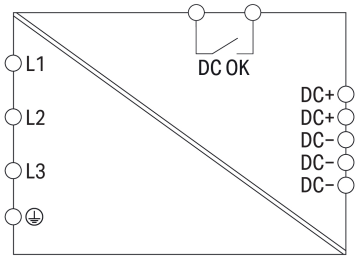
Data Sheet | Item Number: 787-742

Switched-mode power supply; Eco; 3-phase; 24 VDC output voltage; 20 A output current; DC OK contact

https://www.wago.com/787-742





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

Phases	2 / 3
Nominal input voltage $U_{i\,nom}$	(2 / 3) x 400 … 500 VAC
Input voltage range	(2 / 3) x 360 … 575 VAC; 500 … 650 VDC
Nominal mains frequency range	47 … 63 Hz; 0 Hz
Input current I_i	≤ 3 x 2 A (400 VAC; 24 VDC / 20 A)
Discharge current	≤ 3.5 mA
Inrush current	≤ 30 A
Power factor	≥ 0.5
Power factor correction (PFC)	Passive
Mains failure hold-up time	≥ 17 ms (3 x 400 VAC)

Output

Nominal output voltage $U_{o\,nom}$	24 VDC (SELV)
Output voltage range	22 … 28 VDC (adjustable)
Default Setting	24 VDC
Nominal output current $I_{o\,nom}$	20 A (24 VDC)
Nominal output power	480 W
Deviation	≤ 1 %
Residual ripple	≤ 100 mV (peak-to-peak)
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

Signaling and Communication

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

Efficiency/Power Losses

Power loss P_l	≤ 50 W
Power loss (max.) $P_{l\,(max.)}$	55 W
Efficiency (typ.)	90 %

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Circuit Protection

Internal fuse	3 x T 5 A / 250 VAC
Pre-fuse (required)	An external DC fuse is required for the DC input voltage.
Backup fuse (recommended)	3 x Circuit breaker ≥ 6 A; Tripping characteristic: B or C Alternative: motor circuit breaker

Safety and protection

Isolation voltage (pri.-sec.)	4.242 kVDC
Isolation voltage (pri.-PE)	2.2 kVDC
Isolation voltage (sec.-PE)	0.7 kVDC
Isolation voltage (sec.-signal)	0.7 kVDC
Protection class	I
Protection type	IP20; per EN 60529
Resistance to reverse feed	≤ 30 VDC
Overvoltage category	II
Pollution degree	2
Transient suppression (primary)	Varistor
Short-circuit-protected	Yes
Open-circuit-proof	Yes
Parallel operation	Yes
Series operation	Yes
MTBF	> 250,000 h (per IEC 61709)

Connection Data

Connection 1

Connection type	Input/output
Connection technology	CAGE CLAMP®
WAGO connector	WAGO 2706 Series
Solid conductor	0.5 … 6 mm² / 20 … 10 AWG
Fine-stranded conductor	0.5 … 6 mm² / 20 … 10 AWG
Strip length	11 … 12 mm / 0.43 … 0.47 inches

Connection 2

Connection type	Signaling
Connection technology	Push-in CAGE CLAMP®
WAGO connector	*picoMAX*® 3.5 (WAGO 2091 Series)
Solid conductor	0.2 … 1.5 mm² / 24 … 14 AWG
Fine-stranded conductor	0.2 … 1.5 mm² / 24 … 14 AWG
Strip length	8 … 9 mm / 0.31 … 0.35 inches

Physical data

Width	110 mm / 4.331 inches
Height	130 mm / 5.118 inches
Depth from upper-edge of DIN-rail	151 mm / 5.944 inches

Mechanical data

Mounting type	DIN-35 rail

Continued on next page

Material data

Weight	1930 g

Environmental requirements

Ambient temperature (operation)	-25 … +70 °C
Ambient temperature (storage)	-40 … +85 °C
Relative humidity	10 … 95 % (no condensation permissible)
Derating	-2 %/K (> 50 °C; 400 VAC)
Climatic category	3K3 (per EN 60721)

Standards and Specifications

Conformity marking	CE
Standards/specifications	EN 62368-1 EN 61204-3 (Class A) UL 60950-1 UL 508 SEMI F47

Commercial data

Product Group	6 (INTERFACE ELECTRONIC)
PU (SPU)	1 pcs
Packaging type	Box
Country of origin	CN
GTIN	4050821848387
Customs tariff number	85044083900

Product Classification

UNSPSC	39121004
eCl@ss 10.0	27-04-07-01
eCl@ss 9.0	27-04-07-01
ETIM 9.0	EC002540
ETIM 10.0	EC002540
ECCN	NO US CLASSIFICATION

Environmental Product Compliance

RoHS Compliance Status	Compliant,No Exemption
SCIP notification number (Bulgaria)	580705db-f9c1-4986-b762-ea0b9541d3b8
SCIP notification number (Czech Republic)	f4d1cfe3-5091-4c22-8601-3b9986e3bea0

Approvals / Certificates

General approvals

Approval	Standard	Certificate Name
EAC GZO Almaty Standart	TP TC 004/2011	EAC CoC 03078
EAC GZO Almaty Standart	TP TC 020/2011	EAC CoC 03081
UL Underwriters Laboratories Inc.	UL 508	E255817

General approvals

UR Underwriters Laboratories Inc.	UL 60950-1	E255815

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Declarations of conformity and manufacturer's declarations

Approval	Standard	Certificate Name
EU-Declaration of Conformity WAGO GmbH & Co. KG	-	-
MFD for SEMI F47 WAGO GmbH & Co. KG	-	-

Downloads

Environmental Product Compliance

Compliance Search

Environmental Product Compliance 787-742

Documentation

Bid Text

787-742	12.07.2019	xml 7.25 KB
787-742	12.07.2019	docx 23.19 KB

Instruction Leaflet

Primary Switch Mode Power Supply ECO-Power	V 1.5.6 21.12.2020	pdf 264.97 KB

CAD/CAE-Data

CAD data

2D/3D Models 787-742

CAE data

EPLAN Data Portal 787-742

WSCAD Universe 787-742

ZUKEN Portal 787-742

1 Compatible Products

1.1 Optional Accessories

1.1.1 Tool

1.1.1.1 Operating tool



Item No.: 210-719
Operating tool; Blade: 2.5 x 0.4 mm; with a partially insulated shaft



Item No.: 210-769
SCREWDRIVER; green