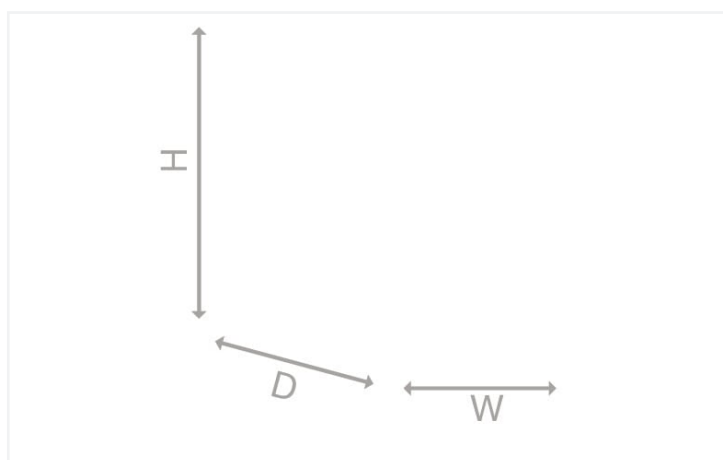
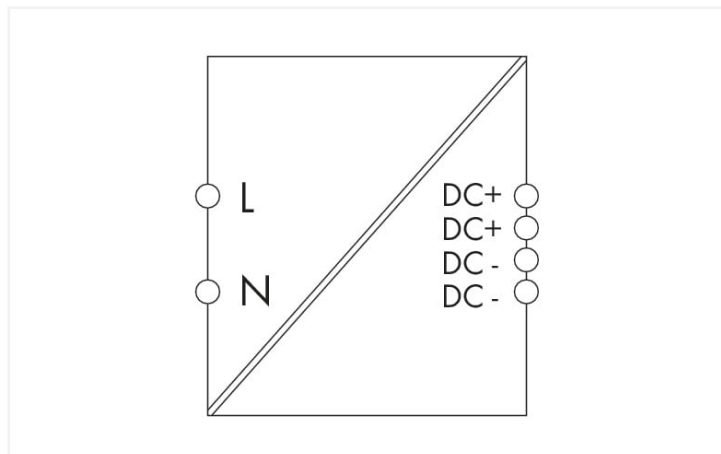


## Data Sheet | Item Number: 787-1020

Switched-mode power supply; Compact; 1-phase; 5 VDC output voltage; 5.5 A output current; DC OK signal

<https://www.wago.com/787-1020>



### Features:

- Switched-mode power supply
- Natural convection cooling when horizontally mounted
- Stepped profile, ideal for distribution boards/boxes
- Overhead mounting is possible with derating
- Suitable for both parallel and series operation
- Electrically isolated output voltage (SELV) per EN 61010-2-201/UL 60950-1; PELV per EN 60204

### Technical data

#### Input

|   |  |
|---|--|
| Phases                                    | 1  |
| Nominal input voltage $U_{i, \text{nom}}$ | 1 x AC 100 ... 240 V                             |
| Input voltage range                       | 1 x AC 85 ... 264 V; DC 120 ... 300 V            |
| Nominal mains frequency range             | 44 ... 66 Hz; 0 Hz                               |
| Input current $I_i$                       | $\leq 0.29$ A (230 VAC); $\leq 0.56$ A (110 VAC) |
| Discharge current                         | $\leq 1$ mA                                      |
| Inrush current                            | $\leq 30$ A (NTC)                                |
| Power factor correction (PFC)             | passive  |
| Mains failure hold-up time                | $\geq 80$ ms (230 VAC); $\geq 10$ ms (110 VAC)   |

#### Output

|  |   |
|--|---|
| Nominal output voltage $U_{o, \text{nom}}$ | DC 5 V (SELV)                                   |
| Output voltage range                       | DC 4.5 ... 8.5 V (adjustable)                   |
| Default setting                            | DC 5 V  |
| Nominal output current $I_{o, \text{nom}}$ | 5.5 A (5 VDC); 3.5 A (in any mounting position) |
| Nominal output power                       | 27.5 W  |
| Deviation                                  | $\leq 2$ %                                      |
| Residual ripple                            | $\leq 100$ mV (Peak-to-peak)                    |
| Current limitation                         | $1.1 \times I_{o, \text{nom}}$ (typ.)           |
| Overload behavior                          | Constant current                                |

### Signaling and Communication

|                            |                                   |
|----------------------------|-----------------------------------|
| Signaling                  | 1 x Status indication LED (green) |
| Operation status indicator | Green LED (U <sub>o</sub> )       |

### Efficiency/power losses

|                                       |  |
|---------------------------------------|--|
| Power loss P <sub>I</sub>             | ≤ 2.4 W; ≤ 9.4 W (230 VAC; nominal load) |
| Power loss (max.) P <sub>I(max)</sub> | 9.9 W (264 VAC / 5 VDC; 5.5 A)           |
| Efficiency (typ.)                     | 75 %                                     |

### Circuit protection

|                             |  |
|-----------------------------|--|
| Internal fuse               | T 2 A / 250 VAC  |
| Backup fusing (required)    | An external DC fuse is required for the DC input voltage.                  |
| Backup fusing (recommended) | Circuit breaker: 6 A (C characteristic), 10 A (B characteristic) or higher |

### Safety and protection

|                                   |                                    |
|-----------------------------------|------------------------------------|
| Isolation voltage (pri.-sec.)     | DC 4.242 kV                        |
| Protection class                  | II                                 |
| Protection type                   | IP20; per EN 60529                 |
| Resistance to reverse feed        | ≤ DC 10 V                          |
| Overvoltage category              | II                                 |
| Pollution degree                  | 2                                  |
| Transient suppression (primary)   | Varistor                           |
| Overvoltage protection; secondary | ≤ 16 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 type 1       | Input/output                                 |
| Connection technology   | CAGE CLAMP®                                  |
| WAGO connector          | WAGO 740 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            | 6 ... 7 mm / 0.24 ... 0.28 inches            |

### Physical data

|                                   |                      |
|-----------------------------------|----------------------|
| Width                             | 72 mm / 2.835 inches |
| Height                            | 89 mm / 3.504 inches |
| Depth                             | 59 mm / 2.323 inches |
| Depth from upper-edge of DIN-rail | 55 mm / 2.165 inches |

### Mechanical Data

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

### Material Data

|                             |       |
|-----------------------------|-------|
| Flammability class per UL94 | V0    |
| Fire load                   | 0 MJ  |
| Weight                      | 240 g |

### Environmental requirements

|  |  |
|--|--|
| Ambient temperature (operation at $U_N$ )    | -25 ... +60 °C (Device starts at -40 °C (type-tested)) |
| Surrounding air temperature (storage)        | -25 ... +80 °C   |
| Ambient temperature UL (operation at $U_N$ ) | -25 ... +55 °C   |
| Relative humidity                            | 5 ... 96 % (no condensation permissible)               |
| Derating                                     | -3 %/K (> 45 °C)                                       |

### Standards and specifications

|                          |   |
|--------------------------|---|
| Conformity marking       | CE  |
| Standards/specifications | EN 61010-1<br>EN 61010-2-201<br>EN 61204-3<br>UL 60950-1<br>UL 508<br>DNV |

### Commercial data

|                       |               |
|-----------------------|---------------|
| eCl@ss 10.0           | 27-04-07-01   |
| eCl@ss 9.0            | 27-04-07-01   |
| ETIM 8.0              | EC002540      |
| ETIM 7.0              | EC002540      |
| PU (SPU)              | 1 pcs         |
| Packaging type        | Box           |
| Country of origin     | DE            |
| GTIN                  | 4055143098816 |
| Customs tariff number | 85044083900   |

### Approvals / Certificates

#### General approvals



| Approval                                    | Standard                         | Certificate Name                |
|---|----------------------------------|---------------------------------|
| EAC<br>Brjansker Zertifizierungs-<br>stelle | TP TC 004/2011,TP TC<br>020/2011 | EAC RU C-DE.AM02.<br>B.00089_19 |
| UL<br>Underwriters Laboratories<br>Inc.     | UL 508                           | E255817                         |
| UL<br>Underwriters Laboratories<br>Inc.     | UL 60950-1                       | E255815                         |

### Downloads

#### Environmental Product Compliance

| Compliance Search                         |  |  |   |
|---|--|--|---|
| Environmental Product Compliance 787-1020 |  |  |   |
|   |  |  | ↓ |

## Documentation

| Bid Text |            |                  |   |
|----------|------------|------------------|---|
| 787-1020 | 12.06.2019 | docx<br>20.36 KB | ↓ |
| 787-1020 | 24.06.2019 | xml<br>6.83 KB   | ↓ |

| Instruction Leaflet   |                          |                   |   |
|-----------------------|--------------------------|-------------------|---|
| Power Supply COM-PACT | 29-03-2021<br>20.12.2021 | pdf<br>2143.15 KB | ↓ |

## CAD/CAE-Data

| CAD data                 |   |
|--------------------------|---|
| 2D/3D Models<br>787-1020 | ↓ |

| CAE data                      |   |
|-------------------------------|---|
| EPLAN Data Portal<br>787-1020 | ↓ |
| WSCAD Universe<br>787-1020    | ↓ |
| ZUKEN Portal<br>787-1020      | ↓ |

## 1 Compatible Products

### 1.1 Optional Accessories

#### 1.1.1 Marking

##### 1.1.1.1 Marking strip



**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

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

Current addresses can be found at: [www.wago.com](http://www.wago.com)