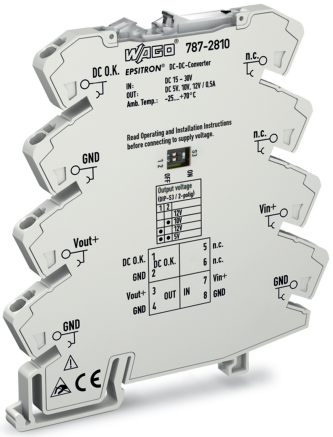
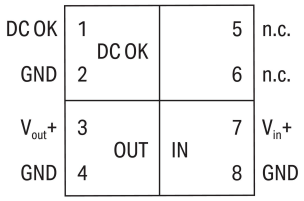
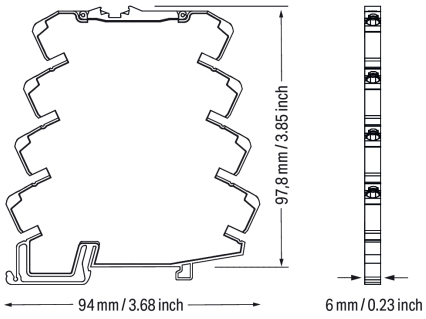
Data Sheet | Item Number: 787-2810

DC/DC Converter; 24 VDC input voltage; 5/10/12 VDC adjustable output voltage; 0.5 A output current; DC OK contact

https://www.wago.com/787-2810







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 $U_{o\,nom}$	5 / 10 / 12 VDC (adjustable via DIP switch)
Output voltage range	±3 %
Nominal output current $I_{o\,nom}$	0.5 A
Nominal output power	2.5 W
Deviation	≤ 3 %
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.)	82.5 % (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	0.491 MJ
Weight	36.4 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	4055143440745
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

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)	eabc3905-ffc5-4667-9155-f05b53673875
SCIP notification number (Belgium)	0adddd40-e104-4c72-ab7b-1d1debecdb27
SCIP notification number (Bulgaria)	2338fea6-e376-4709-bd5d-70813548af58
SCIP notification number (Czech Republic)	a9ce542d-abc0-4b1f-9c23-01162ffb77ed
SCIP notification number (Denmark)	65351928-1118-4b60-8187-a66b7f4600a6
SCIP notification number (Finland)	24cd08db-1286-42fb-8732-484102a9d921
SCIP notification number (France)	51ad6168-048f-4d4f-a67c-7161b0440fe5
SCIP notification number (Germany)	18db0ecd-84a3-4e81-8e09-aec2199e33d4
SCIP notification number (Hungary)	e50bcb28-ed96-4031-a132-ccc833e6d2df
SCIP notification number (Italy)	110cb643-a819-4932-a51d-cdf356faed29
SCIP notification number (Netherlands)	f3c80b51-245f-442a-b193-968183274aea
SCIP notification number (Poland)	437bb647-6a14-4f72-a293-a2eb4e98b4de
SCIP notification number (Romania)	dc656d91-7c1a-4097-b447-dbe00e114880
SCIP notification number (Sweden)	538d88fe-495d-428b-9f4b-9493b7138130

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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 787-2810

Documentation

Bid Text

787-2810	24.06.2019	docx 20.01 KB
787-2810	24.06.2019	pdf 89.89 KB
787-2810	19.02.2019	xml 6.23 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 787-2810

CAE data

EPLAN Data Portal 787-2810

ZUKEN Portal 787-2810

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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