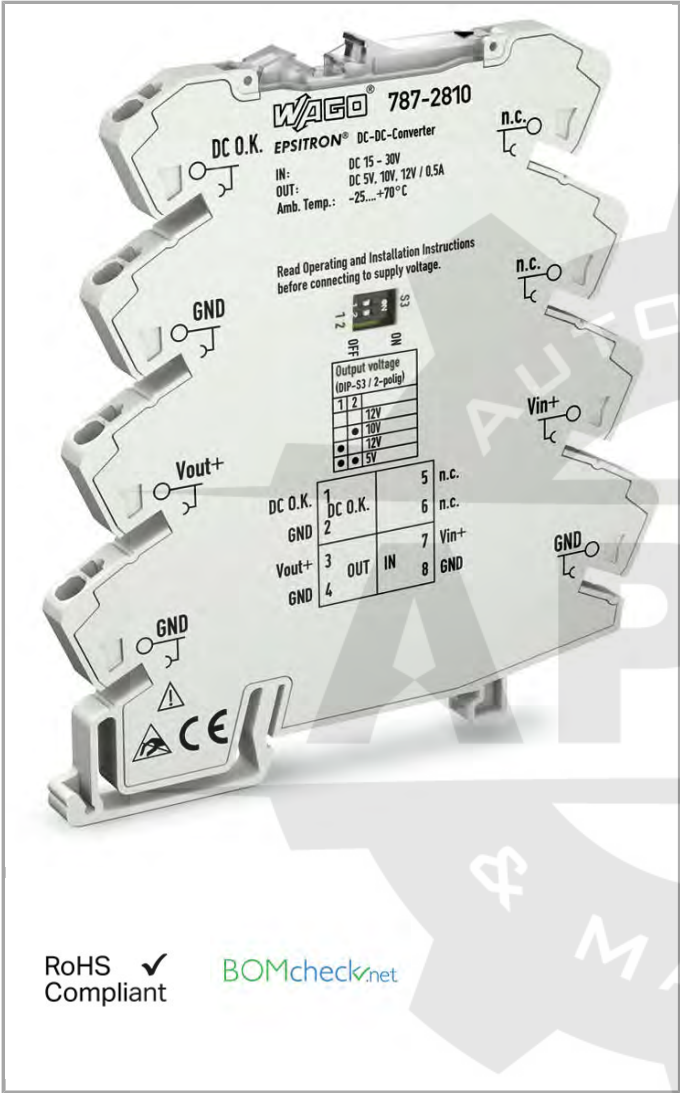


Data sheet | Item number: 787-2810

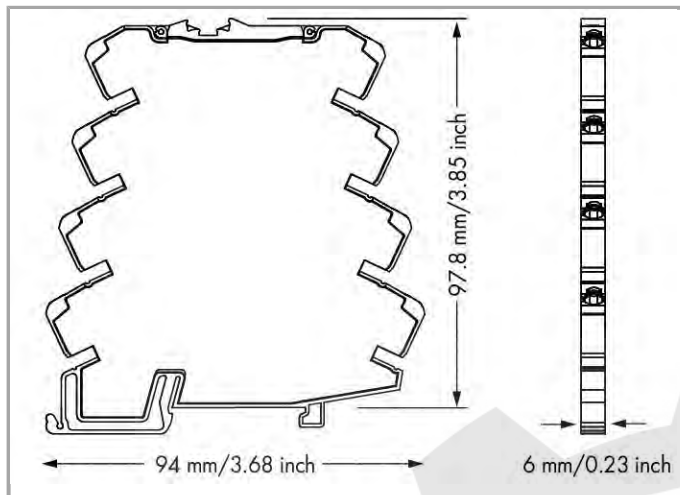
DC/DC Converter; 24 VDC input voltage; 5/10/12 VDC adjustable output voltage; 0.5 A output current; DC OK contact



787-2810



DC O.K.	1	5	n.c.
GND	2	6	n.c.
Vout+	3	7	Vin+
GND	4	8	GND



Item description

Features:

- DC/DC Converter in a compact 6 mm housing
- 787-28xx DC/DC Converters supply devices with 5, 10, 12 or 24 VDC from a power supply with 24 or 48 VDC, 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

Data

Technical Data

Input

Nominal input voltage $U_{i \text{ nom}}$	DC 24 V
Input voltage range	DC 15 ... 30 V
Nominal mains frequency range	0 Hz
Input current I_i	$\leq 0.5 \text{ A}$
Inrush current	$\leq 0.5 \text{ A}$ (at nominal input voltage)

Output

Nominal output voltage $U_{o \text{ nom}}$	DC 5 / 10 / 12 V (set via DIP switches)
Output voltage range	$\pm 3 \%$
Nominal output current $I_{o \text{ nom}}$	0.5 A
Nominal output power	6 W
Adjustment accuracy	$\leq 3 \%$



Mains/load regulation	$\leq 1 \%$
Residual ripple	$\leq 20 \text{ mV}$ (peak-to-peak)

Signaling and communication

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

Efficiency/Power losses:

Power loss P_v	$\leq 0.21 \text{ W}$ (no load); $\leq 0.7 \text{ W}$ (nominal load)
Efficiency	82.5 % (at nominal input voltage and nominal output)

Fuse protection:

Internal fuse	No
---------------	----

Safety and protection:

Protection class	III
Protection class	IP20 (per EN 60529)
Reverse voltage protection	yes
Feedback voltage	$\leq \text{DC } 16 \text{ V}$
Short circuit protection	Yes
No-load proof	Yes
Parallel operation	No
Series connection	No
MTBF	$> 1,800,000 \text{ h}$

Connection data

Number of jumper slots	8
Connection technology	Push-in CAGE CLAMP®
WAGO terminal	WAGO 857 Series
Solid conductor	0.08 ... 2.5 mm ² / 28 ... 14 AWG
Fine-stranded conductor	0.34 ... 2.5 mm ² / 22 ... 14 AWG
Strip length	9 ... 10 mm / 0.35 ... 0.39 inch

Geometrical Data

Width	6 mm / 0.236 inch
Height from upper-edge of DIN-35 rail	97.8 mm / 3.85 inch

Depth	94 mm / 3.701 inch
-------	--------------------

Mechanical data

Type of mounting	DIN-35 rail (EN 60715)
------------------	------------------------

Material Data

Fire load	0 MJ
Weight	36.4 g

Environmental Requirements

Surrounding air (operating) temperature	-25 ... 70 °C
Surrounding air (storage) temperature	-40 ... 85 °C
Relative humidity	≤ 95% (no condensation permissible)
Derating	No derating
Pollution degree	2
Climatic category	3K3 (per EN 60721; except for low air pressure)

Standards and specifications

Conformity marking	1
Standards/specifications	EN 61000-6-2; EN 61000-6-3; EN 60950-1; UL 60950*; UL 508*; ANSI/ISA 12.12.01*; ATEX*; IEC Ex*; DNV GL* (*pending)

Commercial data

Country of origin	DE
GTIN	4055143440745
Customs Tariff No.	85044082900

Approvals / Certificates

UL-Approvals

Logo	Approval	Additional Approval Text	Certificate name
	UL Underwriters Laboratories Inc. (ORDINARY LOCATIONS)	UL 61010-2-201	E175199 Vol.3 Sec. 1

Compatible products

ferrule

	Item no.: 216-241 Ferrule; Sleeve for 0.5 mm ² / 20 AWG; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90	216-241
	Item no.: 216-242 Ferrule; Sleeve for 0.75 mm ² / 18 AWG; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90	216-242
	Item no.: 216-243 Ferrule; Sleeve for 1 mm ² / AWG 18; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90	216-243
	Item no.: 216-244 Ferrule; Sleeve for 1.5 mm ² / AWG 16; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90	216-244

Marking accessories

	Item no.: 2009-110 Marking strips; on reel; not stretchable; plain; snap-on type	2009-110
	Item no.: 2009-115 WMB-Inline; for Smart Printer; on reel; stretchable 5 - 5.2 mm; plain; snap-on type	2009-115
	Item no.: 2009-115/000-002 WMB-Inline; for Smart Printer; on reel; stretchable 5 - 5.2 mm; plain; snap-on type	2009-115 /000-002
	Item no.: 2009-115/000-006 WMB-Inline; for smartPRINTER; on reel; stretchable 5 - 5.2 mm; plain; snap-on type	2009-115 /000-006
	Item no.: 2009-115/000-007 WMB-Inline; for Smart Printer; on reel; stretchable 5 - 5.2 mm; plain; snap-on type	2009-115 /000-007
	Item no.: 2009-115/000-012 WMB-Inline; for smartPRINTER; on reel; stretchable 5 - 5.2 mm; plain; snap-on type	2009-115 /000-012
	Item no.: 2009-115/000-017 WMB-Inline; for Smart Printer; on reel; stretchable 5 - 5.2 mm; plain; snap-on type	2009-115 /000-017
	Item no.: 2009-115/000-023 WMB-Inline; for Smart Printer; on reel; stretchable 5 - 5.2 mm; plain; snap-on type	2009-115 /000-023
	Item no.: 2009-115/000-024 WMB-Inline; for smartPRINTER; on reel; stretchable 5 - 5.2 mm; plain; snap-on type	2009-115 /000-024
	Item no.: 793-501 WMB marking card; as card; not stretchable; plain; snap-on type	793-501
	Item no.: 793-501/000-002 WMB marking card; as card; not stretchable; plain; snap-on type	793-501 /000-002

**Item no.: 793-501/000-005**

WMB marking card; as card; not stretchable; plain; snap-on type

/000-005

793-501

**Item no.: 793-501/000-006**

WMB marking card; as card; not stretchable; plain; snap-on type

/000-006

793-501

**Item no.: 793-501/000-007**

WMB marking card; as card; not stretchable; plain; snap-on type

/000-007

793-501

**Item no.: 793-501/000-012**

WMB marking card; as card; not stretchable; plain; snap-on type

/000-012

793-501

**Item no.: 793-501/000-017**

WMB marking card; as card; not stretchable; plain; snap-on type

/000-017

793-501

**Item no.: 793-501/000-023**

WMB marking card; as card; not stretchable; plain; snap-on type

/000-023

793-501

**Item no.: 793-501/000-024**

WMB marking card; as card; not stretchable; plain; snap-on type

/000-024

793-501

**Item no.: 793-502**

WMB marking card; as card; MARKED; 1 ... 10 (10x); not stretchable; Horizontal marking; snap-on type

793-502

**Item no.: 793-502/000-002**

WMB marking card; as card; MARKED; 1 ... 10 (10x); not stretchable; Horizontal marking; snap-on type

/000-002

793-502

**Item no.: 793-502/000-005**

WMB marking card; as card; MARKED; 1 ... 10 (10x); not stretchable; Horizontal marking; snap-on type

/000-005

793-502

**Item no.: 793-502/000-006**

WMB marking card; as card; MARKED; 1 ... 10 (10x); not stretchable; Horizontal marking; snap-on type

/000-006

793-502

**Item no.: 793-502/000-007**

WMB marking card; as card; MARKED; 1 ... 10 (10x); not stretchable; Horizontal marking; snap-on type

/000-007

793-502

**Item no.: 793-502/000-012**

WMB marking card; as card; MARKED; 1 ... 10 (10x); not stretchable; Horizontal marking; snap-on type

/000-012

793-502

**Item no.: 793-502/000-017**

WMB marking card; as card; MARKED; 1 ... 10 (10x); not stretchable; Horizontal marking; snap-on type

/000-017

793-502

**Item no.: 793-502/000-023**

WMB marking card; as card; MARKED; 1 ... 10 (10x); not stretchable; Horizontal marking; snap-on type

/000-023

793-502

**Item no.: 793-502/000-024**

WMB marking card; as card; MARKED; 1 ... 10 (10x); not stretchable; Horizontal marking; snap-on type /0000-024

793-502

**Item no.: 793-503**

WMB marking card; as card; MARKED; 11 ... 20 (10x); not stretchable; Horizontal marking; snap-on type

793-503

**Item no.: 793-503/000-002**

WMB marking card; as card; MARKED; 11 ... 20 (10x); not stretchable; Horizontal marking; snap-on type /0000-002

793-503

**Item no.: 793-503/000-005**

WMB marking card; as card; MARKED; 11 ... 20 (10x); not stretchable; Horizontal marking; snap-on type /0000-005

793-503

**Item no.: 793-503/000-006**

WMB marking card; as card; MARKED; 11 ... 20 (10x); not stretchable; Horizontal marking; snap-on type /0000-006

793-503

**Item no.: 793-503/000-007**

WMB marking card; as card; MARKED; 11 ... 20 (10x); not stretchable; Horizontal marking; snap-on type /0000-007

793-503

**Item no.: 793-503/000-012**

WMB marking card; as card; MARKED; 11 ... 20 (10x); not stretchable; Horizontal marking; snap-on type /0000-012

793-503

**Item no.: 793-503/000-017**

WMB marking card; as card; MARKED; 11 ... 20 (10x); not stretchable; Horizontal marking; snap-on type /0000-017

793-503

**Item no.: 793-503/000-023**

WMB marking card; as card; MARKED; 11 ... 20 (10x); not stretchable; Horizontal marking; snap-on type /0000-023

793-503

**Item no.: 793-503/000-024**

WMB marking card; as card; MARKED; 11 ... 20 (10x); not stretchable; Horizontal marking; snap-on type /0000-024

793-503

**Item no.: 793-504**

WMB marking card; as card; MARKED; 21 ... 30 (10x); not stretchable; Horizontal marking; snap-on type

793-504

**Item no.: 793-504/000-002**

WMB marking card; as card; MARKED; 21 ... 30 (10x); not stretchable; Horizontal marking; snap-on type /0000-002

793-504

**Item no.: 793-504/000-005**

WMB marking card; as card; MARKED; 21 ... 30 (10x); not stretchable; Horizontal marking; snap-on type /0000-005

793-504

**Item no.: 793-504/000-006**

WMB marking card; as card; MARKED; 21 ... 30 (10x); not stretchable; Horizontal marking; snap-on type /0000-006

793-504

**Item no.: 793-504/000-012**

WMB marking card; as card; MARKED; 21 ... 30 (10x); not stretchable; Horizontal marking; snap-on type /0000-012

793-504

**Item no.: 793-504/000-017**

WMB marking card; as card; MARKED; 21 ... 30 (10x); not stretchable; Horizontal marking; snap-on type /0000-017/

793-504

**Item no.: 793-504/000-023**

WMB marking card; as card; MARKED; 21 ... 30 (10x); not stretchable; Horizontal marking; snap-on type /0000-023/

793-504

**Item no.: 793-505**

WMB marking card; as card; MARKED; 31 ... 40 (10x); not stretchable; Horizontal marking; snap-on type

793-505

**Item no.: 793-505/000-005**

WMB marking card; as card; MARKED; 31 ... 40 (10x); not stretchable; Horizontal marking; snap-on type /0000-005/

793-505

**Item no.: 793-505/000-006**

WMB marking card; as card; MARKED; 31 ... 40 (10x); not stretchable; Horizontal marking; snap-on type /0000-006/

793-505

**Item no.: 793-505/000-007**

WMB marking card; as card; MARKED; 31 ... 40 (10x); not stretchable; Horizontal marking; snap-on type /0000-007/

793-505

**Item no.: 793-505/000-012**

WMB marking card; as card; MARKED; 31 ... 40 (10x); not stretchable; Horizontal marking; snap-on type /0000-012/

793-505

**Item no.: 793-506**

WMB marking card; as card; MARKED; 41 ... 50 (10x); not stretchable; Horizontal marking; snap-on type

793-506

**Item no.: 793-506/000-005**

WMB marking card; as card; MARKED; 41 ... 50 (10x); not stretchable; Horizontal marking; snap-on type /0000-005/

793-506

**Item no.: 793-506/000-006**

WMB marking card; as card; MARKED; 41 ... 50 (10x); not stretchable; Horizontal marking; snap-on type /0000-006/

793-506

**Item no.: 793-506/000-012**

WMB marking card; as card; MARKED; 41 ... 50 (10x); not stretchable; Horizontal marking; snap-on type /0000-012/

793-506

**Item no.: 793-506/000-017**

WMB marking card; as card; MARKED; 41 ... 50 (10x); not stretchable; Horizontal marking; snap-on type /0000-017/

793-506

**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

793-5501

**Item no.: 793-5501/000-002**

WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type /0000-002/

793-5501

**Item no.: 793-5501/000-005**

WMB marking card; as card; stretchable 5 - 5.2 mm; plain; snap-on type

/0000-005/

793-5501

**Item no.: 793-5501/000-006**

WMB marking card; as card; stretchable 5 - 5.2 mm; plain; snap-on type

/000-006

793-5501

**Item no.: 793-5501/000-007**

WMB marking card; as card; stretchable 5 - 5.2 mm; plain; snap-on type

/000-007

793-5501

**Item no.: 793-5501/000-012**

WMB marking card; as card; stretchable 5 - 5.2 mm; plain; snap-on type

/000-012

793-5501

**Item no.: 793-5501/000-014**

WMB marking card; as card; stretchable 5 - 5.2 mm; plain; snap-on type

/000-014

793-5501

**Item no.: 793-5501/000-017**

WMB marking card; as card; stretchable 5 - 5.2 mm; plain; snap-on type

/000-017

793-5501

**Item no.: 793-5501/000-023**

WMB marking card; as card; stretchable 5 - 5.2 mm; plain; snap-on type

/000-023

793-5501

**Item no.: 793-5501/000-024**

WMB marking card; as card; stretchable 5 - 5.2 mm; plain; snap-on type

/000-024

793-5501

**Item no.: 793-566**

WMB marking card; as card; MARKED; 1 ... 50 (2x); not stretchable; Horizontal marking; snap-on type

793-566

**Item no.: 793-566/000-002**

WMB marking card; as card; MARKED; 1 ... 50 (2x); not stretchable; Horizontal marking; snap-on type

/000-002

793-566

**Item no.: 793-566/000-005**

WMB marking card; as card; MARKED; 1 ... 50 (2x); not stretchable; Horizontal marking; snap-on type

/000-005

793-566

**Item no.: 793-566/000-006**

WMB marking card; as card; MARKED; 1 ... 50 (2x); not stretchable; Horizontal marking; snap-on type

/000-006

793-566

**Item no.: 793-566/000-007**

WMB marking card; as card; MARKED; 1 ... 50 (2x); not stretchable; Horizontal marking; snap-on type

/000-007

793-566

**Item no.: 793-566/000-012**

WMB marking card; as card; MARKED; 1 ... 50 (2x); not stretchable; Horizontal marking; snap-on type

/000-012

793-566

**Item no.: 793-566/000-017**

WMB marking card; as card; MARKED; 1 ... 50 (2x); not stretchable; Horizontal marking; snap-on type

/000-017

793-566

**Item no.: 793-566/000-023**

WMB marking card; as card; MARKED; 1 ... 50 (2x); not stretchable; Horizontal marking; snap-on type

/000-023

793-566



Item no.: 793-566/000-024

793-566

WMB marking card; as card; MARKED; 1 ... 50 (2x); not stretchable; Horizontal marking; snap-on type

/000-024

tools



Item no.: 210-720

210-720

Operating tool with partially insulated shaft; Type 2, blade (3.5 x 0.5) mm

Downloads

Documentation

Instruction Leaflet

DC/DC-Wandler

V 1.1.0

pdf
3.3 MB

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Additional Information

Disposal; Electrical and electronic equipment, Packaging

V 1.0.0

pdf
265.8 kB

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CAD/CAE - Smart Data

CAD data

3D Download 787-2810

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Subject to changes.