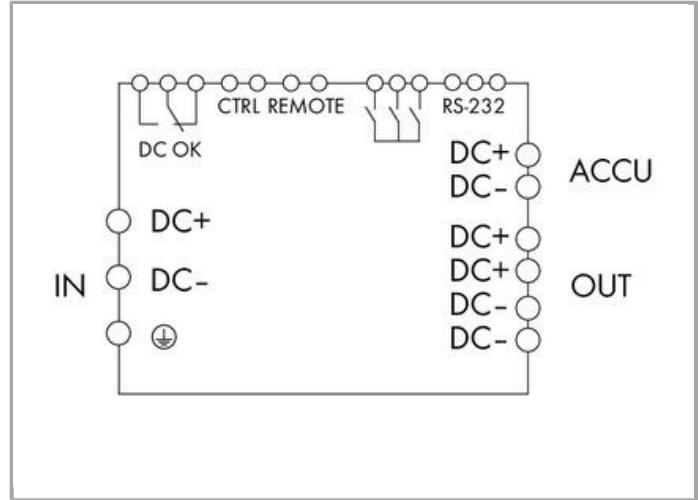


Data sheet | Item number: 787-870

UPS charger and controller; 24 VDC input voltage; 24 VDC output voltage;
10 A output current; LineMonitor; communication capability



www.wago.com/787-870



RoHS Compliant

BOMcheck.net

Item description

Features:



- Charger and controller for uninterruptible power supply (UPS)
- Current and voltage monitoring, as well as parameter setting via LCD and RS-232 interface
- Active signal outputs for function monitoring
- Remote input for deactivating the buffered output
- Input for temperature control of connected battery
- Battery control (from manufacturing no. 215563 onwards) detects both battery life and battery type

Data

Technical Data

Input

Nominal input voltage $U_{i\text{ nom}}$	24 VDC
Input voltage range	22 ... 29 VDC
Nominal mains frequency range	0 Hz
Input current I_i	≤ 0.1 A (no load); ≤ 0.8 A (charging); ≤ 10.8 A
Inrush current	≤ 4 A (no load)

Output

Nominal output voltage $U_{o\text{ nom}}$	24 VDC
Output voltage range	$U_i - 1$ VDC (at nominal operation); 20 ... 25.5 VDC (at buffer operation)
Nominal output current $I_{o\text{ nom}}$	10 A
Current limitation	1.1 ... 1.4 x $I_{o\text{ nom}}$ typ.

Energy storage

Buffer time	10 ... 600 s (or continuously; adjustable)
Switch-on threshold (adjustable)	20 ... 25.5 VDC
Charging current	≤ 0.6 A
End-of-charge voltage	26 ... 29.5 VDC (temperature-controlled; optional fixed setting)
Recommended battery module	787-871, 787-872, 787-873, 787-876, 787-1671

Signaling and communication

Signaling	1 x LED DC OK (green) 1 x LED warning (yellow) 1 x LED error (red) LCD 3 x signal output (24 VDC, max. 25 mA) 1 x potential-free relay contact (max. 30 VDC, 1 A) 1 x RS-232 interface Battery Control (C+, C-)
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Operation status indicator	LED green (U _o) LED yellow (warning) LED red (error)
Communication	RS-232 serial interface
Remote input	to switch off buffer operation

Efficiency/Power losses:

Power loss P _v	15 W (no load); 20 W (nominal load)
Efficiency	95 %

Fuse protection:

Internal fuse	T 15 A
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Safety and protection:

Insulation voltage (connectors-housing)	0.5 kV DC
Protection class	III
Degree of protection	IP20 (per EN 60529)
Reverse voltage protection	yes
Feedback voltage	≤ 35VDC
Parallel operation	Yes, a maximum three battery modules for buffer time extension (temperature measurement evaluation is only possible via one battery module)
Series connection	No
MTBF	> 500,000 h (per IEC 61709)

Connection data

Connection type (1)	Input/Output
Connection technology	CAGE CLAMP®
WAGO terminal	WAGO 231 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 Inch
Connection type (2)	Signaling
Connection technology 2	CAGE CLAMP®
WAGO terminal 2	WAGO 733 Series
Solid conductor (2)	0.08 ... 0.5 mm ² / 28 ... 20 AWG
Fine-stranded conductor (2)	0.08 ... 0.5 mm ² / 28 ... 20 AWG
Strip length (2)	5 ... 6 mm / 0.2 ... 0.24 Inch
Max. line length	3 m (Input, Output, Battery Control)

Geometrical Data

Width	40 mm / 1.575 inch
Height	163 mm / 6.417 inch
Length from upper-edge of DIN-35 rail	163 mm / 6.417 inch
Note on dimensions	Height including pluggable connector

Mechanical data

Type of mounting	DIN-35 rail (EN 60715) in 2 positions
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Material Data

Weight	800 g
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Environmental Requirements

Surrounding air (operating) temperature	-10 ... 60 °C
Surrounding air (storage) temperature	-25 ... 85 °C
Relative humidity	5 ... 96 % (no condensation permissible)
Pollution degree	2

Standards and specifications





Conformity marking	CE
Standards/specifications	EN 60950; UL 60950; UL 508; EN 61000-6-2; EN 61000-6-3

















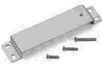

Commercial data

Country of origin	DE
GTIN	4045454909857
Customs Tariff No.	85044055900
Product Group	6 (Interface Electronics)

Compatible products

ferrule

	Item no.: 216-201 Ferrule; Sleeve for 0.5 mm ² / AWG 22; insulated; electro-tin plated	www.wago.com/216-201
	Item no.: 216-202 Ferrule; Sleeve for 0.75 mm ² / AWG 20; insulated; electro-tin plated	www.wago.com/216-202
	Item no.: 216-203 Ferrule; Sleeve for 1 mm ² / AWG 18; insulated; electro-tin plated	www.wago.com/216-203
	Item no.: 216-204 Ferrule; Sleeve for 1.5 mm ² / AWG 16; insulated; electro-tin plated	www.wago.com/216-204

	Item no.: 216-221 Ferrule; Sleeve for 0.5 mm ² / AWG 22; insulated; electro-tin plated	www.wago.com/216-221
	Item no.: 216-222 Ferrule; Sleeve for 0.75 mm ² / AWG 20; insulated; electro-tin plated	www.wago.com/216-222
	Item no.: 216-223 Ferrule; Sleeve for 1 mm ² / AWG 18; insulated; electro-tin plated	www.wago.com/216-223
	Item no.: 216-224 Ferrule; Sleeve for 1.5 mm ² / AWG 16; insulated; electro-tin plated	www.wago.com/216-224
	Item no.: 216-241 Ferrule; Sleeve for 0.5 mm ² / AWG 22; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90	www.wago.com/216-241
	Item no.: 216-242 Ferrule; Sleeve for 0.75 mm ² / AWG 20; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90	www.wago.com/216-242
	Item no.: 216-243 Ferrule; Sleeve for 1 mm ² / AWG 18; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90	www.wago.com/216-243
	Item no.: 216-244 Ferrule; Sleeve for 1.5 mm ² / AWG 16; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90	www.wago.com/216-244
	Item no.: 216-262 Ferrule; Sleeve for 0.75 mm ² / AWG 20; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90	www.wago.com/216-262
	Item no.: 216-263 Ferrule; Sleeve for 1 mm ² / AWG 18; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90	www.wago.com/216-263
	Item no.: 216-264 Ferrule; Sleeve for 1.5 mm ² / AWG 16; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90	www.wago.com/216-264
	Item no.: 216-284 Ferrule; Sleeve for 1.5 mm ² / AWG 16; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90	www.wago.com/216-284
	Item no.: 216-301 Ferrule; Sleeve for 0.25 mm ² / AWG 24; insulated; electro-tin plated	www.wago.com/216-301
	Item no.: 216-302 Ferrule; Sleeve for 0.34 mm ² / AWG 24; insulated; electro-tin plated	www.wago.com/216-302
	Item no.: 216-321 Ferrule; Sleeve for 0.25 mm ² / AWG 24; insulated; electro-tin plated	www.wago.com/216-321
	Item no.: 216-322 Ferrule; Sleeve for 0.34 mm ² / AWG 24; insulated; electro-tin plated	www.wago.com/216-322
Mounting adapter		
	Item no.: 787-895 EPSITRON® wall mount adapter; for screw fixing of 787-8xx devices on mounting plate or wall without DIN 35 rail	www.wago.com/787-895
	Item no.: 787-896 Carrier rail adapter; for mounting 787-8xx devices to a DIN 35 rail	www.wago.com/787-896



Item no.: 787-897

Carrier rail adapter made of zinc die-cast; for mounting 787-8xx devices to a DIN 35 rail

www.wago.com/787-897

tools



Item no.: 210-719

Operating tool with partially insulated shaft; Type 1, blade (2.5 x 0.4) mm

www.wago.com/210-719



Item no.: 210-720

Operating tool with partially insulated shaft; Type 2, blade (3.5 x 0.5) mm

www.wago.com/210-720

General accessories



Item no.: 761-9005

USB adapter; with 1m connection cable

www.wago.com/761-9005



Item no.: 787-1671

Lead-acid AGM battery module; 24 VDC input voltage; 5 A output current; Capacity: 0.8 Ah; with battery control www.wago.com/787-1671



Item no.: 787-871

Lead-acid AGM battery module; 24 VDC input voltage; 20 A output current; 3.2 Ah capacity; with battery control

www.wago.com/787-871



Item no.: 787-872

Lead-acid AGM battery module; 24 VDC input voltage; 40 A output current; 7 Ah capacity; with battery control www.wago.com/787-872



Item no.: 787-873

Lead-acid AGM battery module; 24 VDC input voltage; 40 A output current; 12 Ah capacity; with battery control www.wago.com/787-873



Item no.: 787-876

Lead-acid AGM battery module; 24 VDC input voltage; 7.5 A output current; 1.2 Ah capacity; with battery control

www.wago.com/787-876



Item no.: 787-890

RS-232 communication cable; Length 1.8 m

www.wago.com/787-890

Marking accessories



Item no.: 2009-110

Marking strips; on reel; not stretchable; plain; snap-on type

www.wago.com/2009-110



Item no.: 210-831

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

www.wago.com/210-831



Item no.: 210-832

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

www.wago.com/210-832

Downloads

Documentation

Quick-Start Guide

Quickstart for Software 759-870

Jan 17, 2018

Download

Configuration of the USV Control Units 787-870, 787-875 and 787-1675

3.1 MB



Bid Text

787-870 Stromversorgung EPSITRON	Jan 14, 2016	DOC 31.2 kB	Download
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Instruction Leaflet

EPSITRON UPS Charger and Control Module 24 VDC, 10 A	Dec 3, 2015	PDF 875.9 kB	Download
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Additional Information

Disposal; Electrical and electronic equipment, Packaging	Oct 15, 2018	265.8 kB	Download
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Libraries

Library

Connection of 787 Series power supplies The WagoLib787_01.lib library makes function blocks and visualization objects available which can be used to display information from the WAGO 787 Series power supply modules.	1.2.0 Aug 20, 2014	ZIP 562.7 kB	Download
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Engineering-Software

Configuration and Commissioning Software

UPS shutdown tool, for automatic shut-down of Windows PCs via UPS	1.0.2 Oct 26, 2011	ZIP 853.7 kB	Download
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Software for Interface-Products

759-870 Software, for configuration and visualization of 787-870 and 787-875 UPS Controllers	2.5.0 Jul 10, 2013	ZIP 3.2 MB	Download
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smartDATA

CAD data

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Subject to changes.

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