

## **Country Fact Sheet Motors**

## **United Kingdom**



Regional Characteristics	
Voltage	3 ~ 400V ± 10% 1 ~ 230V ± 10%
Frequency	50 Hz
Approval Mark	UK Conformity Assessed (UKCA)
Standard	UKCA EN 60034
Regulation	Electrical Equipment Regulations 2016 (S.l. 2016/1101) Energy Information (Amendment) (EU Exit) Regulations 2019 RoHS Regulations 2012 (S.l. 2012/3032)
Scope	The UKCA marking is a UK product marking that is used for goods being placed on the market in Great Britain (England, Wales and Scotland). It covers goods which previously required the CE marking.
Marking	From January 1, 2025: UKCA Declaration and marking on enclosed documents From January 1, 2028: UKCA Mark on the product
<b>Energy Efficiency</b>	Ecodesign Directive
Regional Standard	Directive 2009/125/EC
Regulation	Energy Information (Amendment) (EU Exit) Regulations 2019
Mandatory Efficiency Class	IE2 from 0.12 kW IE3 from 0.75 kW
Scope	<ul> <li>Rated output power from 0.12 up to 1000 kW</li> <li>Rated voltage from 50 up to 1000 V</li> <li>Rated frequency 50 and 60 Hz</li> <li>2-, 4-, 6- and 8-pole</li> <li>For continuous duty operation</li> </ul>
Exemptions	<ul> <li>Intermittent duty like S3 or S6 (duty factor &lt;80%)</li> <li>Exclusively suitable for inverter operation</li> <li>Motors with integrated variable speed drive as integral part of the motor</li> <li>Motors for heavy environmental conditions like ambient temperature above +60°C or below -30°C, installation altitude above 4000m</li> <li>Pole-changeable motors</li> <li>Motors placed on the market before 1st July 2029 as substitutes for identical motors integrated in products placed on the market before 1st July 2021, and specifically marketed as such</li> <li>Motors that share common components with the driven unit and cannot operate as a motor if separated from it</li> <li>Motors specifically designed and specified to operate wholly immersed in a liquid</li> </ul>
Marking	– IE-Class – Nominal efficiency (η) at 50%, 75% and 100 % load
Solutions from Lenze	
Three-phase AC motors	0.12 0.55 kW m550-H IE2-high efficiency motors 0.75 22.0 kW m550-P IE3-premium efficiency motors 30.0 55.0 kW m540-P IE3-premium efficiency motors 0.55 22.0 kW MF inverter-optimized AC motors 0.47 1.36 kW m300 Lenze Smart Motors
Asynchronous servo motors	0.075 0.6 kW SDSGA asynchronous servo motors 0.80 53.8 kW MCA asynchronous servo motors 10.6 60.2 kW MQA asynchronous servo motors
Synchronous servo motor	2.00 9.20 kW m850 synchronous servo motors 0.25 15.8 kW MCS synchronous servo motors

