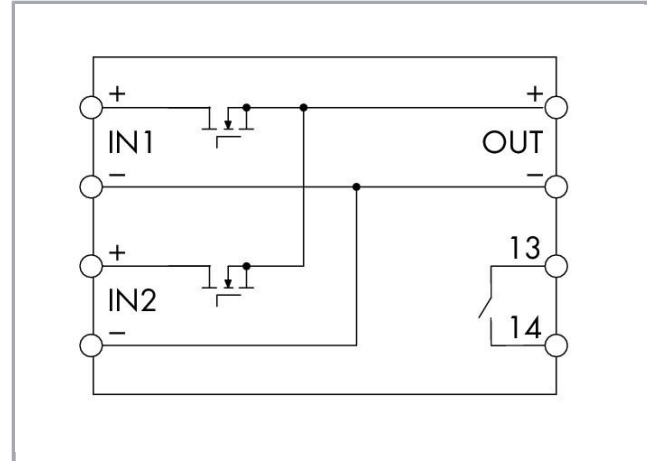


**Data sheet | Item number: 787-1685**

Redundancy Module; 2 x 24 VDC input voltage; 2 x 20 A input current; 24 VDC output voltage; 40 A output current

[www.wago.com/787-1685](http://www.wago.com/787-1685)



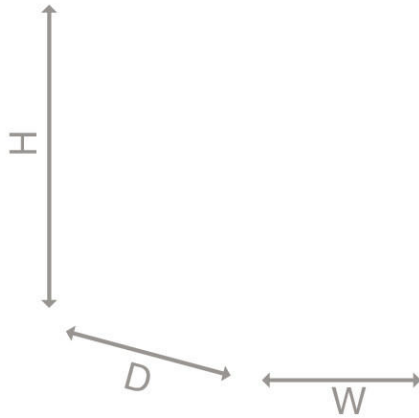
Subject to changes. Please also observe the further product documentation!

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## Item description

### Features:

- Redundancy module with low-loss MOFSET decouples two power supplies.
- For redundant and fail-safe power supply
- Continuous output current: 40 ADC, in any ratio of both inputs (e.g., 20 A / 20 A or 0 A / 40 A)
- Suitable for power supplies with PowerBoost and TopBoost
- Same profile as CLASSIC Power Supplies
- Connects to power supplies with electrically isolated output voltage (SELV) per EN 60950-1/UL 60950-1; PELV per EN 60204

## Data

### Technical Data

#### Input

Nominal input voltage $U_{i\text{nom}}$	2 x DC 24 V
Input voltage range	2 x DC 10 ... 36 V
Nominal mains frequency range	0 Hz
Input current $I_i$	≤ 40 A (from one input path); ≤ 20 A (via both input paths)
PowerBoost Input	DC 60 A (4 s); DC 50 A (8 s)

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TopBoost Input	DC 100 A (50 ms)
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## Output

Nominal output voltage $U_{o\text{ nom}}$	DC 24 V
Output voltage range	DC 10 ... 36 V ( $U_e$ - voltage drop)
Voltage drop	$\leq 100$ mV (Input/Output)
Nominal output current $I_{o\text{ nom}}$	40 A
Nominal output power	960 W
Switching frequency	5 kHz
PowerBoost	DC 120 A (4 s); DC 100 A (8 s)
TopBoost	DC 200 A (50 ms)

## Signaling and communication

Signaling	1 x IN1 LED (green) 1 x IN2 LED (green) 1 x DC OK signal contact (IN1 and IN2 > 10 VDC)
Operation status indicator	2 x Green LED ( $U_o > 10$ VDC)

## Efficiency/Power losses:

Power loss $P_l$	$\leq 1,5$ W (No load); $\leq 9,5$ W (Nominal load)
Efficiency (typ.)	99,5 %

## Fuse protection:

Internal fuse	No
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## Safety and protection:

Isolation voltage (connectors – housing)	DC 0,5 kV
Protection class	III
Protection type	IP20 (per EN 60529)
Reverse voltage protection	yes
Resistance to reverse feed	$\leq$ DC 37 V
Parallel operation	Yes
Series operation	No
MTBF	> 500,000 h (per IEC 61709)

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



## Connection data

Connection type (1)	Input/Output
Connection technology	Push-in CAGE CLAMP®
WAGO Connector	WAGO 831 Series
Solid conductor	0,5 ... 10 mm <sup>2</sup> / 20 ... 8 AWG
Fine-stranded conductor	0,5 ... 10 mm <sup>2</sup> / 20 ... 8 AWG
Strip length	13 ... 15 mm / 0.51 ... 0.59 inch
Connection type 2	Signaling
Connection technology 2	CAGE CLAMP®
WAGO Connector 2	WAGO 721 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
Strip length 2	8 ... 9 mm / 0.31 ... 0.35 inch

## Geometrical Data

Width	42 mm / 1.654 inch
Height	127 mm / 5 inch
Depth from upper edge of DIN-rail	139,5 mm / 5.421 inch

## Mechanical data

Mounting type	DIN-35 rail (EN 60715)
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## Material Data

Weight	370 g
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## Environmental Requirements

Surrounding air temperature (operation)	-40 ... 70 °C
Surrounding air temperature (storage)	-40 ... 85 °C
Relative humidity	5 ... 96 % (no condensation permissible)
Derating	-1.5 %/K (> 65 °C)
Pollution degree	2
Climatic category	3K3 (per EN 60721; except for low air pressure)

## Standards and specifications

Conformity marking	CE
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Standards/specifications

EN 61204-3; EN 60950-1; UL 60950; UL 508; DNV GL

### Commercial data

Packaging type	BOX
Country of origin	CN
GTIN	4055143534529
Customs tariff number	85044090900

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