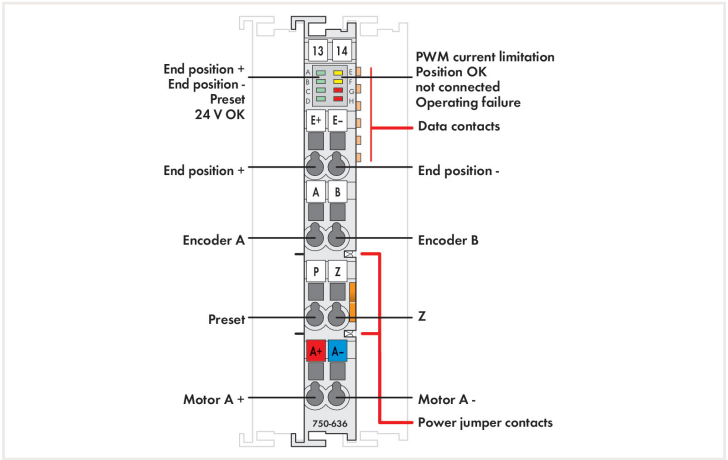
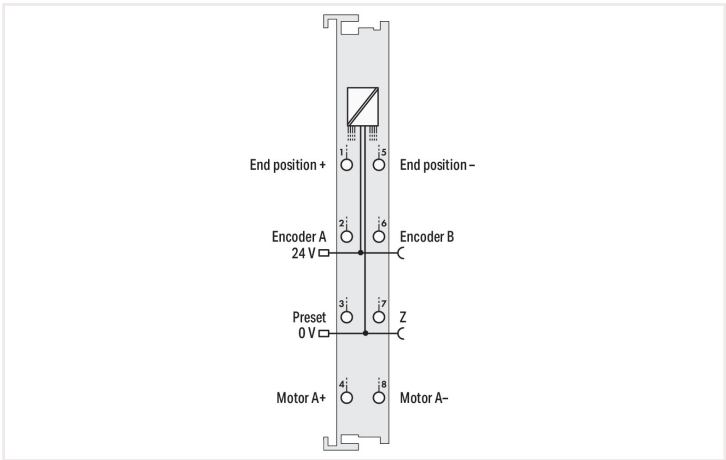
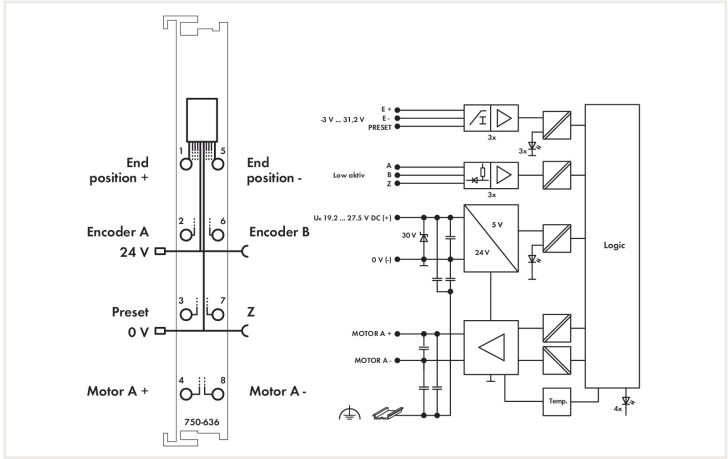




: light gray



This module is a single-channel, intelligent positioning controller for 24 VDC motors up to 5 A with incremental position feedback. Three 24 V inputs record the limit switches and a preset signal. An incremental encoder interface evaluates signals from the position sensor and determines the actual value. Where required, positioning optimizes the initial switching position as a function of direction, taking into account compensation for gearing backlash. Bidirectional control of the DC motor is implemented via a short-circuit-proof, temperature-monitored H-bridge. Both switched operation and soft start/stop or current reduction are possible via PWM control. The field-side 24 V supply voltage from the power contacts, which is monitored for undervoltage/overvoltage events, is looped through to adjacent modules. The module can also be used as:
 a dedicated incremental encoder or as a switch and power controller (PWM).

Technical data	
Number of digital inputs	3
Number of outputs	1 (A+; A-; H-bridge output)
Encoder connection	A, B, zero low-side switching; 5 ... 24 VDC / open collector
Motor connection	A+, A-, H-bridge output; short-circuit-protected
Quadrature decoder	1x, 2x, 4x evaluation
Input characteristic	high-side switching Type 1
Input current at specific input voltage	-3.2 mA at 0.3 V
Input current at specific input voltage (2)	0 mA bei 5 V
Input current (typ.)	2.7 mA at 24 V
Output current (max.) (motor)	5 A (15 A / 500 ms), short-circuit-protected
Voltage range for signal (0)	-3 ... +1.5 VDC
Voltage range for signal (1)	2.4 ... 30 VDC
PWM frequency (typ.)	20 kHz
Data width	32-bit set/actual value; 16-bit control or status

Technical data	
Limit frequency	50 kHz
Supply voltage (system)	5 VDC; via data contacts
Current consumption (5 V system supply)	55 mA
Supply voltage (field)	24 VDC (-15 ... +20 %); via power jumper contacts (power supply via blade contact; transmission via spring contact)
Current consumption, field supply (module with no external load)	12 mA
Isolation	500 V system/field
Number of incoming power jumper contacts	2
Number of outgoing power jumper contacts	2

Connection data	
Connection technology: inputs/outputs	8 x CAGE CLAMP®
Connection type 1	Inputs/outputs
Solid conductor	0.08 ... 2.5 mm² / 28 ... 14 AWG
Fine-stranded conductor	0.08 ... 2.5 mm² / 28 ... 14 AWG
Strip length	8 ... 9 mm / 0.31 ... 0.35 inches

Physical data	
Width	12 mm / 0.472 inches
Height	100 mm / 3.937 inches
Depth	67.8 mm / 2.669 inches
Depth from upper-edge of DIN-rail	60.6 mm / 2.386 inches

Mechanical data	
Mounting type	DIN-35 rail

Material data	
Color	light gray
Housing material	Polycarbonate; polyamide 6.6
Fire load	0.954 MJ
Weight	54 g
Conformity marking	CE

Environmental requirements	
Ambient temperature (operation)	0 ... +55 °C
Surrounding air temperature (storage)	-25 ... +85 °C
Protection type	IP20
Pollution degree (5)	2 per IEC 61131-2
Operating altitude	0 ... 2000 m / 0 ... 6562 ft
Mounting position	horizontal (standing/lying); vertical
Relative humidity (without condensation)	95 %
Vibration resistance	per IEC 60068-2-6
Shock resistance	15g per IEC 60068-2-27
EMC immunity to interference	per EN 61000-6-2
EMC emission of interference	per EN 61000-6-3
Exposure to pollutants	per IEC 60068-2-42 and IEC 60068-2-43
Permissible H ₂ S 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 (Remote I/O)
eCl@ss 10.0	27-24-26-05
eCl@ss 9.0	27-24-26-05
ETIM 8.0	EC001601
ETIM 7.0	EC001601
PU (SPU)	1 Stück
Packaging type	Box
Country of origin VKOrg Germany	DE
GTIN	4045454925307
Customs tariff number VKOrg Germany	85389099990

Approvals and certificates		
Country specific Approvals		
EAC Brjansker Zertifizierungs- stelle	TP TC 020/2011	EAC RU C-DE.AM02. B.00087/19
KC National Radio Research Agency	Article 58-2, Clause 3	MSIP-REM-W43-MCM750

Downloads	
Environmental Product Compliance	
Compliance Search	
Environmental Product Compliance 750-636	

Documentation			
Manual		System Description	
DC Drive Controller	V 2.0.2	750/753 Series I/O- System – General Pro- duct Information	pdf 2953.72 KB
System Manual WAGO I/O System 750 / 753	V 3.1.0 11.05.2022	Overview on WAGO-I/ O-SYSTEM 750 appro- vals	pdf 953.35 KB
System Manual Series 750/753		Use in Hazardous Envi- ronments	pdf 770.48 KB
		V 1.0.0	pdf 1007.06 KB

Additional Information			
Disposal; Electrical and electronic equipment, Packaging	V 1.0.0	pdf 259.56 KB	↓
DC drive controller		pdf 76.15 KB	↓

Bid Text			
750-636	19.02.2019	xml 7.18 KB	↓
750-636	09.10.2017	doc 32.50 KB	↓

CAD/CAE-Data	
CAD data	CAE data
2D/3D Models 750-636 ↓	EPLAN Data Portal 750-636 ↓
	WSCAD Universe 750-636 ↓
	ZUKEN Portal 750-636 ↓

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

Libraries			
Library			
Control DC motor with 750-636	1.0.0 08.11.2017	zip 146.93 KB	↓

1 Compatible products			
1.1 Optional accessories			
1.1.1 DIN-rail			
1.1.1.1 Mounting accessories			

 :210-196 Aluminum carrier rail; 35 x 8.2 mm; 1.6 mm thick; 2 m long; unslopped; similar to EN 60715; silver-colored	 :210-198 Copper carrier rail; 35 x 15 mm; 2.3 mm thick; 2 m long; unslopped; according to EN 60715; copper-colored	 :210-508 Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; slopped; galvanized; similar to EN 60715; silver-colored	 :210-197 Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; slopped; similar to EN 60715; silver-colored
 :210-506 Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; unslopped; galvanized; similar to EN 60715; silver-colored	 :210-114 Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; unslopped; similar to EN 60715; silver-colored	 :210-118 Steel carrier rail; 35 x 15 mm; 2.3 mm thick; 2 m long; unslopped; according to EN 60715; silver-colored	 :210-115 Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; slopped; according to EN 60715; "Hole width 18 mm; silver-colored
 :210-112 Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; slopped; according to EN 60715; "Hole width 25 mm; silver-colored	 :210-504 Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; slopped; galvanized; according to EN 60715; silver-colored	 :210-113 Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; unslopped; according to EN 60715; silver-colored	 :210-505 Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; unslopped; galvanized; according to EN 60715; silver-colored

1.1.2 Marking

1.1.2.1 Group marker carrier



: 750-107
Group marker carrier

1.1.2.2 Marker

: 2009-145/000-006
Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; blue

: 2009-145/000-007
Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; gray

: 2009-145/000-023
Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; green

: 2009-145/000-012
Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; orange

: 2009-145/000-005
Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; red

: 2009-145/000-024
Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; violet

: 2009-145
Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; white

: 2009-145/000-002
Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; yellow



: 248-501/000-006
Mini-WSB marking card; as card; not stretchable; plain; snap-on type; blue

: 248-501/000-007
Mini-WSB marking card; as card; not stretchable; plain; snap-on type; gray

: 248-501/000-023
Mini-WSB marking card; as card; not stretchable; plain; snap-on type; green

: 248-501/000-017
Mini-WSB marking card; as card; not stretchable; plain; snap-on type; light green



: 248-501/000-012
Mini-WSB marking card; as card; not stretchable; plain; snap-on type; orange

: 248-501/000-005
Mini-WSB marking card; as card; not stretchable; plain; snap-on type; red

: 248-501/000-024
Mini-WSB marking card; as card; not stretchable; plain; snap-on type; violet

: 248-501
Mini-WSB marking card; as card; not stretchable; plain; snap-on type; white



: 248-501/000-002
Mini-WSB marking card; as card; not stretchable; plain; snap-on type; yellow



1.1.2.3 Marker carrier



: 750-103
Group marker carrier

1.1.3 Shield termination

1.1.3.1 Shield clamping saddles



: 790-108
Shield clamping saddle; 11 mm wide; diameter of compatible conductor; 3 ... 8 mm



: 790-208
Shield clamping saddle; 12.4 mm wide; 3 ... 8 mm



: 790-116
Shield clamping saddle; 19 mm wide; diameter of compatible conductor; 7 ... 16 mm



: 790-216
Shield clamping saddle; 21.8 mm wide; 6 ... 16 mm



: 790-124
Shield clamping saddle; 27 mm wide; diameter of compatible conductor; 6 ... 24 mm



: 790-220
Shield clamping saddle; 30 mm wide; 6 ... 20 mm



: 790-140
Shield clamping saddle; diameter of compatible conductor

1.1.4 Supply module

1.1.4.1 Supply module



: 750-612
Power Supply; 0 ... 230 V AC/DC



: 750-602
Power Supply; 24 VDC



: 750-601
Power Supply; 24 VDC; fuse holder



: 750-610
Power Supply; 24 VDC; fuse holder; Diagnostics

1.1.5 System enclosure

1.1.5.1 System enclosure



: 850-825
IP65 enclosure; Aluminium (RAL 7032); WxHxD (160x100x160 mm); 9 x M12, 4 x M20



: 850-826
IP65 enclosure; Aluminium (RAL 7032); WxHxD (240x100x160 mm); 4 x M20, 4 x M16, 14 x M12 cable grip



: 850-827
IP65 enclosure; Aluminium (RAL 7032); WxHxD (320x100x160 mm); 4 x M20, 8 x M16, 17 x M12 cable grip



: 850-828
IP65 enclosure; Aluminium (RAL 7032); WxHxD (480x100x160 mm); 4 x M20, 10 x M16, 35 x M12 cable grip



: 850-826/002-000
IP65 enclosure; Aluminium (RAL 7035); WxHxD (240x100x160 mm); 4 x M20, 4 x M16, 14 x M12 cable grip



: 850-827/002-000
IP65 enclosure; Aluminium (RAL 7035); WxHxD (320x100x160 mm); 4 x M20, 8 x M16, 17 x M12 cable grip



: 850-828/002-000
IP65 enclosure; Aluminium (RAL 7035); WxHxD (480x100x160 mm); 4 x M20, 10 x M16, 35 x M12 cable grip



: 850-834
IP65 enclosure; Polyester (RAL 7032); WxHxD (164x100x164 mm); 9 x M12, 4 x M20



: 850-835
IP65 enclosure; Polyester (RAL 7032); WxHxD (244x100x164 mm); 4 x M20, 4 x M16, 14 x M12 cable grip



: 850-836
IP65 enclosure; Polyester (RAL 7032); WxHxD (324x100x164 mm); 4 x M20, 8 x M16, 17 x M12 cable grip



: 850-814/002-000
IP65 enclosure; Sheet steel (RAL 7035); WxHxD (200x120x200 mm); without flange plate



: 850-815/002-000
IP65 enclosure; Sheet steel (RAL 7035); WxHxD (300x120x200 mm); without flange plate



: 850-816/002-000
IP65 enclosure; Sheet steel (RAL 7035); WxHxD (400x120x200 mm); without flange plate



: 850-817/002-000
IP65 enclosure; Sheet steel (RAL 7035); WxHxD (600x120x200 mm); without flange plate