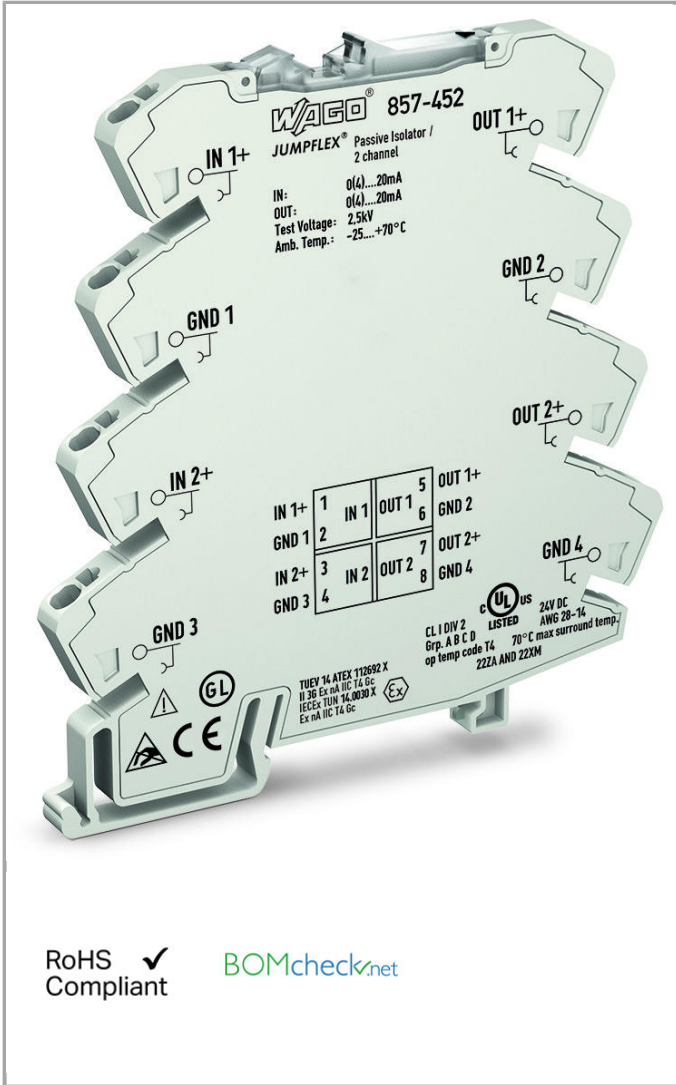


Data sheet | Item number: 857-452

Passive isolator, 2-channel; Current input signal; 2 x current output signal;
Power via input; 6 mm module width



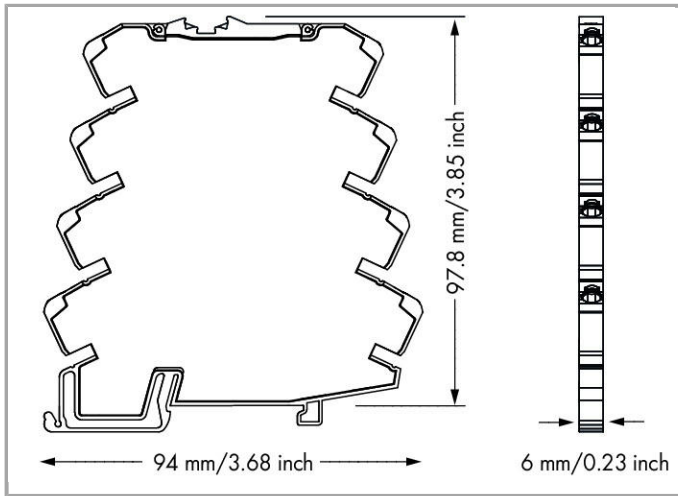
857-452



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

RoHS Compliant

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



Item description

Short description:

WAGO's passive isolator (2-channel) electrically isolates and filters 0(4)–20 mA standard analog signals, while drawing power for signal transmission from the input circuit. The connected sensor supplies the passive isolator with the required power to energize the connected load.

Features:

- No additional supply voltage required
- Safe 2-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	0 ... 20 mA; 4 ... 20 mA
Voltage drop at input	≤ 2.5 V (at 20 mA at the output)
Max. input current	40mA
Max. input voltage	20 V
Response threshold	200 μA

Output

Output signal type	Current
Output signal current	0 ... 20 mA; 4 ... 20 mA
Load impedance (output/current)	≤ 600 Ω (temperature range restrictions may occur)

Signal processing

Max. operating frequency	100 Hz
Step response typ.	3.5 ms

Measurement error

Transmission error typ.	≤ 0.1 % of upper range value
Load error	≤ 0.05% (of the full scale value; per 100 Ω load)
Temperature coefficient	≤ 0.01 %/K

Power supply

Type of power supply	passive (via input)
----------------------	---------------------

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	62 g

Environmental Requirements

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

Standards and specifications

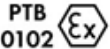

Conformity marking	1
EMC immunity to interference	EN 61000-6-2
EMC emission of interference	EN 61000-6-4

Commercial data





Product Group	6 (Interface Electronics)
Country of origin	DE
GTIN	4045454471354
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
















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	/000-002	2009-115
	Item no.: 2009-115/000-006 WMB-Inline; for smartPRINTER; on reel; stretchable 5 - 5.2 mm; plain; snap-on type	/000-006	2009-115
	Item no.: 2009-115/000-007 WMB-Inline; for Smart Printer; on reel; stretchable 5 - 5.2 mm; plain; snap-on type	/000-007	2009-115
	Item no.: 2009-115/000-012 WMB-Inline; for smartPRINTER; on reel; stretchable 5 - 5.2 mm; plain; snap-on type	/000-012	2009-115
	Item no.: 2009-115/000-017 WMB-Inline; for Smart Printer; on reel; stretchable 5 - 5.2 mm; plain; snap-on type	/000-017	2009-115
	Item no.: 2009-115/000-023 WMB-Inline; for Smart Printer; on reel; stretchable 5 - 5.2 mm; plain; snap-on type	/000-023	2009-115
	Item no.: 2009-115/000-024 WMB-Inline; for smartPRINTER; on reel; stretchable 5 - 5.2 mm; plain; snap-on type	/000-024	2009-115
	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	/000-002	793-501
	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








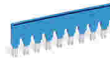






	Item no.: 793-502/000-023 WMB marking card; as card; MARKED; 1 ... 10 (10x); not stretchable; Horizontal marking; snap-on type / 000-023	793-502
	Item no.: 793-502/000-024 WMB marking card; as card; MARKED; 1 ... 10 (10x); not stretchable; Horizontal marking; snap-on type / 000-024	793-502
	Item no.: 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
	Item no.: 793-504/000-002 WMB marking card; as card; MARKED; 21 ... 30 (10x); not stretchable; Horizontal marking; snap-on type / 000-002	793-504
	Item no.: 793-504/000-005 WMB marking card; as card; MARKED; 21 ... 30 (10x); not stretchable; Horizontal marking; snap-on type / 000-005	793-504
	Item no.: 793-504/000-006 WMB marking card; as card; MARKED; 21 ... 30 (10x); not stretchable; Horizontal marking; snap-on type / 000-006	793-504

	Item no.: 793-504/000-012 WMB marking card; as card; MARKED; 21 ... 30 (10x); not stretchable; Horizontal marking; snap-on type	793-504
		/000-012
	Item no.: 793-504/000-017 WMB marking card; as card; MARKED; 21 ... 30 (10x); not stretchable; Horizontal marking; snap-on type	793-504
		/000-017
	Item no.: 793-504/000-023 WMB marking card; as card; MARKED; 21 ... 30 (10x); not stretchable; Horizontal marking; snap-on type	793-504
		/000-023
	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	793-505
		/000-005
	Item no.: 793-505/000-006 WMB marking card; as card; MARKED; 31 ... 40 (10x); not stretchable; Horizontal marking; snap-on type	793-505
		/000-006
	Item no.: 793-505/000-007 WMB marking card; as card; MARKED; 31 ... 40 (10x); not stretchable; Horizontal marking; snap-on type	793-505
		/000-007
	Item no.: 793-505/000-012 WMB marking card; as card; MARKED; 31 ... 40 (10x); not stretchable; Horizontal marking; snap-on type	793-505
		/000-012
	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	793-506
		/000-005
	Item no.: 793-506/000-006 WMB marking card; as card; MARKED; 41 ... 50 (10x); not stretchable; Horizontal marking; snap-on type	793-506
		/000-006
	Item no.: 793-506/000-012 WMB marking card; as card; MARKED; 41 ... 50 (10x); not stretchable; Horizontal marking; snap-on type	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	793-506
		/000-017
	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	793-5501
		/000-002

	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	793-566 /000-023
	Item no.: 793-566/000-024 WMB marking card; as card; MARKED; 1 ... 50 (2x); not stretchable; Horizontal marking; snap-on type	793-566 /000-024
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	859-402 /000-005
	Item no.: 859-402/000-006 Push-in type jumper bar; 2-way; Nominal current 18 A; insulated	859-402 /000-006
	Item no.: 859-402/000-029 Push-in type jumper bar; 2-way; Nominal current 18 A; insulated	859-402 /000-029
	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	859-403 /000-005
	Item no.: 859-403/000-006 Push-in type jumper bar; 3-way; Nominal current 18 A; insulated	859-403 /000-006
	Item no.: 859-403/000-029 Push-in type jumper bar; 3-way; Nominal current 18 A; insulated	859-403 /000-029
	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	859-404 /000-005
	Item no.: 859-404/000-006 Push-in type jumper bar; 4-way; Nominal current 18 A; insulated	859-404 /000-006

	Item no.: 859-404/000-029 Push-in type jumper bar; 4-way; Nominal current 18 A; insulated		859-404
		/000-029	
	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		859-405
		/000-005	
	Item no.: 859-405/000-006 Push-in type jumper bar; 5-way; Nominal current 18 A; insulated		859-405
		/000-006	
	Item no.: 859-405/000-029 Push-in type jumper bar; 5-way; Nominal current 18 A; insulated		859-405
		/000-029	
	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		859-406
		/000-005	
	Item no.: 859-406/000-006 Push-in type jumper bar; 6-way; Nominal current 18 A; insulated		859-406
		/000-006	
	Item no.: 859-406/000-029 Push-in type jumper bar; 6-way; Nominal current 18 A; insulated		859-406
		/000-029	
	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		859-407
		/000-005	
	Item no.: 859-407/000-006 Push-in type jumper bar; 7-way; Nominal current 18 A; insulated		859-407
		/000-006	
	Item no.: 859-407/000-029 Push-in type jumper bar; 7-way; Nominal current 18 A; insulated		859-407
		/000-029	
	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	7000-029	859-408
	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	7000-005	859-409
	Item no.: 859-409/000-006 Push-in type jumper bar; 9-way; Nominal current 18 A; insulated	7000-006	859-409
	Item no.: 859-409/000-029 Push-in type jumper bar; 9-way; Nominal current 18 A; insulated	7000-029	859-409
	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	7000-005	859-410
	Item no.: 859-410/000-006 Push-in type jumper bar; 10-way; Nominal current 18 A; insulated	7000-006	859-410
	Item no.: 859-410/000-029 Push-in type jumper bar; 10-way; Nominal current 18 A; insulated	7000-029	859-410
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
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

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Instruction Leaflet

Signal Conditioners and Isolating Amps Passive isolator 2-channel		pdf 1.7 MB	Download
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Additional Information

Disposal; Electrical and electronic equipment, Packaging	V 1.0.0	pdf 265.8 kB	Download
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CAD/CAE - Smart Data**CAD data**

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Subject to changes.
