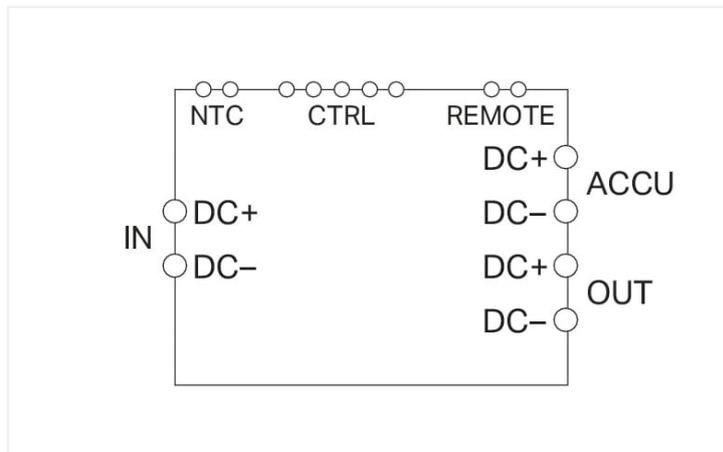


# Data Sheet | Item Number: 787-915

UPS charger and controller; 24 VDC input voltage; 24 VDC output voltage; 40 A output current

<https://www.wago.com/787-915>



## Features:

- DC UPS module for uninterruptible power supply (UPS)
- Potential-free contacts provide function monitoring
- Remote input for buffered output deactivation
- Input for temperature control of connected battery
- Battery internal resistance measurement for diagnosing batteries, including the connection cable and fuse

## Notes

Safety information

For North America: Use only batteries with appropriate safety approvals!

## Technical data

### Input

|                                    |   |
|------------------------------------|---|
| Nominal input voltage $U_{i, nom}$ | DC 24 V   |
| Input voltage range                | DC 22 ... 28 V  |
| Nominal mains frequency range      | 0 Hz  |
| Input current $I_i$                | $\leq 0.16$ A (no load); $\leq 4$ A (Charging); $\leq 44$ A |

### Output

|                                     |   |
|-------------------------------------|---|
| Nominal output voltage $U_{o, nom}$ | DC 24 V   |
| Output voltage range                | $U_i$ (rated operation); 19.5 ... 26.5 VDC (battery voltage in buffer mode) |
| Nominal output current $I_{o, nom}$ | 40 A  |

## Energy storage systems

|                                  |  |
|----------------------------------|--|
| Buffer time                      | load-dependent   |
| Switch-on threshold (adjustable) | DC 21.5 ... 22.5 V   |
| Charging current                 | 1 ... 4 A (adjustable in 1 A steps via DIP switch; Default setting: 2 A)                 |
| End-of-charge voltage            | DC 26.4 ... 29 V (temperature controlled with NTC; without temperature sensor: 27.2 VDC) |
| Recommended battery module       | Typ: VRLA 24 V; 7 ... 40 Ah  |

## Signaling and communication

|                            |   |
|----------------------------|---|
| Signaling                  | 1 x Power LED (green)<br>1 x UPS LED (yellow)<br>1 x Warning LED (red)<br>2 x Isolated relay contact (max. 30 VDC; 1 A) |
| Operation status indicator | Green LED (operation)<br>Yellow LED (buffer mode/charging)<br>Red LED (warning)   |
| Remote input               | Switching buffer mode off   |

## Efficiency/power losses

|                   |  |
|-------------------|--|
| Power loss $P_1$  | $\leq 4$ W; $\leq 22.5$ W (nominal load) |
| Efficiency (typ.) | 97 % (Rated operation); 85 % (Charging)  |

## Circuit protection

|                             |                            |
|-----------------------------|----------------------------|
| Internal fuse               | T 6.3 A (charging circuit) |
| Backup fusing (recommended) | T 50 A                     |

### Safety and protection

|  |                                 |
|--|---------------------------------|
| Isolation voltage (connectors – housing) | DC 0.5 kV                       |
| Protection class                         | III                             |
| Protection type                          | IP20; per EN 60529              |
| Reverse voltage protection               | Yes                             |
| Pollution degree                         | 2                               |
| Parallel operation                       | No                              |
| Series operation                         | No                              |
| MTBF                                     | 600,000 h (40 °C; per SN 29500) |

### Connection data

|   |  |
|---|--|
| Connection type 1                                   | Input/output                                 |
| Connection technology                               | Push-in CAGE CLAMP®                          |
| WAGO connector                                      | WAGO 2636 Series                             |
| Solid conductor                                     | 0.75 ... 16 mm <sup>2</sup> / 18 ... 4 AWG   |
| Fine-stranded conductor                             | 0.75 ... 25 mm <sup>2</sup> / 18 ... 4 AWG   |
| Fine-stranded conductor; with insulated ferrule     | 0.75 ... 16 mm <sup>2</sup>                  |
| Fine-stranded conductor; with uninsulated ferrule   | 0.75 ... 16 mm <sup>2</sup>                  |
| Strip length  | 18 ... 20 mm / 0.71 ... 0.79 inches          |
| Connection type 2                                   | Signaling                                    |
| Connection technology 2                             | CAGE CLAMP®                                  |
| WAGO connector 2                                    | WAGO 741 Series                              |
| Solid conductor 2                                   | 0.08 ... 2.5 mm <sup>2</sup> / 28 ... 12 AWG |
| Fine-stranded conductor 2                           | 0.08 ... 2.5 mm <sup>2</sup> / 28 ... 12 AWG |
| Fine-stranded conductor; with insulated ferrule 2   | 0.25 ... 1.5 mm <sup>2</sup>                 |
| Fine-stranded conductor; with uninsulated ferrule 2 | 0.25 ... 1.5 mm <sup>2</sup>                 |
| Strip length 2                                      | 5 ... 6 mm / 0.2 ... 0.24 inches             |

### Physical data

|                                   |                       |
|-----------------------------------|-----------------------|
| Width                             | 68 mm / 2.677 inches  |
| Height                            | 181 mm / 7.126 inches |
| Depth from upper-edge of DIN-rail | 162 mm / 6.38 inches  |

### Mechanical data

|               |             |
|---------------|-------------|
| Mounting type | DIN-35 rail |
|---------------|-------------|

### Material data

|           |        |
|-----------|--------|
| Fire load | 0 MJ   |
| Weight    | 1100 g |

### Environmental requirements

|                                 |  |
|---------------------------------|--|
| Ambient temperature (operation) | 0 ... +50 °C                             |
| Ambient temperature (storage)   | -20 ... +55 °C                           |
| Relative humidity               | 5 ... 95 % (no condensation permissible) |

| Standards and specifications       |  |
|------------------------------------|--|
| Conformity marking                 | CE   |
| Standards/specifications           | EN 62368-1<br>EN 61000-6-2<br>EN 61000-6-3 |
| Standards/specifications (pending) | CSA  |

| Commercial data       |             |
|-----------------------|-------------|
| ETIM 8.0              | EC000382    |
| ETIM 7.0              | EC000382    |
| PU (SPU)              | 1 pcs       |
| Packaging type        | Box         |
| Country of origin     | DE          |
| Customs tariff number | 85044083900 |

| 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 |
| CSA<br>CSA Group                         | CAN/CSA-C22.2 No. 62368-1 | 70216154                     | EU-Declaration of Confor- mity<br>WAGO GmbH & Co. KG       | -        | -                |
| EAC<br>Brjansker Zertifizierungs- stelle | TP TC 020/2011            | RU_C-DE.AM02. B.00093-19     |  |          |                  |
| EAC<br>Brjansker Zertifizierungs- stelle | TP TC 004/2011            | EAC RU C-DE.AM02. B.00089_19 |  |          |                  |

### Downloads

| Environmental Product Compliance         |                   |
|--|-------------------|
| Compliance Search                        |                   |
| Environmental Product Compliance 787-915 | <a href="#">↓</a> |

### Documentation

| Bid Text |            |                  |                   | Instruction Leaflet              |            |                  |                   |
|----------|------------|------------------|-------------------|----------------------------------|------------|------------------|-------------------|
| 787-915  | 12.07.2019 | docx<br>21.62 KB | <a href="#">↓</a> | UPS charger and con- trol module | 14.12.2020 | pdf<br>537.72 KB | <a href="#">↓</a> |
| 787-915  | 12.07.2019 | xml<br>7.11 KB   | <a href="#">↓</a> |                                  |            |                  |                   |

CAD/CAE-Data

CAD data

2D/3D Models 787-915



CAE data

EPLAN Data Portal  
787-915

