

10/68-2.81 EN



d0132rxa

- **Electrical actuator for continuous positioning or step control**
- **Stallproof without the need of position or torque dependent switch-off**
- **Three-phase induction motor**
- **Robust gearing with high mechanical efficiency**
- **Internal rotary - linear conversion**
- **Hand wheel for emergency operation**
- **Sensors for position and temperature integrated**
- **Signal and power input only via separate micro processor controlled power electronics**
- **Voltage supply AC 230 V only via power electronics**

Application

Compact actuator for the operation of final control elements with preferably linear movement. The actuator thrust rod transfers the force directly to the final control element.

A special power electronics controls the actuator. It is the interface between actuator and control system.

Positioning:

During continuous positioning the power electronic unit varies the motor torque steplessly until the actuator force and the restoring process forces are balanced. High response sensitivity and high positioning accuracy with short positioning time ensure an excellent control quality and a long actuator life.

Technical Data

Actuator

Type	RSD 200-0,7	RSD 200-5,0
Rated force	200 kN (adjustable to 0.5; 0.75 or 1 x rated force)	
Starting force	1.2 x rated force (break-away force in end positions for a short time 2 x rated force)	
Rated speed [mm/s]; adjustable	0.1 ... 0.7	0.1 ... 5.0
Stroke	min.: 0 ... 30 mm / max. 0 ... 180 mm or min. 0 ... 70 mm / max. 0 ... 300 mm	
Weight (180 mm stroke)	approx. 400 kg	
Weight (300 mm stroke)	approx. 460 kg	
Electronics	for field installation: type EBN 853 ¹⁾ for rack installation: type EBS 852 ¹⁾	for field installation: type EBN 861 ¹⁾ for rack installation: type EBS 862 ¹⁾
Motor type	MC 90 BA	MC 112 BA
Sensors	position transmitter and temperature sensor always available	

- 1) data sheet EBN 853:10/68-8.26
 data sheet EBN 861:10/68-8.22
 data sheet EBS 852:10/68-8.24
 data sheet EBS 862:10/68-8.25

General Data

RSD 200	
Operation mode	S9 - stall proof acc. to DIN IEC 2/915/CDV
Protection class	IP 66
Humidity	≤ 95% average; (condensation not permitted)
Ambient temperature	-10° C ... +65° C or -30° C ... +50° C (optionally)
Mounting position	any position; preferably IMV 1; IMV 3; IMB 5 acc. to DIN DIN IEC 34; other positions on request
Coating	2 component epoxy-resin paint (RAL 9005, black)
Anti condensation heater (optionally)	motor: energy supply directly from Contrac electronic unit signal hood: separate heating resistor; energy supply from Contrac electronic unit
Electrical connection	plug with crimp snap-in contacts or terminals connecting cable electronics - actuator optionally (see ordering information of electronics)
Voltage supply for motor and sensors	only via special electronics (see data sheet of electronics)

Plug, 24-pole, at actuator:

	Crimp contacts	Terminals (Option)
cable gauge:	motor, heater: 1.5 mm ² signal: 0.5 mm ²	2.5 mm ²
contact surface	gold plated	motor, signal: gold plated heater: silver plated

Thread for cable gland

Tapped hole	Optional adapter*	
M20 x 1.5 (2x)	PG 16 (2x)	NPT 1/2" (2x)
M25 x 1.5 (1x)	PG 21 (1x)	NPT 3/4" (1x)

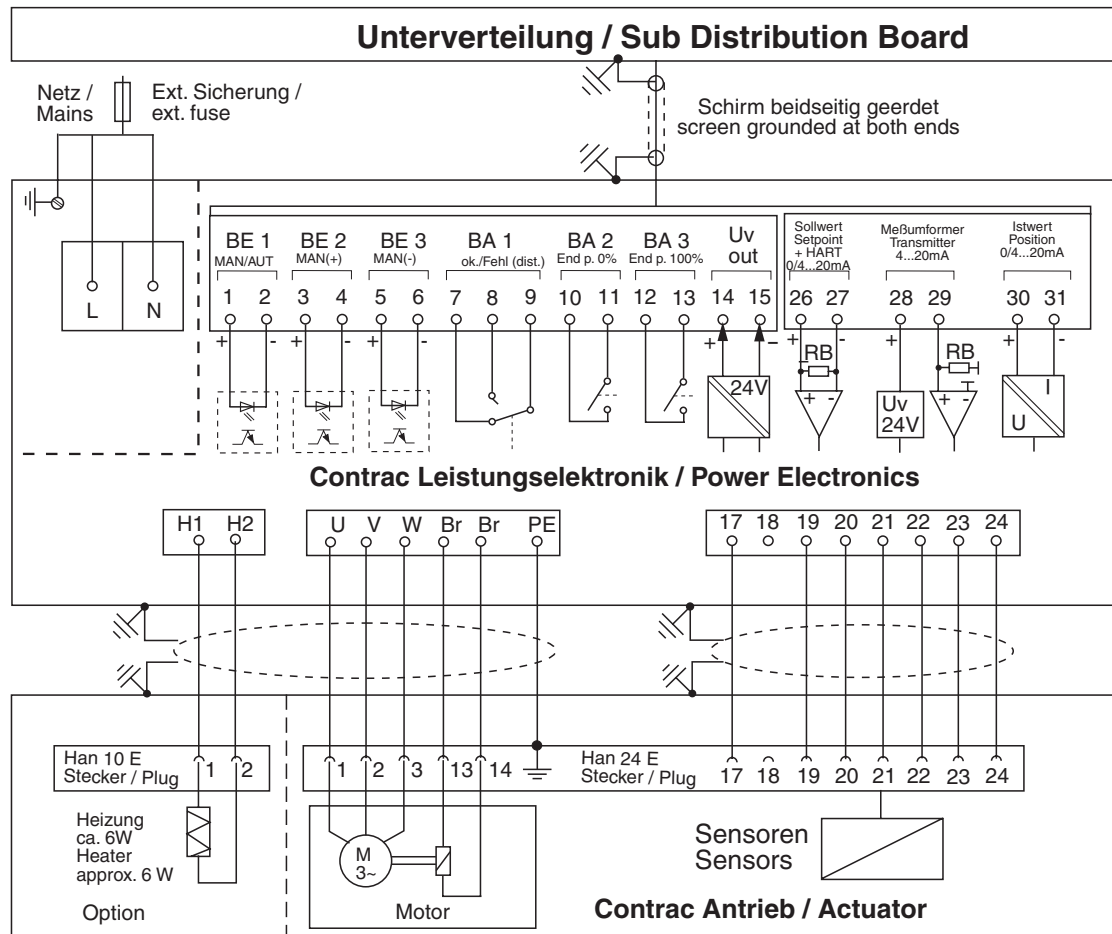
*Adapters for PG or NPT only available if additionally ordered.

Technical Data

Electrical Connection RSD 200

The electrical connection is done via a plug at the actuator and via terminals at the electronics.
 Electrical connection: standard; analogue / binary

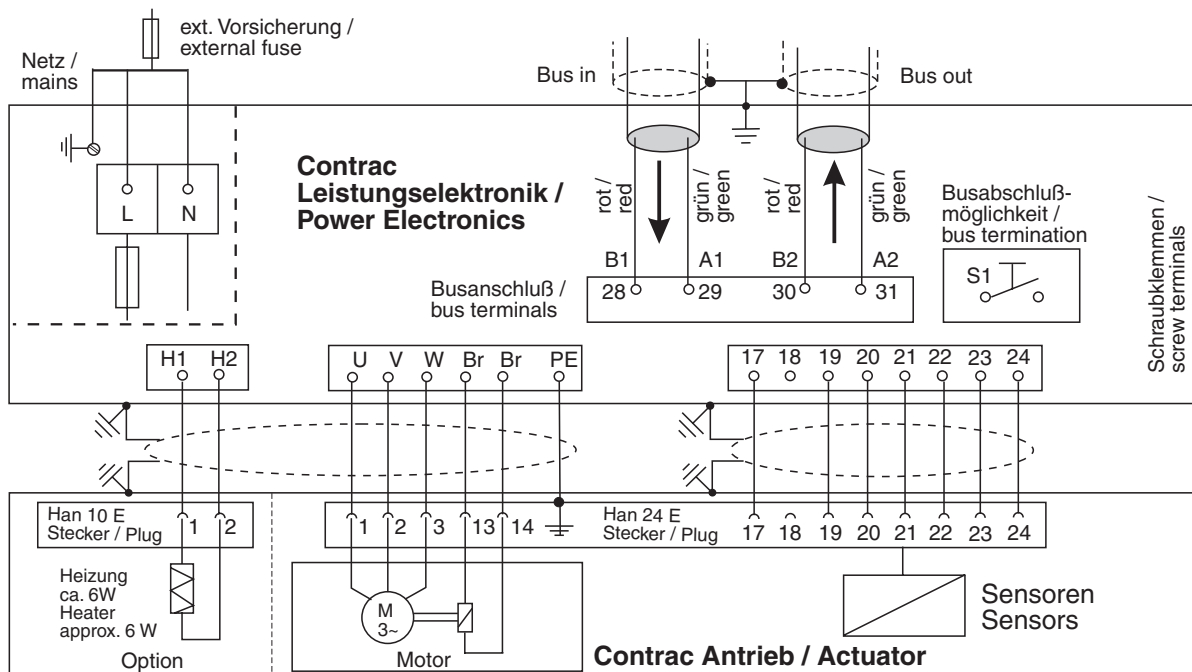
one-sided screening
 in following wiring possible



r00009x1

Technical Data

Electrical connection: Option Profibus DP (not for electronics EBS ...)



r00010x1

Order Information

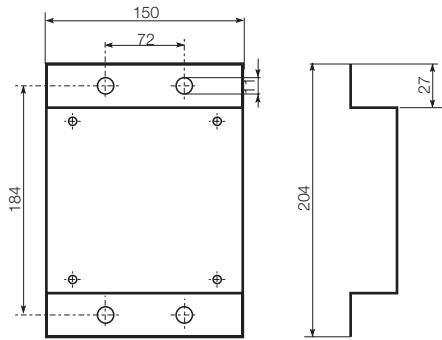
		Catalog No.			
RSD 200-0,7		V68672			
Rated stroke 180 mm			1518		
Rated stroke 300 mm			1618		
Rated force 200 kN (adjustable to 50%/75%/100%)					
Rated speed 0.7 mm/s (adjustable to 0.7 ... 0.1 mm/s)					
RSD 200-5,0		V68672			
Rated stroke 180 mm			1519		
Rated stroke 300 mm			1619		
Rated force 200 kN (adjustable to 50%/75%/100%)					
Rated speed 5.0 mm/s (adjustable to 5.0 ... 0.1 mm/s)					
				Code	
Special actuator features					
Select at least one feature					
Electrical connection	plug (24-pole) compl., crimped		277		
	plug (24-pole) compl., terminals		278		
	plug bottom part; covered ¹⁾		279		
Ambient temperature	-10°C ... +65°C		344		
	-30°C ... +50°C		341		
Additional actuator features (selection not necessarily required)					
Electrical connection thread	Set NPT adapter (joint metric / NPT thread)		680		
	Set PG adapter (joint metric / PG thread)		681		
Anti condensation heater			360		
Identification on data label	(alphanumeric; max. 32 characters)		294		
Accessories	cover for male plug; 24 pole		337		
Accessories	plug holder		338		
Factory certificate 2.1 acc. to EN 10204			291		
Certificate B acc. to EN 10202			292		
Assembly with valve at ABB	(order and piece no. of valve required)		481		
Manual (give total quantity)					
	German (no remark for 1 copy)		Z2D		
	English (code no. always required)		Z2E		

¹⁾ female plug with cables to be ordered with electronic unit

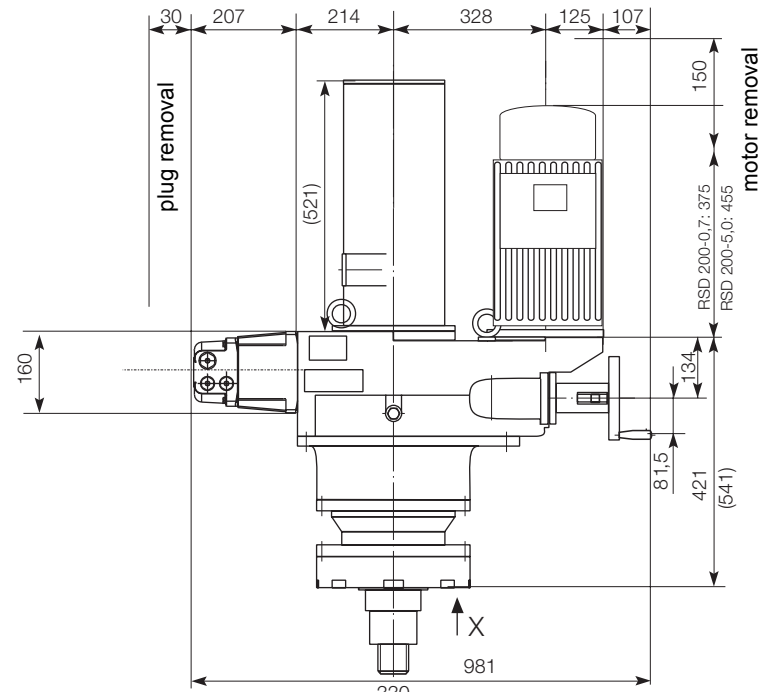
Attention! Electronic unit to be ordered separately!

Dimensions

Linear Actuator RSD 200



plug holder
(not to scale)



values in brackets for
actuators with 300 mm
max. stroke

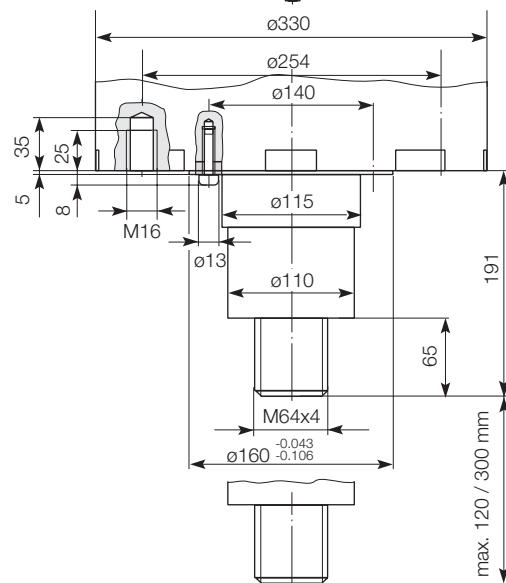
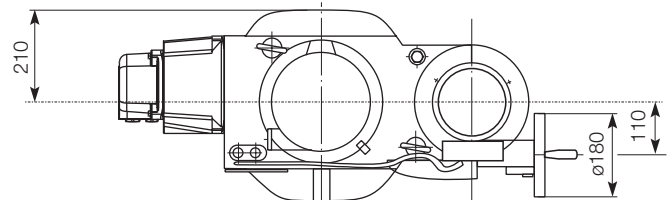
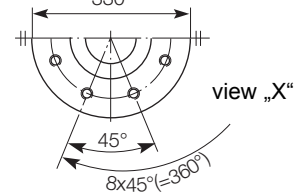




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