

# STA / STAC

STA / STAW Sectional door drives for spring-balanced doors

STAC / STAWC Sectional door drives for spring-balanced doors with integrated control unit

The STA / STAW and STAC / STAWC series of drives are optimally designed for spring-balanced sectional doors. This guarantees a drive that is developed especially for this particular application, with a special motor to supply a great deal of power in the smallest space. The drive is therefore extremely compact and its housing very slim.

External or integrated controls: All drives in the STA / STAW series work on the basis of external controls, whereas the drives in the STAC / STAWC have integrated controls. We have the flexibility to quickly realise custom solutions for individual customer requirements at any time.

## Characteristics

- 01 2 versions available  
STA / STAW external control  
STAC / STAWC integrated control

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- 02 Pressure cast aluminium housing

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- 03 Rolled worm shaft

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- 04 Double worm shaft bearings

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- 05 Standard 25.4 mm sleeve shaft.  
Special sleeve shaft on request.

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- 06 Emergency operation via emergency hand crank (KU), emergency hand chain (KE), emergency unlocking device (E) or emergency unlocking device with spring reset (E-FR)

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- 07 Straightforward conversion from crank to chain

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- 08 Maintenance unlocking optional

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- 09 End position setting via electronic absolute encoder or mechanical limit switch

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- 10 Thermal protection in the motor windings

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- 11 Higher motor duty cycle available. Designation by the addendum **HD**

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- 12 Supply 230 / 400V / 50Hz / 3~ STA / STAC  
or 230V / 50 Hz / 1~ STAW / STAWC  
(custom solutions on request)

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- 13 Plug-in connections

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- 14 Version with external or integrated control, for combination with an extensive control programme  
**Supply:** 230 / 400V / 3~, 230V / 1~  
**Frequency:** 50 / 60 Hz  
**Control voltage:** 24V-DC  
(Section 10 "Controls")

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- 15 Frequency converter control optional (STA only). Increasing the drive motor speed (operation with frequency converter) reduces the drive torque. The following applies in this case: Increasing the drive motor speed by 10% reduces the drive torque by 5%.  
Version FU-I with integrated frequency converter  
Version FU-E with external frequency converter

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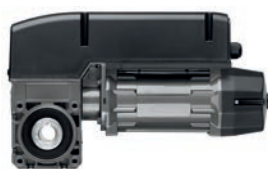
- 16 Custom versions, such as different voltages and frequencies, higher protection classes and sleeve shaft diameters on request.

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- 17 ATEX versions  
(Section 6 "Drives for use in explosion protected rooms")



STA / STAW



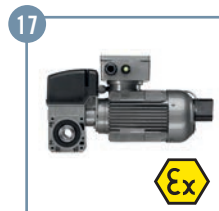
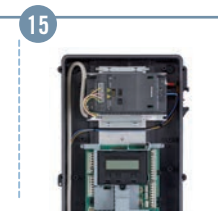
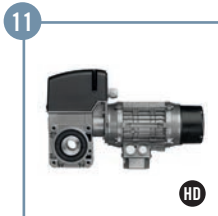
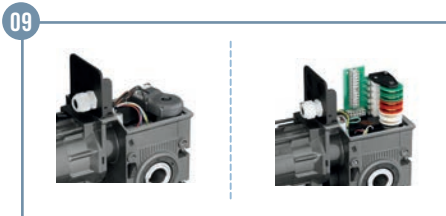
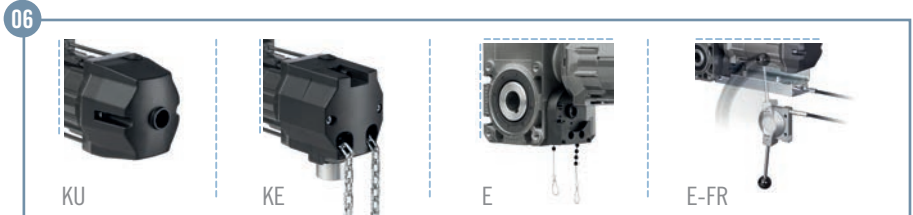
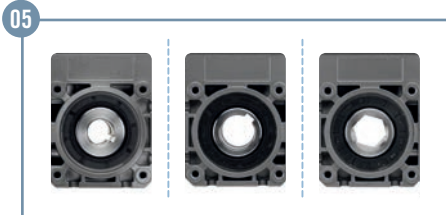
STAC / STAWC

SECTIONAL DOOR DRIVES

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Sectional door drives



# DOOR SIZE

Selecting the right sectional door drive

Sectional door drives

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Drives for doors with spring balance

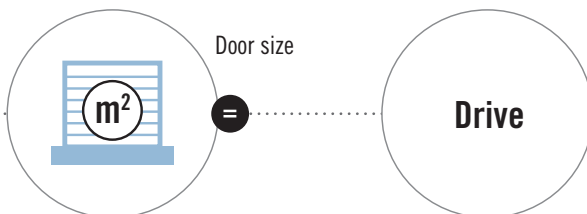
## Door size in m<sup>2</sup>

	18	20	30	45	50
STA / STAC 1-13-15	—	—	—	X	—
STA / STAC 1-11-19	—	—	X	—	—
STA / STAC 1-12-19	—	—	—	X	—
STA / STAC 1-14-19	—	—	—	—	X
STA / STAC 1-5-24	X	—	—	—	—
STA / STAC 1-10-24	—	—	X	—	—
STA / STAC 1-11-24	—	—	—	X	—
STA / STAC 1-10-30	—	—	—	X	—
STA / STAC 1-8-45	—	—	X	—	—
STA / STAC 1-13-15 HD	—	—	—	—	X
STA / STAC 1-12-19 HD	—	—	—	—	X
STA / STAC 1-11-24 HD	—	—	—	—	X
STA / STAC 1-10-30 HD	—	—	—	—	X
STAW / STAWC 1-7-19	—	X	—	—	—
STAW / STAWC 1-6-24	—	X	—	—	—

The values in the table take into account a weight of 13 kg/m<sup>2</sup> and presume an exact spring balance.

In certain situations, the friction can be greater and this must be considered when calculating the values. A drive with a higher duty cycle (HD) should be chosen for door systems with above-average switching cycles.

Straightforward drive selection



# TECHNICAL DATA

## Sectional door drives for spring-balanced doors

### STA / STAC

		STA 1-13-15 STAC 1-13-15	STA 1-11-19 STAC 1-11-19	STA 1-12-19 STAC 1-12-19	STA 1-14-19 STAC 1-14-19
Drive torque	Nm	130	110	120	140
Drive motor speed	min <sup>-1</sup>	15	19	19	19
Static holding torque	Nm	600	600	600	600
Motor output	kW	0,55	0,37	0,55	0,65
Operating voltage	V	230 / 400 / 3~	230 / 400 / 3~	230 / 400 / 3~	230 / 400 / 3~
Mains frequency	Hz	50	50	50	50
Control voltage	V	24	24	24	24
Motor current rating	A	3,1 / 1,8	3,5 / 2,0	4,1 / 2,4	3,5 / 2,0
Max. cycles per hour *		20	20	20	20
Fuse protection, on site (mains operation)	A	10,0	10,0	10,0	10,0
IP protection class		54	54	54	54
Temperature range **	°C	-20 / +60	-20 / +60	-20 / +60	-20 / +60
Continuous sound pressure level	dB (A)	< 70	< 70	< 70	< 70
Unit weight (approx.)	kg	15	15	15	15
Maximum output revolutions		20	20	20	20
A / height KU / KE / E / E-FR	mm	.....	245 / 245 / 245 / 256	.....	245 / 245 / 245 / 256
B / width KU / KE / E / E-FR	mm	.....	104 / 104 / 104 / 116	.....	104 / 104 / 104 / 116
C / length KU / KE / E / E-FR	mm	.....	399 / 409 / 369 / 369	.....	419 / 429 / 389 / 369
A1	mm	55	55	55	55
C1	mm	55	55	55	55
Ø - Sleeve shaft diameter (standard)	mm	25,4	25,4	25,4	25,4

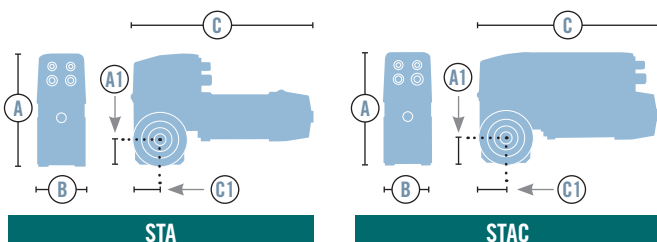
**HD** Drives with the addendum HD have a higher duty cycle.

\* One cycle corresponds to two door movements (opening and closing).

The specified values refer to 10 revolutions of the drive shaft per movement and presume an even distribution.

\*\* Temperature range < -20°C: oil grade and electric heating on request.

Detailed drawings with all dimensions are available for download under [www.mfz-antriebe.de](http://www.mfz-antriebe.de).



# TECHNICAL DATA

Sectional door drives for spring-balanced doors

## STA / STAC

		STA 1-5-24 STAC 1-5-24	STA 1-10-24 STAC 1-10-24	STA 1-11-24 STAC 1-11-24	STA 1-10-30 STAC 1-10-30	STA 1-8-45 STAC 1-8-45
Drive torque	Nm	50	100	110	100	80
Drive motor speed	min <sup>-1</sup>	24	24	24	30	45
Static holding torque	Nm	600	600	600	600	600
Motor output	kW	0,25	0,37	0,55	0,55	0,55
Operating voltage	V	230 / 400 / 3~	230 / 400 / 3~	230 / 400 / 3~	230 / 400 / 3~	230 / 400 / 3~
Mains frequency	Hz	50	50	50	50	50
Control voltage	V	24	24	24	24	24
Motor current rating	A	2,3 / 1,3	3,5 / 2,0	4,1 / 2,4	3,5 / 2,0	3,0 / 1,7
Max. cycles per hour *		20	20	20	20	20
Fuse protection, on site (mains operation)	A	10,0	10,0	10,0	10,0	10,0
IP protection class		54	54	54	54	54
Temperature range **	°C	-20 / +60	-20 / +60	-20 / +60	-20 / +60	-20 / +60
Continuous sound pressure level	dB (A)	< 70	< 70	< 70	< 70	< 70
Unit weight (approx.)	kg	15	15	15	15	15
Maximum output revolutions		20	20	20	20	20
A / height KU / KE / E / E-FR	mm	245 / 245 / 245 / 256	245 / 245 / 245 / 256	245 / 245 / 245 / 256	245 / 245 / 245 / 256	245 / 245 / 245 / 256
B / width KU / KE / E / E-FR	mm	104 / 104 / 104 / 116	104 / 104 / 104 / 116	104 / 104 / 104 / 116	104 / 104 / 104 / 116	104 / 104 / 104 / 116
C / length KU / KE / E / E-FR	mm	369 / 379 / 339 / 339	369 / 379 / 339 / 339	369 / 379 / 339 / 339	369 / 379 / 339 / 339	369 / 379 / 339 / 339
A1	mm	55	55	55	55	55
C1	mm	55	55	55	55	55
Ø - Sleeve shaft diameter (standard)	mm	25,4	25,4	25,4	25,4	25,4

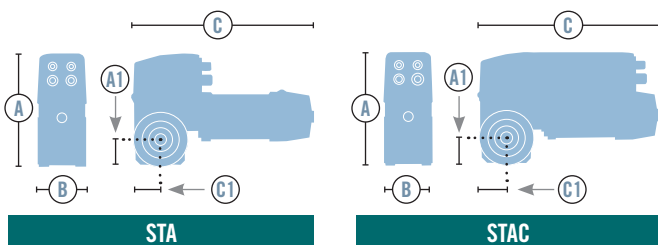
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STA HD

STAW / STAWC

		STA HD				STAW / STAWC	
		STA 1-13-15 HD	STA 1-12-19 HD	STA 1-11-24 HD	STA 1-10-30 HD	STAW 1-7-19 STAWC 1-7-19	STAW 1-6-24 STAWC 1-6-24
Drive torque	Nm	130	120	110	100	70	60
Drive motor speed	min <sup>-1</sup>	15	19	24	30	19	24
Static holding torque	Nm	600	600	600	600	600	600
Motor output	kW	0,55	0,55	0,55	0,55	0,37	0,37
Operating voltage	V	230 / 400 / 3~	230 / 400 / 3~	230 / 400 / 3~	230 / 400 / 3~	230 / 1~	230 / 1~
Mains frequency	Hz	50	50	50	50	50	50
Control voltage	V	24	24	24	24	24	24
Motor current rating	A	3,1 / 1,8	3,0 / 1,7	3,0 / 1,7	3,0 / 1,7	6,2	6,2
Max. cycles per hour *		30	30	30	30	8	8
Fuse protection, on site (mains operation)	A	10	10	10	10	10	10
IP protection class		54	54	54	54	54	54
Temperature range **	°C	-20 / +60	-20 / +60	-20 / +60	-20 / +60	-20 / +60	-20 / +60
Continuous sound pressure level	dB (A)	< 70	< 70	< 70	< 70	< 70	< 70
Unit weight (approx.)	kg	23	23	23	23	23	23
Maximum output revolutions		20	20	20	20	20	20
A / height KU / KE / E / E-FR	mm	245 / 245 / 245 / 256				245 / 245 / 245 / 256	
B / width KU / KE / E / E-FR	mm	136 / 191 / 136 / 136				104 / 104 / 104 / 116	
C / length KU / KE / E / E-FR	mm	396 / 438 / 336 / 336				399 / 409 / 369 / 369	
A1	mm	55	55	55	55	55	55
C1	mm	55	55	55	55	55	55
∅ - Sleeve shaft diameter (standard)	mm	25,4	25,4	25,4	25,4	25,4	25,4

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