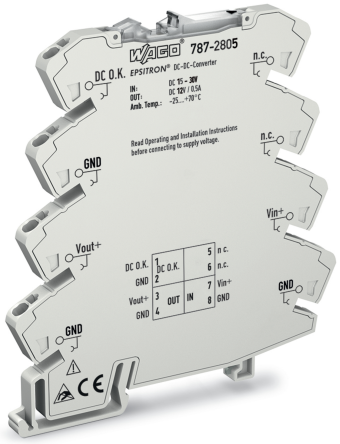
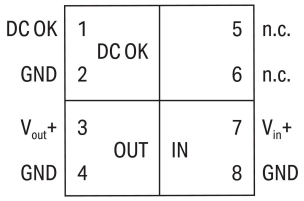
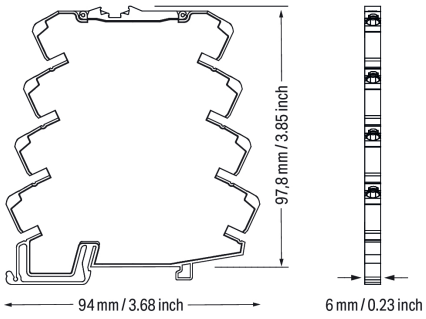
Data Sheet | Item Number: 787-2805

DC/DC Converter; 24 VDC input voltage; 12 VDC output voltage; 0.5 A output current; DC OK contact

https://www.wago.com/787-2805







Features:

- DC/DC converter in a compact 6 mm housing
- DC/DC converters (787-28xx) supply devices with 5, 10, 12 or 24 VDC from a 24 or 48 VDC power supply with an output power up to 12 W.
- Output voltage monitoring via DC OK signal output
- Can be commoned with 857 and 2857 Series devices
- Comprehensive range of approvals for multiple applications

Technical data

Input

Nominal input voltage $U_{i\,nom}$	24 VDC
Input voltage range	15 … 30 VDC
Nominal mains frequency range	0 Hz
Input current I_i	≤ 0.5 A
Inrush current	≤ 0.5 A (at nominal input voltage)

Output

Nominal output voltage $U_{o\,nom}$	12 VDC
Output voltage range	±2 %
Nominal output current $I_{o\,nom}$	0.5 A
Nominal output power	6 W
Deviation	≤ 2 %
Load regulation	≤ 1 %
Residual ripple	≤ 20 mV (peak-to-peak)

Signaling and Communication

Signaling	1 x DC OK LED (green) 1 x Short circuit LED (red) 1 x Active signal output (U_i, max. 4 mA)
Operation status indicator	Green LED (U_o) Red LED (short circuit)

Efficiency/Power Losses

Power loss P_l	≤ 0.21 W; ≤ 0.7 W (nominal load)
Efficiency (typ.)	90 % (at nominal input voltage and nominal output)

Circuit Protection

Internal fuse	No

Safety and protection

Protection class	III
Protection type	IP20; per EN 60529
Reverse voltage protection	Yes
Resistance to reverse feed	≤ 16 VDC
Pollution degree	2
Short-circuit-protected	Yes
Open-circuit-proof	Yes
Parallel operation	No
Series operation	No
MTBF	> 1,800,000 h

Connection Data

Number of jumper slots	8

Connection 1

Connection technology	Push-in CAGE CLAMP®
WAGO connector	WAGO 857 Series
Solid conductor	0.08 … 2.5 mm² / 28 … 14 AWG
Fine-stranded conductor	0.34 … 2.5 mm² / 22 … 14 AWG
Strip length	9 … 10 mm / 0.35 … 0.39 inches

Physical data

Width	6 mm / 0.236 inches
Height	94 mm / 3.701 inches
Depth from upper-edge of DIN-rail	97.8 mm / 3.85 inches

Mechanical data

Mounting type	DIN-35 rail

Material data

Fire load	0.495 MJ
Weight	48.6 g

Continued on next page

Environmental requirements

Ambient temperature (operation)	-25 … +70 °C
Ambient temperature (storage)	-40 … +85 °C
Relative humidity	≤ 95 % (no condensation permissible)
Derating	No derating
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 60950-1 UL 61010-2-201

Commercial data

PU (SPU)	1 pcs
Packaging type	Bag
Country of origin	DE
GTIN	4055143407045
Customs tariff number	85044083900

Product Classification

UNSPSC	39121006
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

CAS-No.	1303-86-2 1317-36-8 7439-92-1
REACH Candidate List Substance	Diboron trioxide Lead Lead monoxide
RoHS Compliance Status	Compliant,With Exemption
RoHS Exemption	6(c) 7(a) 7(c)-I 7(c)-II
SCIP notification number (Austria)	4f2a43e4-a730-4da6-863a-5a38b11c0458
SCIP notification number (Belgium)	f9285629-a82b-482e-9934-56caaa89bd90
SCIP notification number (Bulgaria)	aa1c2089-ca90-475b-b065-b290f8c47c73
SCIP notification number (Czech Republic)	e4407a61-44ef-46f6-8b71-5957fb1b0e35
SCIP notification number (Denmark)	62e3f530-0083-4301-a58f-c18079aaac67
SCIP notification number (Finland)	b5859d05-b7e1-4a35-a43a-cf33af17f955
SCIP notification number (France)	9a8251e6-a882-4123-987f-3af679ef6e75
SCIP notification number (Germany)	6edaf339-2ec1-4a85-bfcf-c4ac37d4e41b
SCIP notification number (Hungary)	50511142-efbe-4d96-bb7d-4eb00b7c1b98
SCIP notification number (Italy)	7c3519fd-876f-4af4-a334-e0f41b17ffce
SCIP notification number (Netherlands)	f84285ba-e8f4-418f-8037-d27c744e1818
SCIP notification number (Poland)	91abfe2e-594d-4cbf-9277-a9a191349087
SCIP notification number (Romania)	a5085aab-1513-44f7-a544-88b3170333b2
SCIP notification number (Sweden)	7ecaaaff-70ab-45de-8e2c-ff4a34524af3

Continued on next page

Approvals / Certificates

General approvals

Approval	Standard	Certificate Name
EAC GZO Almaty Standart	TP TC 020/2011	EAC CoC 03081
UL Underwriters Laboratories Inc. (ORDINARY LOCATIONS)	UL 61010-2-201	E175199 Vol3 Sec1

Declarations of conformity and manufacturer's declarations

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

Downloads

Environmental Product Compliance

Compliance Search

Environmental Product Compliance 787-2805

Documentation

Bid Text

787-2805	19.02.2019	xml 5.65 KB
787-2805	11.01.2016	doc 34.50 KB
787-2805	11.01.2016	docx 19.89 KB
787-2805	11.01.2016	pdf 89.73 KB

Instruction Leaflet

DC/DC-Wandler	V 1.1.1 31.03.2020	pdf 2359.41 KB

CAD/CAE-Data

CAD data

2D/3D Models 787-2805

CAE data

EPLAN Data Portal 787-2805

WSCAD Universe 787-2805

ZUKEN Portal 787-2805

Continued on next page

1 Compatible Products

1.1 Optional Accessories

1.1.1 Marking

1.1.1.1 Marker

Item No.: 793-5501
WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type; white



Item No.: 793-502
WMB marking card; as card; MARKED; 1 ... 10 (10x); not stretchable; Horizontal marking; snap-on type; white



Item No.: 793-566
WMB marking card; as card; MARKED; 1 ... 50 (2x); not stretchable; Horizontal marking; snap-on type; white

Item No.: 793-503
WMB marking card; as card; MARKED; 11 ... 20 (10x); not stretchable; Horizontal marking; snap-on type; white

Item No.: 793-504
WMB marking card; as card; MARKED; 21 ... 30 (10x); not stretchable; Horizontal marking; snap-on type; white

Item No.: 793-505
WMB marking card; as card; MARKED; 31 ... 40 (10x); not stretchable; Horizontal marking; snap-on type; white

Item No.: 793-506
WMB marking card; as card; MARKED; 41 ... 50 (10x); not stretchable; Horizontal marking; snap-on type; white

Item No.: 793-501
WMB marking card; as card; not stretchable; plain; snap-on type; white



Item No.: 2009-115
WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; white

1.1.1.2 Marking strip



Item No.: 2009-110
Marking strips; for Smart Printer; on reel; not stretchable; plain; snap-on type; white

1.1.2 Tool

1.1.2.1 Operating tool



Item No.: 210-720
Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft; multicoloured