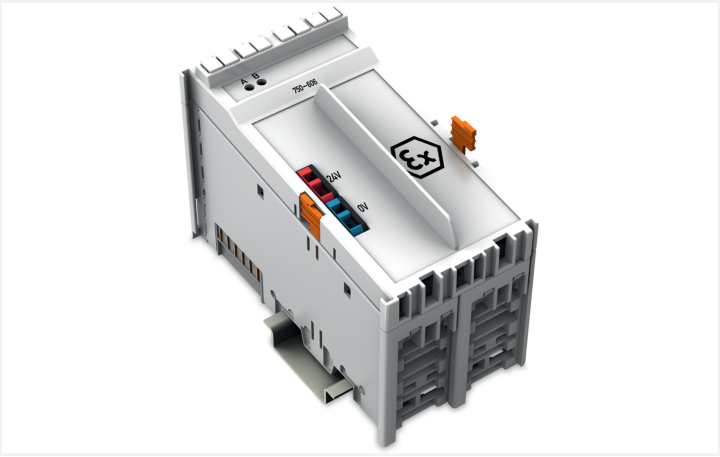
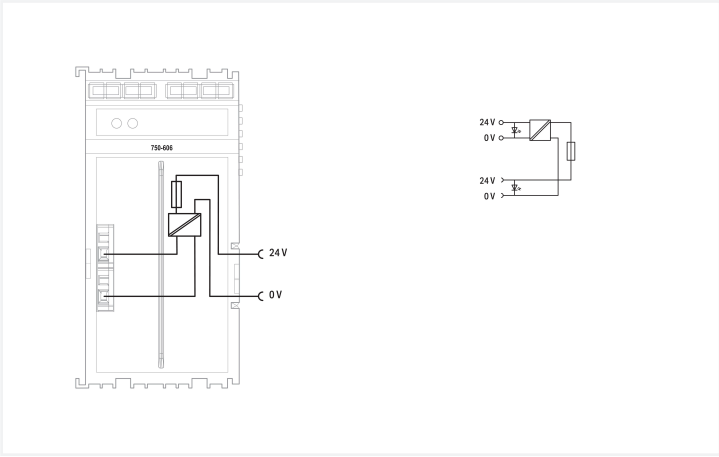
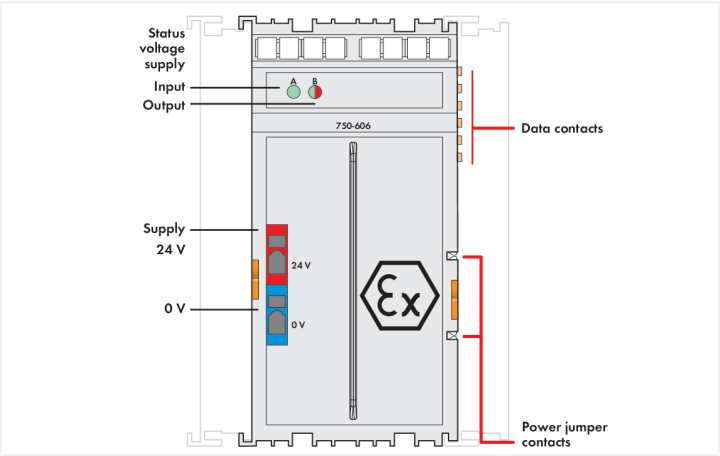
Data Sheet | Item Number: 750-606

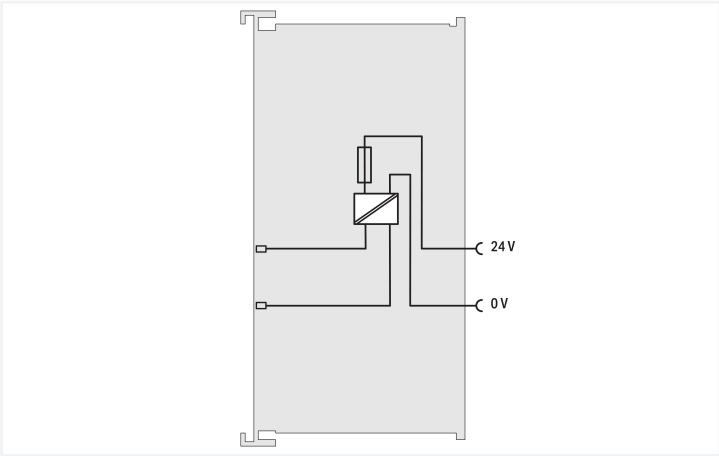
Power Supply; 24 VDC; Diagnostics; Intrinsically safe

https://www.wago.com/750-606









This supply module powers all intrinsically safe 750 Series Ex i Modules. It also monitors the power supply to the downstream Ex i segment and electrically isolates the intrinsically safe from the non-intrinsically safe section of the WAGO I/O System 750. The input and output sides are electrically isolated from each other.

The maximum output current provided by the supply module is 1.0 A. When configuring the Ex i segment, the total current must not be exceeded.

In the event of a short circuit or overload, electronic monitoring automatically disables the output voltage. Once the fault has been cleared, the output voltage is reactivated after approximately 10 seconds.

Note:

If more than one supply module is required per station due to load conditions, four spacer modules (750-616) must be used to ensure proper separation between the intrinsically safe Ex i segments.

Indicators:

- Green LED (input voltage)
- Green/red LED (output voltage available/not available)

Notes

Note	General information on explosion protection, including installation regulations, can be found in the WAGO I/O System 750/753 manuals!

Technical data

Item description	Power Supply; 24 VDC; Diagnostics
Supply voltage	24 VDC; (–25 % ... +30 %); input voltage
Fuse	electronic
Intrinsically safe Ex i	Yes
Diagnostics	Input voltage failure, fuse triggered
Data width	2-bit diagnostics
Supply voltage (system)	5 VDC; via data contacts
Current consumption (system supply)	7.5 mA
Supply voltage (field)	24 VDC, SELV/PELV (-25 ... +30 %); via power jumper contacts (supply via CAGE CLAMP® connection; distribution via spring contact); External fuse required: 10 A slow-blow
Power consumption $P_{max.}$	29 W
Power loss P_l	< 5 W
Number of outgoing power jumper contacts	2
Current carrying capacity (power jumper contacts)	1 A
Indicators	LED (A) green: operating voltage status: input; LED (B) green/red: operating voltage status: output

Explosion protection

Identification	**ATEX:** II 3 (1) G Ex ec [ia Ga] IIC T4 Gc; II (1) D [Ex ia Da] IIIC; I (M1) [Ex ia Ma] I **IECEx/INMETRO:** Ex ec [ia Ga] IIC T4 Gc; [Ex ia Da] IIIC; [Ex ia Ma] I **cULus (Zone classified):** AEx nA IIC T4 Gc; Ex nA IIC T4 Gc X **cULus (Devision classified):** Class I, Div. 2, Group A B C D, T4
Ex standard	EN IEC 60079-0, -7, -11
Power supply (output)	U_o = 26.8 V (safe voltage per IEC 60079-11, protection level ia); U_n = 24 V ± 0.3 V, I_n = 1 A
Power supply (input)	U_n = 24 VDC (–25 ... +30 %); $_{Pmax}$ = 29 W; $_{Um}$ = 253 VAC

Connection Data

Connectable conductor materials	Copper
Connection type	Field supply
Solid conductor	0.08 ... 1.5 mm² / 28 ... 14 AWG
Fine-stranded conductor	0.08 ... 1.5 mm² / 28 ... 14 AWG
Strip length	5 ... 6 mm / 0.2 ... 0.24 inches
Connection technology: field supply	2 x CAGE CLAMP®

Physical data

Width	48 mm / 1.89 inches
Height	100 mm / 3.937 inches
Depth	70.9 mm / 2.791 inches
Depth from upper-edge of DIN-rail	63.7 mm / 2.508 inches

Continued on next page

Mechanical data

Mounting type	DIN-35 rail

Material data

Housing material	Polycarbonate; polyamide 6.6
Fire load	2.475 MJ
Weight	167.5 g
Conformity marking	CE

Environmental requirements

Ambient temperature (operation)	0 … +55 °C
Ambient temperature (storage)	-25 … +85 °C
Protection type	IP20
Pollution degree	2 per IEC 61131-2
Operating altitude	0 … 2000 m / 0 … 6562 ft
Mounting position	Horizontal left, horizontal right, horizontal top, horizontal bottom, vertical top and vertical bottom
Relative humidity (without 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
Exposure to pollutants	per IEC 60068-2-42 and IEC 60068-2-43
Permissible H_2S contaminant concentration at a relative humidity 75 %	10 ppm
Permissible SO_2 contaminant concentration at a relative humidity 75 %	25 ppm

Commercial data

Product Group	15 (I/O System)
PU (SPU)	1 pcs
Packaging type	Box
Country of origin	DE
GTIN	4045454961909
Customs tariff number	85389091890

Product Classification

UNSPSC	39121004
eCl@ss 10.0	27-24-26-10
eCl@ss 9.0	27-24-26-10
ETIM 9.0	EC001600
ETIM 10.0	EC001600
ECCN	NO US CLASSIFICATION

Continued on next page

Environmental Product Compliance

RoHS Compliance Status	Compliant,No Exemption
SCIP notification number (Austria)	c0e961b9-f5ee-4b65-a1a8-472aee7a2b4c
SCIP notification number (Belgium)	9a9fbad1-2151-4ca2-aec5-25ab8f123037
SCIP notification number (Bulgaria)	ed072b21-fb78-4134-9934-dfa4a6dc0ef4
SCIP notification number (Czech Republic)	266c66db-8acb-4f00-bf69-094ee6553caa
SCIP notification number (Denmark)	350710b9-e9a4-4603-aaf5-169b93ff0e77
SCIP notification number (Finland)	8ff26ff3-9f09-4bb8-aedc-18be5f80fba7
SCIP notification number (France)	8535d1d5-e475-4e2e-a292-5ec098a62a8b
SCIP notification number (Germany)	8624e861-a34f-472f-901f-a8b55966be77
SCIP notification number (Hungary)	a933bfdc-ce3e-40d2-95cd-93c13d3796c4
SCIP notification number (Italy)	f9a05418-8ba1-4d38-9d5d-9faba4db04de
SCIP notification number (Netherlands)	9e17eb72-481a-4d00-bf13-7abd58508e22
SCIP notification number (Poland)	25b955c9-d2f8-4744-b703-a5b0acbd030b
SCIP notification number (Romania)	737c4cd0-1a61-4064-827d-49007a2f8b50
SCIP notification number (Sweden)	a8f2598e-8225-4e57-84ed-8ccaa13ba2aa

Approvals / Certificates

General approvals

Approval	Standard	Certificate Name
EAC GZO Almaty Standart	TP TC 020/2011	EAC CoC 03083
KC National Radio Research Agency	Article 58-2, Clause 3	MSIP-REM-W43-SPP750
UL Underwriters Laboratories Inc. (ORDINARY LOCATIONS)	-	E175199

Declarations of conformity and manufacturer's declarations

Approval	Standard	Certificate Name
EU-Ex-Declaration of Conformity WAGO GmbH & Co. KG	-	-
UK-Ex-Declaration of Conformity WAGO GmbH & Co. KG	-	-

Approvals for marine applications

Approval	Standard	Certificate Name
ABS American Bureau of Shipping	-	25-0415412
BV Bureau Veritas S.A.	-	30389/C0 BV
DNV DNV GL SE	DNV-CG-0339,Aug.2021	TAA0000194
KR Korean Register of Shipping	-	KR HMB05880-AC001
LR Lloyds Register EMEA	-	LR22180952TA
PRS Polski Rejestr Statków	-	TE/1101/880590/23
RINA RINA Germany GmbH	-	ELE343521XG001

Approvals for hazardous areas

Approval	Standard	Certificate Name
AEx UL International Germany GmbH	UL 60079	E480271
ATEX TUEV Nord Cert GmbH	EN 60079	TUEV12ATEX106032X (Ex ec[iaGa] IIC T4 Gc, [Ex iaDa] IIIC, [Ex iaMa] I)
CCC CNEX	CNCA-C23-01	2020312310000211 (Ex ec IIC T4 Gc)
IECEx TUEV Nord Cert GmbH	IEC 60079	IECEx TUN12.0039X (Ex ec [iaGa] IIC T4 Gc, [Ex iaDa] IIIC, [Ex iaMa] I)
INMETRO TÜV Rheinland do Brasil Ltda.	-	TÜV_14.1911_X
KTL Korea Testing Laboratory	KOSHA Article 34, IEC60079-0	20-KA4BO-0093X
UKEx Element Materials Technology UK	-	EMA21UKEX0069X

Continued on next page

Approvals for hazardous areas

UL Underwriters Laboratories Inc. (HAZARDOUS LOCATIONS)	UL 121201	E198726

Downloads

Environmental Product Compliance

Compliance Search

Environmental Product Compliance 750-606	

Documentation

Manual

Product Manual 24VDC 1.0A Ex i power supply	1035160331 | 6 | en-US | 2025-12-10 10:10 11.12.2025	pdf 1170.04 KB	
System Manual Series 750/753			

System Description

750/753 Series I/O-System – General Product Information	pdf 953.35 KB	
Overview on WAGO-I/O-SYSTEM 750 approvals	pdf 770.48 KB	
Ex i Overview	pdf 442.07 KB	

Bid Text

750-606	19.02.2019	xml 5.42 KB	
750-606	06.10.2017	doc 28.50 KB	

Instruction Leaflet

CCC Ex (Additional information)	26.04.2023	pdf 143.96 KB	

CAD/CAE-Data

CAD data

2D/3D Models 750-606	

CAE data

EPLAN Data Portal 750-606	
WSCAD Universe 750-606	
ZUKEN Portal 750-606	

Continued on next page

Device Files

Device Driver			
WAGO USB Service Kabel Treiber / Serie 750 und 857	6.5.3.0 10.09.2014	zip 4721.96 KB	

1 Compatible Products

1.1 Optional Accessories

1.1.1 DIN-rail

1.1.1.1 Mounting accessories



Item No.: 210-196
Aluminum carrier rail; 35 x 8.2 mm; 1.6 mm thick; 2 m long; unslotted; similar to EN 60715; silver-colored



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



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



Item No.: 210-114
Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; unslotted; similar to EN 60715; silver-colored



Item No.: 210-118
Steel carrier rail; 35 x 15 mm; 2.3 mm thick; 2 m long; unslotted; according to EN 60715; silver-colored



Item No.: 210-115
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



Item No.: 210-112
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



Item No.: 210-113
Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; unslotted; according to EN 60715; silver-colored

1.1.2 Marking

1.1.2.1 Group marker carrier



Item No.: 750-106
Group marker carrier

1.1.2.2 Marker



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



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



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



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



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



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



Item No.: 2009-145
Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; white



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



Item No.: 248-501/000-006
Mini-WSB marking card; as card; not stretchable; plain; snap-on type; blue



Item No.: 248-501/000-007
Mini-WSB marking card; as card; not stretchable; plain; snap-on type; gray



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



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



Item No.: 248-501/000-012
Mini-WSB marking card; as card; not stretchable; plain; snap-on type; orange



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



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



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

Continued on next page

1.1.2.2 Marker



Item No.: 248-501/000-002
Mini-WSB marking card; as card; not stretchable; plain; snap-on type; yellow

1.1.2.3 Marker carrier



Item No.: 750-103
Group marker carrier

1.1.3 Shield termination

1.1.3.1 Shield clamping saddles



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



Item No.: 790-208
Shield clamping saddle; 12.4 mm wide; 3 … 8 mm



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



Item No.: 790-216
Shield clamping saddle; 21.8 mm wide; 6 … 16 mm



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



Item No.: 790-220
Shield clamping saddle; 30 mm wide; 6 … 20 mm



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

1.1.4 Tool

1.1.4.1 Operating tool



Item No.: 210-719
Operating tool; Blade: 2.5 x 0.4 mm; with a partially insulated shaft