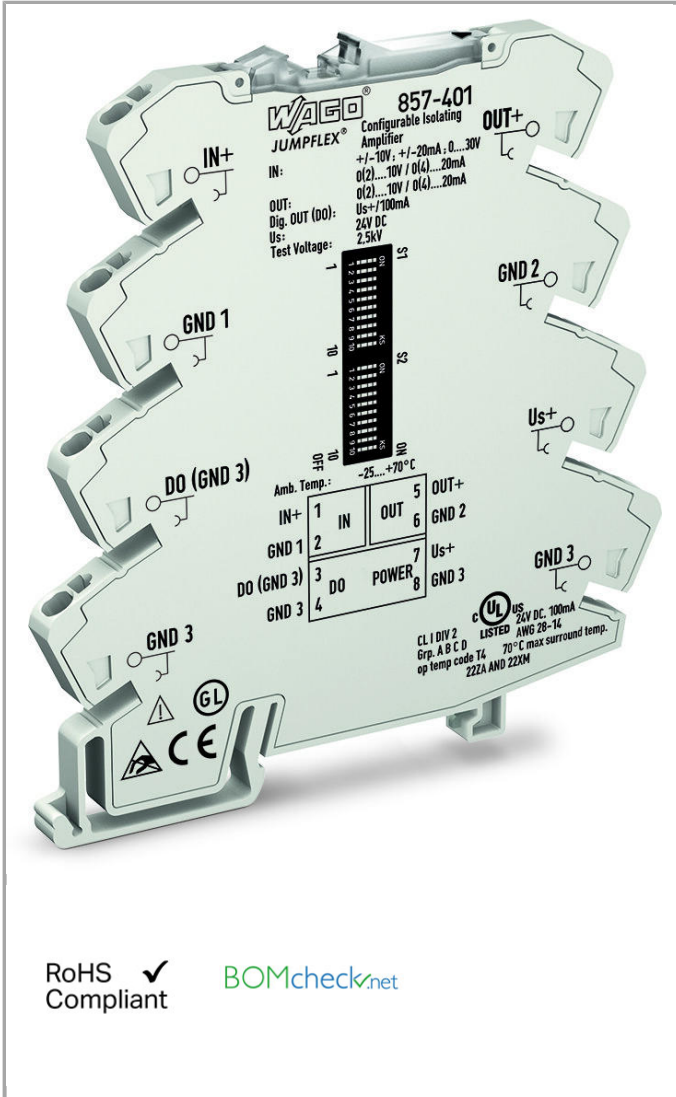


Data sheet | Item number: 857-401

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



857-401



IN+	1	IN	OUT	5	OUT+
GND 1	2	U,I	U,I	6	GND 2
DO	3			7	Us+
GND 3	4	DO	POWER	8	GND 3

RoHS Compliant

BOMcheck.net



## Input

Input signal type	Voltage Current
Input signal voltage	$\pm 10 \text{ V}; 0 \dots 30 \text{ V}$
Input signal, current	$\pm 20 \text{ mA}$
Input resistance (input/current)	$\leq 200 \Omega$
Input resistance (input/voltage)	$\geq 100 \text{ k}\Omega$
Max. input current	22 mA
Max. input voltage	31 V
Min. measuring span	1 V
Min. current measuring span	2 mA

## Output

Output signal type	Current Voltage
Output signal voltage	0 ... 5 V; 1 ... 5 V; 0 ... 10 V; 2 ... 10 V
Output signal current	0 ... 10 mA; 2 ... 10 mA; 2 ... 20 mA; 4 ... 20 mA
Load impedance (output/voltage)	$\geq 2 \text{ k}\Omega$
Load impedance (output/current)	$\leq 600 \Omega$

## Output – Digital

Max. switching voltage (DO)	Supply voltage applied
Max. continuous current (DO)	100 mA (no internal restriction)
Number of switching thresholds (DO)	1 (adjustable)

## Signal processing

Step response typ.	8 ms
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## Measurement error

Transmission error typ.	$\leq 0.1 \%$ of upper range value
Temperature coefficient	$\leq 0.01 \%$ /K

## Power supply

Type of power supply	24 VDC
Nominal supply voltage $U_S$	DC 24 V
Supply voltage range	$\pm 30 \%$
Current consumption at supply voltage	$\leq 40 \text{ mA} (+ I_{DO})$

## 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 <sup>2</sup> / 28 ... 14 AWG
Fine-stranded conductor	0.34 ... 2.5 mm <sup>2</sup> / 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
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## Material Data

Color	light gray
Fire load	0.772 MJ
Weight	37.04 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; EN 61326-1; EN 50121-3-2
EMC emission of interference	EN 61000-6-3; EN 61326-1
Standards/specifications	EN 61373

## Commercial data




Product Group	6 (Interface Electronics)
Country of origin	DE
GTIN	4045454828509

Customs Tariff No.


85437090300

## Approvals / Certificates

### Ship Approvals




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

### UL-Approvals


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

## Compatible products

















### assembling

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

### power supply





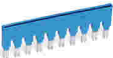










	<b>Item no.: 787-2852</b> Switched-mode power supply; for JUMPFLEX® Signal Conditioners; 1-phase; 24 VDC output voltage; 1 A output current	787-2852
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## Jumper
















	<b>Item no.: 281-482</b> Comb-style jumper bar; insulated; 2-way; IN = IN terminal block	281-482
	<b>Item no.: 859-402</b> Push-in type jumper bar; 2-way; Nominal current 18 A; insulated	859-402
	<b>Item no.: 859-402/000-005</b> Push-in type jumper bar; 2-way; Nominal current 18 A; insulated	859-402 /000-005
	<b>Item no.: 859-402/000-006</b> Push-in type jumper bar; 2-way; Nominal current 18 A; insulated	859-402 /000-006
	<b>Item no.: 859-402/000-029</b> Push-in type jumper bar; 2-way; Nominal current 18 A; insulated	859-402 /000-029
	<b>Item no.: 859-403</b> Push-in type jumper bar; 3-way; Nominal current 18 A; insulated	859-403
	<b>Item no.: 859-403/000-005</b> Push-in type jumper bar; 3-way; Nominal current 18 A; insulated	859-403 /000-005
	<b>Item no.: 859-403/000-006</b> Push-in type jumper bar; 3-way; Nominal current 18 A; insulated	859-403 /000-006
	<b>Item no.: 859-403/000-029</b> Push-in type jumper bar; 3-way; Nominal current 18 A; insulated	859-403 /000-029
	<b>Item no.: 859-404</b> Push-in type jumper bar; 4-way; Nominal current 18 A; insulated	859-404
	<b>Item no.: 859-404/000-005</b> Push-in type jumper bar; 4-way; Nominal current 18 A; insulated	859-404 /000-005
	<b>Item no.: 859-404/000-006</b> Push-in type jumper bar; 4-way; Nominal current 18 A; insulated	859-404 /000-006
	<b>Item no.: 859-404/000-029</b> Push-in type jumper bar; 4-way; Nominal current 18 A; insulated	859-404 /000-029
	<b>Item no.: 859-405</b> Push-in type jumper bar; 5-way; Nominal current 18 A; insulated	859-405
	<b>Item no.: 859-405/000-005</b> Push-in type jumper bar; 5-way; Nominal current 18 A; insulated	859-405 /000-005
	<b>Item no.: 859-405/000-006</b> Push-in type jumper bar; 5-way; Nominal current 18 A; insulated	859-405 /000-006

































<b>Item no.: 859-405/000-029</b> Push-in type jumper bar; 5-way; Nominal current 18 A; insulated	/000-029	859-405
<b>Item no.: 859-406</b> Push-in type jumper bar; 6-way; Nominal current 18 A; insulated		859-406
<b>Item no.: 859-406/000-005</b> Push-in type jumper bar; 6-way; Nominal current 18 A; insulated	/000-005	859-406
<b>Item no.: 859-406/000-006</b> Push-in type jumper bar; 6-way; Nominal current 18 A; insulated	/000-006	859-406
<b>Item no.: 859-406/000-029</b> Push-in type jumper bar; 6-way; Nominal current 18 A; insulated	/000-029	859-406
<b>Item no.: 859-407</b> Push-in type jumper bar; 7-way; Nominal current 18 A; insulated		859-407
<b>Item no.: 859-407/000-005</b> Push-in type jumper bar; 7-way; Nominal current 18 A; insulated	/000-005	859-407
<b>Item no.: 859-407/000-006</b> Push-in type jumper bar; 7-way; Nominal current 18 A; insulated	/000-006	859-407
<b>Item no.: 859-407/000-029</b> Push-in type jumper bar; 7-way; Nominal current 18 A; insulated	/000-029	859-407
<b>Item no.: 859-408</b> Push-in type jumper bar; 8-way; Nominal current 18 A; insulated		859-408
<b>Item no.: 859-408/000-005</b> Push-in type jumper bar; 8-way; Nominal current 18 A; insulated	/000-005	859-408
<b>Item no.: 859-408/000-006</b> Push-in type jumper bar; 8-way; Nominal current 18 A; insulated	/000-006	859-408
<b>Item no.: 859-408/000-029</b> Push-in type jumper bar; 8-way; Nominal current 18 A; insulated	/000-029	859-408
<b>Item no.: 859-409</b> Push-in type jumper bar; 9-way; Nominal current 18 A; insulated		859-409
<b>Item no.: 859-409/000-005</b> Push-in type jumper bar; 9-way; Nominal current 18 A; insulated	/000-005	859-409











	<b>Item no.: 859-409/000-006</b> Push-in type jumper bar; 9-way; Nominal current 18 A; insulated	859-409 /000-006
	<b>Item no.: 859-409/000-029</b> Push-in type jumper bar; 9-way; Nominal current 18 A; insulated	859-409 /000-029
	<b>Item no.: 859-410</b> Push-in type jumper bar; 10-way; Nominal current 18 A; insulated	859-410
	<b>Item no.: 859-410/000-005</b> Push-in type jumper bar; 10-way; Nominal current 18 A; insulated	859-410 /000-005
	<b>Item no.: 859-410/000-006</b> Push-in type jumper bar; 10-way; Nominal current 18 A; insulated	859-410 /000-006
	<b>Item no.: 859-410/000-029</b> Push-in type jumper bar; 10-way; Nominal current 18 A; insulated	859-410 /000-029
<b>Marking accessories</b>		
	<b>Item no.: 2009-110</b> Marking strips; on reel; not stretchable; plain; snap-on type	2009-110
	<b>Item no.: 2009-115</b> WMB-Inline; for Smart Printer; on reel; stretchable 5 - 5.2 mm; plain; snap-on type	2009-115
	<b>Item no.: 2009-115/000-002</b> WMB-Inline; for Smart Printer; on reel; stretchable 5 - 5.2 mm; plain; snap-on type	2009-115 /000-002
	<b>Item no.: 2009-115/000-006</b> WMB-Inline; for smartPRINTER; on reel; stretchable 5 - 5.2 mm; plain; snap-on type	2009-115 /000-006
	<b>Item no.: 2009-115/000-007</b> WMB-Inline; for Smart Printer; on reel; stretchable 5 - 5.2 mm; plain; snap-on type	2009-115 /000-007
	<b>Item no.: 2009-115/000-012</b> WMB-Inline; for smartPRINTER; on reel; stretchable 5 - 5.2 mm; plain; snap-on type	2009-115 /000-012
	<b>Item no.: 2009-115/000-017</b> WMB-Inline; for Smart Printer; on reel; stretchable 5 - 5.2 mm; plain; snap-on type	2009-115 /000-017
	<b>Item no.: 2009-115/000-023</b> WMB-Inline; for Smart Printer; on reel; stretchable 5 - 5.2 mm; plain; snap-on type	2009-115 /000-023
	<b>Item no.: 2009-115/000-024</b> WMB-Inline; for smartPRINTER; on reel; stretchable 5 - 5.2 mm; plain; snap-on type	2009-115 /000-024

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

	<b>Item no.: 793-502/000-017</b> WMB marking card; as card; MARKED; 1 ... 10 (10x); not stretchable; Horizontal marking; snap-on type /000-017	793-502
	<b>Item no.: 793-502/000-023</b> WMB marking card; as card; MARKED; 1 ... 10 (10x); not stretchable; Horizontal marking; snap-on type /000-023	793-502
	<b>Item no.: 793-502/000-024</b> WMB marking card; as card; MARKED; 1 ... 10 (10x); not stretchable; Horizontal marking; snap-on type /000-024	793-502
	<b>Item no.: 793-503</b> WMB marking card; as card; MARKED; 11 ... 20 (10x); not stretchable; Horizontal marking; snap-on type	793-503
	<b>Item no.: 793-503/000-002</b> WMB marking card; as card; MARKED; 11 ... 20 (10x); not stretchable; Horizontal marking; snap-on type /000-002	793-503
	<b>Item no.: 793-503/000-005</b> WMB marking card; as card; MARKED; 11 ... 20 (10x); not stretchable; Horizontal marking; snap-on type /000-005	793-503
	<b>Item no.: 793-503/000-006</b> WMB marking card; as card; MARKED; 11 ... 20 (10x); not stretchable; Horizontal marking; snap-on type /000-006	793-503
	<b>Item no.: 793-503/000-007</b> WMB marking card; as card; MARKED; 11 ... 20 (10x); not stretchable; Horizontal marking; snap-on type /000-007	793-503
	<b>Item no.: 793-503/000-012</b> WMB marking card; as card; MARKED; 11 ... 20 (10x); not stretchable; Horizontal marking; snap-on type /000-012	793-503
	<b>Item no.: 793-503/000-017</b> WMB marking card; as card; MARKED; 11 ... 20 (10x); not stretchable; Horizontal marking; snap-on type /000-017	793-503
	<b>Item no.: 793-503/000-023</b> WMB marking card; as card; MARKED; 11 ... 20 (10x); not stretchable; Horizontal marking; snap-on type /000-023	793-503
	<b>Item no.: 793-503/000-024</b> WMB marking card; as card; MARKED; 11 ... 20 (10x); not stretchable; Horizontal marking; snap-on type /000-024	793-503
	<b>Item no.: 793-504</b> WMB marking card; as card; MARKED; 21 ... 30 (10x); not stretchable; Horizontal marking; snap-on type	793-504
	<b>Item no.: 793-504/000-002</b> WMB marking card; as card; MARKED; 21 ... 30 (10x); not stretchable; Horizontal marking; snap-on type /000-002	793-504
	<b>Item no.: 793-504/000-005</b> WMB marking card; as card; MARKED; 21 ... 30 (10x); not stretchable; Horizontal marking; snap-on type /000-005	793-504

	<b>Item no.: 793-504/000-006</b> WMB marking card; as card; MARKED; 21 ... 30 (10x); not stretchable; Horizontal marking; snap-on type	793-504 /000-006
	<b>Item no.: 793-504/000-012</b> WMB marking card; as card; MARKED; 21 ... 30 (10x); not stretchable; Horizontal marking; snap-on type	793-504 /000-012
	<b>Item no.: 793-504/000-017</b> WMB marking card; as card; MARKED; 21 ... 30 (10x); not stretchable; Horizontal marking; snap-on type	793-504 /000-017
	<b>Item no.: 793-504/000-023</b> WMB marking card; as card; MARKED; 21 ... 30 (10x); not stretchable; Horizontal marking; snap-on type	793-504 /000-023
	<b>Item no.: 793-505</b> WMB marking card; as card; MARKED; 31 ... 40 (10x); not stretchable; Horizontal marking; snap-on type	793-505
	<b>Item no.: 793-505/000-005</b> WMB marking card; as card; MARKED; 31 ... 40 (10x); not stretchable; Horizontal marking; snap-on type	793-505 /000-005
	<b>Item no.: 793-505/000-006</b> WMB marking card; as card; MARKED; 31 ... 40 (10x); not stretchable; Horizontal marking; snap-on type	793-505 /000-006
	<b>Item no.: 793-505/000-007</b> WMB marking card; as card; MARKED; 31 ... 40 (10x); not stretchable; Horizontal marking; snap-on type	793-505 /000-007
	<b>Item no.: 793-505/000-012</b> WMB marking card; as card; MARKED; 31 ... 40 (10x); not stretchable; Horizontal marking; snap-on type	793-505 /000-012
	<b>Item no.: 793-506</b> WMB marking card; as card; MARKED; 41 ... 50 (10x); not stretchable; Horizontal marking; snap-on type	793-506
	<b>Item no.: 793-506/000-005</b> WMB marking card; as card; MARKED; 41 ... 50 (10x); not stretchable; Horizontal marking; snap-on type	793-506 /000-005
	<b>Item no.: 793-506/000-006</b> WMB marking card; as card; MARKED; 41 ... 50 (10x); not stretchable; Horizontal marking; snap-on type	793-506 /000-006
	<b>Item no.: 793-506/000-012</b> WMB marking card; as card; MARKED; 41 ... 50 (10x); not stretchable; Horizontal marking; snap-on type	793-506 /000-012
	<b>Item no.: 793-506/000-017</b> WMB marking card; as card; MARKED; 41 ... 50 (10x); not stretchable; Horizontal marking; snap-on type	793-506 /000-017
	<b>Item no.: 793-5501</b> WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type	793-5501
	<b>Item no.: 793-5501/000-002</b>	

	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	793-5501
	<b>Item no.: 793-5501/000-005</b> WMB marking card; as card; stretchable 5 - 5.2 mm; plain; snap-on type	/000-005	793-5501
	<b>Item no.: 793-5501/000-006</b> WMB marking card; as card; stretchable 5 - 5.2 mm; plain; snap-on type	/000-006	793-5501
	<b>Item no.: 793-5501/000-007</b> WMB marking card; as card; stretchable 5 - 5.2 mm; plain; snap-on type	/000-007	793-5501
	<b>Item no.: 793-5501/000-012</b> WMB marking card; as card; stretchable 5 - 5.2 mm; plain; snap-on type	/000-012	793-5501
	<b>Item no.: 793-5501/000-014</b> WMB marking card; as card; stretchable 5 - 5.2 mm; plain; snap-on type	/000-014	793-5501
	<b>Item no.: 793-5501/000-017</b> WMB marking card; as card; stretchable 5 - 5.2 mm; plain; snap-on type	/000-017	793-5501
	<b>Item no.: 793-5501/000-023</b> WMB marking card; as card; stretchable 5 - 5.2 mm; plain; snap-on type	/000-023	793-5501
	<b>Item no.: 793-5501/000-024</b> WMB marking card; as card; stretchable 5 - 5.2 mm; plain; snap-on type	/000-024	793-5501
	<b>Item no.: 793-566</b> WMB marking card; as card; MARKED; 1 ... 50 (2x); not stretchable; Horizontal marking; snap-on type		793-566
	<b>Item no.: 793-566/000-002</b> WMB marking card; as card; MARKED; 1 ... 50 (2x); not stretchable; Horizontal marking; snap-on type	/000-002	793-566
	<b>Item no.: 793-566/000-005</b> WMB marking card; as card; MARKED; 1 ... 50 (2x); not stretchable; Horizontal marking; snap-on type	/000-005	793-566
	<b>Item no.: 793-566/000-006</b> WMB marking card; as card; MARKED; 1 ... 50 (2x); not stretchable; Horizontal marking; snap-on type	/000-006	793-566
	<b>Item no.: 793-566/000-007</b> WMB marking card; as card; MARKED; 1 ... 50 (2x); not stretchable; Horizontal marking; snap-on type	/000-007	793-566
	<b>Item no.: 793-566/000-012</b> WMB marking card; as card; MARKED; 1 ... 50 (2x); not stretchable; Horizontal marking; snap-on type	/000-012	793-566

	<b>Item no.: 793-566/000-017</b> WMB marking card; as card; MARKED; 1 ... 50 (2x); not stretchable; Horizontal marking; snap-on type	793-566 /000-017
	<b>Item no.: 793-566/000-023</b> WMB marking card; as card; MARKED; 1 ... 50 (2x); not stretchable; Horizontal marking; snap-on type	793-566 /000-023
	<b>Item no.: 793-566/000-024</b> WMB marking card; as card; MARKED; 1 ... 50 (2x); not stretchable; Horizontal marking; snap-on type	793-566 /000-024
<b>transfer module</b>		
	<b>Item no.: 857-980</b> Interface adapter; 16-pole; analog	857-980
<b>General accessories</b>		
	<b>Item no.: 750-921</b> Bluetooth® Adapter	750-921
	<b>Item no.: 750-923</b> Configuration cable; USB connector; Length: 2.5 m	750-923
	<b>Item no.: 750-923/000-001</b> Configuration cable; USB connector; Length: 5 m	750-923 /000-001
	<b>Item no.: 857-304</b> Relay module; Nominal input voltage: 24 VDC; 1 changeover contact; Limiting continuous current: 6 A; Yellow status indicator; Module width: 6 mm	857-304
	<b>Item no.: 857-979</b> Supply and through module	857-979
<b>tools</b>		
	<b>Item no.: 210-720</b> Operating tool with partially insulated shaft; Type 2, blade (3.5 x 0.5) mm	210-720

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

857-401 Trennverstärker,	Mar 9, 2016	doc 31.2 kB	Download
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**Instruction Leaflet**

Measurement Transducer and Isolation Amplifier Configurable, with digital output		pdf 2.0 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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## Engineering-Software

### Software for Interface-Products

Interface Configuration Software FULL	1.6.2.11	exe	Download
The full setup, in addition to the WAGO Interface Configuration Software, includes the installation for the Microsoft .NET Framework.	Jan 14, 2019	97.5 MB	

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Interface Configuration Software SMALL	1.6.2.11	exe	Download
The full setup only includes the WAGO Interface Configuration Software.	Jan 14, 2019	47.1 MB	

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## CAD/CAE - Smart Data

### CAD data

3D Download 857-401		URL	Download
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Subject to changes.