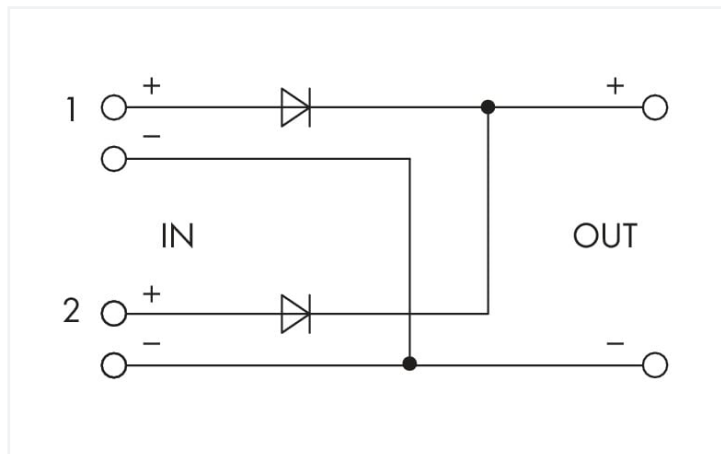


## Data Sheet | Item Number: 787-785

Redundancy Module; 2 x 9 ... 54 VDC input voltage; 2 x 40 A input current; 9–54 VDC output voltage; 76 A output current

<https://www.wago.com/787-785>



### Features:

- Redundancy module with two inputs decouples two power supplies.
- For redundant and fail-safe power supply
- With LED for input voltage monitoring on site and remotely

### Technical data

Input		Output	
Nominal input voltage $U_{i\text{nom}}$	2 x DC 24 V	Nominal output voltage $U_{o\text{nom}}$	DC 24 V
Input voltage range	2 x DC 9 ... 54 V	Output voltage range	DC 9 ... 54 V ( $U_e$ - voltage drop)
Nominal mains frequency range	0 Hz	Voltage drop	$\leq 500$ mV (Input/output)
Input current $I_i$	$\leq 40$ A (per path); $\leq 76$ A (in total)	Nominal output current $I_{o\text{nom}}$	40 A (redundancy operation); 65 A (parallel operation [UL]); 76 A (parallel operation)
		Nominal output power	1824 W
		Output power (max.)	$\leq 4104$ W

### Signaling and communication

Signaling	1 x IN1 LED (green) 1 x IN2 LED (green) 1 x OUT LED (green)
Operation status indicator	2 x Green LED ( $U_i > 7.5$ VDC) 1 x Green LED ( $U_o > 7.5$ VDC)

### Efficiency/power losses

Power loss $P_i$	$\leq 38$ W (nominal load)
Efficiency (typ.)	97 %

### Safety and protection

Isolation voltage (connectors – housing)	DC 0.5 kV
Protection class	III
Protection type	IP20; per EN 60529
Resistance to reverse feed	$\leq$ DC 60 V
Pollution degree	2
Overvoltage protection; secondary	No
Short-circuit-protected	No
Open-circuit-proof	Yes
Parallel operation	Yes
Series operation	No
MTBF	$> 10$ million h (per IEC 61709)

### Connection data

Connection type 1	Input/output
Connection technology	Push-in CAGE CLAMP®
WAGO connector	WAGO 2716 Series
Solid conductor	1.5 ... 16 mm <sup>2</sup> / 16 ... 6 AWG
Fine-stranded conductor	1.5 ... 16 mm <sup>2</sup> / 16 ... 6 AWG
Strip length	12 ... 13 mm / 0.47 ... 0.51 inches

### Physical data

Width	83 mm / 3.268 inches
Height	130 mm / 5.118 inches
Depth from upper-edge of DIN-rail	153 mm / 6.024 inches

### Mechanical data

Mounting type	DIN-35 rail
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### Material data

Fire load	0 MJ
Weight	31.1 g

### Environmental requirements

Ambient temperature (operation)	-25 ... +70 °C
Ambient temperature (storage)	-40 ... +85 °C
Relative humidity	≤ 95% (no condensation permissible)
Derating	-2.66 %/K (55 °C < T <sub>u</sub> ≤ 70 °C)
Resistance to shock and vibration	Shock: 15g (per EN 60068-2-27)

### Standards and specifications

Conformity marking	CE
Standards/specifications	UL 508

### 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	CN
GTIN	4055143036306
Customs tariff number	85044095900

**Environmental Product Compliance**

RoHS Compliance Status	Compliant,With Exemption
RoHS Exemption	6(c) 7(a) 7(c)-I 7(c)-II
SCIP notification number (Bulgaria)	75cbc6ca-380f-491f-9b29-12c9e6632df9
SCIP notification number (Czech Republic)	4969e245-4a19-46ff-9f47-4c2740f21a13

**Approvals / Certificates**

**General approvals** **Declarations of conformity and manufacturer's declarations**



Approval	Standard	Certificate Name
UL Underwriters Laboratories Inc.	UL 508	E255817

Approval	Standard	Certificate Name
EU-Declaration of Confor- mity WAGO GmbH & Co. KG	-	-

**Downloads**

**Environmental Product Compliance**

**Compliance Search**

Environmental Product Compliance 787-785	<a href="#">↓</a>
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**Documentation**

**Bid Text**

Item	Date	Format	Size	Action
787-785	15.07.2019	xml	5.59 KB	<a href="#">↓</a>
787-785	15.07.2019	docx	21.63 KB	<a href="#">↓</a>

**Instruction Leaflet**

Document	Version	Date	Format	Size	Action
Diode Redundancy Module	V 1.2.0	29.09.2021	pdf	283.98 KB	<a href="#">↓</a>

**CAD/CAE-Data**

**CAD data**

2D/3D Models 787-785	<a href="#">↓</a>
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**CAE data**

EPLAN Data Portal 787-785	<a href="#">↓</a>
WSCAD Universe 787-785	<a href="#">↓</a>
ZUKEN Portal 787-785	<a href="#">↓</a>

**1 Compatible Products**

**1.1 Optional Accessories**

1.1.1 Ferrule

1.1.1.1 Ferrule



**Item No.: 216-201**

Ferrule; Sleeve for 0.5 mm<sup>2</sup> / 20 AWG; insulated; electro-tin plated; white



**Item No.: 216-202**

Ferrule; Sleeve for 0.75 mm<sup>2</sup> / 18 AWG; insulated; electro-tin plated; gray



**Item No.: 216-203**

Ferrule; Sleeve for 1 mm<sup>2</sup> / AWG 18; insulated; electro-tin plated; red



**Item No.: 216-204**

Ferrule; Sleeve for 1.5 mm<sup>2</sup> / AWG 16; insulated; electro-tin plated; black



**Item No.: 216-224**

Ferrule; Sleeve for 1.5 mm<sup>2</sup> / AWG 16; insulated; electro-tin plated; black



**Item No.: 216-244**

Ferrule; Sleeve for 1.5 mm<sup>2</sup> / AWG 16; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; black



**Item No.: 216-264**

Ferrule; Sleeve for 1.5 mm<sup>2</sup> / AWG 16; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; black



**Item No.: 216-284**

Ferrule; Sleeve for 1.5 mm<sup>2</sup> / AWG 16; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; black



**Item No.: 216-289**

Ferrule; Sleeve for 10 mm<sup>2</sup> / AWG 8; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; red



**Item No.: 216-209**

Ferrule; Sleeve for 10 mm<sup>2</sup> / AWG 8; insulated; electro-tin plated; red



**Item No.: 216-205**

Ferrule; Sleeve for 2.08 mm<sup>2</sup> / AWG 14; insulated; electro-tin plated; yellow



**Item No.: 216-206**

Ferrule; Sleeve for 2.5 mm<sup>2</sup> / AWG 14; insulated; electro-tin plated; blue



**Item No.: 216-246**

Ferrule; Sleeve for 2.5 mm<sup>2</sup> / AWG 14; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; blue



**Item No.: 216-266**

Ferrule; Sleeve for 2.5 mm<sup>2</sup> / AWG 14; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; blue



**Item No.: 216-286**

Ferrule; Sleeve for 2.5 mm<sup>2</sup> / AWG 14; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; blue



**Item No.: 216-267**

Ferrule; Sleeve for 4 mm<sup>2</sup> / AWG 12; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; gray



**Item No.: 216-287**

Ferrule; Sleeve for 4 mm<sup>2</sup> / AWG 12; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; gray



**Item No.: 216-207**

Ferrule; Sleeve for 4 mm<sup>2</sup> / AWG 12; insulated; electro-tin plated; gray



**Item No.: 216-208**

Ferrule; Sleeve for 6 mm<sup>2</sup> / AWG 10; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; yellow



**Item No.: 216-288**

Ferrule; Sleeve for 6 mm<sup>2</sup> / AWG 10; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; yellow