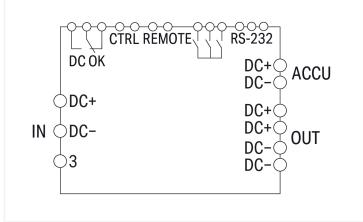
UPS charger and controller; 24 VDC input voltage; 24 VDC output voltage; 10 A out-

put current; LineMonitor; communication capability

https://www.wago.com/787-870







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

| Technical data | |
|--|--|
| Input | |
| Nominal input voltage U _{i nom} | 24 VDC |
| Input voltage range | 22 29 VDC |
| Nominal mains frequency range | 0 Hz |
| Input current I _i | \leq 0.1 A (no load); \leq 0.8 A (Charging); \leq 10.8 A |
| Inrush current | ≤ 4 A (no load) |

| Output | |
|---|---|
| Nominal output voltage U _{o nom} | 24 VDC |
| Output voltage range | U _i – 1 VDC (rated operation); 20 25.5 VDC (buffer mode) |
| Nominal output current I _{o nom} | 10 A |
| Current limitation | 1.1 1.4 x I _{o nom} (typ.) |

| Energy storage systems | |
|----------------------------------|--|
| Buffer time | 10 s 10 min or constant; adjustable |
| Switch-on threshold (adjustable) | DC 20 25.5 V |
| Storage type | Lead-acid (AGM) |
| 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 Warning LED (yellow) 1 x Error LED (red) LCD 3 x Signal output (24 VDC; max. 25 mA) 1 x Isolated relay contact (max. 30 VDC; 1 A) 1 x RS-232 interface Battery control (C+; C-) |
| Operation status indicator | Green LED (U _o) Yellow LED (warning) Red LED (error) |
| Communications | RS-232 serial interface |
| Remote input | Switching buffer mode off |

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Efficiency/power losses

Power loss P_1 $\leq 15 \text{ W}; \leq 20 \text{ W (nominal load)}$

Efficiency (typ.) 95 %

Circuit protection

Internal fuse T 15 A

| Safety and protection | |
|--|--|
| Isolation voltage (connectors – housing) | 0.5 kVDC |
| Protection class | III |
| Protection type | IP20; per EN 60529 |
| Reverse voltage protection | Yes |
| Resistance to reverse feed | ≤ 35 VDC |
| Pollution degree | 2 |
| Parallel operation | Yes, max. 3 battery modules for buffer time extension (temperature measurement evaluation is only possible via one battery module) |
| Series operation | No |
| MTBF | > 500,000 h (per IEC 61709) |

| Connection data | | | |
|---------------------|--------------------------------------|---|---------------------------|
| Cable length (max.) | 3 m (Input, output, battery control) | Connection 1 | |
| | Connection type 1 | Input/output | |
| | Connection technology | CAGE CLAMP® | |
| | WAGO connector | WAGO 231 Series | |
| | Solid conductor | $0.08 \dots 2.5 \text{ mm}^2 / 28 \dots 12 \text{ AWG}$ | |
| | Fine-stranded conductor | $0.08 \dots 2.5 \text{ mm}^2 / 28 \dots 12 \text{ AWG}$ | |
| | | Strip length | 8 9 mm / 0.31 0.35 inches |

| Connection 2 | |
|-------------------------|--------------------------|
| Connection type | Signaling |
| Connection technology | CAGE CLAMP® |
| WAGO connector 2 | WAGO 733 Series |
| Solid conductor | 0.08 0.5 mm² / 28 20 AWG |
| Fine-stranded conductor | 0.08 0.5 mm² / 28 20 AWG |
| Strip length | 5 6 mm / 0.2 0.24 inches |

| Physical data | |
|-----------------------------------|-----------------------|
| Width | 40 mm / 1.575 inches |
| Height | 163 mm / 6.417 inches |
| Depth from upper-edge of DIN-rail | 163 mm / 6.417 inches |
| Note (dimensions) | Height with connector |

| Mechanical data | |
|-----------------|-------------|
| Mounting type | DIN-35 rail |

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Material dataFire load0 MJWeight800 g

| Environmental requirements | |
|---------------------------------|-------------------------------------|
| Ambient temperature (operation) | -10 +60 °C |
| Ambient temperature (storage) | -25 +85 °C |
| Relative humidity | 596 % (no condensation permissible) |

| Standards and specifications | |
|------------------------------|--|
| Conformity marking | CE |
| Standards/specifications | EN 61010-1 EN 61010-2-201 UL 60950 UL 508 EN 61000-6-2 EN 61000-6-3 |

| Commercial data | |
|-----------------------|--------------------------|
| Product Group | 6 (INTERFACE ELECTRONIC) |
| eCl@ss 10.0 | 27-04-06-90 |
| eCl@ss 9.0 | 27-04-06-90 |
| ETIM 9.0 | EC000382 |
| ETIM 8.0 | EC000382 |
| PU (SPU) | 1 pcs |
| Packaging type | Вох |
| Country of origin | DE |
| GTIN | 4045454909857 |
| Customs tariff number | 85044060900 |

| Environmental Product Compliance | |
|----------------------------------|------------------------|
| RoHS Compliance Status | Compliant,No Exemption |

Approvals / Certificates

General approvals



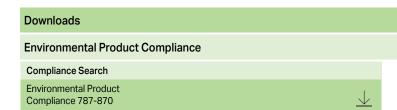
| Approval | Standard | Certificate Name |
|---|----------------|------------------|
| EAC GZO Almaty Standart | TP TC 020/2011 | EAC CoC 03081 |
| UL Underwriters Laboratories Inc. | UL 508 | E255817 |
| UR Underwriters Laboratories Inc. | UL 60950-1 | E255815 |

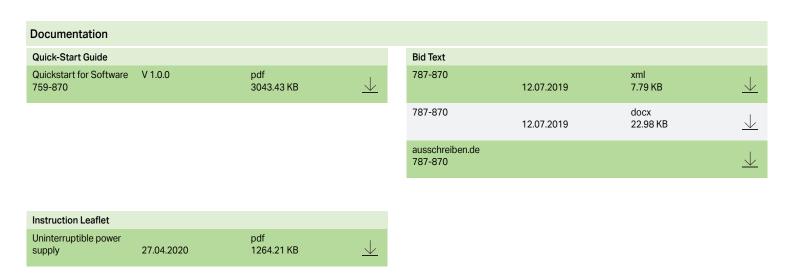
Declarations of conformity and manufacturer's declarations

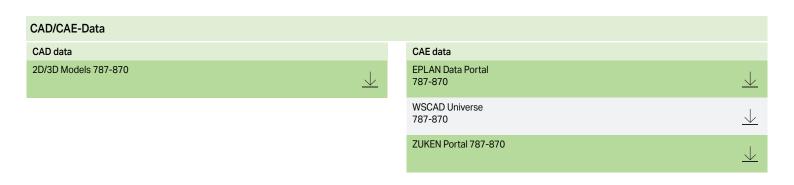
| Approval | Standard | Certificate Name |
|---|----------|------------------|
| EU-Declaration of Confor- mity WAGO GmbH & Co. KG | - | - |
| UK-Declaration of Conformity WAGO GmbH & Co. KG | - | - |

https://www.wago.com/787-870









| Engineering-Softwar | те | | | |
|--|------------|-------------|--------------------------|--|
| Configuration and Commissioning Software | | | | |
| WAGO UPS Shutdown | 4.13 | exe | <u>↓</u> | |
| Tool | 18.11.2021 | 48463.53 KB | | |
| WAGO Software | 4.13 | zip | $\underline{\downarrow}$ | |
| 759-870 | 10.05.2021 | 38762.69 KB | | |

https://www.wago.com/787-870



Libraries

Library

Anbindung Stromversorgungen Serie 787

1.3.0 14.05.2014 zip 549.48 KB

 $\underline{\downarrow}$

1 Compatible Products

1.1 Optional Accessories

1.1.1 Cables and connectors

1.1.1.1 Communication cable



Item No.: 787-890

RS-232 communication cable; Length 1.8

1.1.1.2 Connecting cable



Item No.: 761-9005

USB adapter; with 1m connection cable

1.1.2 Marking

1.1.2.1 Marking strip

Item No.: 2009-110

Marking strips; for Smart Printer; on reel; not stretchable; plain; snap-on type; white

<u>Item No.: 210-831</u>

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

<u>Item No.: 210-832</u>

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

1.1.3 Mounting adapter

1.1.3.1 DIN-rail adapter



Item No.: 787-897

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

The state of

Item No.: 787-896

Carrier rail adapter; for mounting 787-8xx devices to a DIN 35 rail

1.1.3.2 Wall-mount adapter



Item No.: 787-895

Mounting carrier; for screw fixing of 787-8xx devices on mounting plate or wall without DIN 35 rail

https://www.wago.com/787-870



1.1.4 Power supply

1.1.4.1 Uninterruptible power supply





Item No.: 787-871

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



Item No.: 787-873

Lead-acid AGM battery module; 24 VDC input voltage; 40 A output current; 12 Ah capacity; with battery control



Item No.: 787-872

Lead-acid AGM battery module; 24 VDC input voltage; 40 A output current; 7 Ah capacity; with battery control



Item No.: 787-1671

Lead-acid AGM battery module; 24 VDC input voltage; 5 A output current; Capacity: 0.8 Ah; with battery control

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

1.1.5 Tool

1.1.5.1 Operating tool



Item No.: 210-719

Operating tool; Blade: 2.5 x 0.4 mm; with a partially insulated shaft

Item No.: 210-720

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

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

Current addresses can be found at:: www.wago.com

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