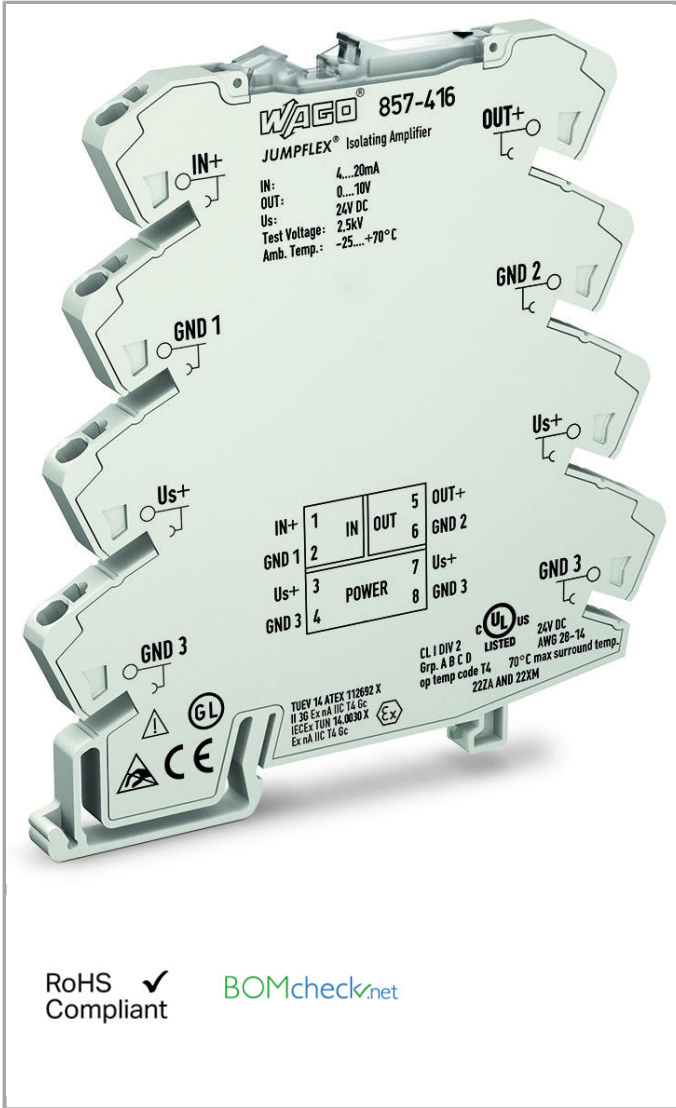


Data sheet | Item number: 857-416

Isolation amplifier; Current input signal; Voltage output signal; Supply voltage: 24 VDC; 6 mm module width



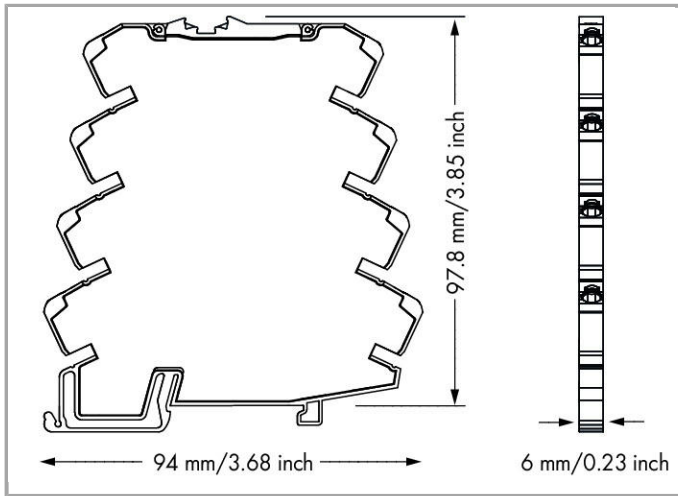
857-416



IN+	1	IN	OUT	5	OUT+
GND 1	2			6	GND 2
Us+	3	POWER		7	Us+
GND 3	4			8	GND 3

RoHS Compliant

[BOMcheck.net](https://www.bomcheck.net)



Item description

Short description:

The pre-configured isolation amplifier converts, amplifies, filters and electrically isolates standard analog signals.

Features:

- Input/Output: current/voltage signal
- Safe 3-way isolation with 2.5kV test voltage per EN 61140

Data

Technical Data

Configuration

Configuration options	permanently configured
-----------------------	------------------------

Input

Input signal type	Current
Input signal, current	4 ... 20 mA
Input resistance (input/current)	$\leq 50 \Omega$
Max. input current	50 mA

Output

Output signal type	Voltage
Output signal voltage	0 ... 10 V
Load impedance (output/voltage)	$\geq 2 \text{ k}\Omega$

Signal processing

Max. operating frequency	100 Hz
--------------------------	--------

Step response typ.	3.5 ms
--------------------	--------

Measurement error

Transmission error typ.	≤ 0.1 % of upper range value
Temperature coefficient	≤ 0.01 %/K

Power supply

Type of power supply	24 VDC
Nominal supply voltage U_S	DC 24 V
Supply voltage range	±30 %
Current consumption at supply voltage	≤ 25 mA

Safety and protection:

Test voltage (input/output/supply)	AC 2.5 kV; 50 Hz; 1 min
Protection class	IP20

Connection data

Connection technology	Push-in CAGE CLAMP®
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
------------------	-------------

Material Data

Color	light gray
Fire load	0 MJ
Weight	35.8 g

Environmental Requirements

Surrounding air (operating) temperature	-25 ... 70 °C
Surrounding air (storage) temperature	-40 ... 85 °C

Standards and specifications

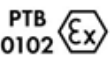

Conformity marking	1
EMC immunity to interference	EN 61000-6-2
EMC emission of interference	EN 61000-6-4

Commercial data





Product Group	6 (Interface Electronics)
Country of origin	DE
GTIN	4045454609849
Customs Tariff No.	85437090300

Approvals / Certificates


Ex-Approvals

Logo	Approval	Additional Approval Text	Certificate name
	IECEX TUEV Nord Cert GmbH	EN 60079-0	TÜV_14_ATEX_112692_X
	IECEX TUEV Nord Cert GmbH	IEC 60079-0	IECEX_TUN_14.0030_X

Ship Approvals




Logo	Approval	Additional Approval Text	Certificate name
	BV Bureau Veritas S.A.	-	40179_A0
	DNV GL Det Norske Veritas, Germanischer Lloyd	-	TAA00001D1
	NK Nippon Kaiji Kyokai	-	TA17255M
	PRS Polski Rejestr Statków	-	TE/2186 /880590/18

UL-Approvals








Logo	Approval	Additional Approval Text	Certificate name
	UL UL International Netherlands B.V. (ORDINARY LOCATIONS)	UL 508	E175199 Sec.4
















Compatible products
















assembling
















	Item no.: 249-116 Screwless end stop; 6 mm wide; for DIN-rail 35 x 15 and 35 x 7.5	249-116
	Item no.: 249-117 Screwless end stop; 10 mm wide; for DIN-rail 35 x 15 and 35 x 7.5	249-117
	Item no.: 249-197 Screwless end stop; 14 mm wide; for DIN-rail 35 x 15 and 35 x 7.5	249-197
















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	793-501
		/000-005
	Item no.: 793-501/000-006 WMB marking card; as card; not stretchable; plain; snap-on type	793-501
		/000-006
	Item no.: 793-501/000-007 WMB marking card; as card; not stretchable; plain; snap-on type	793-501
		/000-007
	Item no.: 793-501/000-012 WMB marking card; as card; not stretchable; plain; snap-on type	793-501
		/000-012
	Item no.: 793-501/000-017 WMB marking card; as card; not stretchable; plain; snap-on type	793-501
		/000-017
	Item no.: 793-501/000-023 WMB marking card; as card; not stretchable; plain; snap-on type	793-501
		/000-023
	Item no.: 793-501/000-024 WMB marking card; as card; not stretchable; plain; snap-on type	793-501
		/000-024
	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	793-502
		/000-002
	Item no.: 793-502/000-005 WMB marking card; as card; MARKED; 1 ... 10 (10x); not stretchable; Horizontal marking; snap-on type	793-502
		/000-005
	Item no.: 793-502/000-006 WMB marking card; as card; MARKED; 1 ... 10 (10x); not stretchable; Horizontal marking; snap-on type	793-502
		/000-006
















	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	/000-024	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	/000-002	793-503
	Item no.: 793-503/000-005 WMB marking card; as card; MARKED; 11 ... 20 (10x); not stretchable; Horizontal marking; snap-on type	/000-005	793-503
	Item no.: 793-503/000-006 WMB marking card; as card; MARKED; 11 ... 20 (10x); not stretchable; Horizontal marking; snap-on type	/000-006	793-503
	Item no.: 793-503/000-007 WMB marking card; as card; MARKED; 11 ... 20 (10x); not stretchable; Horizontal marking; snap-on type	/000-007	793-503
	Item no.: 793-503/000-012 WMB marking card; as card; MARKED; 11 ... 20 (10x); not stretchable; Horizontal marking; snap-on type	/000-012	793-503
	Item no.: 793-503/000-017 WMB marking card; as card; MARKED; 11 ... 20 (10x); not stretchable; Horizontal marking; snap-on type	/000-017	793-503
	Item no.: 793-503/000-023 WMB marking card; as card; MARKED; 11 ... 20 (10x); not stretchable; Horizontal marking; snap-on type	/000-023	793-503
	Item no.: 793-503/000-024 WMB marking card; as card; MARKED; 11 ... 20 (10x); not stretchable; Horizontal marking; snap-on type	/000-024	793-503
	Item no.: 793-504 WMB marking card; as card; MARKED; 21 ... 30 (10x); not stretchable; Horizontal marking; snap-on type		793-504

	<p>Item no.: 793-504/000-002 WMB marking card; as card; MARKED; 21 ... 30 (10x); not stretchable; Horizontal marking; snap-on type</p>	793-504
		/000-002
	<p>Item no.: 793-504/000-005 WMB marking card; as card; MARKED; 21 ... 30 (10x); not stretchable; Horizontal marking; snap-on type</p>	793-504
		/000-005
	<p>Item no.: 793-504/000-006 WMB marking card; as card; MARKED; 21 ... 30 (10x); not stretchable; Horizontal marking; snap-on type</p>	793-504
		/000-006
	<p>Item no.: 793-504/000-012 WMB marking card; as card; MARKED; 21 ... 30 (10x); not stretchable; Horizontal marking; snap-on type</p>	793-504
		/000-012
	<p>Item no.: 793-504/000-017 WMB marking card; as card; MARKED; 21 ... 30 (10x); not stretchable; Horizontal marking; snap-on type</p>	793-504
		/000-017
	<p>Item no.: 793-504/000-023 WMB marking card; as card; MARKED; 21 ... 30 (10x); not stretchable; Horizontal marking; snap-on type</p>	793-504
		/000-023
	<p>Item no.: 793-505 WMB marking card; as card; MARKED; 31 ... 40 (10x); not stretchable; Horizontal marking; snap-on type</p>	793-505
	<p>Item no.: 793-505/000-005 WMB marking card; as card; MARKED; 31 ... 40 (10x); not stretchable; Horizontal marking; snap-on type</p>	793-505
		/000-005
	<p>Item no.: 793-505/000-006 WMB marking card; as card; MARKED; 31 ... 40 (10x); not stretchable; Horizontal marking; snap-on type</p>	793-505
		/000-006
	<p>Item no.: 793-505/000-007 WMB marking card; as card; MARKED; 31 ... 40 (10x); not stretchable; Horizontal marking; snap-on type</p>	793-505
		/000-007
	<p>Item no.: 793-505/000-012 WMB marking card; as card; MARKED; 31 ... 40 (10x); not stretchable; Horizontal marking; snap-on type</p>	793-505
		/000-012
	<p>Item no.: 793-506 WMB marking card; as card; MARKED; 41 ... 50 (10x); not stretchable; Horizontal marking; snap-on type</p>	793-506
	<p>Item no.: 793-506/000-005 WMB marking card; as card; MARKED; 41 ... 50 (10x); not stretchable; Horizontal marking; snap-on type</p>	793-506
		/000-005
	<p>Item no.: 793-506/000-006 WMB marking card; as card; MARKED; 41 ... 50 (10x); not stretchable; Horizontal marking; snap-on type</p>	793-506
		/000-006
	<p>Item no.: 793-506/000-012 WMB marking card; as card; MARKED; 41 ... 50 (10x); not stretchable; Horizontal marking; snap-on type</p>	793-506
		/000-012

	Item no.: 793-506/000-017 WMB marking card; as card; MARKED; 41 ... 50 (10x); not stretchable; Horizontal marking; snap-on type	/000-017	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	/000-002	793-5501
	Item no.: 793-5501/000-005 WMB marking card; as card; stretchable 5 - 5.2 mm; plain; snap-on type	/000-005	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 WMB marking card; as card; MARKED; 1 ... 50 (2x); not stretchable; Horizontal marking; snap-on type	/000-024	793-566
power supply			
	Item no.: 787-2852 Switched-mode power supply; for JUMPFLEX® Signal Conditioners; 1-phase; 24 VDC output voltage; 1 A output current		787-2852
Jumper			
	Item no.: 281-482 Comb-style jumper bar; insulated; 2-way; IN = IN terminal block		281-482
	Item no.: 859-402 Push-in type jumper bar; 2-way; Nominal current 18 A; insulated		859-402
	Item no.: 859-402/000-005 Push-in type jumper bar; 2-way; Nominal current 18 A; insulated	/000-005	859-402
	Item no.: 859-402/000-006 Push-in type jumper bar; 2-way; Nominal current 18 A; insulated	/000-006	859-402
	Item no.: 859-402/000-029 Push-in type jumper bar; 2-way; Nominal current 18 A; insulated	/000-029	859-402
	Item no.: 859-403 Push-in type jumper bar; 3-way; Nominal current 18 A; insulated		859-403
	Item no.: 859-403/000-005 Push-in type jumper bar; 3-way; Nominal current 18 A; insulated	/000-005	859-403
	Item no.: 859-403/000-006 Push-in type jumper bar; 3-way; Nominal current 18 A; insulated	/000-006	859-403
	Item no.: 859-403/000-029 Push-in type jumper bar; 3-way; Nominal current 18 A; insulated	/000-029	859-403

	Item no.: 859-404 Push-in type jumper bar; 4-way; Nominal current 18 A; insulated		859-404
	Item no.: 859-404/000-005 Push-in type jumper bar; 4-way; Nominal current 18 A; insulated	/000-005	859-404
	Item no.: 859-404/000-006 Push-in type jumper bar; 4-way; Nominal current 18 A; insulated	/000-006	859-404
	Item no.: 859-404/000-029 Push-in type jumper bar; 4-way; Nominal current 18 A; insulated	/000-029	859-404
	Item no.: 859-405 Push-in type jumper bar; 5-way; Nominal current 18 A; insulated		859-405
	Item no.: 859-405/000-005 Push-in type jumper bar; 5-way; Nominal current 18 A; insulated	/000-005	859-405
	Item no.: 859-405/000-006 Push-in type jumper bar; 5-way; Nominal current 18 A; insulated	/000-006	859-405
	Item no.: 859-405/000-029 Push-in type jumper bar; 5-way; Nominal current 18 A; insulated	/000-029	859-405
	Item no.: 859-406 Push-in type jumper bar; 6-way; Nominal current 18 A; insulated		859-406
	Item no.: 859-406/000-005 Push-in type jumper bar; 6-way; Nominal current 18 A; insulated	/000-005	859-406
	Item no.: 859-406/000-006 Push-in type jumper bar; 6-way; Nominal current 18 A; insulated	/000-006	859-406
	Item no.: 859-406/000-029 Push-in type jumper bar; 6-way; Nominal current 18 A; insulated	/000-029	859-406
	Item no.: 859-407 Push-in type jumper bar; 7-way; Nominal current 18 A; insulated		859-407
	Item no.: 859-407/000-005 Push-in type jumper bar; 7-way; Nominal current 18 A; insulated	/000-005	859-407
	Item no.: 859-407/000-006 Push-in type jumper bar; 7-way; Nominal current 18 A; insulated	/000-006	859-407
	Item no.: 859-407/000-029 Push-in type jumper bar; 7-way; Nominal current 18 A; insulated	/000-029	859-407

	Item no.: 859-408 Push-in type jumper bar; 8-way; Nominal current 18 A; insulated	859-408
	Item no.: 859-408/000-005 Push-in type jumper bar; 8-way; Nominal current 18 A; insulated	859-408 /000-005
	Item no.: 859-408/000-006 Push-in type jumper bar; 8-way; Nominal current 18 A; insulated	859-408 /000-006
	Item no.: 859-408/000-029 Push-in type jumper bar; 8-way; Nominal current 18 A; insulated	859-408 /000-029
	Item no.: 859-409 Push-in type jumper bar; 9-way; Nominal current 18 A; insulated	859-409
	Item no.: 859-409/000-005 Push-in type jumper bar; 9-way; Nominal current 18 A; insulated	859-409 /000-005
	Item no.: 859-409/000-006 Push-in type jumper bar; 9-way; Nominal current 18 A; insulated	859-409 /000-006
	Item no.: 859-409/000-029 Push-in type jumper bar; 9-way; Nominal current 18 A; insulated	859-409 /000-029
	Item no.: 859-410 Push-in type jumper bar; 10-way; Nominal current 18 A; insulated	859-410
	Item no.: 859-410/000-005 Push-in type jumper bar; 10-way; Nominal current 18 A; insulated	859-410 /000-005
	Item no.: 859-410/000-006 Push-in type jumper bar; 10-way; Nominal current 18 A; insulated	859-410 /000-006
	Item no.: 859-410/000-029 Push-in type jumper bar; 10-way; Nominal current 18 A; insulated	859-410 /000-029
General accessories		
	Item no.: 857-979 Supply and through module	857-979
tools		
	Item no.: 210-720 Operating tool with partially insulated shaft; Type 2, blade (3.5 x 0.5) mm	210-720
transfer module		
	Item no.: 857-980 Interface adapter; 16-pole; analog	857-980

**Downloads****Documentation****Bid Text**

857-416 Trennverstärker,	Mar 9, 2016	doc 29.7 kB	Download
-----------------------------	-------------	----------------	----------

Instruction Leaflet

Signal Conditioners and Isolation Amps 4...20 mA / 0...10 V		pdf 1.5 MB	Download
--	--	---------------	----------

Additional Information

Disposal; Electrical and electronic equipment, Packaging	V 1.0.0	pdf 265.8 kB	Download
--	---------	-----------------	----------

CAD/CAE - Smart Data**CAD data**

3D Download 857-416		URL	Download
---------------------	--	-----	----------

Subject to changes.
