

Application-specific motors

Energy storage devices

Technical specifications

General technical specifications

Type of motor IEC	IEC low-voltage motors SIMOTICS FD energy storage devices	
Frame sizes	315, 355	
Rated power	275 ... 670 kW	
Rated speed	2000 ... 1800 rpm	
Rated torque	1313 ... 3554 Nm	
Versions	Air-cooled, enclosed version • with forced ventilation (IC416) Water-cooled version • with water-jacket cooling (IC71W) Air-cooled, open version • with forced ventilation (IC06)	
Version in accordance with standards and specifications	• UL (order code D31) • CSA (order code D40) • Import to the Eurasian customs union (order code D47)	
Insulation of the stator winding in accordance with EN 60034-1 (IEC 60034-1)	Temperature class 180 (H) DURIGNIT IR 2000, IVIC-C premium insulation system	
Degree of protection in accordance with EN 60034-5 (IEC 60034-5)	As standard IP55/IP54: Air-cooled, enclosed version; water-cooled version (IP55 without rotary pulse encoder and with POG 10 rotary pulse encoder, IP54 with all other rotary pulse encoders) IP23: Air-cooled, open version	
Cooling in accordance with EN 60034-6 (IEC 60034-6)	• Force-ventilated motors 1LQ17 (IC416, radially mounted separately driven fan) • Water-cooled motors 1LH17 (IC71W) • Force-ventilated, open-circuit ventilated motors 1LP17 (IC06, radially mounted separately driven fan)	
Permissible coolant temperature and installation altitude	As standard Air-cooled motors: Coolant temperature -20 ... +40 °C, installation altitude up to 1000 m above sea level Water-cooled motors: Cooling water inlet temperature +5 ... +25 °C, installation altitude up to 1000 m above sea level	
Standard voltages in accordance with EN 60038 (IEC 60038)	• 480 V • Separately driven fan motor: 400 V, 50 Hz – order code Y81 for separately driven fan with special voltage	
Type of construction according to EN 60034-7 (IEC 60034-7)	IM B3 (foot-mounted design without flange)	
Paint finish Suitability of paint finish for climate group according to IEC 60721, Part 2-1	As standard: color RAL 7030 stone gray	
Vibration severity level according to EN 60034-14 (IEC 60034-14)	Level A (normal)	
Shaft extension according to DIN 748 (IEC 60072)	Energy storage devices are designed without shaft extension	
Sound pressure level according to EN ISO 1680 (tolerance +3 dB)	The relevant sound pressure level is listed in the selection and ordering data for the required motor. For boundary conditions see "Technical information" on page 2/7	
Weights	The relevant weight is listed in the selection and ordering data for the required motor.	
Modular mounting concept	• Prepared for mounting of rotary pulse encoder or brake. • Incremental encoder HTL 1024 POG 10 (Baumer-Hübner) • Incremental encoder HOG 10, HOG 11 (Baumer-Hübner)	
Options	See "Article No. supplements and special versions"	

Note:

The rated motor data is specified in the selection and ordering data for a rated pulse frequency of 2.5 kHz and space-vector modulation.