

Country Fact Sheet Motors

Switzerland



Regional Characteristics		
Voltage	3 ~ 400V ± 10% 1 ~ 230V ± 10%	
Frequency	50 Hz	
Approval Mark	CE Conformity	
Standard	EN IEC 60034	
Regulation	Low Voltage Directive 2014/35/EU ErP Directive 2009/125/EG RoHS Directive 2011/65/EU	
Scope	All machines and electronic devices which are affected by any EU Directive.	
Marking		
Energy Efficiency	Ecodesign Directive	
Regional Standard	Directive 2009/125/EC	
Regulation	EnV 730.02	
Mandatory Efficiency Class	IE2 from 0.12 kW IE3 from 0.75 kW	
Scope	- Rated output power from 0.12 up to 1000 kW - Rated voltage from 50 up to 1000 V - Rated frequency 50 and 60 Hz - 2-, 4-, 6- and 8-pole - For continuous duty operation	
Exemptions	- Motors with intermittent duty like S3 (duty factor < 80%) or S6 (duty factor < 80%) - Exclusively suitable for inverter operation - Motors with integrated variable speed drive as integral part of the motor - Motors for heavy environmental conditions like ambient temperature above +60°C or below -30°C, installation altitude above 4000m - Motors for heavy environmental conditions like ambient temperature above +60°C or below -30°C, installation altitude above 4000m - Pole-changeable motors - Motors placed on the market before 1st July 2029 as substitutes for identical motors integrated in products placed on the market before 1st July 2022, and specifically marketed as such - Motors that share common components with the driven unit and cannot operate as a motor if separated from it - Motors specifically designed and specified to operate wholly immersed in a liquid	
Marking	- IE-Class - Nominal efficiency (η) at 50%, 75% and 100 % load	
Solutions from Lenze		
Three-phase AC motors	0.12 ... 0.55 kW 0.75 ... 22.0 kW 30.0 ... 55.0 kW 0.55 ... 22.0 kW 0.47 ... 1.36 kW	m550-H IE2-high efficiency motors m550-P IE3-premium efficiency motors m540-P IE3-premium efficiency motors MF inverter-optimized AC motors m300 Lenze Smart Motors
Asynchronous servo motors	0.075 ... 0.6 kW 0.80 ... 53.8 kW 10.6 ... 60.2 kW	SDSGA asynchronous servo motors MCA asynchronous servo motors MQA asynchronous servo motors
Synchronous servo motor	2.00 ... 9.20 kW 0.25 ... 15.8 kW	m850 synchronous servo motors MCS synchronous servo motors

