

# ZAtop Gearless elevator machine

## SM315



Synchronous motor actuated by permanent magnets and according to the provisions of the Lift Directive 2014/33/EU

### Drive

- NdFeB magnets
- For fast elevators of up to 4 m/s
- Insulation class F with temperature monitoring

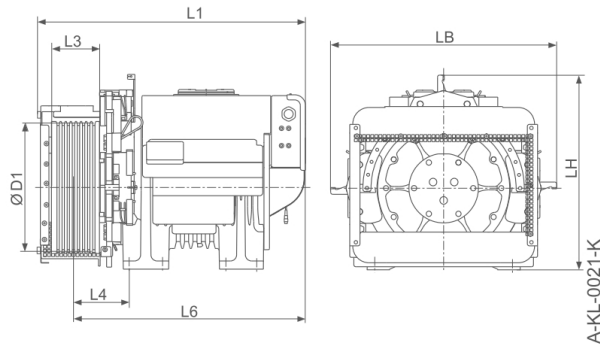
### Brake system

- Safety component in accordance with Lift Directive 2014/33/EU
- Separately activated brake circuits
- Deployable as an element of the ascending car overspeed protection means
- Deployable as part of the protection against unintended car movement

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Deflection pulleys	Page 68
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## Technical data

SM315.100A



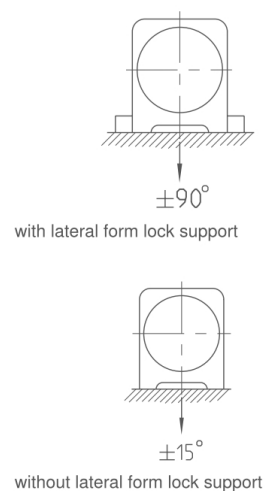
Motor type	Nominal torque Nm	Max. axle load kg	Nominal speed rpm	Rated output power kW	L1 mm	LH mm	L4 mm	L6 mm	LB mm	D1 mm	L3 mm	Weight kg
SM315.100A	5000	13000	40 - 156	20.9 - 81.7	1315	954	260	1129	1108	520	230	1884
										640		1938



## Scope of delivery and options

SM315	Standard	Options
Motor	Gearless elevator machine	-
Traction sheave	See D1	-
Brake	Certified brake system	Mechanical hand release system prepared for bowden cable
Brake monitoring	Inductive proximity switches	-
Motor cable	-	10 m, 15 m, 20 m, 25 m halogen free
Absolute encoder	EnDat	BiSS-C / SSI
Rope guard	2 pieces	-
Protection at traction sheave	Traction sheave cover	-
Temperature monitoring	PT100-thermistor	-
Cooling	Surface cooling	Forced ventilation

## Resulting rope force



## Example configurations

Other configurations, also outside of the examples listed below, are possible.

Our calculation software ZAlift is available to you for fast and convenient calculation of your elevator machine.

Suspension	Payload	Speed	Traction sheave	Motor type	Number of ropes	Rope diameter	Motor power	Rated current
	kg	m/s	mm			mm	kW	A
1:1	2500	1.0	640	SM315.100A-30	7	13	20.9	60
	3000	1.0	520	SM315.100A-30	10	13	20.9	60
2:1	5000	2.5	640	SM315.100A-30	7	16	81.7	200
		2.0	520	SM315.100A-30	9	13	81.7	200
		1.6	640	SM315.100A-30	9	13	54.5	133
4:1	10000	1.0	640	SM315.100A-30	8	13	62.8	150
		1.0	520	SM315.100A-30	10	13	81.7	200

Information

ZAtop

ZAtopx

ZAsyn

ZAdisc

ZAtop AM

System components  
motorsControl  
technologySystem components  
control  
technology

Appendix