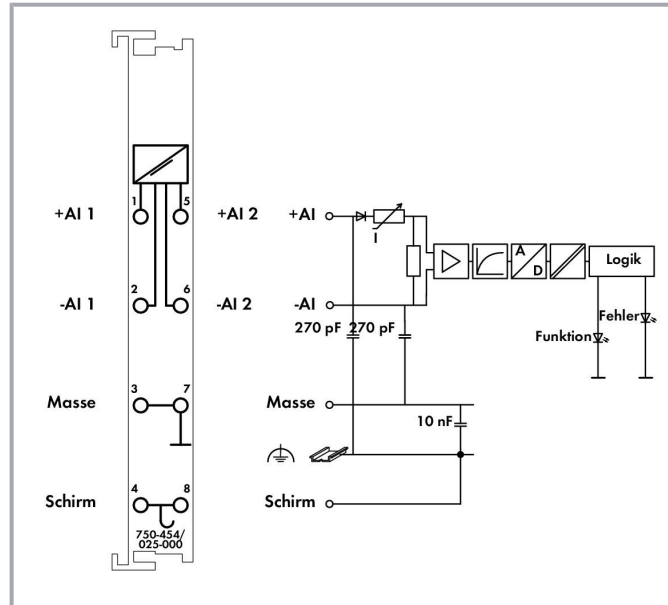
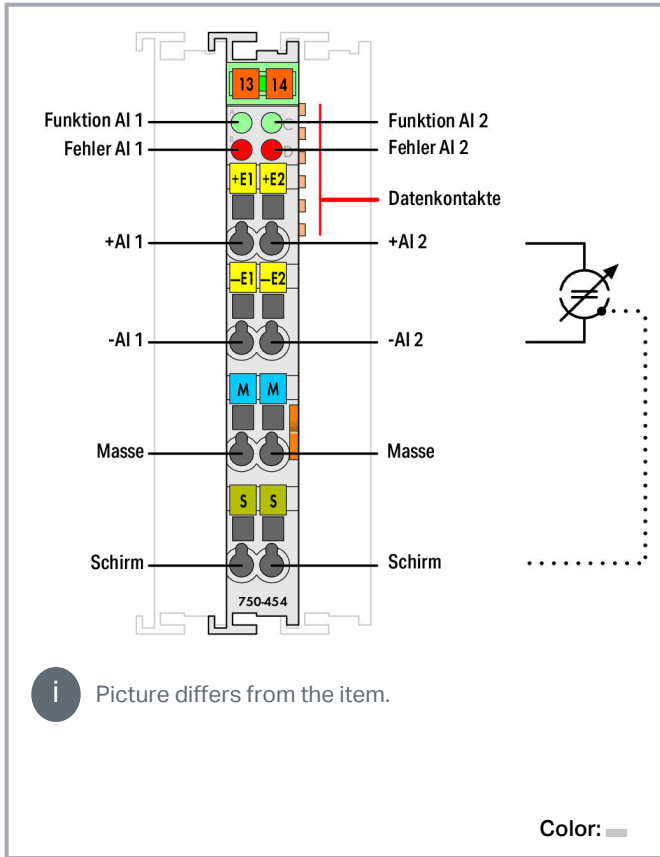


# Data sheet | Item number: 750-454/025-000

2-channel analog input; 4 ... 20 mA; Differential input; Ext. Temperature

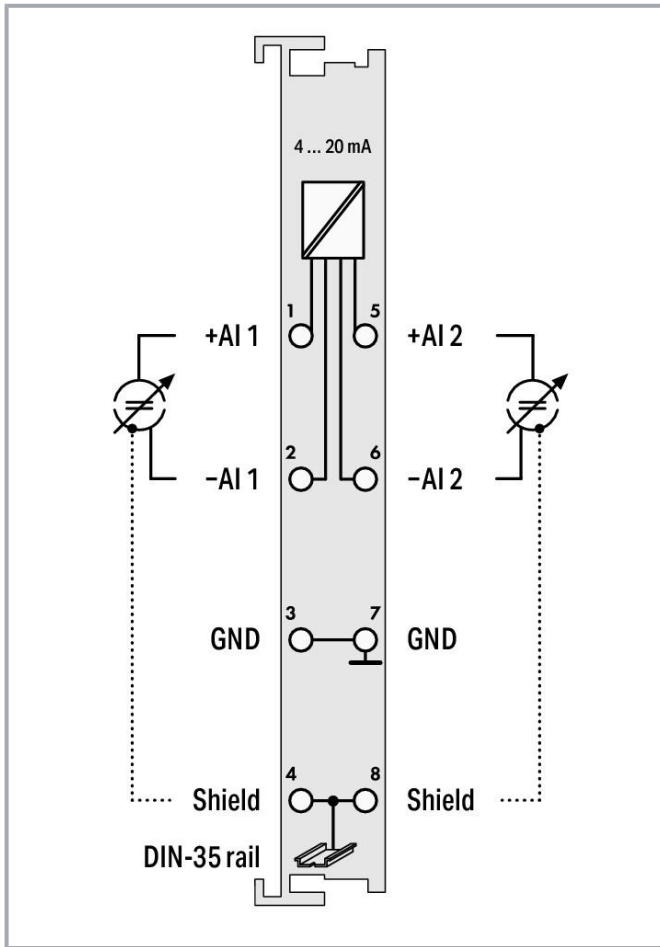
[www.wago.com/750-454/025-000](http://www.wago.com/750-454/025-000)



Subject to changes. Please also observe the further product documentation!

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## Item description

This analog input module processes standard 4–20 V signals.

The input signal is electrically isolated and transmitted with a resolution of 12 bits.

The internal system supply powers the module.

The input channels of the module are differential inputs.

The shield directly connects to the DIN-rail.

## Data

### Technical data

Number of analog inputs	2
Total number of channels (module)	2

Subject to changes. Please also observe the further product documentation!



Signal type	Current
Signal type (current)	4 ... 20 mADC
Sensor connection	2 x (2-wire)
Input voltage (max.)	35 V
Signal characteristic	Differential
Resolution [bit]	12 bits
Input resistance (max.)	220 Ω
Data width	2 x 16-bit data; 2 x 8-bit control/status (optional)
Conversion time (typ.)	2 ms
Measurement error (reference temperature)	25 °C
Measurement error – deviation (max.) from the upper-range value	0.2 %
Temperature error (max.) of the upper-range value	0.01 %/K
Supply voltage (system)	5 VDC; via data contacts
Power consumption (5 V system supply)	70 mA
Isolation	500 V system/field

### Connection data

Connection technology: inputs/outputs	8 x CAGE CLAMP®
Connection type (1)	Inputs/Outputs
Solid conductor	0.08 ... 2.5 mm <sup>2</sup> / 28 ... 14 AWG
Fine-stranded conductor	0.08 ... 2.5 mm <sup>2</sup> / 28 ... 14 AWG
Strip length	8 ... 9 mm / 0.31 ... 0.35 inch

### Physical data

Width	12 mm / 0.472 inch
Height	100 mm / 3.937 inch
Depth	69.8 mm / 2.748 inch
Depth from upper edge of DIN-rail	62.6 mm / 2.465 inch

### Mechanical data

Mounting type	DIN-35 rail
---------------	-------------

### Material data

Color	light gray
Housing material	Polycarbonate; polyamide 6.6
Fire load	0.912 MJ

Subject to changes. Please also observe the further product documentation!



Weight	49.9 g
Conformity marking	CE

## Environmental requirements

Surrounding air temperature (operation)	-20 ... 60 °C
Surrounding air temperature (storage)	-40 ... 85 °C
Protection type	IP20
Pollution degree (5)	2 per IEC 61131-2
Operating altitude	0 ... 2000 m
Mounting position	horizontal (standing/lying); vertical
Relative humidity (without condensation)	95 %
Relative humidity (with condensation)	Short-term condensation per Class 3K6/IEC EN 60721-3-3 and E-DIN 40046-721-3, accounting for a temperature range of -20 to +60 °C (except for wind-driven precipitation, water and ice formation)
Vibration resistance	4g per IEC 60068-2-6
Shock resistance	15g per IEC 60068-2-27
EMC immunity to interference	per EN 61000-6-2, marine applications
EMC emission of interference	per EN 61000-6-4, marine applications
Exposure to pollutants	Per IEC 60068-2-42 and IEC 60068-2-43
Permissible H <sub>2</sub> S contaminant concentration at a relative humidity 75 %	10 ppm
Permissible SO <sub>2</sub> contaminant concentration at a relative humidity 75 %	25 ppm

## Commercial data

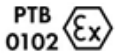
Product Group	15 (Remote I/O)
PU (SPU)	1 Stück
Packaging type	box
Country of origin	DE
GTIN	4045454643379
Customs tariff number	85389099990





## Approvals / Certificates

### Ex-Approvals


Logo	Approval	Additional Approval Text	Certificate name
	<b>ATEX</b> TUEV Nord Cert GmbH	EN 60079-0	TÜV 07 ATEX 554086 X en.

Subject to changes. Please also observe the further product documentation!





 Ex nA IIC T4 Gc	CCCEX CQST/CNEx	CNCA-C23-01	2020312310000215
	EAC Brjansker Zertifizierungsstelle	TP TC 012/2011	EAC RU C-DE.AM02. B.00163/19
	TUEV Nord TUEV Nord Cert GmbH	IEC 60079-0	IECEX TUN 09.0001 X
	UL Underwriters Laboratories Inc. (HAZARDOUS LOCATIONS)	UL 121201	E198726 Sec.1

**Country specific Approvals**

Logo	Approval	Additional Approval Text	Certificate name
	KC National Radio Research Agency	Article 58-2, Clause 3	MSIP- REM-W43- AIM750

**Ship Approvals**

Logo	Approval	Additional Approval Text	Certificate name
	ABS American Bureau of Shipping	-	19- HG1821812- PDA
	DNV GL Det Norske Veritas, Germanischer Lloyd	-	TAA00001J4
	LR Lloyds Register	-	LR_19_20048
	PRS	-	TE/2237


Subject to changes. Please also observe the further product documentation!



Polski Rejestr Statków








/880590/19

## UL-Approvals



Logo	Approval	Additional Approval Text	Certificate name
	UL UL International Netherlands B.V. (ORDINARY LOCATIONS)	UL 508	E175199 Sec.1

## Optional accessories

### Shield termination

Shield clamping saddle			
	<b>Item no.: 790-116</b> Shield clamping saddle; 19 mm wide; diameter of compatible conductor; 7 ... 16 mm		<a href="http://www.wago.com/790-116">www.wago.com/790-116</a>
	<b>Item no.: 790-124</b> Shield clamping saddle; 27 mm wide; diameter of compatible conductor; 6 ... 24 mm		<a href="http://www.wago.com/790-124">www.wago.com/790-124</a>
	<b>Item no.: 790-108</b> Shield clamping saddle; 11 mm wide; diameter of compatible conductor; 3 ... 8 mm		<a href="http://www.wago.com/790-108">www.wago.com/790-108</a>
	<b>Item no.: 790-140</b> Shield clamping saddle; diameter of compatible conductor		<a href="http://www.wago.com/790-140">www.wago.com/790-140</a>
	<b>Item no.: 790-216</b> Shield clamping saddle; 21.8 mm wide; 6 ... 16 mm		<a href="http://www.wago.com/790-216">www.wago.com/790-216</a>
	<b>Item no.: 790-220</b> Shield clamping saddle; 30 mm wide; 6 ... 20 mm		<a href="http://www.wago.com/790-220">www.wago.com/790-220</a>
	<b>Item no.: 790-208</b> Shield clamping saddle; 12.4 mm wide; 3 ... 8 mm		<a href="http://www.wago.com/790-208">www.wago.com/790-208</a>

### System housing

System enclosure			
	<b>Item no.: 850-814/002-000</b> IP65 enclosure; Sheet steel (RAL 7035); WxHxD (200x120x200 mm); without flange plate		<a href="http://www.wago.com/850-814/002-000">www.wago.com/850-814/002-000</a>
	<b>Item no.: 850-815/002-000</b> IP65 enclosure; Sheet steel (RAL 7035); WxHxD (300x120x200 mm); without flange plate		<a href="http://www.wago.com/850-815/002-000">www.wago.com/850-815/002-000</a>

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**Item no.: 850-816/002-000**

IP65 enclosure; Sheet steel (RAL 7035); WxHxD (400x120x200 mm); without flange plate

[www.wago.com/850-816/002-000](http://www.wago.com/850-816/002-000)



**Item no.: 850-817/002-000**

IP65 enclosure; Sheet steel (RAL 7035); WxHxD (600x120x200 mm); without flange plate

[www.wago.com/850-817/002-000](http://www.wago.com/850-817/002-000)



**Item no.: 850-825**

IP65 enclosure; Aluminium (RAL 7032); WxHxD (160x100x160 mm); 9 x M12, 4 x M20

[www.wago.com/850-825](http://www.wago.com/850-825)



**Item no.: 850-826**

IP65 enclosure; Aluminium (RAL 7032); WxHxD (240x100x160 mm); 4 x M20, 4 x M16, 14 x M12 cable grip

[www.wago.com/850-826](http://www.wago.com/850-826)



**Item no.: 850-827**

IP65 enclosure; Aluminium (RAL 7032); WxHxD (320x100x160 mm); 4 x M20, 8 x M16, 17 x M12 cable grip

[www.wago.com/850-827](http://www.wago.com/850-827)



**Item no.: 850-827/002-000**

IP65 enclosure; Aluminium (RAL 7035); WxHxD (320x100x160 mm); 4 x M20, 8 x M16, 17 x M12 cable grip

[www.wago.com/850-827/002-000](http://www.wago.com/850-827/002-000)



**Item no.: 850-826/002-000**

IP65 enclosure; Aluminium (RAL 7035); WxHxD (240x100x160 mm); 4 x M20, 4 x M16, 14 x M12 cable grip

[www.wago.com/850-826/002-000](http://www.wago.com/850-826/002-000)



**Item no.: 850-828/002-000**

IP65 enclosure; Aluminium (RAL 7035); WxHxD (480x100x160 mm); 4 x M20, 10 x M16, 35 x M12 cable grip

[www.wago.com/850-828/002-000](http://www.wago.com/850-828/002-000)



**Item no.: 850-828**

IP65 enclosure; Aluminium (RAL 7032); WxHxD (480x100x160 mm); 4 x M20, 10 x M16, 35 x M12 cable grip

[www.wago.com/850-828](http://www.wago.com/850-828)



**Item no.: 850-834**

IP65 enclosure; Polyester (RAL 7032); WxHxD (164x100x164 mm); 9 x M12, 4 x M20

[www.wago.com/850-834](http://www.wago.com/850-834)



**Item no.: 850-835**

IP65 enclosure; Polyester (RAL 7032); WxHxD (244x100x164 mm); 4 x M20, 4 x M16, 14 x M12 cable grip

[www.wago.com/850-835](http://www.wago.com/850-835)



**Item no.: 850-836**

IP65 enclosure; Polyester (RAL 7032); WxHxD (324x100x164 mm); 4 x M20, 8 x M16, 17 x M12 cable grip

[www.wago.com/850-836](http://www.wago.com/850-836)

#### Marking accessories

Marker carrier

**Item no.: 750-103**

Group marker carrier

[www.wago.com/750-103](http://www.wago.com/750-103)

Marker

Subject to changes. Please also observe the further product documentation!

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**Item no.: 2009-145/000-006**

Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; blue [www.wago.com/2009-145/000-006](http://www.wago.com/2009-145/000-006)

**Item no.: 2009-145**

Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; white [www.wago.com/2009-145](http://www.wago.com/2009-145)

**Item no.: 2009-145/000-002**

Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; yellow [www.wago.com/2009-145/000-002](http://www.wago.com/2009-145/000-002)

**Item no.: 2009-145/000-007**

Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; gray [www.wago.com/2009-145/000-007](http://www.wago.com/2009-145/000-007)

**Item no.: 2009-145/000-005**

Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; red [www.wago.com/2009-145/000-005](http://www.wago.com/2009-145/000-005)

**Item no.: 2009-145/000-012**

Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; orange [www.wago.com/2009-145/000-012](http://www.wago.com/2009-145/000-012)

**Item no.: 2009-145/000-023**

Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; green [www.wago.com/2009-145/000-023](http://www.wago.com/2009-145/000-023)

**Item no.: 2009-145/000-024**

Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; violet [www.wago.com/2009-145/000-024](http://www.wago.com/2009-145/000-024)



**Item no.: 248-501/000-006**

Mini-WSB marking card; as card; not stretchable; plain; snap-on type; blue [www.wago.com/248-501/000-006](http://www.wago.com/248-501/000-006)



**Item no.: 248-501/000-007**

Mini-WSB marking card; as card; not stretchable; plain; snap-on type; gray [www.wago.com/248-501/000-007](http://www.wago.com/248-501/000-007)



**Item no.: 248-501/000-002**

Mini-WSB marking card; as card; not stretchable; plain; snap-on type; yellow [www.wago.com/248-501/000-002](http://www.wago.com/248-501/000-002)



**Item no.: 248-501/000-012**

Mini-WSB marking card; as card; not stretchable; plain; snap-on type; orange [www.wago.com/248-501/000-012](http://www.wago.com/248-501/000-012)

Subject to changes. Please also observe the further product documentation!





**Item no.: 248-501**  
Mini-WSB marking card; as card; not stretchable; plain; snap-on type; white

[www.wago.com/248-501](http://www.wago.com/248-501)



**Item no.: 248-501/000-017**  
Mini-WSB marking card; as card; not stretchable; plain; snap-on type; light green

[www.wago.com/248-501/000-017](http://www.wago.com/248-501/000-017)



**Item no.: 248-501/000-005**  
Mini-WSB marking card; as card; not stretchable; plain; snap-on type; red

[www.wago.com/248-501/000-005](http://www.wago.com/248-501/000-005)



**Item no.: 248-501/000-024**  
Mini-WSB marking card; as card; not stretchable; plain; snap-on type; violet

[www.wago.com/248-501/000-024](http://www.wago.com/248-501/000-024)



**Item no.: 248-501/000-023**  
Mini-WSB marking card; as card; not stretchable; plain; snap-on type; green

[www.wago.com/248-501/000-023](http://www.wago.com/248-501/000-023)



**Item no.: 750-100**  
Marker card; as a DIN A4 sheet; plain

[www.wago.com/750-100](http://www.wago.com/750-100)

Group marker carrier



**Item no.: 750-106**  
Group marker carrier

[www.wago.com/750-106](http://www.wago.com/750-106)

Carrier rail

Mounting accessories



**Item no.: 210-197**  
Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; slotted; similar to EN 60715; silver-colored

[www.wago.com/210-197](http://www.wago.com/210-197)



**Item no.: 210-198**  
Copper carrier rail; 35 x 15 mm; 2.3 mm thick; 2 m long; unslotted; according to EN 60715; copper-colored

[www.wago.com/210-198](http://www.wago.com/210-198)



**Item no.: 210-504**  
Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; slotted; galvanized; according to EN 60715; silver-colored

[www.wago.com/210-504](http://www.wago.com/210-504)



**Item no.: 210-505**  
Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; unslotted; galvanized; according to EN 60715; silver-colored

[www.wago.com/210-505](http://www.wago.com/210-505)


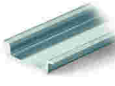



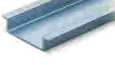


**Item no.: 210-506**  
Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; unslotted; galvanized; similar to EN 60715; silver-colored

[www.wago.com/210-506](http://www.wago.com/210-506)

**Item no.: 210-508**

Subject to changes. Please also observe the further product documentation!

	Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; slotted; galvanized; similar to EN 60715; silver-colored	<a href="http://www.wago.com/210-508">www.wago.com/210-508</a>
	<b>Item no.: 210-113</b> Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; unslotted; according to EN 60715; silver-colored	<a href="http://www.wago.com/210-113">www.wago.com/210-113</a>
	<b>Item no.: 210-118</b> Steel carrier rail; 35 x 15 mm; 2.3 mm thick; 2 m long; unslotted; according to EN 60715; silver-colored	<a href="http://www.wago.com/210-118">www.wago.com/210-118</a>
	<b>Item no.: 210-112</b> Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; slotted; according to EN 60715; "Hole width 25 mm; silver-colored	<a href="http://www.wago.com/210-112">www.wago.com/210-112</a>
	<b>Item no.: 210-114</b> Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; unslotted; similar to EN 60715; silver-colored	<a href="http://www.wago.com/210-114">www.wago.com/210-114</a>
	<b>Item no.: 210-115</b> Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; slotted; according to EN 60715; "Hole width 18 mm; silver-colored	<a href="http://www.wago.com/210-115">www.wago.com/210-115</a>
	<b>Item no.: 210-196</b> Aluminum carrier rail; 35 x 8.2 mm; 1.6 mm thick; 2 m long; unslotted; similar to EN 60715; silver-colored	<a href="http://www.wago.com/210-196">www.wago.com/210-196</a>

## Downloads

### Documentation

Manual			
2-channel, 4-20mA, diff.	V 1.2.0	pdf 2.1 MB	Download
System Manual WAGO I/O System 750 / 753 Decentralized Automation Technology	V 3.0.2 2021. 4. 27.	pdf 6.6 MB	Download
System Manual Series 750/753 Online HTML		URL	Download

Bid Text			
750-454/025-000 X81 - Datei	2019. 2. 19.	xml 4.5 kB	Download
750-454/025-000 docx - Datei	2017. 10. 17.	docx 17.3 kB	Download
750-454/025-000 doc - Datei	2017. 10. 17.	doc 28.7 kB	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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### System Description

Overview on WAGO-I/O-SYSTEM 750 approvals		pdf 780.2 kB	Download
750/753 Series I/O-System – General Product Information		pdf 1.7 MB	Download
Use in Hazardous Environments Term definition, marking and installation regulations	V 1.0.0	pdf 1.0 MB	Download

### CAD/CAE-Data

#### CAE data

EPLAN Data Portal 750-454/025-000		URL	Download
WSCAD Universe 750-454/025-000		URL	Download
ZUKEN Portal 750-454/025-000		URL	Download
WSCAD Universe 750-454/025-000		URL	Download
EPLAN Data Portal 750-454/025-000		URL	Download

#### CAD data

2D/3D Models 750-454/025-000		URL	Download
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### Device Files

#### Device Driver

WAGO USB Service Kabel Treiber / Serie 750 und 857	6.5.3.0 2014. 9. 10.	zip 4.8 MB	Download
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### Environmental Product Compliance

Subject to changes. Please also observe the further product documentation!



## Compliance Search

Environmental Product Compliance 750-454/025-000  
2-channel analog input; 4 ... 20 mA; Differential input; Ext. Temperature

URL

Download

## Installation Notes

## Product family

**750/753 Series I/O System**  
[Show all products from the family](#)

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