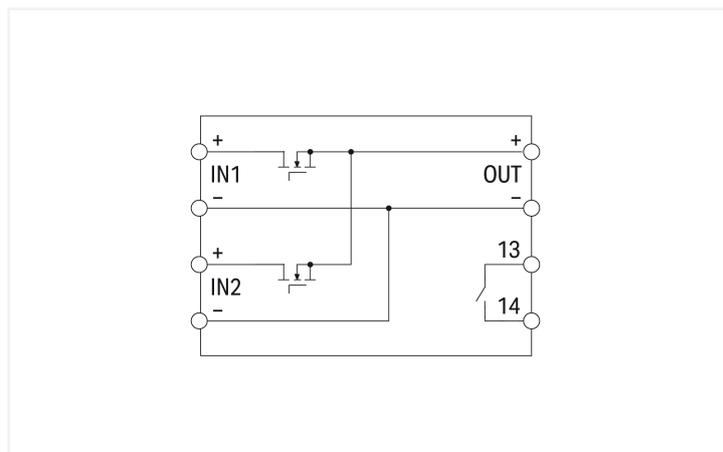


Data Sheet | Item Number: 787-1685/000-070

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

<https://www.wago.com/787-1685/000-070>



Similar to illustration

Features:

- Redundancy module with low-loss MOSFET 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
- Electrically isolated output voltage (SELV/PELV) per EN 61140/UL 60950-1

Technical data

Input		Output	
Nominal input voltage $U_{i, \text{nom}}$	2 x 24 VDC	Nominal output voltage $U_{o, \text{nom}}$	24 VDC
Input voltage range	2 x 10 ... 36 VDC	Output voltage range	10 ... 36 VDC (U_e – voltage drop)
Nominal mains frequency range	0 Hz	Voltage drop	≤ 100 mV (Input/output)
Input current I_i	≤ 40 A (per path); ≤ 40 A (in total)	Nominal output current $I_{o, \text{nom}}$	40 A (redundancy operation); 40 A (parallel operation)
PowerBoost input	DC 60 A (4 s); DC 50 A (8 s)	Nominal output power	960 W
TopBoost input	DC 100 A (50 ms)	Switching frequency	5 kHz
		PowerBoost	120 ADC (4 s); 100 ADC (8 s)
		TopBoost	200 ADC (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	≤ 1.5 W; ≤ 9.5 W (nominal load)
Efficiency (typ.)	99.5 %

Circuit Protection

Internal fuse	No
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Safety and protection

Isolation voltage (connectors – housing)	0.5 kVDC
Protection class	III
Protection type	IP20; per EN 60529
Protective coating	Coated PCBs
Reverse voltage protection	Yes
Resistance to reverse feed	≤ 37 VDC
Pollution degree	2
Parallel operation	Yes
Series operation	No
MTBF	> 500,000 h (per IEC 61709)

Connection Data

Connection 1

Connection type	Input/output
Connection technology	Push-in CAGE CLAMP®
WAGO connector	WAGO 831 Series
Solid conductor	0.5 ... 10 mm ² / 20 ... 8 AWG
Fine-stranded conductor	0.5 ... 10 mm ² / 20 ... 8 AWG
Strip length	13 ... 15 mm / 0.51 ... 0.59 inches

Connection 2

Connection type	Signaling
Connection technology	CAGE CLAMP®
WAGO connector	WAGO 721 Series
Solid conductor	0.08 ... 2.5 mm ² / 28 ... 12 AWG
Fine-stranded conductor	0.08 ... 2.5 mm ² / 28 ... 12 AWG
Strip length	8 ... 9 mm / 0.31 ... 0.35 inches

Physical data

Width	42 mm / 1.654 inches
Height	127 mm / 5 inches
Depth from upper-edge of DIN-rail	139.5 mm / 5.421 inches

Mechanical data

Mounting type	DIN-35 rail
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Material data

Fire load	0 MJ
Weight	370 g

Environmental requirements

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

Standards and Specifications

Conformity marking	CE
Standards/specifications	EN 61000-6-2 EN 61000-6-3 EN 61010-1 EN 61010-2-201 EN 61140 UL 508 UL 60950 DNV

Commercial data

PU (SPU)	1 pcs
Packaging type	Box
Country of origin	DE
GTIN	4066966256413
Customs tariff number	85363030888

Product Classification

UNSPSC	39121006
ETIM 9.0	EC002540
ETIM 10.0	EC002540
ECCN	NO US CLASSIFICATION

Environmental Product Compliance

RoHS Compliance Status	Compliant, No Exemption
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Approvals / Certificates

General approvals	Declarations of conformity and manufacturer's declarations
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Approval	Standard	Certificate Name
EAC GZO Almaty Standart	TP TC 020/2011	EAC CoC 03081

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

Downloads

Environmental Product Compliance

Compliance Search
Environmental Product Compliance 787-1685/000-070



CAD/CAE-Data

CAD data

2D/3D Models
787-1685/000-070

