Automation Technology
Interface Electronic

Supplementary Catalog to
Full Line Catalogs, Volumes 3/4
Edition 2015/1
The new items in this catalog supplement products found in the following main catalogs:

- Volume 3: Automation Technology
- Volume 4: Interface Electronic

3/4
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DNP3 Configurator
Configuration dialog integrated in WAGO-I/O-PRO v2.3 for DNP3 communication parameterization

The DNP3 Configurator is part of the WAGO-I/O-PRO v2.3. Software. The configurator fully supports the DNP3 specific functions of all WAGO telecontrollers.

The configurator sets up DNP3 objects, while configuring data exchange to the PLC application or I/O modules. The settings can be imported and exported in DNP3 XML device profile format.

WAGO’s telecontrollers can work as TCP, UDP and serial DNP3 slave.

Cyclical time synchronization of the telecontrol outstation (slave) can be performed by the master according to DNP3 Device Profile 1.7.2.

In the monitoring direction, the WAGO DNP3 slave can send digital, analog and count values to the master. Both digital and analog values can be received in control direction. Analog values can be processed in 16-bit, 32-bit or FLOAT format. Count values can be processed in 16-bit or 32-bit format. WAGO’s DNP3 slave can simultaneously maintain connections to up four DNP3 masters.

**Description**

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**Technical Data**

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<tr>
<td><strong>Baud rates</strong></td>
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<td><strong>Number of control stations</strong></td>
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</tbody>
</table>
## Interface Electronic

### Relay Sockets with Miniature Switching Relay

<table>
<thead>
<tr>
<th>Description</th>
<th>$V_N$</th>
<th>Item No.</th>
<th>Pack. Unit</th>
<th>Description</th>
<th>$V_N$</th>
<th>Item No.</th>
<th>Pack. Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Relay socket with miniature switching relay, for DIN-rail</td>
<td>24 V ... 230 V AC/DC</td>
<td>857-359</td>
<td>25 (1)</td>
<td>Relay with 1 changeover contact (1u) for normal switching power</td>
<td>24 V ... 230 V AC/DC</td>
<td>857-369</td>
<td>25 (1)</td>
</tr>
</tbody>
</table>

### Technical Data

#### Coil:
- Input voltage range: $V_N \pm 30\% ... +10\%$
- Nominal input current $I_N$: 3.5 mA at 230 VAC, 20 mA at 24 VDC

#### Contacts:
- Contact material: AgNi
- Max. continuous current: 6 A
- Max. switching voltage: 250 VAC
- Max. switching power (resistive): 1500 VA AC; DC see load limit curve
- Max. switching load with load/without load: 6 min$^{-1}$ / 60 min$^{-1}$
- Pull-in/drop-out/bounce time typ.: 15 ms / 50 ms / 5 ms
- Mechanical life: $5 \times 10^4$ switching operations
- Mechanical life at max. load (resistance): $5 \times 10^6$ switching operations

#### General specifications:
- Nominal voltage to EN 60664-1: 250 V / 4 kV / 2
- Dielectric strength, contact-coil (AC, 1 min): 4 kV$\text{rms}$
- Dielectric strength open contact (AC, 1 min): 1 kV$\text{rms}$
- Ambient operating temperature at $V_N$: $-40 \degree C ... +70 \degree C$
- Processing temperature: $-25 \degree C ... +50 \degree C$
- Storage temperature: $-40 \degree C ... +70 \degree C$
- Dimensions (mm): $W \times H \times L$: 6 x 8 x 94
- Wire connection: CAGE CLAMP® S
- Cross sections: 0.34 ... 2.5 mm² / 22 ... 14 AWG
- Strip lengths: 9 ... 10 mm / 0.35 ... 0.39 in
- Standards/Specifications: EN 60664-1; EN 61140; UL 508**  
  ** (pending)
Plug-In Current Transformers
with CAGE CLAMP® Connector

Short description:
The 855 Series Plug-In Current Transformers are inductive, single-conductor current transformers. Based on the principle of measurement, current transformers of this type are used exclusively in AC networks.

Features:
- Screwless CAGE CLAMP® connection technology
- Several mounting options available
- Vibration- and shock-resistant
- High mechanical retention forces
- High current-carrying capacity
- Continuous overload of 120 % the nominal primary current
- Low-voltage current transformer for max. operating voltages up to 1.2 kV
- Can be used in 690 V power networks
- UL recognized components

<table>
<thead>
<tr>
<th>Description</th>
<th>( I_{pN} )</th>
<th>( I_{sN} )</th>
<th>( S_N )</th>
<th>G</th>
<th>Item No.</th>
<th>Pack. Unit</th>
<th>Description</th>
<th>( I_{pN} )</th>
<th>( I_{sN} )</th>
<th>( S_N )</th>
<th>G</th>
<th>Item No.</th>
<th>Pack. Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plugin current transformer</td>
<td>600 A</td>
<td>1 A</td>
<td>5 VA</td>
<td>1</td>
<td>855-401/600-501</td>
<td>1</td>
<td>250 A</td>
<td>1</td>
<td>5 A</td>
<td>5 VA</td>
<td>1</td>
<td>855-405/250-501</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>1500 A</td>
<td>1 A</td>
<td>5 VA</td>
<td>1</td>
<td>855-601/1500-501</td>
<td>1</td>
<td>1500 A</td>
<td>1</td>
<td>5 A</td>
<td>5 VA</td>
<td>1</td>
<td>855-605/1500-501</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>2500 A</td>
<td>1 A</td>
<td>10 VA</td>
<td>1</td>
<td>855-1001/2500-1001</td>
<td>1</td>
<td>2500 A</td>
<td>1</td>
<td>5 A</td>
<td>10 VA</td>
<td>1</td>
<td>855-1005/2500-1001</td>
<td>1</td>
</tr>
</tbody>
</table>

\( I_{pN} \) = Primary rated current
\( I_{sN} \) = Secondary rated current
\( S_N \) = Rated power
G = Accuracy class

Technical Data

Input:
- Rated continuous thermal current \( I_{cth} \)
- Rated short-time thermal current \( I_{th} \)
- Max. operating voltage \( V_{in} \)
- Rated frequency
- Overcurrent limiting factor

Environmental requirements:
- Ambient operating temperature
- Storage temperature
- Max. operating altitude

Safety and protection:
- Test voltage
- Insulation class

Connection:
- Connection technology
- Cross sections
- Strip lengths

Standards and approvals:
- CE
- LuK (Recognized Components)

Accessories

<table>
<thead>
<tr>
<th>Item No.</th>
<th>Pack. Unit</th>
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<tr>
<td>855-9900</td>
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<tr>
<td>855-9910</td>
<td>1</td>
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<tr>
<td>210-720</td>
<td>1</td>
</tr>
<tr>
<td>2007-8873</td>
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### Dimensions:

<table>
<thead>
<tr>
<th>Item No.</th>
<th>855-xxxx/xxxx-xxxx</th>
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</thead>
<tbody>
<tr>
<td><strong>855-4xx/xxxx-xxxx</strong></td>
<td></td>
</tr>
<tr>
<td>Rail 1: 40 x 10 mm</td>
<td></td>
</tr>
<tr>
<td>Rail 2: 30 x 15 mm</td>
<td></td>
</tr>
<tr>
<td>Round cable: 32 mm</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Item No.</th>
<th>855-xxxx/xxxx-xxxx</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>855-6xx/xxxx-xxxx</strong></td>
<td></td>
</tr>
<tr>
<td>Rail 1: 63 x 10 mm</td>
<td></td>
</tr>
<tr>
<td>Rail 2: 50 x 30 mm</td>
<td></td>
</tr>
<tr>
<td>Round cable: 44 mm</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Item No.</th>
<th>855-xxxx/xxxx-xxxx</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>855-8xx/xxxx-xxxx</strong></td>
<td></td>
</tr>
<tr>
<td>Rail 1: 80 x 10 mm</td>
<td></td>
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<tr>
<td>Rail 2: 60 x 30 mm</td>
<td></td>
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<tr>
<td>Round cable: 55 mm</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Item No.</th>
<th>855-xxxx/xxxx-xxxx</th>
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</thead>
<tbody>
<tr>
<td><strong>855-10xx/xxxx-xxxx</strong></td>
<td></td>
</tr>
<tr>
<td>Rail 1: 100 x 10 mm</td>
<td></td>
</tr>
<tr>
<td>Rail 2: 80 x 30 mm</td>
<td></td>
</tr>
<tr>
<td>Round cable: 70 mm</td>
<td></td>
</tr>
</tbody>
</table>

**Simple termination! Quick and easy mounting!**

**Note:**

* The carrier rail adapter is only suitable for 855-3xx/xxxx-xxxx and 855-4xx/xxxx-xxxx transformers.
787-1628

Switched-Mode Power Supply, 1-/2-Phase

EPSITRON® CLASSIC Power

- Primary switch mode power supply unit with TopBoost, enabling secondary-side protection via electronic circuit breakers
- Suitable for protection class I equipment
- Natural convection cooling when horizontally mounted
- Enclosed for use in switchgear cabinets
- DC OK contact
- Suitable for both parallel and series operation
- Electrically isolated output voltage (SELV) acc. to EN 60950-1/UL 60950-1

Description

Item No. Pack. Unit
Switched-mode power supply, 787-1628 24 VDC/ 5 A 1

Technical Data

Input:
- Nominal input voltage \( V_{\text{nom}} \): 1 x (2 x) AC 200 ... 500 VAC
- Input voltage range: 180 ... 550 VAC; 254 ... 780 VDC
- Input voltage derating: -0.5 % (< 200 VAC)
- Frequency: 44 Hz ... 66 Hz; 0 Hz
- Input current \( I_\text{i} \): 1.25 A (200 VAC); 0.67 A (500 VAC)
- Power factor: ≥ 0.52
- Inrush current: < 30 A, NTC
- Mains failure hold-up time: 126 ms (500 VAC); 15 ms (200 VAC)

Output:
- Nominal output voltage \( V_{\text{nom}} \): 24 VDC (SELV)
- Output voltage range: 23 V ... 28.5 VDC adjustable
- Factory preset: 24 VDC
- Output current \( I_\text{o} \): 5 A at 24 VDC
- Adjustment accuracy: < 1 %
- Residual ripple: 30 mV (peak-to-peak) typ.
- Current limitation: 1.1 x \( I_\text{o} \) typ.
- Overload behavior: Constant current
- Operational indication: Green LED (\( V_\text{o} \))
- Signaling: DC OK contact; Make contact (max. 30 V / 1 A)

Efficiency/Power losses:
- Efficiency: 89 % typ.
- Power loss \( P_\text{p} \): 0.94 W (no load), 16.36 W (230 VAC, nominal load), 14.55 W (400 VAC, nominal load)
- Max. power loss \( P_\text{m} \): 18.2 W (200 VAC / 24 VDC, 5 A)

Fuse protection:
- Internal fuse: T 3.15 A / 250 V
- External fuse: Circuit breakers 6 A, 10 A, 16 A, characteristic: B or C
- An external DC fuse is required for the DC input voltage

Environmental requirements:
- Ambient operating temperature: -25 °C ... +70 °C
- Storage temperature: -25 °C ... +85 °C
- Relative humidity: 5 % ... 95 % (no condensation permissible)
- Derating: -2.5 %/K (> 55 °C)

Safety and protection:
- Test voltage PRI–SEC: 4.2 kV DC
- Protection class: Prepared for class I equipment
- Degree of protection: IP20 (acc. to EN 60529)
- Overvoltage protection: Varistor (input side), internal protective circuit, < 40 VDC (output side in case of an error)
- Short circuit protection: yes
- No-load proof: yes
- Feedback voltage: max. 35 VDC
- Parallel operation: yes
- Series connection: yes

Connection and mounting type:
- Wire connection: Input/Output/Signaling: WAGO 721 Series
- Cross sections: Input/Output/Signaling: 0.08 mm² ... 2.5 mm² / 28 ... 12 AWG
- Strip lengths: 8 ... 9 mm / 0.31 ... 0.35 in
- Mounting type: DIN-rail mount (EN 60715)

Dimensions and weight:
- Dimensions (mm) W x H x L: 42 x 127 x 137
- Length from upper-edge of DIN-rail: 42 mm
- Weight: 600 g

Standards and specifications:
- Standards/Specifications: EN 60950-1, EN 61204-3, UL 60950-1, UL 508, GL* (* pending)
• Primary switch mode power supply unit with TopBoost, enabling secondary-side protection via electronic circuit breakers
• Suitable for protection class I equipment
• Natural convection cooling when horizontally mounted
• Enclosed for use in switchgear cabinets
• DC OK contact
• Suitable for both parallel and series operation
• Electrically isolated output voltage (SELV) acc. to EN 60950-1/UL 60950-1

**Description**

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<td>787-1640</td>
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**Technical Data**

### Input:

- Nominal input voltage $V_{i,nom}$: 3 x (2 x) AC 400 … 500 VAC
- Input voltage range: 320 V ... 575 VAC; 450 V ... 800 VDC
- Frequency: 47 Hz ... 63 Hz; 0 Hz
- Input current $I_i$: 3 x 0.73 A (400 VAC); 3 x 0.66 A (500 VAC)
- Inrush current: < 30 A, NTC
- Mains failure hold-up time: 50 ms (500 VAC); 21 ms (400 VAC)

### Output:

- Nominal output voltage $V_{o,nom}$: 24 VDC (SELV)
- Output voltage range: 23 V ... 28.5 VDC adjustable
- Factory preset: 24 VDC
- Output current $I_o$: 10 A at 24 VDC
- Adjustment accuracy: < 1 %
- Residual ripple: 50 mV (peak-to-peak) typ.
- Current limitation: 1.1 x $I_o$, typ.
- Overload behavior: Constant current
- Operational indication: Green LED $V_o$
- Signaling: DC OK contact;
  - Make contact (max. 30 V / 1 A)

### Efficiency/Power losses:

- Efficiency: 90 % typ.
- Power loss $P_v$: 2.1 W (no load);
  - 27.9 W (400 VAC, nominal load)
- Max. power loss $P_v$: 28.3 W (500 VAC / 24 VDC, 10 A)

### Fuse protection:

- Internal fuse -
- External fuse: 3 x circuit breakers 10 A, 16 A,
  - B or C characteristic;
  - or motor circuit breakers
  - An external DC fuse required for DC input
  - voltage

### Environmental requirements:

- Ambient operating temperature: -25 °C ... +70 °C;
  - Device start at -40 °C type-tested
- Storage temperature: -25 °C ... +85 °C
- Relative humidity: 5 % ... 95 % (no condensation permissible)
- Derating: -2.5 %/K (> 55 °C)

### Safety and protection:

- Test voltage PRI-SEC: 4.2 kV DC
- Protection class: Prepared for class I equipment
- Degree of protection: IP20 (acc. to EN 60529)
- Overvoltage protection: Varistor (input side);
  - internal protective circuit,
  - < 41 VDC (output side in case of an error)
- Short circuit protection: yes
- No-load proof: yes
- Feedback voltage: max. 35 VDC
- Parallel operation: yes
- Series connection: yes

### Connection and mounting type:

- Wire connection: Input/Output/Signaling:
  - WAGO 721 Series
- Cross sections: Input/Output/Signaling:
  - 0.08 mm² ... 2.5 mm² / 28 ... 12 AWG
- Strip lengths:
  - 8 ... 9 mm / 0.31 ... 0.35 in
- Mounting type: DIN-rail-mount (EN 60715)

### Dimensions and weight:

- Dimensions (mm) W x H x L: 55 x 127 x 171
- Length from upper-edge of DIN-rail
- Weight: 1000 g

### Standards and specifications:

- Standards/Specifications:
  - EN 60950-1, EN 61204-3,
  - UL 60950-1, UL 508, GL*
  - (* pending)
Switched-Mode Power Supply, 3-Phase

**EPSITRON® CLASSIC Power**

- Primary switch mode power supply unit with TopBoost, enabling secondary-side protection via electronic circuit breakers
- Suitable for protection class I equipment
- Natural convection cooling when horizontally mounted
- Enclosed for use in switchgear cabinets
- DC OK contact
- Suitable for both parallel and series operation
- Electrically isolated output voltage (SELV) acc. to EN 60950-1/UL 60950-1

### Technical Data

**Input:**
- Nominal input voltage $V_{\text{in\_nom}}$: $3 \times (2 \times) \text{AC} 400 \ldots 500 \text{VAC}$
- Input voltage range: $320 \ldots 575 \text{VAC}; 450 \ldots 800 \text{VDC}$
- Frequency: $47 \text{Hz} \ldots 63 \text{Hz}; 0 \text{Hz}$
- Input current $I_i$: $3 \times 1.21 \text{A} (400 \text{VAC}); 3 \times 1.03 \text{A} (500 \text{VAC})$
- Inrush current: $< 30 \text{A}, \text{NTC}$
- Mains failure hold-up time: $25 \text{ms} (500 \text{VAC}); 15 \text{ms} (400 \text{VAC})$

**Output:**
- Nominal output voltage $V_{\text{out\_nom}}$: $24 \text{VDC} (\text{SELV})$
- Output voltage range: $23 \text{V} \ldots 28.5 \text{VDC} \text{adjustable}$
- Factory preset: $24 \text{VDC}$
- Output current $I_o$: $20 \text{A at} 24 \text{VDC}$
- Adjustment accuracy: $< 1 \%$
- Residual ripple: $15 \text{mV (peak-to-peak)}$ typ.
- Current limitation: $1.1 \times I_o$ typ.
- Overload behavior: Constant current
- Operational indication: Green LED ($V_o$)
- Signaling: DC OK contact; Make contact (max. $30 \text{V} / 1 \text{A}$)

**Efficiency/Power losses:**
- Efficiency: $92 \%$ typ.
- Power loss $P_v$: $5.8 \text{W (no load)}$
- Max. power loss $P_{\text{loss}}$: $47.6 \text{W} (300 \text{VAC} / 24 \text{VDC}, 20 \text{A})$

**Fuse protection:**
- Internal fuse: -
- External fuse: $3 \times \text{circuit breakers} 10 \text{A}, 16 \text{A}, 8 \text{or} \text{C \characteristic}$
- An external DC fuse required for DC input voltage

### Description

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</thead>
<tbody>
<tr>
<td>Switched-mode power supply, 24 VDC/ 20 A</td>
<td>787-1642</td>
<td>1</td>
</tr>
</tbody>
</table>

**Technical Data**

- **Environmental requirements:**
  - Ambient operating temperature: $-25 \ldots +70 \, ^\circ\text{C}$
  - Device start at $-40 \, ^\circ\text{C}$ type-tested
- **Protection class:** Prepared for class I equipment
- **Degree of protection:** IP20 (acc. to EN 60529)
- **Overvoltage protection:** Varistor (input side);
  - internal protective circuit,
  - $< 40 \text{VDC (output side in case of an error)}$
- **Short circuit protection:** yes
- **No-load proof:** yes
- **Feedback voltage:** max. $35 \text{VDC}$
- **Parallel operation:** yes
- **Series connection:** yes

**Connection and mounting type:**
- **Wire connection:** Input/Signaling: WAGO 721 Series
  - Output: WAGO 831 Series
- **Cross sections:** Input/Signaling:
  - $0.08 \text{mm}^2 \ldots 2.5 \text{mm}^2 / 28 \ldots 12 \text{AWG}$
  - Output:
    - $0.5 \text{mm}^2 \ldots 10 \text{mm}^2 / 20 \ldots 8 \text{AWG}$
- **Strip lengths:**
  - $8 \ldots 9 \text{mm} / 0.31 \ldots 0.35 \text{in}$
  - Output: $13 \ldots 15 \text{mm} / 0.51 \ldots 0.59 \text{in}$
- **Mounting type:** DIN-rail-mount (EN 60715)

**Dimensions and weight:**
- **Dimensions (mm) $W \times H \times L$:** $80 \times 127 \times 180$
- **Length from upper-edge of DIN-rail:** $1500 \text{g}$

**Standards and specifications:**
- **Standards/Specifications:** EN 60950-1, EN 61204-3, UL 60950-1, UL 508, GL
  - (‘ pending)
**Switched-Mode Power Supply, 3-Phase**

**EPSITRON® CLASSIC Power**

- Primary switch mode power supply unit with TopBoost, enabling secondary-side protection via electronic circuit breakers
- Suitable for protection class I equipment
- Natural convection cooling when horizontally mounted
- Enclosed for use in switchgear cabinets
- DC OK contact
- Suitable for both parallel and series operation
- Electrically isolated output voltage (SELV) acc. to EN 60950-1/UL 60950-1

### Technical Data

#### Input:
- Nominal input voltage $V_{\text{nom}}$: $3 \times (2 \times) \text{AC} \ 400 \ldots 500 \text{VAC}$
- Input voltage range: $320 \text{V} \ldots 575 \text{VAC}; 450 \text{V} \ldots 800 \text{VDC}$
- Frequency: $47 \text{Hz} \ldots 63 \text{Hz}; 0 \text{Hz}$
- Input current $I_i$: $3 \times 2.5 \text{A} (400 \text{VAC}); 3 \times 1.82 \text{A} (500 \text{VAC})$
- Inrush current: $< 30 \text{A}, \text{NTC}$
- Mains failure hold-up time: $25 \text{ms} (500 \text{VAC})$
- $15 \text{ms} (400 \text{VAC})$

#### Output:
- Nominal output voltage $V_{\text{nom}}$: $24 \text{VDC} (\text{SELV})$
- Output voltage range: $23 \text{V} \ldots 28.5 \text{VDC}$ adjustable
- Factory preset: $24 \text{VDC}$
- Output current $I_o$: $40 \text{A at} \ 24 \text{VDC}$
- Adjustment accuracy: $< 1 \%$
- Residual ripple: $30 \text{mV (peak-to-peak)}$ typ.
- Current limitation: $1.1 \times I_o$ typ.
- Overload behavior: Constant current
- Operational indication: Green LED ($V_o$)
- Signaling: DC OK contact;
  - Make contact (max. 30 V / 1 A)

#### Efficiency/Power losses:
- Efficiency: $92 \%$ typ.
- Power loss $P_v$: $4.2 \text{W} (\text{no load})$
  - $83.9 \text{W} (400 \text{VAC} \ \text{nominal load})$
- Max. power loss $P_v$: $83.9 \text{W} (500 \text{VAC} / 24 \text{VDC}, 40 \text{A})$

#### Fuse protection:
- Internal fuse
- External fuse $3 \times \text{circuit breakers 10 A, 16 A,}$
  - B or C characteristic;
  - or motor circuit breakers
- An external DC fuse required for DC input voltage

### Description

<table>
<thead>
<tr>
<th>Description</th>
<th>Item No.</th>
<th>Pack. Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Switched-mode power supply, 24 VDC/ 40 A</td>
<td>787-1644</td>
<td>1</td>
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</table>

### Technical Data

#### Environmental requirements:
- Ambient operating temperature: $-25 \ ^\circ \text{C} \ldots +70 \ ^\circ \text{C}$
- Device start at $-40 \ ^\circ \text{C}$ type-tested
- Storage temperature: $-25 \ ^\circ \text{C} \ldots +85 \ ^\circ \text{C}$
- Relative humidity: $5 \% \ldots 95 \%$ (no condensation permissible)
- Derating: $-2.5 \%/\text{K (}> 55 \ ^\circ \text{C)}$

#### Safety and protection:
- Test voltage PRI-SEC: $4.2 \text{KDC}$
- Protection class: Prepared for class I equipment
- Degree of protection: IP20 (acc. to EN 60529)
- Overvoltage protection: Varistor (input side);
  - internal protective circuit,
  - $< 40 \text{VDC}$ (output side in case of an error)
- Short circuit protection: yes
- No-load proof: yes
- Feedback voltage: max. 35 VDC
- Parallel operation: yes
- Series connection: yes

#### Connection and mounting type:
- Wire connection: Input/Signaling: WAGO 721 Series
  - Output: WAGO 831 Series
- Cross sections:
  - Input/Signaling: $0.08 \text{mm}^2 \ldots 2.5 \text{mm}^2 / 28 \ldots 12 \text{AWG}$
  - Output: $0.5 \text{mm}^2 \ldots 10 \text{mm}^2 / 20 \ldots 8 \text{AWG}$
- Strip lengths:
  - Input/Signaling: $8 \ldots 9 \text{mm} / 0.31 \ldots 0.35 \text{in}$
  - Output: $13 \ldots 15 \text{mm} / 0.51 \ldots 0.59 \text{in}$

#### Mounting type:
- DIN-rail-mount (EN 60715)

#### Dimensions and weight:
- Dimensions (mm) $W \times H \times L$: $126 \times 127 \times 198$
- Length from upper-edge of DIN-rail $2800 \text{g}$

#### Standards and specifications:
- Standards/Specifications: EN 60950-1, EN 61204-3,
  - UL 60950-1, UL 508, GL*
  - (* pending)
787-1014/072-000

DIN-Rail-Mount Module – DC/DC Converter
EPSITRON® COMPACT Power

• Primary switch mode power supply unit
• Suitable for protection class II equipment
• Natural convection cooling when horizontally mounted
• Stepped profile, ideal for distribution boards or distribution boxes
• Suitable for both parallel and series operation
• Electrically isolated output voltage (SELV) acc. to EN 60950-1/UL 60950-1

Description | Item No. | Pack. Unit
--- | --- | ---
Switched-mode power supply, Switched-mode power supply, 24 VDC / 2.0 A | 787-1014/072-000 | 1

Technical Data

<table>
<thead>
<tr>
<th>Input:</th>
<th>72 V DC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nominal input voltage $V_{in,nom}$</td>
<td>72 V DC</td>
</tr>
<tr>
<td>Input voltage range</td>
<td>40–90 VDC</td>
</tr>
<tr>
<td>Frequency</td>
<td>0 Hz</td>
</tr>
<tr>
<td>Input current $I_i$</td>
<td>0.79 A at 72 VDC</td>
</tr>
<tr>
<td>Inrush current</td>
<td>&lt; 30 A, NTC</td>
</tr>
<tr>
<td>Mains failure hold-up time</td>
<td>&gt; 8 ms at 72 V DC</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Output:</th>
<th>24 VDC, SELV</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nominal output voltage $V_{out,nom}$</td>
<td>24 VDC</td>
</tr>
<tr>
<td>Factory preset</td>
<td>24 VDC</td>
</tr>
<tr>
<td>Output current $I_o$</td>
<td>2.0 A at 24 VDC</td>
</tr>
<tr>
<td>max. 1.6 A in any mounting position</td>
<td></td>
</tr>
<tr>
<td>Adjustment accuracy</td>
<td>&lt; 2 %</td>
</tr>
<tr>
<td>Residual ripple</td>
<td>&lt; 100 mV at 20 MHz</td>
</tr>
<tr>
<td>Current limitation</td>
<td>1.1 x $I_o$ typ.</td>
</tr>
<tr>
<td>Overload behavior</td>
<td>Constant current</td>
</tr>
<tr>
<td>Operational indication</td>
<td>Green LED ($V_o$)</td>
</tr>
</tbody>
</table>

Efficiency/Power losses:

- Efficiency $P_e$ 84 % typ.
- Power loss $P_L$ 2.0 W (72 VDC/no load), 9.0 W (72 VDC/nominal load)
- Max. power loss $P_P$ 10.5 W typ. (40 VDC / 24 VDC, 2 A)

Fuse protection:

- Internal fuse 4 AT (125 V DC)
- External fuse 6 A, 10 A power circuit breakers, B, C characteristics

Environmental requirements:

- Ambient operating temperature -40 °C … +70 °C
- Storage temperature -40 °C … +85 °C
- Relative humidity 5 % … 96 % (coated PCB)
- Derating -1.5 %/K (T > 55 °C)
- Degree of pollution 2 (acc. to EN 50178)
- Degree of pollution 3K3 (acc. to EN 60721)
- Climate category 3K3 (acc. to EN 60721)
- Shock and vibration Category 1, class B (acc. to EN 61373:2010)

Safety and protection:

- Enclosure Plastic, light gray
- Flammability class V0 acc. to UL94
- Test voltage PRI–SEC 4.2 kV DC
- Protection class Prepared for class II equipment
- Degree of protection IP20 acc. to EN 60529
- Overvoltage protection Varistor (input side), internal protective circuit, < 40 VDC (output side in case of an error)
- Short circuit protection yes
- No-load proof yes
- Feedback voltage max. 3.5 VDC
- Parallel operation yes
- Series connection yes
- MTBF > 500000 h

Connection and mounting type:

- Wire connection Input/Output: WAGO 740 Series
- Cross sections Input/Output: 0.08 mm² … 2.5 mm² / 28 … 12 AWG
- Strip lengths Input/Output: 6 … 7 mm / 0.24 … 0.28 in
- Mounting type DIN-rail-mount (EN 60715)

Dimensions and weight:

- Dimensions (mm) W x H x L 72 x 89 x 59
- Height: 55 mm, from upper-edge of DINrail
- Weight 250 g

Standards and specifications:

- Standards/Specifications EN 60950, EN 61204-3, EN 50121*, EN 50125*, UL 60950*, UL 508*, GL*
- * (pending)
DIN-Rail-Mount Potential Multiplication Module

- May be used with electronic circuit breakers for 24 and 0 VDC power distribution as a substitute for DIN-rail-mount terminal blocks
- Pre-wiring and electrical isolation of current paths via pluggable picoMAX® Female Headers
- Optional coding pins (2092-1610) protect against any inadvertent mixing of female headers
- Optional gripping plates with sliding connector release (2092-1601/002-000 or 2092-1602/002-000) provide conductor strain relief
- Optional 0 V power supply commoning to adjacent modules via 745-682 Comb-Style Jumper Bar

### Description

<table>
<thead>
<tr>
<th>Description</th>
<th>Item No.</th>
<th>Pack. Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Potential multiplication module</td>
<td>288-870/000-030</td>
<td>1</td>
</tr>
</tbody>
</table>

### Technical Data

- **Max. operating voltage per potential**: 24 VDC
- **Number of potentials**: 4
- **Max. total current per potential**: 10 A
- **Max. total current 0 V**: 40 A
- **Max. current per connection**: 10 A
- **Ambient operating temperature**: -25 °C ... +70 °C (no condensation)
- **Storage temperature**: -40 °C ... +85 °C
- **Dimensions, incl. mounting carrier and combination feet (mm) W x H x L**: 85 x 49 x 100
- **Height from upper-edge of DIN-rail**:
- **Wire connection**
  - Power supply 0 V: CAGE CLAMP® (WAGO 745 Series)
  - Power supply 24 V, connection points: CAGE CLAMP® S (picoMAX® 5.0; WAGO-2092 Series)
- **Cross sections**
  - Power supply 0 V: 0.2 mm² ... 16 mm² / AWG 24 ... 6
  - Power supply 24 V, connection points: 0.2 mm² ... 2.5 mm² / 24 ... 12 AWG (THHN, THWN)
- **Strip lengths**
  - Power supply 0 V: 12 ... 13 mm / 0.47 ... 0.51 in
  - Power supply 24 V, connection points: 9 ... 10 mm / 0.35 ... 0.39 in
- **Mounting direction**
  - Power supply 0 V: 45°
  - Power supply 24 V: connection points: vertical
- **Mounting type**
  - DIN-rail-mount (EN 60715)

### Accessories

- **Coding key carrier**: 2092-1610
- **Gripping plate with sliding connector release, 3- to 4-pole**: 2092-1601/002-000
- **Gripping plate with sliding connector release, 5- to 8-pole**: 2092-1602/002-000
- **Comb-style jumper bar; 2-way**: 745-682
**Interface Electronic**

- May be used with electronic circuit breakers for 24 and 0 VDC power distribution as a substitute for DIN-rail-mount terminal blocks
- Pre-wiring and electrical isolation of current paths via pluggable picoMAX® Female Headers
- Optional coding pins (2092-1610) protect against any inadvertent mixing of female headers
- Optional gripping plates with sliding connector release [2092-1601/002-000 or 2092-1602/002-000] provide conductor strain relief
- Optional 0 V power supply commoning to adjacent modules via 745-682 Comb-Style Jumper Bar (Derating with jumper bar: -1 A/K > 60 °C ambient operating temperature)

### Description

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<th>Item No.</th>
<th>Pack. Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Potential multiplication module</td>
<td>288-870/000-040</td>
<td>1</td>
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</table>

### Technical Data

<table>
<thead>
<tr>
<th>Description</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Max. operating voltage per potential</td>
<td>24 VDC</td>
</tr>
<tr>
<td>Number of potentials</td>
<td>8</td>
</tr>
<tr>
<td>Max. total current per potential</td>
<td>10 A</td>
</tr>
<tr>
<td>Max. total current 0 V</td>
<td>76 A</td>
</tr>
<tr>
<td>Max. current per connection</td>
<td>10 A</td>
</tr>
<tr>
<td>Ambient operating temperature</td>
<td>-25 °C ... +70 °C (no condensation)</td>
</tr>
<tr>
<td>Storage temperature</td>
<td>-40 °C ... +85 °C</td>
</tr>
<tr>
<td>Dimensions, incl. mounting carrier and combination feet (mm) W x H x L</td>
<td>85 x 49 x 154</td>
</tr>
<tr>
<td>wire connection</td>
<td></td>
</tr>
<tr>
<td>Power supply 0 V:</td>
<td></td>
</tr>
<tr>
<td>Power supply 24 V, connection points:</td>
<td></td>
</tr>
<tr>
<td>CAGE CLAMP® (WAGO 745 Series)</td>
<td></td>
</tr>
<tr>
<td>picoMAX® 5.0, WAGO 2092 Series</td>
<td></td>
</tr>
<tr>
<td>Cross sections</td>
<td></td>
</tr>
<tr>
<td>Power supply 24 V, connection points:</td>
<td></td>
</tr>
<tr>
<td>0.2 mm² ... 16 mm² / AWG 24 ... 6</td>
<td></td>
</tr>
<tr>
<td>Power supply 24 V, connection points:</td>
<td></td>
</tr>
<tr>
<td>0.2 mm² ... 2.5 mm² / 24 ... 12 AWG (THHN, THWN)</td>
<td></td>
</tr>
<tr>
<td>Strip lengths</td>
<td></td>
</tr>
<tr>
<td>Power supply 0 V:</td>
<td></td>
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<tr>
<td>Power supply 24 V, connection points:</td>
<td></td>
</tr>
<tr>
<td>9 ... 10 mm / 0.35 ... 0.39 in</td>
<td></td>
</tr>
<tr>
<td>Mounting direction</td>
<td></td>
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<tr>
<td>Power supply 24 V, connection points:</td>
<td></td>
</tr>
<tr>
<td>vertical</td>
<td></td>
</tr>
<tr>
<td>Mounting type</td>
<td>DIN-rail-mount [EN 60715]</td>
</tr>
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### Accessories

<table>
<thead>
<tr>
<th>Accessories</th>
<th>Item No.</th>
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<tbody>
<tr>
<td>Coding key carrier</td>
<td>2092-1610</td>
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<tr>
<td>Gripping plate with sliding connector release, 3- to 4-pole</td>
<td>2092-1601/002-000</td>
</tr>
<tr>
<td>Gripping plate with sliding connector release, 5- to 8-pole</td>
<td>2092-1602/002-000</td>
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<tr>
<td>Comb-style jumper bar, 2-way</td>
<td>745-682</td>
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</tbody>
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## Markers and Roller

<table>
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<tr>
<th>Item No.</th>
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<tr>
<td><strong>WMB Inline markers for Weidmüller</strong></td>
<td></td>
</tr>
<tr>
<td>stretchable 5 - 5.2 mm</td>
<td></td>
</tr>
<tr>
<td>1200 markers per roll</td>
<td></td>
</tr>
<tr>
<td>white</td>
<td>2009-615</td>
</tr>
<tr>
<td><strong>Roller for smartPRINTER</strong></td>
<td></td>
</tr>
<tr>
<td>for WMB Inline markers for Weidmüller</td>
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<tr>
<td>red</td>
<td>258-5010</td>
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<td>210-720</td>
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<td><strong>258 Series</strong></td>
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<td>258-5010</td>
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**Serie 288 Series**

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<tr>
<td>288-870/000.040</td>
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**745 Series**

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<td>745-682</td>
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**787 Series**

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<td>787.1628</td>
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<td>787.1640</td>
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<td>787.1642</td>
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<tr>
<td>787.1644</td>
<td>13</td>
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**855 Series**

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<tr>
<td>855-401/600.501</td>
<td>8</td>
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<tr>
<td>855-405/250.501</td>
<td>8</td>
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<tr>
<td>855-601/1500.501</td>
<td>8</td>
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<tr>
<td>855-605/1500.501</td>
<td>8</td>
</tr>
<tr>
<td>855-801/2000.1001</td>
<td>8</td>
</tr>
<tr>
<td>855-805/2000.1001</td>
<td>8</td>
</tr>
<tr>
<td>855-1001/2500.1001</td>
<td>8</td>
</tr>
<tr>
<td>855-1005/2500.1001</td>
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<tr>
<td>855-9900</td>
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<tr>
<td>855-9910</td>
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**857 Series**

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<tr>
<td>857.359</td>
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<tr>
<td>857.369</td>
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**2007 Series**

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**2009 Series**

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**2092 Series**

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<tbody>
<tr>
<td>2092.1601/002.000</td>
<td>16</td>
</tr>
<tr>
<td>2092.1602/002.000</td>
<td>16</td>
</tr>
<tr>
<td>2092.1610</td>
<td>16</td>
</tr>
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</table>

Products highlighted in RED are new items for Spring 2015