

ZAtop gearless elevator machine

SM180



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

Elevator machine

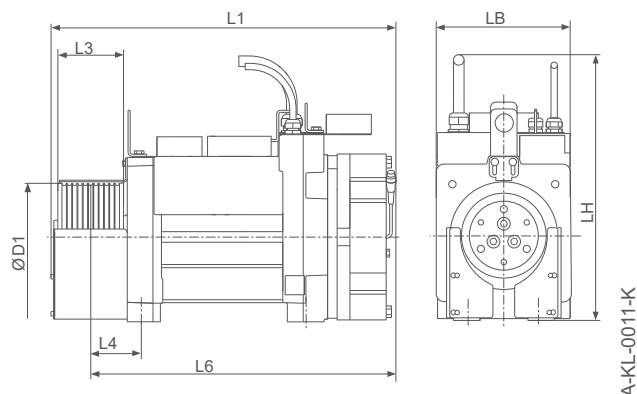
- NdFeB magnets
- Structural width ≤ 255 mm for the narrowest shaft dimensions
- Noise emissions: < 50 dB(A)
- Insulation class F with temperature monitoring

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

Technical data

SM180



Deflection pulleys	Page 70
Forced ventilation	Page 73
ZAlift	Page 76
Motor cables	Page 111

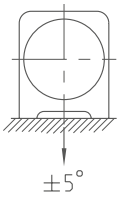
Motor type	Nominal torque Nm	Max. axle load kg	Nominal speed rpm	Rated output power kW	L1 mm	LH mm	L4 mm	L6 mm	LB mm	D1 mm	L3 mm	Weight kg
SM180.24C	215	1500	162 - 384	3.6 - 8.6	500	500	77	428	255	120	68	147
										160	68	152
					493					200	68	155
											76	156
										240	76	162
SM180.35C	295	1850		5.0 - 11.9	566		83	490		120	76	173
										160	76	178
					553					200	76	182
											88	183
										240	76	188
											90	190
SM180.45C	385	2500	162 - 306	6.5 - 12.3	633		101	558		200	106	209
											124	210
										240	106	217
											124	219
SM180.46C	445	2500		7.5 - 13.8						200	106	219
											124	220
										240	106	226
	430										124	229



Scope of delivery and options

SM180	Standard	Options
Motor	Gearless elevator machine	-
Traction sheave	See D1	-
Brake	Certified brake system	Mechanical hand release system with or without bowden cables
Brake monitoring	Microswitch	Inductive proximity switches
Motor cable	-	10 m, 15 m, 20 m, 25 m halogen free
Absolute encoder	EnDat	BiSS-C / SSI / SinCos / TTL
Rope guard	2 pieces	3. Rope guard
Temperature monitoring	PTC thermistor	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 kg	Speed m/s	Traction sheave mm	Motor type	Number of ropes	Rope diameter mm	Motor power kW	Rated current A
2:1	480	1.00	240	SM180.24C-14	7	6 - 6.7	3.6	10.0
	480	2.00	200	SM180.24C-14	7		8.6	22.0
	630	1.60	200	SM180.24C-14	7		6.9	17.0
	675	1.00	200	SM180.24C-14	7		4.3	11.0
	675	1.00	240	SM180.35C-14	8		5.0	13.0
	675	1.60	240	SM180.35C-14	8		8.0	19.0
	800	1.60	200	SM180.35C-14	8		9.5	21.0
	800	1.60	240	SM180.45C-14	11		10.4	27.0
	1000	1.00	240	SM180.45C-14	11		6.5	17.5
	1150	1.60	200	SM180.45C-14	11		12.3	30.0
	1250	1.60	240	SM180.46C-14	11		12.0	31.0
	1275	1.00	240	SM180.46C-14	11		7.5	20.0