















International regulations for energy-efficient motors

World-wide there are various national regulations for the use of energy-efficient motors, which either are already in effect or are still under preparation. This table provides an overview of the regulations in various industrial nations worldwide.

The table below shows the temporal development, the various standard classifications, broken down by IE Class, and the relevant rating ranges. The Efficiency Classes are based on the internationally valid standard IEC 60034-30. Country-specific designations may diverge from this standard. The significant exceptions in the national standard compared to IEC 60034-30 have been stated.

Country	IE	kW	No. of poles	2011	2012	2013	2014	2015	2016	2017	from	to	Significant Exceptions
 European Union	1	0.75	375	2,4,6	Green	Red	Red	Red	Red	Red	...	15.06.2011	All non-S1 and S6 motors Converter-fed motors 2015/2017 IE2 motors with indication 'Use with VSD only' All ATEX 94/9/EG Motors designed for >+60 °C, <-30 °C, >4000 m Brake motors
	2	0.75	375	2,4,6	Green	Green	Green	Green	Red	Red	16.06.2011	31.12.2014	
		0.75	7.5	2,4,6					Green	Green	01.01.2015	31.12.2016	
	3	7.5	375	2,4,6					Green	Green	01.01.2015	31.12.2016	
		0.75	375	2,4,6							01.01.2017	...	
 Switzerland	analogous to European Union												
 Turkey	analogous to European Union (exception: motors designed for >+40 °C, <-15 °C, >1000 m)												
 USA	1	0.75	150	2,4,6	Red	Red	Red	Red	Red	Red	...	30.09.1997	All non-S1 motors Converter-fed motors Geared motors IE2 flange motors IE2 NEMA-Design C
	2	0.75	150	2,4,6	Red	Red	Red	Red	Red	Red	01.10.1997	19.12.2010	
		0.75	185	8	Green	Green	Green	Green	Green	Red	20.12.2010	31.05.2016	
		160	260	6	Green	Green	Green	Green	Green	Red	20.12.2010	31.05.2016	
	160	375	2,4	Green	Green	Green	Green	Green	Red	20.12.2010	31.05.2016		
	3	0.75	150	2,4,6	Green	Green	Green	Green	Green	Red	20.12.2010	31.05.2016	
		0.75	375	2,4						Green	01.06.2016	...	
		0.75	260	6						Green	01.06.2016	...	
0.75		185	8						Green	01.06.2016	...		
 Canada	1	0.75	150	2,4,6	Red	Red	Red	Red	Red	Red	...	30.09.1997	All non-S1 motors Converter-fed motors IE1 with Nema Design C stamp
	2	0.75	150	2,4,6	Green	Green	Red	Red	Red	Red	01.10.1997	11.04.2012	
		0.75	375	8			Green	Green	Green	Green	12.04.2012	...	
		160	375	2,4,6			Green	Green	Green	Green	12.04.2012	...	
	3	0.75	150	2,4,6			Green	Green	Green	Green	12.04.2012	...	
 China	1	0.55	315	2,4,6	Green	Red	Red	Red	Red	Red	01.06.2008	30.06.2011	All non-S1 motors Converter-fed motors Motors for 60 Hz only Unventilated motors Torque motors
	2	0.75	375	2,4,6			Green	Green	Green	Red	01.09.2012	31.08.2016	
	3	7.5	375	2,4,6						Green	01.09.2016	...	
		0.75	375	2,4,6						Green	01.09.2017	...	

Country	IE	kW	No. of poles	2011	2012	2013	2014	2015	2016	2017	from	to	Significant Exceptions	
 Australia	1	0.75	185	2,4,6,8	Red	Red	Red	Red	Red	Red	...	31.03.2006	S2-motors	
	2	0.75	185	2,4,6,8	Green	Green	Green	Green	Green	Green	01.04.2006	...	Converter-fed motors Geared motors	
	3												Underwater motors	
 New Zealand	1	0.75	185	2,4,6,8	Red	Red	Red	Red	Red	Red	...	31.05.2006	S2-motors	
	2	0.75	185	2,4,6,8	Green	Green	Green	Green	Green	Green	01.06.2006	...	Converter-fed motors Geared motors (motor flange part of the gear unit)	
	3													
 Brazil	1	0.75	110	8	Red	Red	Red	Red	Red	Red	...	07.12.2009	All non-S1 motors	
		0.75	150	6	Red	Red	Red	Red	Red	Red	...	07.12.2009	Converter-fed motors	
		0.75	185	2,4	Red	Red	Red	Red	Red	Red	...	07.12.2009	Explosion-protected motors in Category 2/EPL B	
	2	0.75	110	8	Green	Green	Green	Green	Green	Green	Green	08.12.2009	...	
		0.75	150	6	Green	Green	Green	Green	Green	Green	Green	08.12.2009	...	
		0.75	185	2,4	Green	Green	Green	Green	Green	Green	Green	08.12.2009	...	
 Chile	1	0.75	7.5	2,4,6	Green	Green	Green	Green	Green	Green	2011	...	Brake motors Converter-fed motors	
	2													
	3													
 Mexico	1	0.75	150	2,4,6,8	Red	Red	Red	Red	Red	Red	...	30.09.1997	All non-S1 motors	
	2	0.75	375	2,4,6,8	Red	Red	Red	Red	Red	Red	01.10.1997	19.12.2010		
	3	0.75	375	2,4,6	Green	Green	Green	Green	Green	Green	20.12.2010	...		
 Saudi Arabia	1	0.75	375	2,4,6				Red	Red	Red	...	30.06.2015	Converter-fed motors	
	2	0.75	375	2,4,6				Green	Green	Red	01.07.2015	31.12.2016	Brake motors Geared motors	
	3	0.75	375	2,4,6						Green	01.01.2017	...		
 South Africa	1	0.75	375	2,4,6	Green	Green	Green	Green			...		None known	
	2													
	3													
 South Korea	1	0.75	200	2,4,6,8	Red	Red	Red	Red	Red	Red	...	30.06.2010	S2-motors	
		45	200	2,4,6	Green	Green	Green	Green	Green	Red	Red	01.01.2008		Converter-fed motors (not pumps, fans, blowers)
	2	18.5	200	2,4,6,8	Green	Green	Green	Green	Red	Red	Red	01.01.2010	31.12.2015	Explosion protected motors
		0.75	200	2,4,6,8	Green	Green	Green	Green	Red	Red	Red	01.07.2010	31.12.2014	Unventilated motors
		37	200	2,4,6,8					Red	Red	Red	...	31.12.2014	
		15	200	2,4,6,8						Red	Red	...	31.12.2015	
		0.75	200	2,4,6,8							Red	...	31.12.2016	
		0.75	30	2,4,6,8					Green	Green	Green	01.01.2015		
		0.75	15	2,4,6,8						Green	Green	01.01.2016		
	3	37	200	2,4,6,8					Green	Green	Green	01.10.2015	...	
		200	375	2,4,6,8						Green	Green	01.10.2016	...	
0.75		37	2,4,6,8								planned for 2018	...		



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