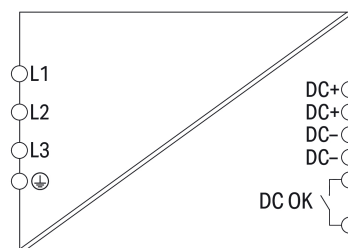


<https://www.wago.com/787-1640>



- Switched-mode power supply with TopBoost, enabling secondary-side protection via circuit breakers
- Natural convection cooling when horizontally mounted
- Encapsulated for use in control cabinets
- DC OK contact
- Suitable for both parallel and series operation
- Electrically isolated output voltage (SELV) per UL 60950-1; PELV per EN 60204

| Input                                   |                                                                                  |
|-----------------------------------------|----------------------------------------------------------------------------------|
| Phases                                  | 2 / 3                                                                            |
| Nominal input voltage $U_{i\text{nom}}$ | $(2 / 3) \times 400 \dots 500 \text{ VAC}$                                       |
| Input voltage range                     | $(2 / 3) \times 320 \dots 575 \text{ VAC}; 450 \dots 800 \text{ VDC}$            |
| Nominal mains frequency range           | 47 ... 63 Hz; 0 Hz                                                               |
| Input current $I_i$                     | $\leq 3 \times 0.73 \text{ A (400 VAC)}; \leq 3 \times 0.66 \text{ A (500 VAC)}$ |
| Discharge current                       | $\leq 1 \text{ mA}$                                                              |
| Inrush current                          | $\leq 30 \text{ A (NTC)}$                                                        |
| Power factor correction (PFC)           | Passive                                                                          |
| Mains failure hold-up time              | $\geq 50 \text{ ms (500 VAC)}; \geq 21 \text{ ms (400 VAC)}$                     |

|                                     |                                    |
|-------------------------------------|------------------------------------|
| Nominal output voltage $U_{o\ nom}$ | 24 VDC (SELV)                      |
| Output voltage range                | 23 ... 28.5 VDC (adjustable)       |
| Default Setting                     | 24 VDC                             |
| Nominal output current $I_{o\ nom}$ | 10 A (24 VDC)                      |
| Nominal output power                | 240 W                              |
| Deviation                           | $\leq 1\%$                         |
| Residual ripple                     | $\leq 50\text{ mV}$ (peak-to-peak) |
| Current limitation                  | $1.1 \times I_{o\ nom}$ (typ.)     |
| Overload behavior                   | Constant current                   |

|                            |                                                                                |
|----------------------------|--------------------------------------------------------------------------------|
| Signaling                  | 1 x DC OK LED (green)<br>1 x DC OK contact (make contact; max. 30 VAC/DC; 1 A) |
| Operation status indicator | Green LED (U <sub>o</sub> )                                                    |

|                                        |                                                                   |
|----------------------------------------|-------------------------------------------------------------------|
| Power loss $P_I$                       | $\leq 2.1 \text{ W}; \leq 27.9 \text{ W (400 VAC; nominal load)}$ |
| Power loss (max.) $P_{I(\text{max.})}$ | $28.3 \text{ W (500 VAC / 24 VDC; 10 A)}$                         |
| Efficiency (typ.)                      | 90 %                                                              |



| Circuit Protection  |                                                                                                                                                                                       |
|---------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Internal fuse       | No                                                                                                                                                                                    |
| Pre-fuse (required) | 3 x Circuit breaker: 6 A, 10 A, 16 A; Tripping characteristic: B or C, 20 A (max.)<br>Alternative: motor circuit breaker<br>An external DC fuse is required for the DC input voltage. |

| Safety and protection             |                                                                   |
|-----------------------------------|-------------------------------------------------------------------|
| Isolation voltage (pri.-sec.)     | 4.242 kVDC                                                        |
| Isolation voltage (pri.-PE)       | 2.2 kVDC                                                          |
| Isolation voltage (sec.-PE)       | 0.7 kVDC                                                          |
| Protection class                  | I                                                                 |
| Protection type                   | IP20; per EN 60529                                                |
| Resistance to reverse feed        | ≤ 35 VDC                                                          |
| Overvoltage category              | II                                                                |
| Pollution degree                  | 2                                                                 |
| Transient suppression (primary)   | Varistor                                                          |
| Overvoltage protection; secondary | Internal protective circuit<br>≤ 41 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 1            |                                   |
| Connection type         | Input/output/signaling            |
| Connection technology   | CAGE CLAMP®                       |
| WAGO connector          | WAGO 721 Series                   |
| Solid conductor         | 0.08 ... 2.5 mm² / 28 ... 12 AWG  |
| Fine-stranded conductor | 0.08 ... 2.5 mm² / 28 ... 12 AWG  |
| Strip length            | 8 ... 9 mm / 0.31 ... 0.35 inches |

| Physical data                     |                       |
|-----------------------------------|-----------------------|
| Width                             | 55 mm / 2.165 inches  |
| Height                            | 127 mm / 5 inches     |
| Depth from upper-edge of DIN-rail | 171 mm / 6.732 inches |

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



| Material data |  |         |
|---------------|--|---------|
| Fire load     |  | 0.37 MJ |
| Weight        |  | 1000 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                        |  | -2.5 %/K (> 55 °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<br>SEMI F47 |

| Commercial data       |  |               |
|-----------------------|--|---------------|
| PU (SPU)              |  | 1 pcs         |
| Packaging type        |  | Box           |
| Country of origin     |  | PL            |
| GTIN                  |  | 4055143259163 |
| 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<br>GZO Almaty Standart                                                                                                                                                                                                                                 | TP TC 004/2011 | EAC CoC 03078    | EU-Declaration of Conformity<br>WAGO GmbH & Co. KG         | -        | -                |
| EAC<br>GZO Almaty Standart                                                                                                                                                                                                                                 | TP TC 020/2011 | EAC CoC 03081    | MFD for SEMI F47<br>WAGO GmbH & Co. KG                     | -        | -                |
| UL<br>Underwriters Laboratories Inc.                                                                                                                                                                                                                       | UL 508         | E255817          |                                                            |          |                  |
| UR<br>Underwriters Laboratories Inc.                                                                                                                                                                                                                       | UL 60950-1     | E255815          |                                                            |          |                  |



Approvals for marine applications



| Approval                | Standard             | Certificate Name |
|-------------------------|----------------------|------------------|
| DNV<br>DNV Germany GmbH | DNV-CG-0339,Aug.2021 | TAA00000KT       |

Downloads

Environmental Product Compliance

| Compliance Search                            |
|----------------------------------------------|
| Environmental Product<br>Compliance 787-1640 |

Documentation

| Bid Text         |
|------------------|
| 787-1640         |
| 04.07.2019       |
| xml<br>7.21 KB   |
| ↓                |
| 787-1640         |
| 13.06.2019       |
| docx<br>21.39 KB |
| ↓                |

| Instruction Leaflet                              |
|--------------------------------------------------|
| Primär getaktete<br>Stromversorgungen<br>CLASSIC |
| pdf<br>166.24 KB                                 |
| ↓                                                |

CAD/CAE-Data

| CAD data              |
|-----------------------|
| 2D/3D Models 787-1640 |

| CAE data                      |
|-------------------------------|
| EPLAN Data Portal<br>787-1640 |
| ↓                             |
| WSCAD Universe<br>787-1640    |
| ↓                             |
| ZUKEN Portal 787-1640         |
| ↓                             |

Engineering-Software

| Configuration and Commissioning Software |
|------------------------------------------|
| WAGO Line Length Cal-<br>culation        |
| 1.3.5<br>09.12.2019                      |
| exe<br>329.50 KB                         |
| ↓                                        |

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 Mounting adapter

1.1.2.1 DIN-rail adapter



**Item No.: 787-897/000-010**  
Carrier rail adapter made of zinc die-cast; horizontal mounting of 787-16xx (TS35)

1.1.3 Tool

1.1.3.1 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