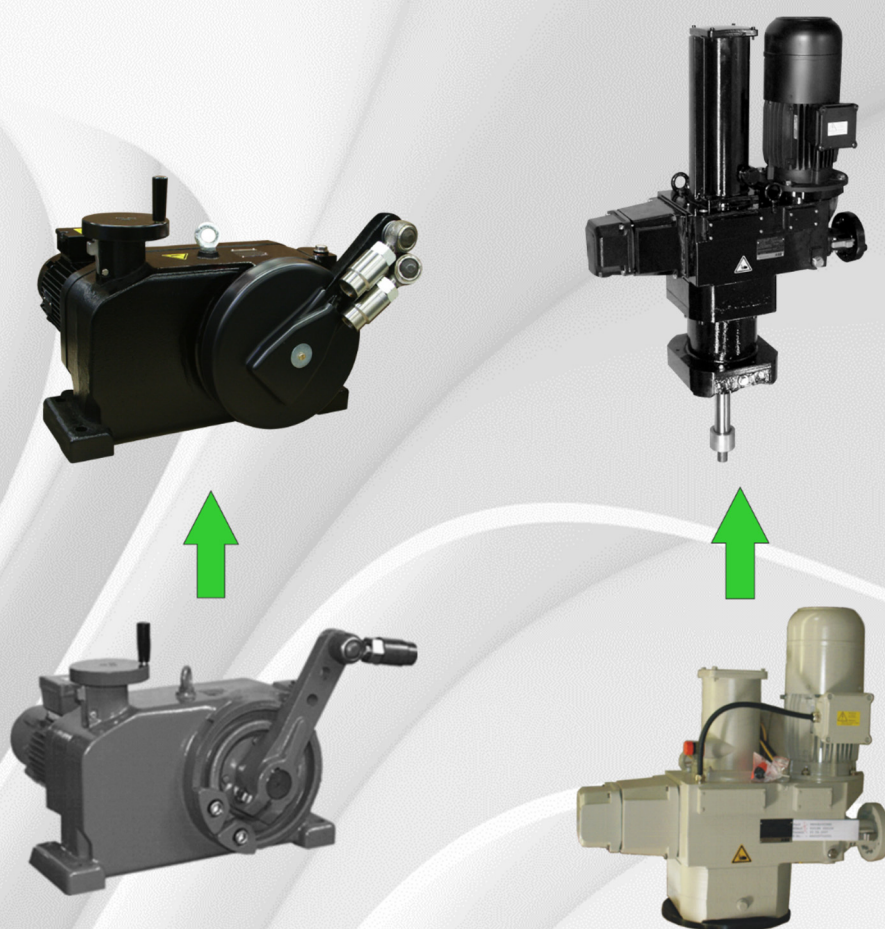


ABB MEASUREMENT & ANALYTICS | DATA SHEET

# Electronic unit and accessories

## Retrofitting on Contrac



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## Options for conversion of old actuators to the latest technology

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**Maintaining actuators with a high level of functional safety and reliability**

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**Save cost thanks to the maintenance of expensive valves and actuators**

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**Electric interfaces to old and new control systems**

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**Easy conversion, also possible on-site**

---

**Modern actuator electronics for actuator-related or service-related installation**

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**The economical solution for continued operation of the installation**

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**Consultation, planning and execution from a competent source**

## General description

Older model S&F control actuators can be converted to the intelligent Contrac actuator types with minimal effort. The prerequisite here is that the actuator is in good general condition. Otherwise the conversion can be performed as a part of repairs at the factory or on-site.

- Replace the old feedback sensor with a Contrac SP1 position sensor.
- The 2-phase servo motor can be converted to Contrac (tachometer and brake rectifier are not needed, sometimes new motor required)
- The previous controller is not needed. It is replaced by a new Contrac EBN853 or EBN852 electronic unit.

- The required rotating field for the motor is generated by the converter electronics system, therefore the excitation capacitor is not needed.
- The wiring for the motor and the sensor must be adapted.
- In linear actuators, the position sensor actuator sometimes needs to be replaced.

After the conversion, the old actuators also have nearly the full functionality of the Contrac series.

For dimensions and specifications of the electronic unit, see data sheets DS/EBN853 and DS/EBS852.

## Rotary actuators

Conventional program				Contrac	
Actuator type	Motor	Remark	Changed actuator designation	Changed motor designation	New motor
RST/RH 12-10	M 163 L/LT		RHC 12-10	MC 163 LR	
RST/RH 25-10	M 403 L/LT		RHC 25-10	MC 403 LR	
RST/RH 25-30	M 163 L/LT		RHC 25-30	MC 163 LR	
RST/RH 40-10	M 753 L/LT		RHC 40-10	MC 753 LR	
RST/RH 60-10	M 1203 L/LT		RHC 60-10	MC 1203 LR	
RST/RH 60-30	M 403 L/LT		RHC 60-30	MC 403 LR	
RST/RH 60-60	M 163 L/LT		RHC 60-60	MC 163 LR	
RST/RH 125-10	M 2403 L/LT	New motor required	RHC 125-10		MCS 90 BA
RST/RH 125-30	M 753 L/LT		RHC 125-30	MC 753 LR	
RST/RH 125-60	M 403 L/LT		RHC 125-60	MC 403 LR	
RST/RH 200-30	M 1203 L/LT		RHC 200-30	MC 1203 LR	
RST/RH 250-60	M 753 L/LT		RHC 250-60	MC 753 LR	
RST/RH 400-30	M 2403 L/LT	New motor required	RHC 400-30		MCS 90 BA
RST/RH 400-60	M 1203 L/LT		RHC 400-60	MC 1203 LR	
RHC 250-10	M 403 L/LT		RHB 250-10	MC 403 LR	
RHC 250-30	M 163 L/LT		RHB 250-30	MC 163 LR	
RHC 250-70	M 063	New motor required, intermediate gears not needed	RHB 250-30		MC 163 LR

## ... Rotary actuators

Conventional program					Contrac
Actuator type	Motor	Remark	Changed actuator designation	Changed motor designation	New motor
RHC 500-10	M 1203 L/LT		RHB 500-10	MC 1203 LR	
RHC 500-60	M 163 L/LT		RHB 500-60	MC 163 LR	
RHC 800-15	M 1203 L/LT		RHB 800-15	MC 1203 LR	
RHC 800-35	M 403 L/LT		RHB 800-35	MC 403 LR	
RHC 1250-12	M 2403 L/LT	New motor required	RHB 1250-12		MCS 90 BA
RHC 1250-35	M 753 L/LT		RHB 1250-35	MC 753 LR	
RHC 1250-60	M 403 L/LT		RHB 1250-60	MC 403 LR	
RHC 2500-25	M 2403 L/LT	New motor required	RHB 2500-25		MCS 90 BA
RHC 2500-45	M 1203 L/LT		RHB 2500-45	MC 1203 LR	
RHC 2500-70	M 753 L/LT		RHB 2500-70	MC 753 LR	
RHC 4000-40	M 2403 L/LT	New motor required	RHB 4000-40		MCS 90 BA
RHC 4000-70	M 1203 L/LT		RHB 400-70	MC 1203 LR	
RHC 8000-80	M 2403 L/LT	New motor required	RHB 8000-80		MCS 90 BA

## Linear actuators

Conventional program					Contrac
Actuator type	Motor	Remark	Changed actuator designation	Changed motor designation	New motor
RS 10-0.4 Stroke 25 to 50 mm	M 063	New motor required, intermediate gears not needed.	RSB 10-1.3 Stroke 20 to 100 mm		MC 163 LR
RS 10-0.4 Stroke 50 to 100 mm	M 063	New motor required, intermediate gears not needed. Replace actuator position sensor.	RSB 10-1.3 Stroke 20 to 100 mm		MC 163 LR
RS 10-0.4 Stroke 120 to 300 mm	M 063	New motor required, intermediate gears not needed. Replace actuator position sensor.	RSB 10-1.3 Stroke 90 to 300 mm		MC 163 LR
RS 10-1.3 Stroke 25 to 50 mm	M 163 L/LT		RSB 10-1.3 Stroke 20 to 100 mm	MC 163 LR	
RS 10-1.3 Stroke 50 to 100 mm	M 163 L/LT	Replace actuator position sensor.	RSB 10-1.3 Stroke 20 to 100 mm	MC 163 LR	
RS 10-1.3 Stroke 120 to 300 mm	M 163 L/LT	Replace actuator position sensor.	RSB 10-1.3 Stroke 90 to 300 mm	MC 163 LR	
RS 10-3.0 Stroke 25 to 50 mm	M 403 L/LT		RSB 10-3.0 Stroke 20 to 100 mm	MC 403 LR	
RS 10-3.0 Stroke 50 to 100 mm	M 403 L/LT	Replace actuator position sensor.	RSB 10-3.0 Stroke 20 to 100 mm	MC 403 LR	
RS 10-3.0 Stroke 120 to 300 mm	M 403 L/LT	Replace actuator position sensor.	RSB 10-3.0 Stroke 90 to 300 mm	MC 403 LR	
RS 10-5.0 Stroke 25 to 50 mm	M 753 L/LT		RSB 10-5.0 Stroke 20 to 100 mm	MC 753 LR	
RS 10-5.0 Stroke 50 to 100 mm	M 753 L/LT	Replace actuator position sensor.	RSB 10-5.0 Stroke 20 to 100 mm	MC 753 LR	
RS 10-5.0 Stroke 120 to 300 mm	M 753 L/LT	Replace actuator position sensor.	RSB 10-5.0 Stroke 90 to 300 mm	MC 753 LR	
RS 20-0.6 Stroke 25 to 50 mm	M 163 L/LT		RSB 10-0.6 Stroke 20 to 100 mm	MC 163 LR	
RS 20-0.6 Stroke 50 to 100 mm	M 163 L/LT	Replace actuator position sensor.	RSB 10-0.6 Stroke 20 to 100 mm	MC 163 LR	
RS 20-0.6 Stroke 120 to 300 mm	M 163 L/LT	Replace actuator position sensor.	RSB 10-0.6 Stroke 90 to 300 mm	MC 163 LR	
RS 20-1.5 Stroke 25 to 50 mm	M 403 L/LT		RSB 20-1.6 Stroke 20 to 100 mm	MC 403 LR	
RS 20-1.5 Stroke 50 to 100 mm	M 403 L/LT	Replace actuator position sensor.	RSB 20-1.6 Stroke 20 to 100 mm	MC 403 LR	
RS 20-1.5 Stroke 120 to 300 mm	M 403 L/LT	Replace actuator position sensor.	RSB 20-1.6 Stroke 90 to 00 mm	MC 403 LR	

## ... Linear actuators

Conventional program					Contrac
Actuator type	Motor	Remark	Changed actuator designation	Changed motor designation	New motor
RS 20-2.5 Stroke 25 to 50 mm	M 753 L/LT		RSB 20-2.5 Stroke 20 to 100 mm	MC 753 LR	
RS 20-2.5 Stroke 50 to 100 mm	M 753 L/LT	Replace actuator position sensor.	RSB 20-2.5 Stroke 20 to 100 mm	MC 753 LR	
RS 20-2.5 Stroke 120 to 300 mm	M 753 L/LT	Replace actuator position sensor.	RSB 20-2.5 Stroke 90 to 300 mm	MC 753 LR	
RS 20-4.0 Stroke 25 to 50 mm	M 1203 L/LT		RSB 20-4.0 Stroke 20 to 100 mm	MC 1203 LR	
RS 20-4.0 Stroke 50 to 100 mm	M 1203 L/LT	Replace actuator position sensor.	RSB 20-4.0 Stroke 20 to 100 mm	MC 1203 LR	
RS 20-4.0 Stroke 120 to 300 mm	M 1203 L/LT	Replace actuator position sensor.	RSB 20-4.0 Stroke 90 to 300 mm	MC 1203 LR	
RS 50-1.5 Stroke 30 to 60 mm	M 1203 L/LT		RSB 50-1.5 Stroke 25 to 120 mm	MC 1203 LR	
RS 50-1.5 Stroke 60 to 120 mm	M 1203 L/LT	Replace actuator position sensor.	RSB 50-1.5 Stroke 25 to 120 mm	MC 1203 LR	
RS 50-1.5 Stroke 120 to 300 mm	M 1203 L/LT	Replace actuator position sensor.	RSB 50-1.5 Stroke 100 to 300 mm	MC 1203 LR	
RS 100-0.8 Stroke 60 to 150 mm	M 1203 L/LT	Replace actuator position sensor.	RSB 100-0.8 Stroke 25 to 150 mm	MC 1203 LR	
RS 100-0.8 Stroke 120 to 300 mm	M 1203 L/LT	Replace actuator position sensor.	RSB 100-0.8 Stroke 100 to 300 mm	MC 1203 LR	
RS 100-1.5 Stroke 60 to 150 mm	M 2403 L/LT	New motor required. Replace actuator position sensor.	RSB 100-1.5 Stroke 25 to 150 mm		MCS 90 BA
RS 100-1.5 Stroke 120 to 300 mm	M 2403 L/LT	New motor required. Replace actuator position sensor.	RSB 100-1.5 Stroke 100 to 300 mm		MCS 90 BA
RS 200-0.7 Stroke 30 to 75 mm	M 2403 L/LT	New motor required.	RSB 200-0.7 Stroke 30 to 180 mm		MCS 90 BA
RS 200-0.7 Stroke 75 to 180 mm	M 2403 L/LT	New motor required. Replace actuator position sensor.	RSB 200-0.7 Stroke 30 to 180 mm	MC 403 LR	MCS 90 BA
RS 200-0.7 Stroke 120 to 300 mm	M 2403 L/LT	New motor required. Replace actuator position sensor.	RSB 200-0.7 Stroke 100 to 300 mm	MC 403 LR	MCS 90 BA

## Limitation

A conversion to Contrac is not possible with the following actuator types. A complete Contrac actuator is however available as a successor.

Actuator type	Remark / Notice
RST/RH 2-60	No conversion or replacement; if possible, use
RST/RH 4-60	Contrac PME.
RST/RH 5-30	Replace with CONTRAC PME 120 with adapter plate.
RST/RH 8-30	Replace with CONTRAC PME 120 with adapter plate.
RST/RH 10-60	Replace with CONTRAC PME 120 with adapter plate.
RS 4-0.5	Replace with CONTRAC LME 620
RS 4-1.0	Replace with CONTRAC LME 620

## Required conversion measures on the actuator

### Replace position sensor\*

- Remove the existing feedback sensor and replace with a Contrac SP1 type position sensor.
- Adapt the internal actuator wiring between the plug connection and sensor in accordance with circuit diagram 1.

#### NOTICE

The mechanical signal contacts on the old feedback sensor are not needed and are replaced with relay outputs on the Contrac electronic unit.

### Replace the actuator of the position sensor\*

The 'Actuator position sensor' component of the linear actuators listed in the table should be replaced with the ordering number provided. By doing so, the mechanical transmission is adapted and the permissible actuator travel is extended to the standard Contrac values.

### Convert the servo motor\*

Remove the brake rectifier and the tachometer generator, if applicable. Mount the resistor group (470 Ohm) in place of the rectifier group.

If the excitation capacitor is installed in the actuator, it must be removed. The motor wiring should be changed in accordance with circuit diagrams 2 and 3.

#### NOTICE

In the majority of the actuators, only the 100 % characteristic curve is available for the motor torque. The actuators cannot be adjusted to 50 % or 75 % through the user interface.

### Replace the servo motor\*

The M 2403 L/LT and M063 B servo motors cannot be converted to Contrac. They must be replaced. Details in the table above.

#### NOTICE

If necessary, the positioning speed of the actuator can be adjusted to the original value on the electronic unit.

### Marking of the converted actuator

We recommend that you mark the changes made on the motor terminal blocks and the name plates on the actuator / motor. The specific designations can be found in the table above.

The identification strips for the motor terminal blocks are attached to the series resistor assembly kit. 2 stickers to label the name plates are in the terminal compartment of the electronic unit.

### New electronic unit\*

A Contrac electronic unit is required for operation. It is available in two versions. For assembly near the actuator (IP66) or for central assembly in the racks (IP20).

- \* For order descriptions and order data on electronic units and installation kits, see **Ordering Information** on page 13.

## Wiring diagram of the Contrac sensor

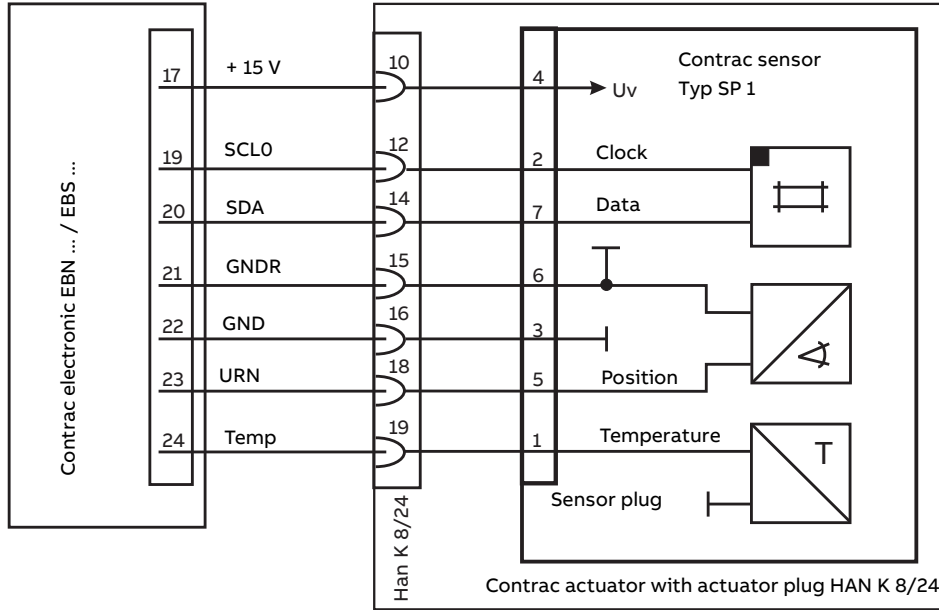


Figure 1: Contrac actuator with HAN K 8/24 actuator plug

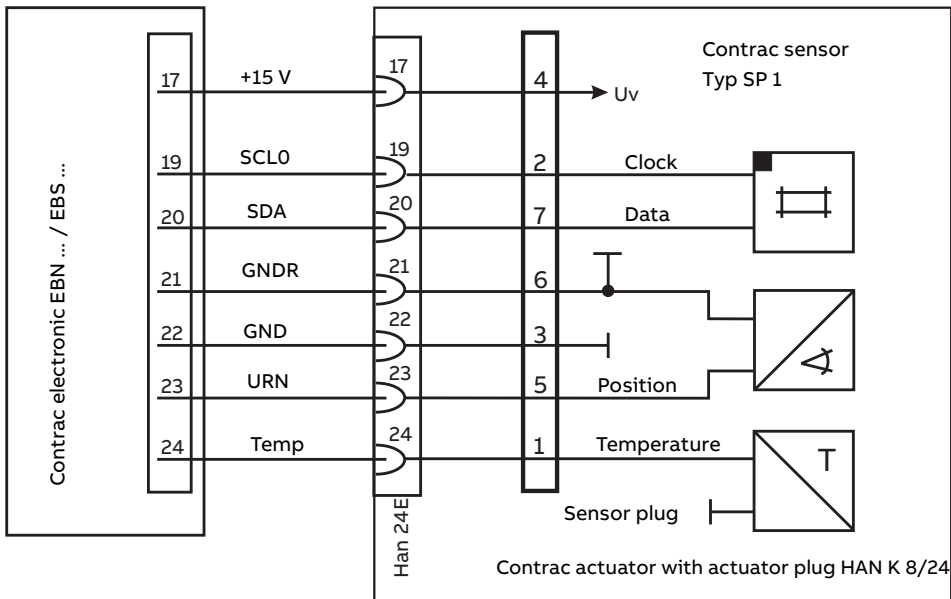


Figure 2: Contrac actuator with HAN 24 E actuator plug



## Motor wiring M 163 L to M 1203 L

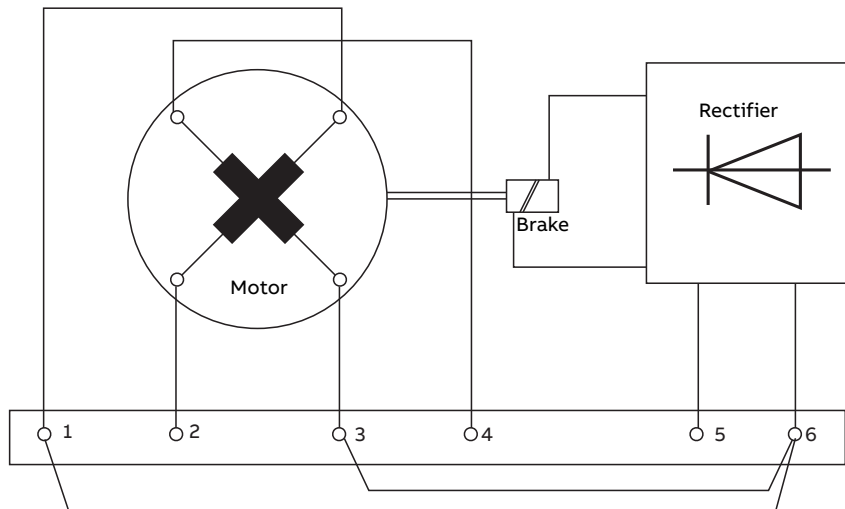


Figure 3: Motor wiring M 163 L to M 1203 L

## Changed wiring for Contrac MC 163 LR to MC 1203 LR

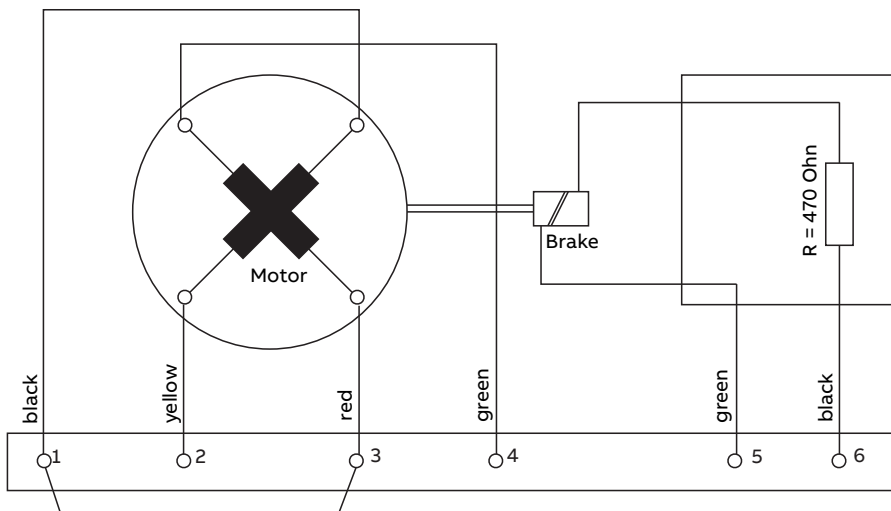


Figure 4: Motor wiring M 163 LR to M 1203 LR

### Motor wiring M 163 LT to M 1203 LT

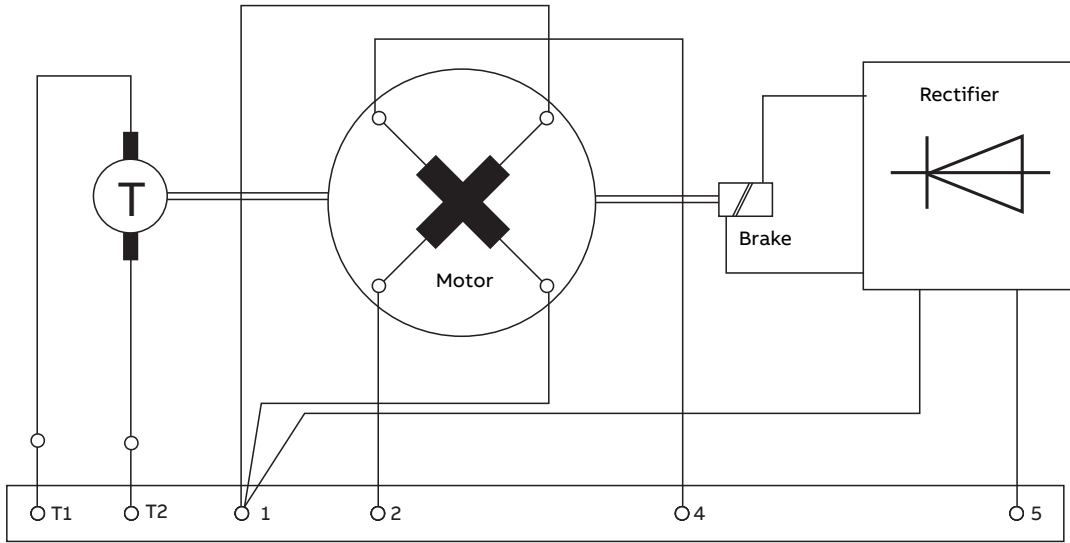


Figure 5: Motor wiring M 163 LT to M 1203 LT

### Changed wiring for Contrac MC 163 LR to MC 1203 LR

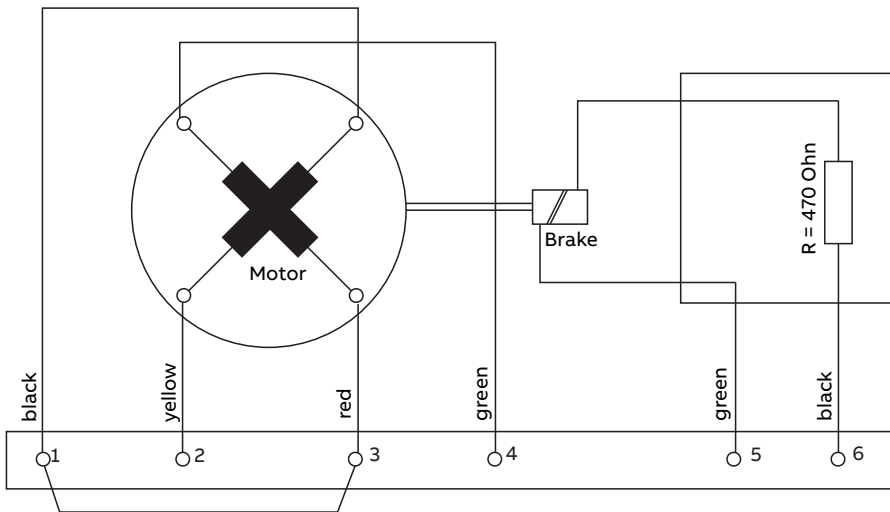


Figure 6: Motor wiring M 163 LR to M 1203 LR

Required change of wiring when using a motor with tachometer generator (M to LT). Due to the elimination of the tachometer generator, the standard terminal assignment can be applied. (A new designation strip is attached to the 'series resistor' mounting kit.)

## Examples of Contrac actuator wiring

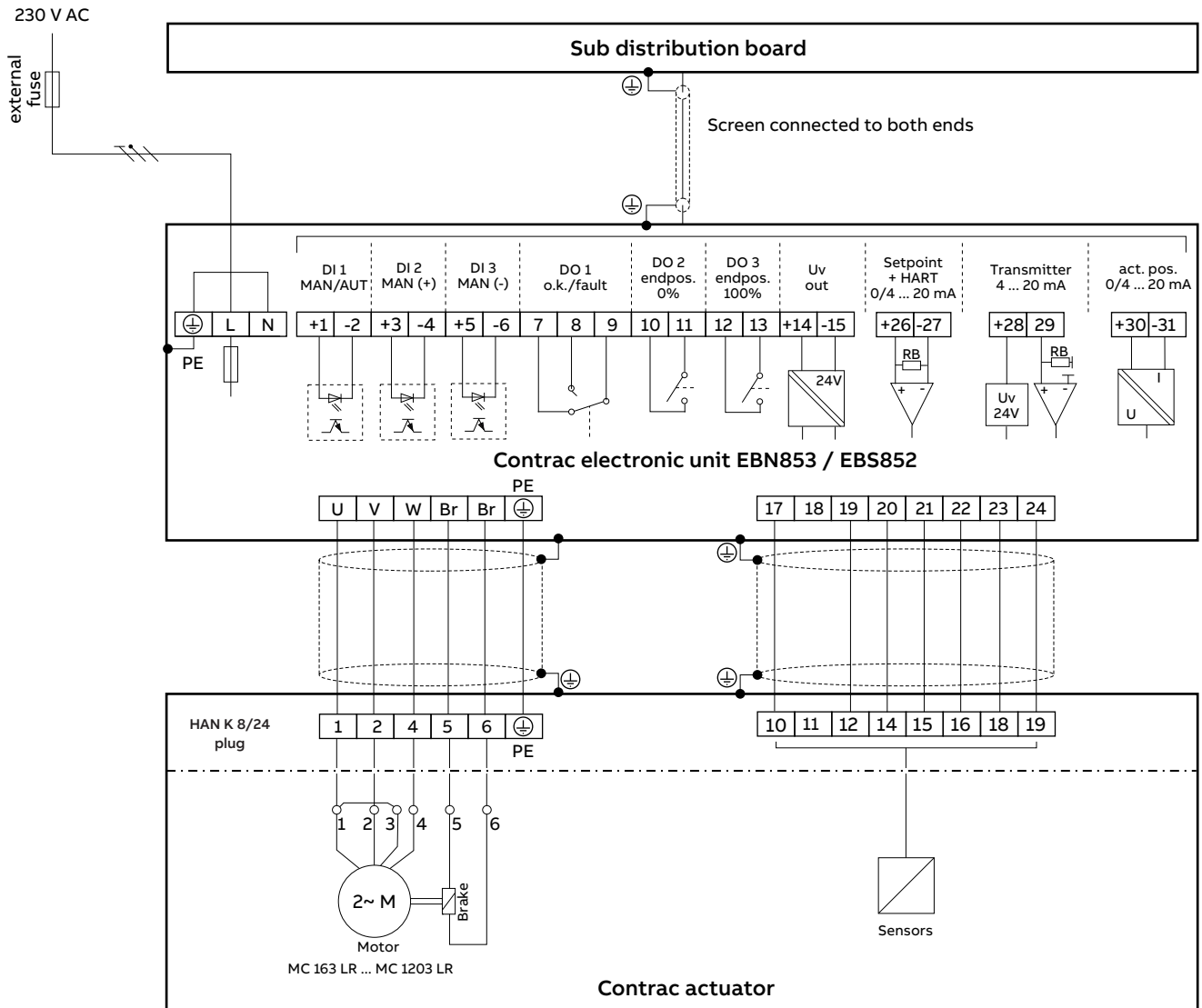


Figure 7: Example with HAN K 8/24 coupler connector

### ... Examples of Contrac actuator wiring

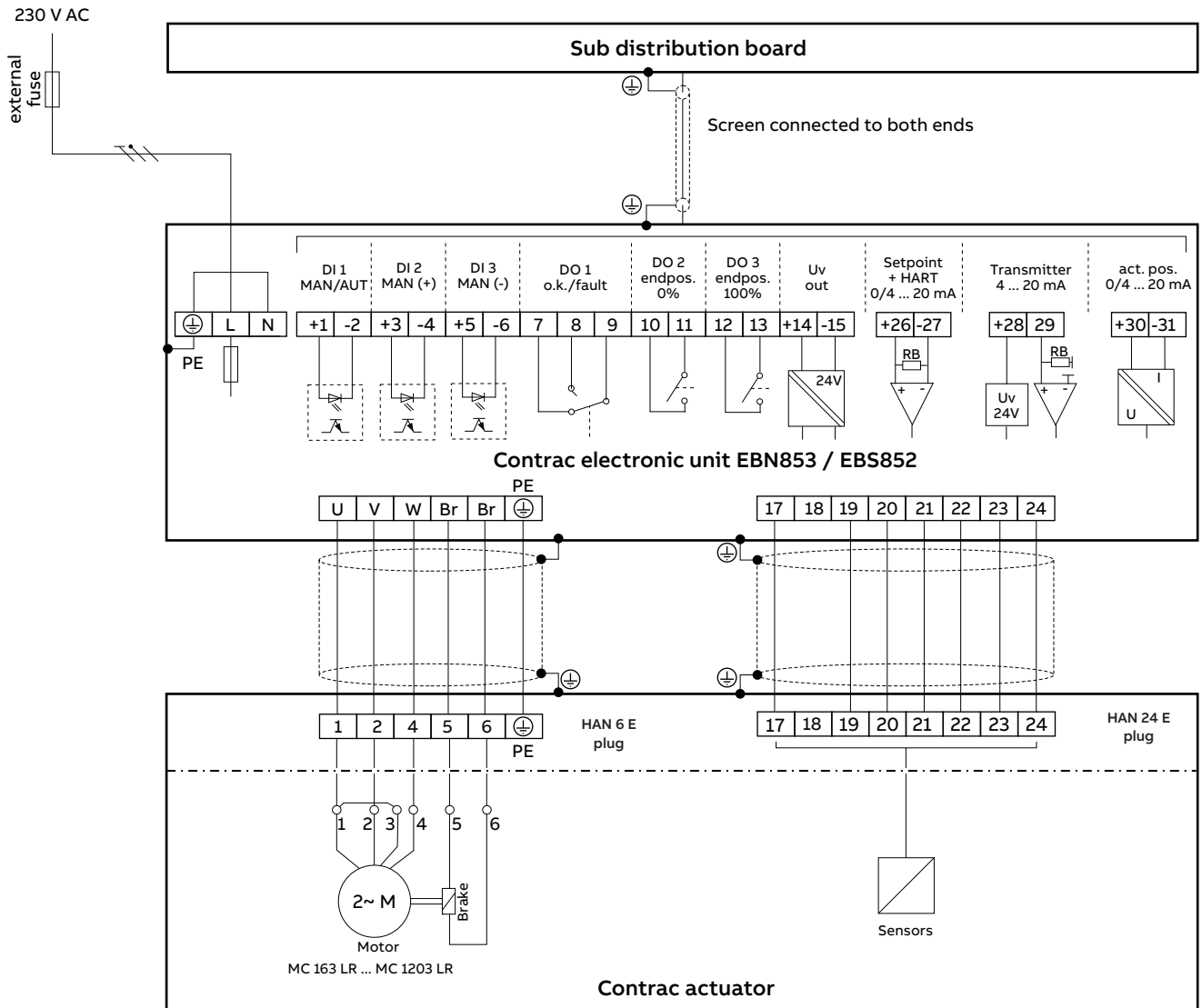


Figure 8: Example with 2 coupler connectors HAN 6 E / HAN 24 E on the actuator

## Ordering Information

### Electronics for field-mounting EBN853 (IP 66)

#### Linear actuators

For linear actuator	Rated force	Rated operating speed	Actuator travel	Type before conversion	Ordering number	Code
RSB 10-1,3/100	10 kN	1,3 mm/s	100 mm	RS 10-1,3	V68853	2061
RSB 10-1,3/300	10 kN	1,3 mm/s	300 mm		V68853	9161
RSB 10-3,0/100	10 kN	3,0 mm/s	100 mm	RS 10-3,0	V68853	2062
RSB 10-3,0/300	10 kN	3,0 mm/s	300 mm		V68853	9162
RSB 10-5,0/100	10 kN	5,0 mm/s	100 mm	RS 10-5,0	V68853	2063
RSB 10-5,0/300	10 kN	5,0 mm/s	300 mm		V68853	9163
RSB 20-0,6/100	20 kN	0,6 mm/s	100 mm	RS 20-0,6	V68853	2064
RSB 20-0,6/300	20 kN	0,6 mm/s	300 mm		V68853	9164
RSB 20-1,5/100	20 kN	1,5 mm/s	100 mm	RS 20-1,5	V68853	2065
RSB 20-1,5/300	20 kN	1,5 mm/s	300 mm		V68853	9165
RSB 20-2,5/100	20 kN	2,5 mm/s	100 mm	RS 20-2,5	V68853	2066
RSB 20-2,5/300	20 kN	2,5 mm/s	300 mm		V68853	9166
RSB 20-4,0/100	20 kN	4,0 mm/s	100 mm	RS 20-4,0	V68853	2067
RSB 20-4,0/300	20 kN	4,0 mm/s	300 mm		V68853	9167
RSB 50-1,5/120	50 kN	1,5 mm/s	120 mm	RS 50-1,5	V68853	3071
RSB 50-1,5/300	50 kN	1,5 mm/s	300 mm		V68853	9171
RSB 100-0,8/150	100 kN	0,8 mm/s	150 mm	RS 100-0,8	V68853	2182
RSB 100-0,8/300	100 kN	0,8 mm/s	300 mm		V68853	9181
RSB 100-1,5/150	100 kN	1,5 mm/s	150 mm	RS 100-1,5	V68853	2182
RSB 100-1,5/300	100 kN	1,5 mm/s	300 mm		V68853	9182
RSB 200-0,7/180	200 kN	0,7 mm/s	180 mm	RS 200-0,7	V68853	5491
RSB 200-0,7/300	200 kN	0,7 mm/s	300 mm		V68853	9191

## ... Ordering Information

### Electronics for field-mounting EBN853 (IP 66)

#### Rotary actuators

For rotary actuator	Nominal torque	Rated operating speed	Type before conversion	Ordering number	Code
RHC 12-10	120 Nm	9,0°/s (10 s/90°)	RST 12-10 RH 12-10	V68853	0535
RHC 25-10	250 Nm	9,0°/s (10 s/90°)	RST 25-10 RH 25-10	V68853	0536
RHC 25-30	250 Nm	3,0°/s (30 s/90°)	RST 25-30 RH 25-30	V68853	0537
RHC 40-10	400 Nm	9,0°/s (10 s/90°)	RST 40-10 RH 40-10	V68853	0538
RHC 60-10	600 Nm	9,0°/s (10 s/90°)	RST 60-10 RH 60-10	V68853	0539
RHC 60-30	600 Nm	3,0°/s (30 s/90°)	RST 60-30 RH 60-30	V68853	0540
RHC 60-60	600 Nm	1,5°/s (60 s/90°)	RST 60-60 RH 60-60	V68853	0541
RHC 125-10	1250 Nm	9,0°/s (10 s/90°)	RST 125-10 RH 125-10	V68853	0542
RHC 125-30	1250 Nm	3,0°/s (30 s/90°)	RST 125-30 RH 125-30	V68853	0543
RHC 125-60	1250 Nm	1,5°/s (60 s/90°)	RST 125-60 RH 125-60	V68853	0544
RHC 200-30	2000 Nm	3,0°/s (30 s/90°)	RST 200-30 RH 200-30	V68853	0545
RHC 250-60	2000 Nm	1,5°/s (60 s/90°)	RST 250-60 RH 250-60	V68853	0546
RHC 400-30	4000 Nm	3,0°/s (30 s/90°)	RST 400-30 RH 400-30	V68853	0547
RHC 400-60	4000 Nm	1,5°/s (60 s/90°)	RST 400-60 RH 400-60	V68853	0548
RHC 800-60	8000 Nm	1,5°/s (60 s/90°)	RST 800-60 RH 800-60	V68853	0549

For rotary actuator	Nominal torque	Rated operating speed	Ordering number	Code
RHB 250-10	250 Nm	9,0°/s (10 s/90°)	V68853	0101
RHB 250-30		3,0°/S (30 s/90°)	V68853	0102
RHB 500-10	500 Nm	9,0°/s (10 s/90°)	V68853	0111
RHB 500-30		1,5°/S (60 s/90°)	V68853	0112
RHB 800-15	800 Nm	6,0°/S (15 s/90°)	V68853	0113
RHB 800-35		2,5°/S (35 s/90°)	V68853	0114
RHB 1250-12	1250 Nm	7,5°/S (12 s/90°)	V68853	0121
RHB 1250-35		2,5°/S (35 s/90°)	V68853	0122
RHB 1250-60		12,5°/S (60 s/90°)	V68853	0123
RHB 2500-25	2500 Nm	3,6°/S (25 s/90°)	V68853	0124
RHB 2500-45		2,0°/S (45 s/90°)	V68853	0125
RHB 2500-70		1,3°/S (70 s/90°)	V68853	0126
RHB 4000-40	4000 Nm	2,25°/S (40 s/90°)	V68853	0131
RHB 4000-70		1,25°/S (70 s/90°)	V68853	0132
RHB 8000-80	8000 Nm	1,12°/S (80 s/90°)	V68853	0133

## ... Ordering Information

### Characteristics of the electronics for field-mounting EBN853 (IP 66)

Characteristics of the electronics	Selection of at least one characteristic required	Code
Supply voltage	AC 230 V 1 PH	380
	AC 115 V 1 Ph	381
Frequency	50 Hz,	382
	60 Hz,	383
Digital communication	RS 232	384
	RS 232 + HART®	385
	PROFIBUS DP®	386
	PROFIBUS DPV®1	387
Electric connection to the actuator	without cable (plug or terminal block on the actuator)	335
	with 5 m cable and 24-pin plug	690
	with 10 m cable and 24-pin plug	691
	with 20 m cable and 24-pin plug	692
Standard setting of the electronics (see specifications)		390
Customer-specific adjustment of the electronics (see data sheet 10/68-2.40)		391
Additional characteristics of the electronics (selection not absolutely required)		
Electrical connection thread	NPT adapter set (metric / NPT thread)	680
	PG adapter set (metric / PG thread)	681
Actuator heating "ON"		359
Name plate marking	(alphanumeric, max. 32 characters)	295
	Name plate with US units	253
F. no. of the related actuator on the electronics name plate		297
Declaration of compliance (2.1) to EN 10204		291
Inspection certificate B in accordance with EN 10202		292
Usage instructions (provide total quantity)		
German (no entry for 1 piece)		Z1D
English (code no. always required)		Z1E



## Electronics for rack mounting EBS852 (IP 20)

### Linear actuators

For linear actuator	Rated force	Rated operating speed	Actuator travel	Type before conversion	Ordering number	Code
RSB 10-1,3/100	10 kN	1,3 mm/s	100 mm		V68852	2061
RSB 10-1,3/300	10 kN	1,3 mm/s	300 mm		V68852	9161
RSB 10-3,0/100	10 kN	3,0 mm/s	100 mm		V68852	2062
RSB 10-3,0/300	10 kN	3,0 mm/s	300 mm		V68852	9162
RSB 10-5,0/100	10 kN	5,0 mm/s	100 mm		V68852	2063
RSB 10-5,0/300	10 kN	5,0 mm/s	300 mm		V68852	9163
RSB 20-0,6/100	20 kN	0,6 mm/s	100 mm		V68852	2064
RSB 20-0,6/300	20 kN	0,6 mm/s	300 mm		V68852	9164
RSB 20-1,5/100	20 kN	1,5 mm/s	100 mm		V68852	2065
RSB 20-1,5/300	20 kN	1,5 mm/s	300 mm		V68852	9165
RSB 20-2,5/100	20 kN	2,5 mm/s	100 mm		V68852	2066
RSB 20-2,5/300	20 kN	2,5 mm/s	300 mm		V68852	9166
RSB 20-4,0/100	20 kN	4,0 mm/s	100 mm		V68852	2067
RSB 20-4,0/300	20 kN	4,0 mm/s	300 mm		V68852	9167
RSB 50-1,5/120	50 kN	1,5 mm/s	120 mm		V68852	3071
RSB 50-1,5/300	50 kN	1,5 mm/s	300 mm		V68852	9171
RSB 100-0,8/150	100 kN	0,8 mm/s	150 mm		V68852	2181
RSB 100-0,8/300	100 kN	0,8 mm/s	300 mm		V68852	9181
RSB 100-1,5/150	100 kN	1,5 mm/s	150 mm		V68852	2182
RSB 100-1,5/300	100 kN	1,5 mm/s	300 mm		V68852	9182
RSB 200-0,7/180	200 kN	0,7 mm/s	180 mm		V68852	5491
RSB 200-0,7/300	200 kN	0,7 mm/s	300 mm		V68852	9191

## ... Ordering Information

### Electronics for rack mounting EBS852 (IP 20)

#### Rotary actuators

For rotary actuator	Nominal torque	Rated operating speed	Type before conversion	Ordering number	Code
RHC 12-10	120 Nm	9,0°/s (10 s/90°)	RST 12-10 RH 12-10	V68852	0535
RHC 25-10	250 Nm	9,0°/s (10 s/90°)	RST 25-10 RH 25-10	V68852	0536
RHC 25-30	250 Nm	3,0°/s (30 s/90°)	RST 25-30 RH 25-30	V68852	0537
RHC 40-10	400 Nm	9,0°/s (10 s/90°)	RST 40-10 RH 40-10	V68852	0538
RHC 60-10	600 Nm	9,0°/s (10 s/90°)	RST 60-10 RH 60-10	V68852	0539
RHC 60-30	600 Nm	3,0°/s (30 s/90°)	RST 60-30 RH 60-30	V68852	0540
RHC 60-60	600 Nm	1,5°/s (60 s/90°)	RST 60-60 RH 60-60	V68852	0541
RHC 125-10	1250 Nm	9,0°/s (10 s/90°)	RST 125-10 RH 125-10	V68852	0542
RHC 125-30	1250 Nm	3,0°/s (30 s/90°)	RST 125-30 RH 125-30	V68852	0543
RHC 125-60	1250 Nm	1,5°/s (60 s/90°)	RST 125-60 RH 125-60	V68852	0544
RHC 200-30	2000 Nm	3,0°/s (30 s/90°)	RST 200-30 RH 200-30	V68852	0545
RHC 250-60	2000 Nm	1,5°/s (60 s/90°)	RST 250-60 RH 250-60	V68852	0546
RHC 400-30	4000 Nm	3,0°/s (30 s/90°)	RST 400-30 RH 400-30	V68852	0547
RHC 400-60	4000 Nm	1,5°/s (60 s/90°)	RST 400-60 RH 400-60	V68852	0548
RHC 800-60	8000 Nm	1,5°/s (60 s/90°)	RST 800-60 RH 800-60	V68852	0549

For rotary actuator	Nominal torque	Rated operating speed	Ordering number	Code
RHB 250-10	250 Nm	9,0°/s (10 s/90°)	V68852	0101
RHB 250-30		3,0°/S (30 s/90°)	V68852	0102
RHB 500-10	500 Nm	9,0°/s (10 s/90°)	V68852	0111
RHB 500-30		1,5°/S (60 s/90°)	V68852	0112
RHB 800-15	800 Nm	6,0°/S (15 s/90°)	V68852	0113
RHB 800-35		2,5°/S (35 s/90°)	V68852	0114
RHB 1250-12	1250 Nm	7,5°/S (12 s/90°)	V68852	0121
RHB 1250-35		2,5°/S (35 s/90°)	V68852	0122
RHB 1250-60		12,5°/S (60 s/90°)	V68852	0123
RHB 2500-25	2500 Nm	3,6°/S (25 s/90°)	V68852	0124
RHB 2500-45		2,0°/S (45 s/90°)	V68852	0125
RHB 2500-70		1,3°/S (70 s/90°)	V68852	0126
RHB 4000-40	4000 Nm	2,25°/S (40 s/90°)	V68852	0131
RHB 4000-70		1,25°/S (70 s/90°)	V68852	0132
RHB 8000-80	8000 Nm	1,12°/S (80 s/90°)	V68852	0133

### Characteristics of the electronics for rack mounting EBS852 (IP 20)

Characteristics of the electronics	Selection of at least one characteristic required	Code
Supply voltage	AC 230 V 1 PH	380
	AC 115 V 1 Ph	381
Frequency	50 Hz,	382
	60 Hz,	383
Digital communication	RS 232	384
	RS 232 + HART®	385
Electric connection to the actuator	without cable (plug or terminal block on the actuator)	335
Standard setting of the electronics (see specifications)		390
Customer-specific adjustment of the electronics (see data sheet 10/68-2.40)		391
Additional characteristics of the electronics (selection not absolutely required)		
Actuator heating "ON"		359
Name plate marking	(alphanumeric, max. 32 characters)	295
	Name plate with US units	253
F. no. of the related actuator on the electronics name plate		297
Declaration of compliance (2.1) to EN 10204		291
Inspection certificate B in accordance with EN 10202		292
Usage Instructions (provide total quantity)		
German (no entry for 1 piece)		Z1D
English (code no. always required)		Z1E

## ... Ordering Information

### Accessories

	<b>Order no.</b>
Position sensor type SP 1	8689123
Series resistor mounting kit	764725
MCS 90 BA Motor with special flange and shaft like M 2403 Replacement for M 2403 L/LT	9101215
MC 163 LR Motor with sprocket for RHB 250-30 Replacement for M 063 B	789 473
MC 163 LR Motor with sprocket for RHB 10-1.3 Replacement for M 063 B	789 485
Gear for position sensor in linear actuators	
for RS 10-... Stroke to 100 mm	774 217
for RS 10-... Stroke to 300 mm	774 218
for RS 20-... Stroke to 100 mm	774 217
for RS 20-... Stroke to 300 mm	774 218
for RS 50-... Stroke to 120 mm	774 221
for RS 50-... Stroke to 300 mm	774 222
for RS 100-... Stroke to 150 mm	767 662
for RS 100-... Stroke to 300 mm	786 302
for RS 200-... Stroke to 180 mm	786 460

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## Notes

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## Notes

Sales



Service





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