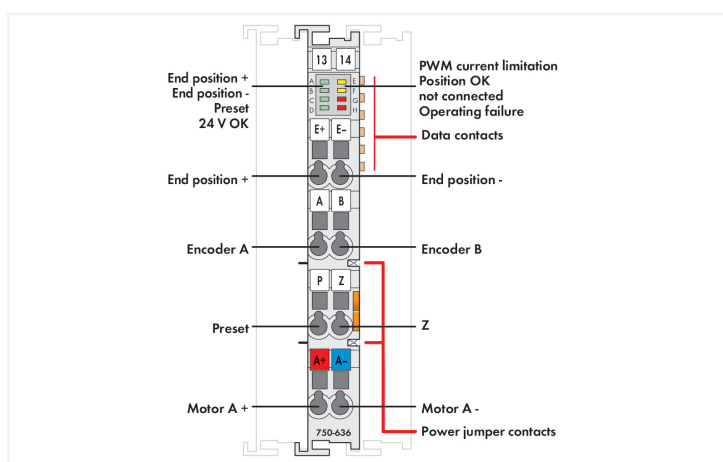
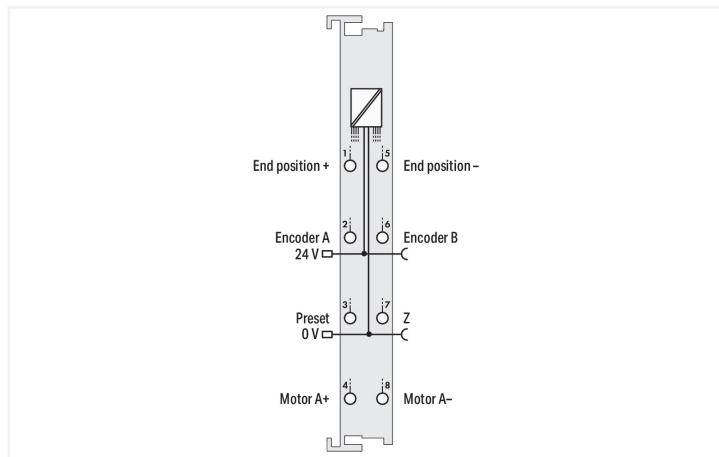
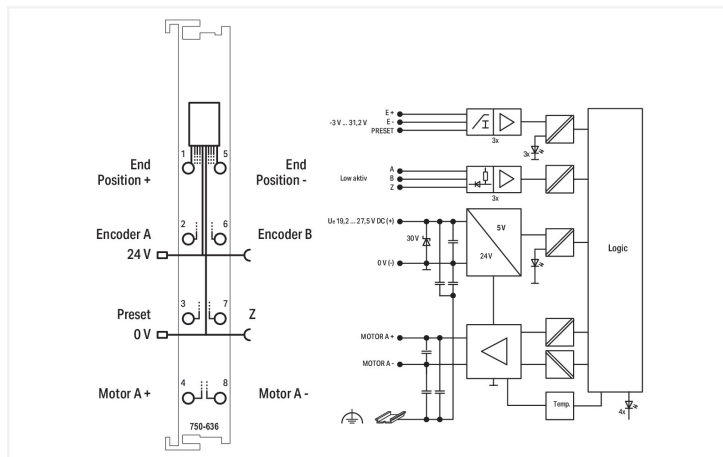


Data Sheet | Item Number: 750-636

DC Drive Controller; 24 VDC; 5 A

<https://www.wago.com/750-636>



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
Indicators	LED (A-D) green: End position +, End position -, Preset, 24 V OK; LED (E, F) yellow: PWM current limitation, Position OK; LED (G, H) red: Reserved, Operating failure
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 mm ² / 28 ... 14 AWG
Fine-stranded conductor	0.08 ... 2.5 mm ² / 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
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Material data

Color	light gray
Housing material	Polycarbonate; polyamide 6.6
Fire load	0.967 MJ
Weight	54 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 (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

Environmental Product Compliance

CAS-No.	1303-86-2 1317-36-8 7439-92-1 79-94-7
REACH Candidate List Substance	Diboron trioxide Lead Lead monoxide Tetrabromobisphenol A (TBBPA)
RoHS Exemption	7(a) 7(c)-I 7(c)-II
SCIP notification number (Austria)	5eed9119-6121-4905-8626-51428c8fb070
SCIP notification number (Belgium)	63c19e02-82af-4a4e-960f-b2926a1e17c7
SCIP notification number (Bulgaria)	5cdf4862-5d49-4e54-835e-fb9783403207
SCIP notification number (Czech Republic)	3225c449-b2b1-486f-b76f-aaf557d18ef7
SCIP notification number (Denmark)	a4e11752-04fd-40a8-bbfe-4328f0922d0d
SCIP notification number (Finland)	d7565f47-a353-4f9e-987b-d6df6e0ed891
SCIP notification number (France)	74ef8070-c749-412c-83ed-2656ad76e65a
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SCIP notification number (Romania)	636ad810-3ccb-4d26-9f12-dc84bf698ff9
SCIP notification number (Sweden)	c9a2bf11-4d77-45c0-ab39-e172f301827f

Approvals / Certificates

General approvals



Approval	Standard	Certificate Name
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

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

Current addresses can be found at: www.wago.com



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