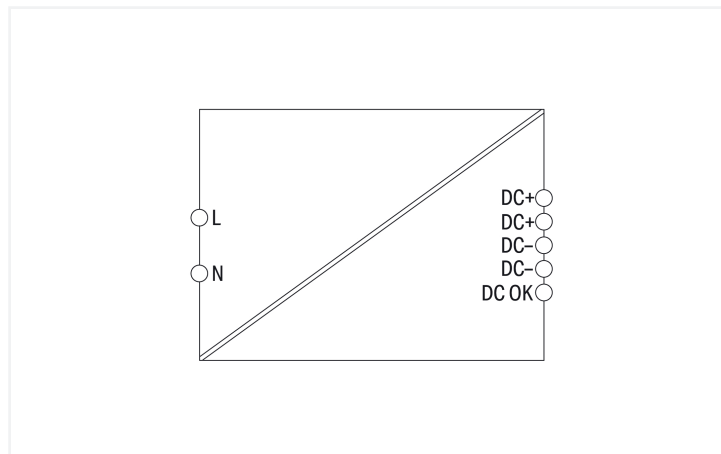


## Data Sheet | Item Number: 787-1611

Switched-mode power supply; Classic; 1-phase; 12 VDC output voltage; 4 A output current; NEC Class 2; DC OK signal

<https://www.wago.com/787-1611>



### 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 UL 60950-1; PELV per EN 60204
- DNV approval, also suitable for EMC 1 in conjunction with 787-980 Filter Module

### Technical data

Input	
Phases	1
Nominal input voltage $U_{\text{nom}}$	1 x 100 ... 240 VAC
Input voltage range	1 x 85 ... 264 VAC; 120 ... 300 VDC
Input voltage derating	-2.5 %/V (< 95 VAC)
Nominal mains frequency range	44 ... 66 Hz; 0 Hz
Input current $I_i$	$\leq 0.46$ A (240 VAC); $\leq 0.86$ A (100 VAC)
Discharge current	$\leq 0.25$ mA
Inrush current	$\leq 30$ A

Input	
Power factor correction (PFC)	Passive
Mains failure hold-up time	$\geq 120$ ms (230 VAC); $\geq 15$ ms (100 VAC)

### Output

Nominal output voltage $U_{o, nom}$	12 VDC (SELV)
Output voltage range	11.5 ... 14.5 VDC (adjustable)
Default Setting	12 VDC
Nominal output current $I_{o, nom}$	4 A (12 VDC); 4.2 A (
Nominal output power	48 W
Deviation	$\leq 1 \%$
Residual ripple	$\leq 20$ mV (peak-to-peak)
Current limitation	$1.1 \times I_{o, nom}$ (typ.)
Overload behavior	Constant current

### Efficiency/Power Losses

Power loss $P_l$	$\leq 1$ W; $\leq 8$ W (230 VAC; nominal load)
Power loss (max.) $P_{l(max)}$	9.1 W (100 VAC / 12 VDC; 4 A)
Efficiency (typ.)	86 %

### Safety and protection

Isolation voltage (pri.-sec.)	4.242 kVDC
Protection class	II
Protection type	IP20; per EN 60529
Resistance to reverse feed	$\leq 25$ VDC
Overvoltage category	II
Pollution degree	2
Transient suppression (primary)	Varistor
Overvoltage protection; secondary	Internal protective circuit $\leq 35$ 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)

### Signaling and Communication

Signaling	1 x DC OK LED (green) 1 x Active signal output DC OK (12 VDC; 40 mA)
Operation status indicator	Green LED ( $U_o$ )

### Circuit Protection

Internal fuse	T 4 A / 250 VAC
Pre-fuse (required)	An external DC fuse is required for the DC input voltage.
Backup fuse (recommended)	Circuit breaker: 6 A, 10 A, 16 A; Tripping characteristic: B or C

### Connection Data

#### Connection 1

Connection type	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 inches

### Physical data

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

### Mechanical data

Mounting type	DIN-35 rail
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### Material data

Fire load	0.24 MJ
Weight	257.6 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	-3 %/K (> 50 °C)
Climatic category	3K3 (per EN 60721)

### 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 DNV SEMI F47

### Commercial data

Product Group	6 (INTERFACE ELECTRONIC)
PU (SPU)	1 pcs
Packaging type	Box
Country of origin	DE
GTIN	4055143060448
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	Approval	Standard	Certificate Name
EAC GZO Almaty Standart	TP TC 004/2011	EAC CoC 03078	EU-Declaration of Confor- mity WAGO GmbH & Co. KG	-	-
EAC GZO Almaty Standart	TP TC 020/2011	EAC CoC 03081	MFD for SEMI F47 WAGO GmbH & Co. KG	-	-
UL Underwriters Laboratories Inc.	UL 508	E255817			
UR Underwriters Laboratories Inc.	UL 60950-1	E255815			

### Approvals for marine applications

Approval	Standard	Certificate Name
DNV DNV Germany GmbH	DNVGL-CG-339, Dec. 2019	TAA00002YC





### Downloads

Environmental Product Compliance	
Compliance Search	
Environmental Product Compliance 787-1611	<a href="#">↓</a>

### Documentation

Bid Text				Instruction Leaflet	
787-1611	04.07.2019	xml 6.94 KB	<a href="#">↓</a>	Primär getaktete Stromversorgungen CLASSIC	pdf 314.15 KB <a href="#">↓</a>
787-1611	31.05.2019	docx 19.96 KB	<a href="#">↓</a>		

## CAD/CAE-Data

CAD data	CAE data
2D/3D Models 787-1611 	EPLAN Data Portal 787-1611 
	WSCAD Universe 787-1611 
	ZUKEN Portal 787-1611 

## 1 Compatible Products

## 1.1 Optional Accessories

## 1.1.1 Marking

## 1.1.1.1 Marker

**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 Tool

## 1.1.2.1 Operating tool

**Item No.: 210-720**

Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft; multicoloured

**Item No.: 210-769**

SCREWDRIVER; green