

# euromotori



## Explosion proof motors **280-315L**

ATEX category II 2G, II 2GD; IEC Ex  
Ex db, Ex dbe, IIB, IIC, tb, IP66 (Z. 1-21)  
Power from 75 to 200 kW  
Reference Norms: IEC 60079-0, 1, 7, 31  
IEC 60034, IEC 60072 - IE3 Efficiency class  
**100% Made in Italy**



# Explosion proof motors **280-315L**

Euromotori is pleased to introduce the new motors frame size 280 and 315L, which are fully designed and manufactured in Italy.

Great attention to detail has been paid and innovative solutions like the newly designed terminal box rotation mode, make them products that are suitable for heavy use and when maximum reliability is needed.

The cutting edge basic features, and the long list of variants available, are able to satisfy the most demanding specifications.

## TECHNICAL FEATURES

- > High efficiency TEFC three-phase squirrel cage asynchronous motors.
- > Frame and terminal box IP55.
- > High volume terminal box, which allows easy connection of large cables (threaded holes up to 2xM90) and provides more room for auxiliaries.
- > Dimensions compliant with IEC 60072 standard.
- > Power supply: 400V/50Hz
- > Class F insulation.
- > PTC thermistors.
- > Anti-condensation heaters.
- > Terminal box can be rotated by 90° in 4 different positions.
- > Exclusive design thought to avoid cables pinching while being rotated.
- > Cable entries sizes marked with dedicated plates.
- > Internal anti-rust treatment and external epoxy polyester paint coating plus stainless steel nameplate and fasteners guarantee a proper corrosion protection.
- > Robust construction: frame, terminal box, end shields and flanges made of cast iron; thick sheet steel fan cover; solid casted feet.
- > Standard motors equipped with radial deep groove open ball bearings with greasing nipples.
- > Low friction dust seals.
- > Roller bearings for heavy loads.
- > Low maintenance requirements.
- > Groups IIB, IIC, IIIC.
- > Temperature Class T3, T4, T150°C, T135°C.
- > Protection IP55, IP56, IP65, IP66.
- > Power from 75 to 200 kW.
- > Three phase 1 or 2 speeds.
- > Pole 2, 4, 6 – 8 pole available in IE1.
- > Self-ventilated & with forced ventilation.



## MECHANICAL VARIANTS

Special flanges and shafts.  
Low temperature versions (up to -60°C).  
Locked bearings, roller bearings or special bearings; isolated bearings.  
SPM probe (vibrations measurement).  
Double-ended shafts.  
Condensation drain valves.  
Grade B balancing.  
Rain cap or sun shield.  
Water protection disc.  
Low noise fan.  
Execution without ventilation (IC410), for on deck installation.  
Auxiliary terminal box.

## ELECTRICAL VARIANTS

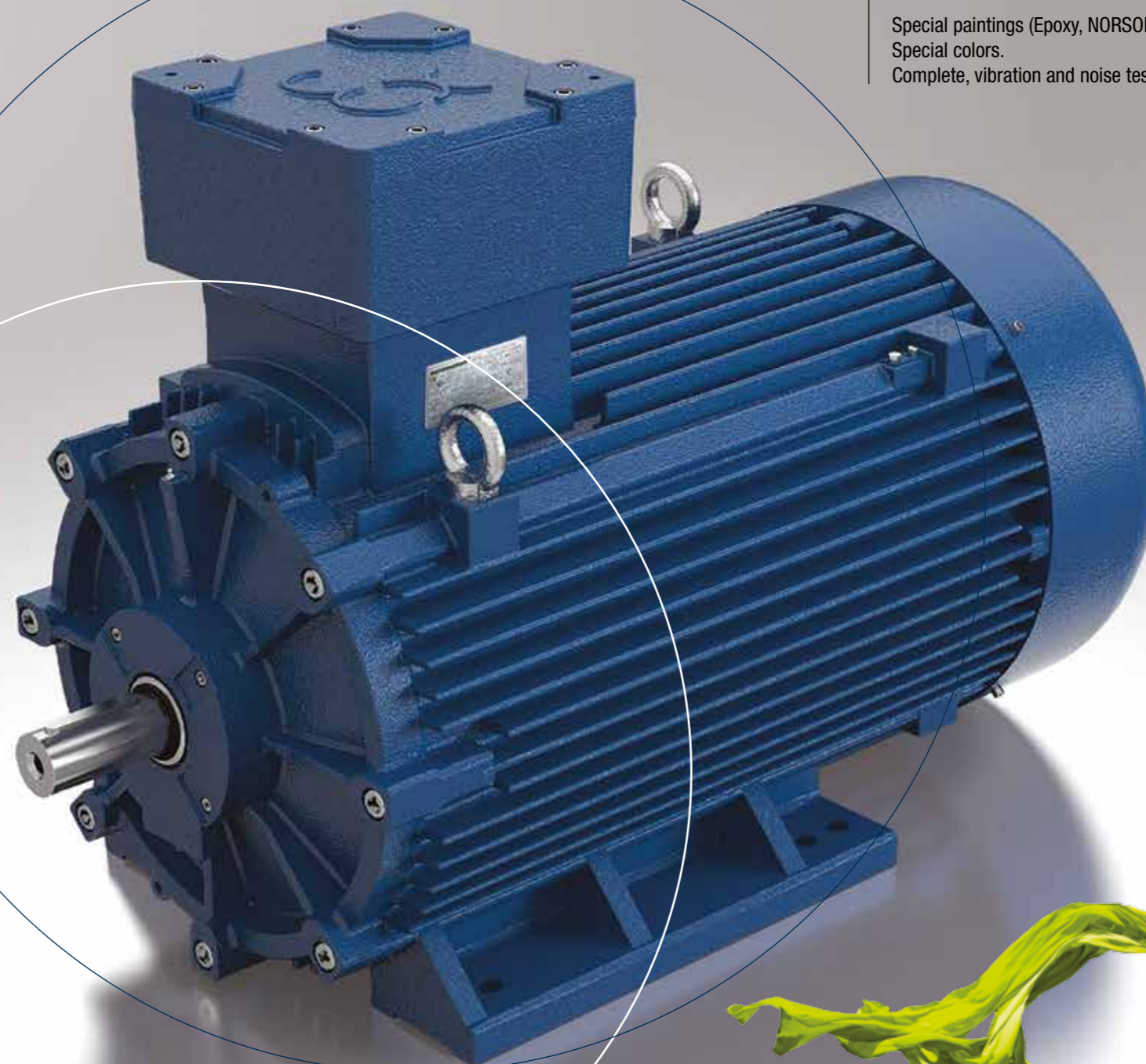
Special voltage and frequency.  
Bimetallic thermal protection (NO, NC), thermistors (PTC), RTD sensors (PT100).  
Three phase 2 speeds.  
Other polarities (Dahlander and separate windings).  
Motors for tropical climates, also for high temperatures.  
Electrical special designs.  
Class H insulation.

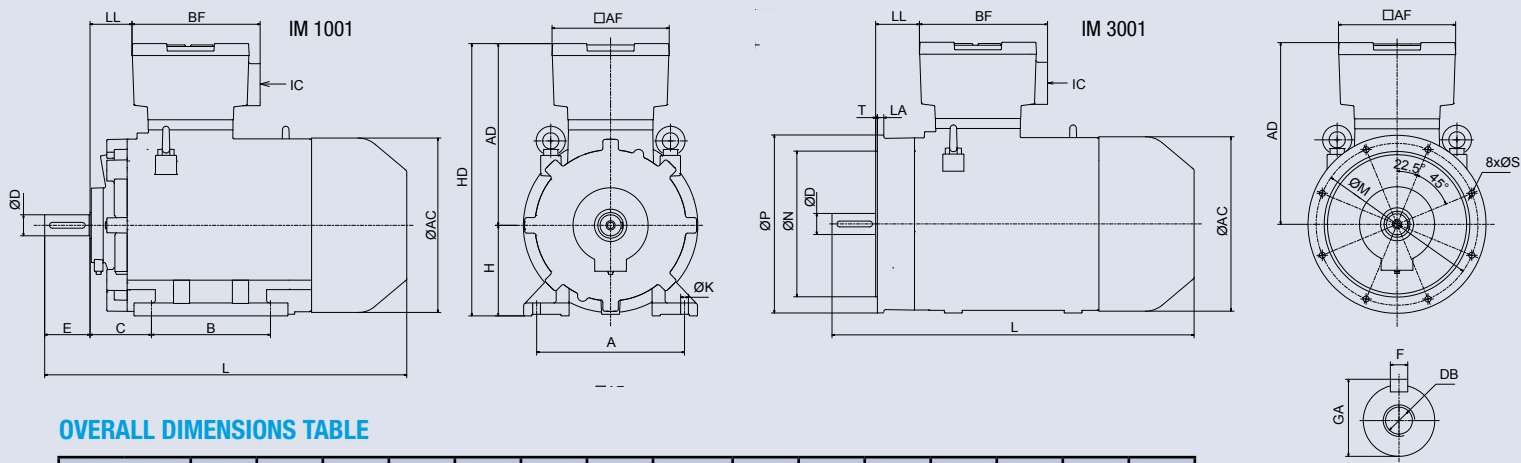
## ACCESSORIES

Suitable for frequency converter use and AC drives.  
Forced ventilation (IC416).  
Encoders (100 – 10000 ppr).  
Bearing sensors.

## FINISHING AND TESTS

Special paintings (Epoxy, NORSOK).  
Special colors.  
Complete, vibration and noise tests.





### OVERALL DIMENSIONS TABLE

Type	2p	A	AA	AB	ØAC	AD	AF	B	BB	BF	C	ØD	DB	E	F
280	S	2	457	140	537	539	562	368	476	396	190	65	M20	140	18
		4,6,8										75			20
	M	2						65	18						
		4,6,8						75	20						
315	S/M	2	508	150	597	619	602	406/457	567	216	65	140	18		
		4,6,8									80	170	22		
	LA/LB	2						65	140		18				
		4,6,8						80	170		22				

Type	2p	GA	H	HA	HD	ØK	LL	LA	L	IC	ØM	ØN	ØP	ØF	T
280	S	2	69	280	842	24	130	20	1120	2xM63x1.5+1xM20x1.5	500	450	550	19	5
		4,6,8	79,5						1180						
	M	2	69												
		4,6,8	79,5												
315	S/M	2	69	315	909	28	131	22	1315	550	600	660	23	6	
		4,6,8	85						1345						
	LA/LB	2	69						1445						
		4,6,8	85						1475						

### SINGLE SPEED MOTORS NOMINAL DATA (3000, 1500, 1000 AND 750 1/MIN)

Series		Type	Pole	Dati nominali a 400V/50Hz				Mass
IIB	IIC			Power	Speed	Current	Torque	
				(kW)	(1/min)	(A)	(Nm)	(kg)
Ex db, Ex dbe, ATEX II 2G, ATEX II 2GD, IP65, T4	Ex db, Ex dbe, ATEX II 2G, ATEX II 2GD, IP65, T4	MAK280S-2	2	75	2971	126	241	853
		MAK280M-2		90		142	289	945
		MAK280S-4	4	75	1483	134	483	886
		MAK280M-4		90		159	580	977
		MAK280S-6	6	45	984	87	437	856
		MAK280M-6		55		106	534	948
		MAK280S-8	8	37	734	73	481	878
		MAK280M-8		45		91	585	968
		MAK315S-2	2	110	2978	180	353	1286
		MAK315M-2		132		214	423	1392
		MAK315LA-2		160		258	513	1551
		MAK315LB-2		200		321	641	1657
		MAK315S-4	4	110	1484	189	708	1343
		MAK315M-4		132		225	849	1496
		MAK315LA-4		160		273	1029	1654
		MAK315LB-4		200		343	1285	1762
MAK315S-6	6	75	992	136	722	1333		
MAK315M-6		90		160	866	1455		
MAK315LA-6		110		202	1059	1597		
MAK315LB-6		132		242	1271	1673		
MAK315S-8	8	55	743	104	707	1324		
MAK315M-8		75		139	965	1443		
MAK315LA-8		90		165	1158	1585		
MAK315LB-8		110		201	1416	1660		

Every care has been taken to ensure the accuracy of the information contained in this publication. The company reserves the right to supply products that may slightly differ from those illustrated and described in this publication.

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