

Data Sheet | Item Number: 787-736

Switched-mode power supply; Eco; 1-phase; 24 VDC output voltage; 40 A output current; DC OK contact; 6,00 mm²

<https://www.wago.com/787-736>



Features:

- Natural convection cooling when horizontally mounted
- Encapsulated for use in control cabinets
- Fast and tool-free termination via lever-actuated PCB terminal blocks
- Bounce-free switching signal (DC OK) via optocoupler
- Parallel operation
- Electrically isolated output voltage (SELV) per UL 60950-1; PELV per EN 60204

Technical data

Input		Output	
Phases	1	Nominal output voltage $U_{o, nom}$	DC 24 V (SELV)
Nominal input voltage $U_{i, nom}$	1 x AC 110 ... 240 V	Output voltage range	DC 22 ... 28 V (adjustable)
Input voltage range	1 x AC 90 ... 264 V; DC 130 ... 373 V	Default Setting	DC 24 V
Input voltage derating	-2 %/V (< 100 VAC)	Nominal output current $I_{o, nom}$	40 A (24 VDC)
Nominal mains frequency range	47 ... 63 Hz; 0 Hz	Nominal output power	960 W
Input current I_i	≤ 6 A (230 VAC); ≤ 12 A (115 VAC)	Deviation	≤ 1 %
Discharge current	≤ 2 mA	Residual ripple	≤ 100 mV (peak-to-peak)
Inrush current	≤ 30 A	Overload behavior	Constant power (in overload range: 1.15 ... 1.4 x $I_{o, nom}$); Shutdown and automatic restart in the event of a short circuit
Power factor	≥ 0.94 (230 VAC); ≥ 0.98 (115 VAC)		
Power factor correction (PFC)	Active		
Mains failure hold-up time	≥ 17 ms (230 VAC)		

Signaling and communication

Signaling	1 x LED DC OK (green) 1 x Overload LED (red) 1 x DC OK signal output (optocoupler as make contact; max. 31.2 V; 20 mA)
Operation status indicator	Green LED (24 VDC OK) Red LED (overload)

Efficiency/power losses

Power loss P_1	≤ 107 W (230 VAC; nominal load)
Efficiency (typ.)	90 %

Circuit protection

Internal fuse	T 20 A / 250 VAC
Backup fusing (required)	An external DC fuse is required for the DC input voltage.
Backup fusing (recommended)	Circuit breaker: 13 A, 16 A, 20 A; Tripping characteristic: B or C

Safety and protection

Isolation voltage (pri.-sec.)	DC 4.242 kV
Isolation voltage (pri.-PE)	DC 2.2 kV
Isolation voltage (sec.-PE)	DC 0.7 kV
Isolation voltage (sec.-signal)	DC 0.7 kV
Protection class	I
Protection type	IP20; per EN 60529
Resistance to reverse feed	≤ DC 29 V
Overvoltage category	II
Pollution degree	2
Transient suppression (primary)	Varistor

Safety and protection

Short-circuit-protected	Yes
Open-circuit-proof	Yes
Parallel operation	Yes
Series operation	Yes
MTBF	> 250,000 h (per IEC 61709)

Connection data

Connection type 1	Input/signaling
Connection technology	CAGE CLAMP®
WAGO connector	WAGO 2706 Series
Solid conductor	0.5 ... 6 mm ² / 20 ... 10 AWG
Fine-stranded conductor	0.5 ... 6 mm ² / 20 ... 10 AWG
Strip length	11 ... 12 mm / 0.43 ... 0.47 inches
Connection type 2	Output
Connection technology	CAGE CLAMP®
WAGO connector 2	WAGO 2716 Series
Solid conductor 2	1.5 ... 16 mm ² / 16 ... 6 AWG
Fine-stranded conductor 2	1.5 ... 16 mm ² / 16 ... 6 AWG
Strip length 2	12 ... 13 mm / 0.47 ... 0.51 inches

Physical data

Width	170 mm / 6.69 inches
Height	136 mm / 5.354 inches
Depth from upper-edge of DIN-rail	150 mm / 5.91 inches

Mechanical data

Mounting type	DIN-35 rail
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Material data

Fire load	0 MJ
Weight	74.1 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)
Climatic category	3K3 (per EN 60721)

Standards and specifications

Conformity marking	CE
Standards/specifications	EN 62368-1 EN 61204-3 EN 61000-6-2 EN 61000-6-4 UL 60950-1 UL 508 SEMI F47

Commercial data

Product Group	6 (INTERFACE ELECTRONIC)
eCl@ss 10.0	27-04-07-01
eCl@ss 9.0	27-04-07-01
ETIM 9.0	EC002540
ETIM 8.0	EC002540
PU (SPU)	1 pcs
Packaging type	Box
Country of origin	CN
GTIN	4050821748250
Customs tariff number	85044083900

Environmental Product Compliance

RoHS Compliance Status	Compliant, No Exemption
SCIP notification number (Bulgaria)	a62607a7-2856-4d66-af7d-40c67b37a0f5
SCIP notification number (Czech Republic)	6a5b31a3-c7f4-42d8-9112-e5ab02ad13dd