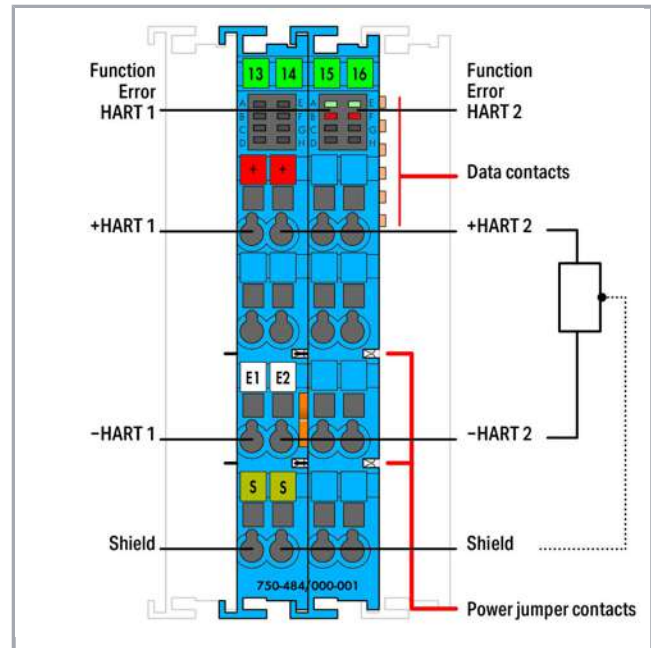


## Data sheet | Item number: 750-484/000-001

2-channel analog input; 4 ... 20 mA HART; NAMUR NE 43; Intrinsically safe;  
blue

[www.wago.com/750-484\\_000-001](http://www.wago.com/750-484_000-001)



RoHS   
Compliant

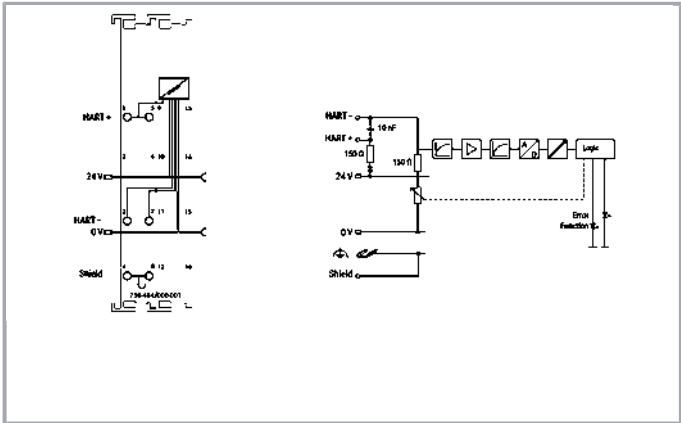
BOMcheck.net

Color: 

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

WAGO Kontakttechnik GmbH & Co. KG  
Hansastr. 27  
32423 Minden  
Phone: +49571 887-0 | Fax: +49571 887-169  
Email: [info.de@wago.com](mailto:info.de@wago.com) | Web: [www.wago.com](http://www.wago.com)

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Item description

This analog input module connects two field-side signal conditioners equipped with a HART interface that are to be used in hazardous areas of Zone 0+1.

The module supplies signal conditioners, reads process values via analog interface, and enables HART communication for configuring and importing dynamic variables.

The WAGO I/O System 750 must be installed either in Zone 2 or in a non-hazardous area.

The 24 V supply is supplied to the field contacts (HART +) from the power jumper contacts via multipliers. The shield directly connects to the DIN-rail.

The measurement input is equipped with current limitation, which limits the current to 25 mA. This module powers 2-wire signal conditioners.

Up to 4 HART dynamic variables (PV, SV, TV, QV) per channel can be mapped in the cyclic process image of the coupler or controller (parameterizable). For HART communication with connected intelligent HART field devices, the HART protocol can be mapped in the cyclic process image of the coupler or controller (parameterizable).

FDT/DTM device drivers are available for select (programmable) couplers, allowing HART tool routing to the connected HART device.

Note:

The analog output module must only be operated via 24 VDC Ex !

General information (e.g., installation regulations) on explosion protection is available in the WAGO I/O System 750 manuals!

Data

Technical Data

Number of analog inputs	2
Total number of channels (module)	2
Type of signal	Electricity
Type of signal current	DC 4 ... 20 mA

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



Sensor supply voltage	DC 16,5 V; Transmitter supply $U_V$ at 20 mA
Sensor connection	2 x (2-wire)
Input filter	parameterizable
Input filter: parametrizable (channel by channel)	yes
Signal characteristic	Single-ended
Diagnostics	Wire break, measurement range overflow
Resolution [bit]	12 Bit
Power consumption $P_{max}$	1.60 W (with slaves (20 mA))
Bit width	2 x 2-byte data; 2 x 2-byte data + 2n x 4-byte data (n = number of dynamic variables); 2 x 2-byte data + 6-byte mailbox
Overvoltage protection	30 V, reverse polarity protected
Conversion time (typ. $\leq$ )	10 ms
Messfehler, Bezugstemperatur	25 °C
Messfehler, Abweichung max. vom Messbereichsendwert	0.2 %
Temperaturfehler max. vom Messbereichsendwert	0.01 %/K
Intrinsic safety Ex i	yes
System supply voltage	DC 5 V; via data contacts
Current consumption, system supply (5 V)	25 mA
Field supply voltage	DC 24 V; (Ex i power supply: $U_O$ = max. 27.3 V); via power jumper contacts (power supply via blade contact; transmission via spring contact)
Current consumption, field supply (module with no external load)	26 mA
HART devices per channel	One device (single-drop, no multi-drop)
HART modems per channel	One modem (no multiplex)
Power loss $P_V$	0.62 W (without slaves)
Isolation	300 VAC system/field
Number of incoming power jumper contacts	2
Number of outgoing power jumper contacts	2
Current carrying capacity of the power jumper contacts	1 A
Ex guideline	EN/IEC 60079-0, -7, -11, -26, -31
Electric circuit, safety-relevant data	$U_O$ = 27.3 V; $I_O$ = 92.7 mA; $P_O$ = 630 mW; Linear characteristic curve
Reactances Ex ia IIC	$L_O$ = 1.5 mH; $C_O$ = 87 nF
Reactances Ex ia IIB	$L_O$ = 15 mH; $C_O$ = 670 nF
Ex ia IIA reactances	$L_O$ = 38 mH; $C_O$ = 2.2 $\mu$ F
Reactances Ex ia I	$L_O$ = 36 mH; $C_O$ = 3.49 $\mu$ F

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Reactances

Reactances without accounting for the concurrence of L and C

## Connection data

Connection technology: In-/Outputs	16 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

## Geometrical Data

Width	24 mm / 0.945 inch
Height	67,8 mm / 2.669 inch
Height from upper-edge of DIN-35 rail	60,6 mm / 2.386 inch
Depth	100 mm / 3.937 inch

## Mechanical data

Type of mounting	DIN-35 rail
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## Material Data

Color	blue
Housing material	Polycarbonate, polyamide 6.6
Weight	91.9 g
Conformity marking	CE

## Environmental Requirements

Surrounding air (operating) temperature	0 ... 55 °C
Surrounding air (storage) temperature	-40 ... 85 °C
Protection class	IP20
Degree of pollution (5)	2 per IEC 61131-2
Operating altitude	0 ... 2000 m
Mounting position	horizontal (standing/lying); vertical
Relative air humidity (no condensation)	95 %
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 61000-6-3, marine applications

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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

Packaging type	BOX
Country of origin	DE
GTIN	4055143766654
Customs Tariff No.	85389099990

## Approvals / Certificates

### Ex-Approvals

Logo	Approval	Additional Approval Text	Certificate name
	<b>ATEX</b> TUEV Nord Cert GmbH	EN 60079	TUEV_12_ATEX_106032X
	<b>INMETRO</b> TÜV Rheinland do Brasil Ltda.	-	TÜV_14.1911_X
	<b>TUEV Nord</b> TUEV Nord Cert GmbH	IEC 60079	IECEx TUN 12.0039X
	<b>UL</b> Underwriters Laboratories Inc. (HAZARDOUS LOCATIONS)	UL 121201	E198726 Sec.1

### UL-Approvals

Logo	Approval	Additional Approval Text	Certificate name
	<b>UL</b> Underwriters Laboratories Inc. (ORDINARY LOCATIONS)	UL 508	E175199 Sec.1

## Counterpart

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## Downloads

### Documentation

#### Data sheet

750-484/000-001, 2AI 4-20mA HART NAMUR NE43 Ex i		pdf 211.5 kB	Download
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#### Manual

2-channel, 4-20mA, HART, Ex i, single ended	V 1.4.0	pdf 2.9 MB	Download
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#### Bid Text

750-484/000-001 doc - Datei	Sep 13, 2018	doc 35.3 kB	Download
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750-484/000-001 GAEB X81 - Datei	Feb 19, 2019	xml 8.3 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

Ex i Overview		pdf 616.0 kB	Download
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Design Notes Basic conditions and recommendations for higher operational safety	V 2.0.0	pdf 1.5 MB	Download
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Use in Hazardous Environments Term definition, marking and installation regulations	V 1.0.0	pdf 1.0 MB	Download
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750/753 Series I/O-System – General Product Information		pdf 1.7 MB	Download
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Overview on WAGO-I/O-SYSTEM 750 approvals		pdf 780.2 kB	Download
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## Application Notes

### Application Note CoDeSys 2.3

HART Tool Routing via ETHERNET with 750-820x/750-88x and CODESYS 2.3 (a116120)

1.0.0  
Mar 22, 2019

pdf  
3.9 MB

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This application note describes how to set up asset management systems, which facilitate simple, efficient configuration of HART field devices.

With the Cerabar PMC51 (Endress+Hauser) as an example, a connection is established from any HART sensor to a WAGO PROFIBUS Controller and a WAGO ETHERNET Fieldbus Coupler. The configuration is made with the asset management software WAGOframe, PACTware und FieldCare.

HART Tool Routing via PROFIBUS with 750-833 and 750-333 (a116140)

1.0.0  
Mar 22, 2019

pdf  
5.3 MB

[Download](#)

This application note describes how to set up asset management systems, which facilitate simple, efficient configuration of HART field devices.

Using the Cerabar PMC51 (Endress+Hauser) as an example, connecting any HART sensor to a WAGO PROFIBUS controller and a WAGO PROFIBUS Coupler is explained. The cyclic PROFIBUS Master (750-8208) realizes the data exchange. As an acyclic master, a TH LINK PROFIBUS provides access for the plant asset management applications WAGOframe, PACTware and FieldCare.

### Application Note e!COCKPIT

HART Tool Routing via ETHERNET with 750-820x and e!RUNTIME (a116130)

1.0.0  
Mar 22, 2019

pdf  
2.9 MB

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## Installation Notes

### Product family

**750/753 Series – I/O System**

[Show all products from the family](#)

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Hansastr. 27

32423 Minden

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