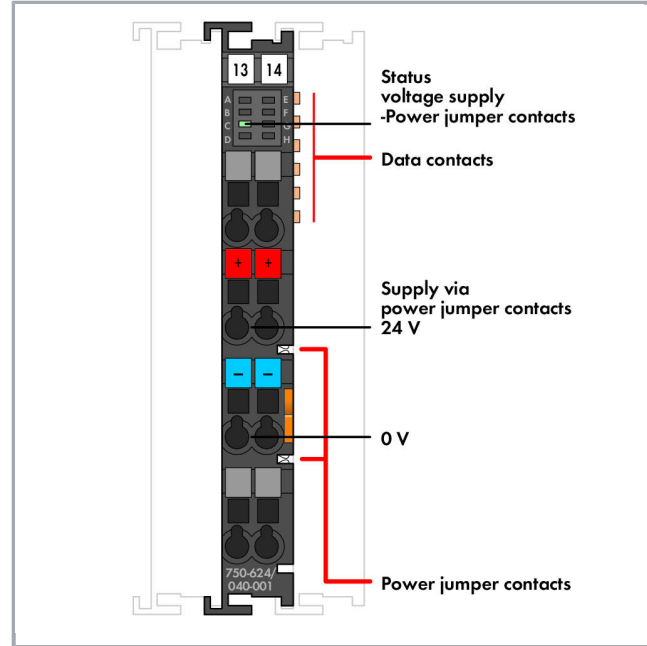


Data sheet | Item number: 750-624/040-001

Filter module for field-side power supply (surge); 24 VDC; Higher isolation;  
Without power jumper contacts; Extreme; dark gray



[www.wago.com/750-624/040-001](http://www.wago.com/750-624/040-001)



RoHS Compliant

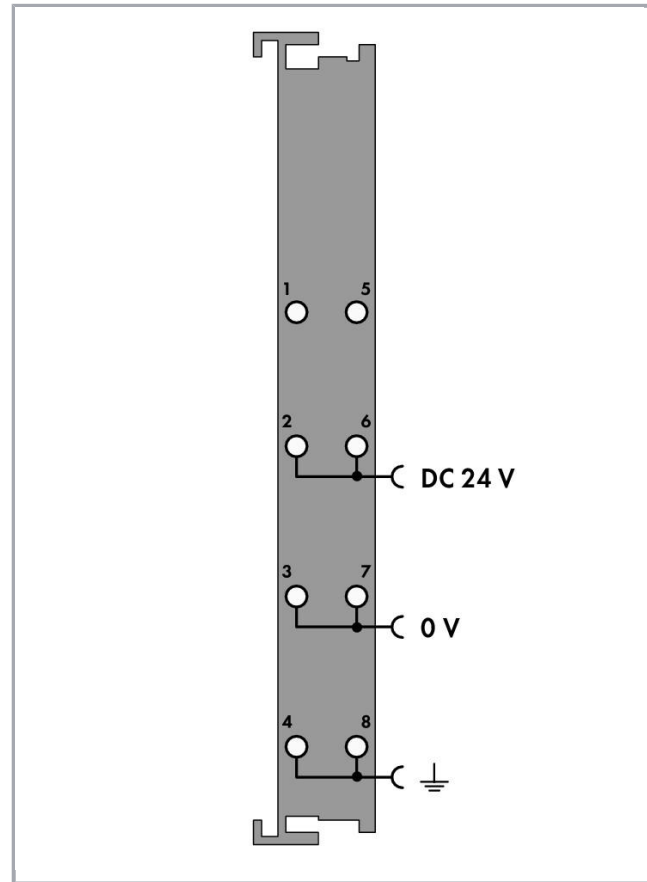
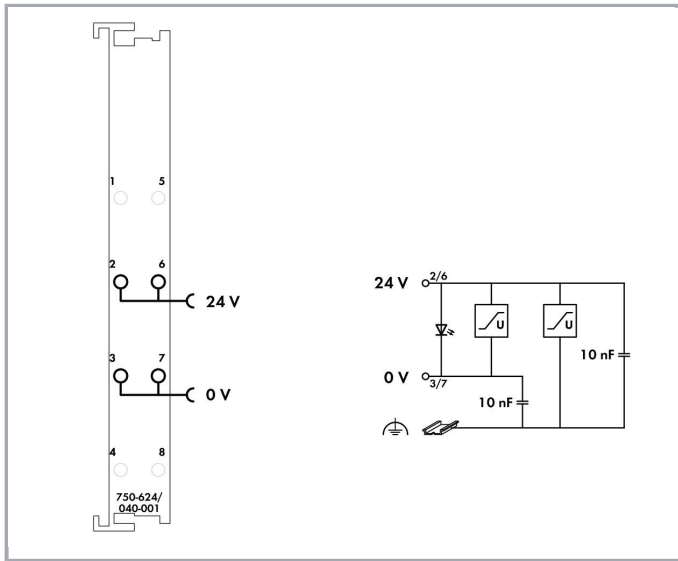
[BOMcheck.net](https://www.bomcheck.net)

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

The WAGO I/O System 750 XTR can also be used in marine applications and onshore/offshore installations (e.g., platforms, loading facilities). This is verified by certification under the standards of leading

agencies such as Germanischer Lloyd and Lloyd's Register. This overvoltage protection module ensures proper (certified) system operation. This also applies to XTR I/O Modules used in substations and/or telecontrol systems as well as railway technology.

The following modules are required for power supply: 750-626/040-000 Power Supply Filter (system and field supply) or 750-624/040-001 Field-Side Power Supply Filter (only field supply).

The 750-624/040-001 Field-Side Power Supply Filter is equipped with surge suppression and can also be used as a power supply module.

The device is ideal for operation in extreme environments thanks to:

- Extended temperature range
- Greater immunity to impulse voltages and electromagnetic interference
- Higher vibration and shock resistance

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WAGO Kontakttechnik GmbH & Co. KG

Hansastr. 27

32423 Minden

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## Data

### Technical Data

Type of signal	Voltage
Type of signal voltage	DC 24 V
System supply voltage	DC 5 V; via data contacts
Field supply voltage	DC 24 V (-25 ... +30 %); via pluggable connector (CAGE CLAMP® connection); specified values for surrounding air temperatures: +15 ... +35 °C; for -40 ... +55 °C: 24 V (-25 ... +20 %); for +55 ... +70 °C: 24 V (-25 ... +10 %); Lower limit in all temperature ranges: -27.5 % (including 15 % residual ripple)
Rated surge voltage	1 kV
Number of outgoing power jumper contacts	2
Current carrying capacity of the power jumper contacts	10 A

### Connection data

Connection technology: field supply	4 x CAGE CLAMP®
Connection type (1)	Field supply
Solid conductor	0,25 ... 2,5 mm <sup>2</sup> / 24 ... 14 AWG
Fine-stranded conductor	0,25 ... 2,5 mm <sup>2</sup> / 24 ... 14 AWG
Strip length	8 ... 9 mm / 0.31 ... 0.35 inch

### Geometrical Data

Width	12 mm / 0.472 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
------------------	-------------

### Material Data

Color	dark gray
Housing material	Polycarbonate, polyamide 6.6
Weight	47.8 g
Conformity marking	CE

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



## Environmental Requirements

Surrounding air (operating) temperature	-40 ... 70 °C
Surrounding air (storage) temperature	-40 ... 85 °C
Protection class	IP20
Degree of pollution (5)	2 per IEC 61131-2
Operating altitude	without temperature derating: 0 ... 2000 m; with temperature derating: 2000 ... 5000 m (0.5 K/100 m); 5000 m (max.)
Mounting position	horizontal (standing/lying); vertical
Relative air humidity (no condensation)	95 %
Relative humidity	Short-term condensation per Class 3K7/IEC EN 60721-3-3 and E-DIN 40046-721-3 (except for wind-driven precipitation, water and ice formation)
Vibration resistance	per IEC 60068-2-6 (acceleration: 5g), EN 60870-2-2, IEC 60721-3-1, -3, EN 50155; EN 61373
Shock resistance	per IEC 60068-2-27 (15g/11 ms/half-sine/1,000 shocks; 25g/6 ms/1,000 shocks), EN 50155, EN 61373
EMC immunity to interference	per EN 61000-6-1, -2; EN 61131-2; marine applications; EN 50121-3-2; EN 50121-4, -5; EN 60255-26; EN 60870-2-1; EN 61850-3; IEC 61000-6-5; IEEE 1613; VDEW: 1994
EMC emission of interference	per EN 61000-6-3, -4, EN 61131-2, EN 60255-26, marine applications, EN 60870-2-1, EN 61850-3, EN 50121-3-2, EN 50121-4, -5
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)
Packaging type	BOX
Country of origin	DE
GTIN	4050821460176
Customs Tariff No.	85389091890

## Approvals / Certificates

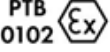


### Ex-Approvals

Certificate


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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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Logo	Approval	Additional Approval Text	name
	<b>ATEX</b> TUEV Nord Cert GmbH	EN 60079-0	TUEV 17 ATEX 193969X
	<b>IECEX</b> TUEV Nord Cert GmbH	IEC 60079-0	IECEX TUN 16.0046X
	<b>UL</b> Underwriters Laboratories Inc. (HAZARDOUS LOCATIONS)	UL 121201	E198726 Sec.1

## Country specific Approvals

Logo	Approval	Additional Approval Text	Certificate name
	<b>KC</b> National Radio Research Agency	Article 58-2, Clause 3	MSIP- REM-W43- FTM750

## Ship Approvals


Logo	Approval	Additional Approval Text	Certificate name
	<b>ABS</b> American Bureau of Shipping	-	18- HG1778162- PDA
	<b>DNV GL</b> Det Norske Veritas, Germanischer Lloyd	-	TAA00000Y7
	<b>LR</b> Lloyds Register	-	17/20073 LR
	<b>PRS</b> Polski Rejestr Statków	-	TE/2215 /880590/18

## UL-Approvals

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WAGO Kontakttechnik GmbH & Co. KG  
 Hansastr. 27  
 32423 Minden  
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Logo	Approval	Additional Approval Text	Certificate name
	UL UL International Netherlands B.V. (ORDINARY LOCATIONS)	UL 508	E175199 Sec.1






## Counterpart

## Compatible products

### system box

	<b>Item no.: 850-804</b> IP65 enclosure; Stainless steel; WxHxD (400x123x200 mm); 4 x M20, 16 x M16, 28 x M12 cable grip	<a href="http://www.wago.com/850-804">www.wago.com/850-804</a>
	<b>Item no.: 850-804/000-001</b> IP65 enclosure; Stainless steel; WxHxD (400x123x200 mm); 2 x M20, 13 x M16, 32 x M12 cable grip	<a href="http://www.wago.com/850-804/000-001">www.wago.com/850-804/000-001</a>
	<b>Item no.: 850-805</b> IP65 enclosure; Stainless steel; WxHxD (600x123x200 mm); 4 x M20, 19 x M16, 67 x M12 cable grip	<a href="http://www.wago.com/850-805">www.wago.com/850-805</a>
	<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>
	<b>Item no.: 850-816/002-000</b> IP65 enclosure; Sheet steel (RAL 7035); WxHxD (400x120x200 mm); without flange plate	<a href="http://www.wago.com/850-816/002-000">www.wago.com/850-816/002-000</a>
	<b>Item no.: 850-817/002-000</b> IP65 enclosure; Sheet steel (RAL 7035); WxHxD (600x120x200 mm); without flange plate	<a href="http://www.wago.com/850-817/002-000">www.wago.com/850-817/002-000</a>
	<b>Item no.: 850-825</b> IP65 enclosure; Aluminium (RAL 7032); WxHxD (160x100x160 mm); 9 x M12, 4 x M20	<a href="http://www.wago.com/850-825">www.wago.com/850-825</a>
	<b>Item no.: 850-826</b> IP65 enclosure; Aluminium (RAL 7032); WxHxD (240x100x160 mm); 4 x M20, 4 x M16, 14 x M12 cable grip	<a href="http://www.wago.com/850-826">www.wago.com/850-826</a>

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

	<p><b>Item no.: 850-826/002-000</b> IP65 enclosure; Aluminium (RAL 7035); WxHxD (240x100x160 mm); 4 x M20, 4 x M16, 14 x M12 cable grip</p>	<p><a href="http://www.wago.com/850-826/002-000">www.wago.com/850-826/002-000</a></p>
	<p><b>Item no.: 850-827</b> IP65 enclosure; Aluminium (RAL 7032); WxHxD (320x100x160 mm); 4 x M20, 8 x M16, 17 x M12 cable grip</p>	<p><a href="http://www.wago.com/850-827">www.wago.com/850-827</a></p>
	<p><b>Item no.: 850-827/002-000</b> IP65 enclosure; Aluminium (RAL 7035); WxHxD (320x100x160 mm); 4 x M20, 8 x M16, 17 x M12 cable grip</p>	<p><a href="http://www.wago.com/850-827/002-000">www.wago.com/850-827/002-000</a></p>
	<p><b>Item no.: 850-828</b> IP65 enclosure; Aluminium (RAL 7032); WxHxD (480x100x160 mm); 4 x M20, 10 x M16, 35 x M12 cable grip</p>	<p><a href="http://www.wago.com/850-828">www.wago.com/850-828</a></p>
	<p><b>Item no.: 850-828/002-000</b> IP65 enclosure; Aluminium (RAL 7035); WxHxD (480x100x160 mm); 4 x M20, 10 x M16, 35 x M12 cable grip</p>	<p><a href="http://www.wago.com/850-828/002-000">www.wago.com/850-828/002-000</a></p>
	<p><b>Item no.: 850-834</b> IP65 enclosure; Polyester (RAL 7032); WxHxD (164x100x164 mm); 9 x M12, 4 x M20</p>	<p><a href="http://www.wago.com/850-834">www.wago.com/850-834</a></p>
	<p><b>Item no.: 850-835</b> IP65 enclosure; Polyester (RAL 7032); WxHxD (244x100x164 mm); 4 x M20, 4 x M16, 14 x M12 cable grip</p>	<p><a href="http://www.wago.com/850-835">www.wago.com/850-835</a></p>
	<p><b>Item no.: 850-836</b> IP65 enclosure; Polyester (RAL 7032); WxHxD (324x100x164 mm); 4 x M20, 8 x M16, 17 x M12 cable grip</p>	<p><a href="http://www.wago.com/850-836">www.wago.com/850-836</a></p>
<b>Carrier rail</b>		
	<p><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</p>	<p><a href="http://www.wago.com/210-112">www.wago.com/210-112</a></p>
	<p><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</p>	<p><a href="http://www.wago.com/210-113">www.wago.com/210-113</a></p>
	<p><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</p>	<p><a href="http://www.wago.com/210-114">www.wago.com/210-114</a></p>
	<p><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</p>	<p><a href="http://www.wago.com/210-115">www.wago.com/210-115</a></p>
	<p><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</p>	<p><a href="http://www.wago.com/210-118">www.wago.com/210-118</a></p>
	<p><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</p>	<p><a href="http://www.wago.com/210-196">www.wago.com/210-196</a></p>
	<p><b>Item no.: 210-197</b> Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; slotted; similar to EN 60715</p>	<p><a href="http://www.wago.com/210-197">www.wago.com/210-197</a></p>
	<p><b>Item no.: 210-198</b> Copper carrier rail; 35 x 15 mm; 2.3 mm thick; 2 m long; unslotted; according to EN 60715; copper-colored</p>	<p><a href="http://www.wago.com/210-198">www.wago.com/210-198</a></p>

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



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

[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

[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

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

**Item no.: 210-508**  
Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; slotted; galvanized; similar to EN 60715

[www.wago.com/210-508](http://www.wago.com/210-508)

#### shield connection

**Item no.: 790-108**  
Shield clamping saddle; 11 mm wide; diameter of compatible conductor; 3 ... 8 mm

[www.wago.com/790-108](http://www.wago.com/790-108)

**Item no.: 790-116**  
Shield clamping saddle; 19 mm wide; diameter of compatible conductor; 7 ... 16 mm

[www.wago.com/790-116](http://www.wago.com/790-116)

**Item no.: 790-124**  
Shield clamping saddle; 27 mm wide; diameter of compatible conductor; 6 ... 24 mm

[www.wago.com/790-124](http://www.wago.com/790-124)



**Item no.: 790-140**  
Shield clamping saddle; diameter of compatible conductor

[www.wago.com/790-140](http://www.wago.com/790-140)



**Item no.: 790-208**  
Shield clamping saddle; 12.4 mm wide; 3 ... 8 mm

[www.wago.com/790-208](http://www.wago.com/790-208)



**Item no.: 790-216**  
Shield clamping saddle; 21.8 mm wide; 6 ... 16 mm

[www.wago.com/790-216](http://www.wago.com/790-216)

**Item no.: 790-220**  
Shield clamping saddle; 30 mm wide; 6 ... 20 mm

[www.wago.com/790-220](http://www.wago.com/790-220)

#### Marking accessories

**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; white /000-002

[www.wago.com/2009-145](http://www.wago.com/2009-145)

**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 /000-005

[www.wago.com/2009-145](http://www.wago.com/2009-145)



**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 /000-006









[www.wago.com/2009-145](http://www.wago.com/2009-145)

**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; white /000-007

[www.wago.com/2009-145](http://www.wago.com/2009-145)

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



	<p><b>Item no.: 2009-145/000-012</b>                  Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; orange</p>	<p><a href="http://www.wago.com/2009-145/000-012">www.wago.com/2009-145/000-012</a></p>
	<p><b>Item no.: 2009-145/000-023</b>                  Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; green</p>	<p><a href="http://www.wago.com/2009-145/000-023">www.wago.com/2009-145/000-023</a></p>
	<p><b>Item no.: 2009-145/000-024</b>                  Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; violet</p>	<p><a href="http://www.wago.com/2009-145/000-024">www.wago.com/2009-145/000-024</a></p>
	<p><b>Item no.: 248-501</b>                  Miniature WSB Quick marking system; plain; Marker width 5 mm; 10 strips with 10 markers per card</p>	<p><a href="http://www.wago.com/248-501">www.wago.com/248-501</a></p>
	<p><b>Item no.: 248-501/000-002</b>                  Mini-WSB marking card; as card; not stretchable; plain; snap-on type; yellow</p>	<p><a href="http://www.wago.com/248-501/000-002">www.wago.com/248-501/000-002</a></p>
	<p><b>Item no.: 248-501/000-005</b>                  Mini-WSB marking card; as card; not stretchable; plain; snap-on type; red</p>	<p><a href="http://www.wago.com/248-501/000-005">www.wago.com/248-501/000-005</a></p>
	<p><b>Item no.: 248-501/000-006</b>                  Mini-WSB marking card; as card; not stretchable; plain; snap-on type; blue</p>	<p><a href="http://www.wago.com/248-501/000-006">www.wago.com/248-501/000-006</a></p>
	<p><b>Item no.: 248-501/000-007</b>                  Mini-WSB marking card; as card; not stretchable; plain; snap-on type; gray</p>	<p><a href="http://www.wago.com/248-501/000-007">www.wago.com/248-501/000-007</a></p>
	<p><b>Item no.: 248-501/000-012</b>                  Mini-WSB marking card; as card; not stretchable; plain; snap-on type; orange</p>	<p><a href="http://www.wago.com/248-501/000-012">www.wago.com/248-501/000-012</a></p>
	<p><b>Item no.: 248-501/000-017</b>                  Mini-WSB marking card; as card; not stretchable; plain; snap-on type; light green</p>	<p><a href="http://www.wago.com/248-501/000-017">www.wago.com/248-501/000-017</a></p>
	<p><b>Item no.: 248-501/000-023</b>                  Mini-WSB marking card; as card; not stretchable; plain; snap-on type; green</p>	<p><a href="http://www.wago.com/248-501/000-023">www.wago.com/248-501/000-023</a></p>
	<p><b>Item no.: 248-501/000-024</b>                  Mini-WSB marking card; as card; not stretchable; plain; snap-on type; violet</p>	<p><a href="http://www.wago.com/248-501/000-024">www.wago.com/248-501/000-024</a></p>
	<p><b>Item no.: 750-103</b>                  Group marker carrier; transparent</p>	<p><a href="http://www.wago.com/750-103">www.wago.com/750-103</a></p>
	<p><b>Item no.: 750-107</b>                  Group marker carrier; transparent</p>	<p><a href="http://www.wago.com/750-107">www.wago.com/750-107</a></p>

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



## Downloads

### Documentation

#### Manual

24 V DC Field Side Supply Filter HI NC (Surge) /XTR Field side supply filter for eXTReme environmental conditions; for field-side power supply	V 1.3.0	pdf 1.4 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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#### System Description

750 XTR Series I/O-System – General Product Information		pdf 1.1 MB	Download
System Manual /XTR Basic conditions and recommendations for higher operational safety	V 1.2.0	pdf 2.9 MB	Download
Overview on WAGO-I/O-SYSTEM 750 approvals		pdf 780.2 kB	Download

## CAD/CAE-Data

### CAD data

2D/3D Models 750-624/040-001		URL	Download
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### CAE data

EPLAN Data Portal 750-624/040-001		URL	Download
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WSCAD Universe 750-624/040-001		URL	Download
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## Installation Notes

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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## Product family

### 750 XTR Series – I/O System

I/O-System 750 XTR: Dort automatisieren, wo jedes andere System an seine Grenzen stößt – und das zuverlässig und wirtschaftlich! XTR – dieses Kürzel im Systemnamen steht für extremen Schutz vor klimatischen Einflüssen, Schwingungen, Erschütterungen und Überspannungen.

[Learn more about the product family.](#)

[Show all products from the family](#)

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

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WAGO Kontakttechnik GmbH & Co. KG  
Hansastr. 27  
32423 Minden  
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