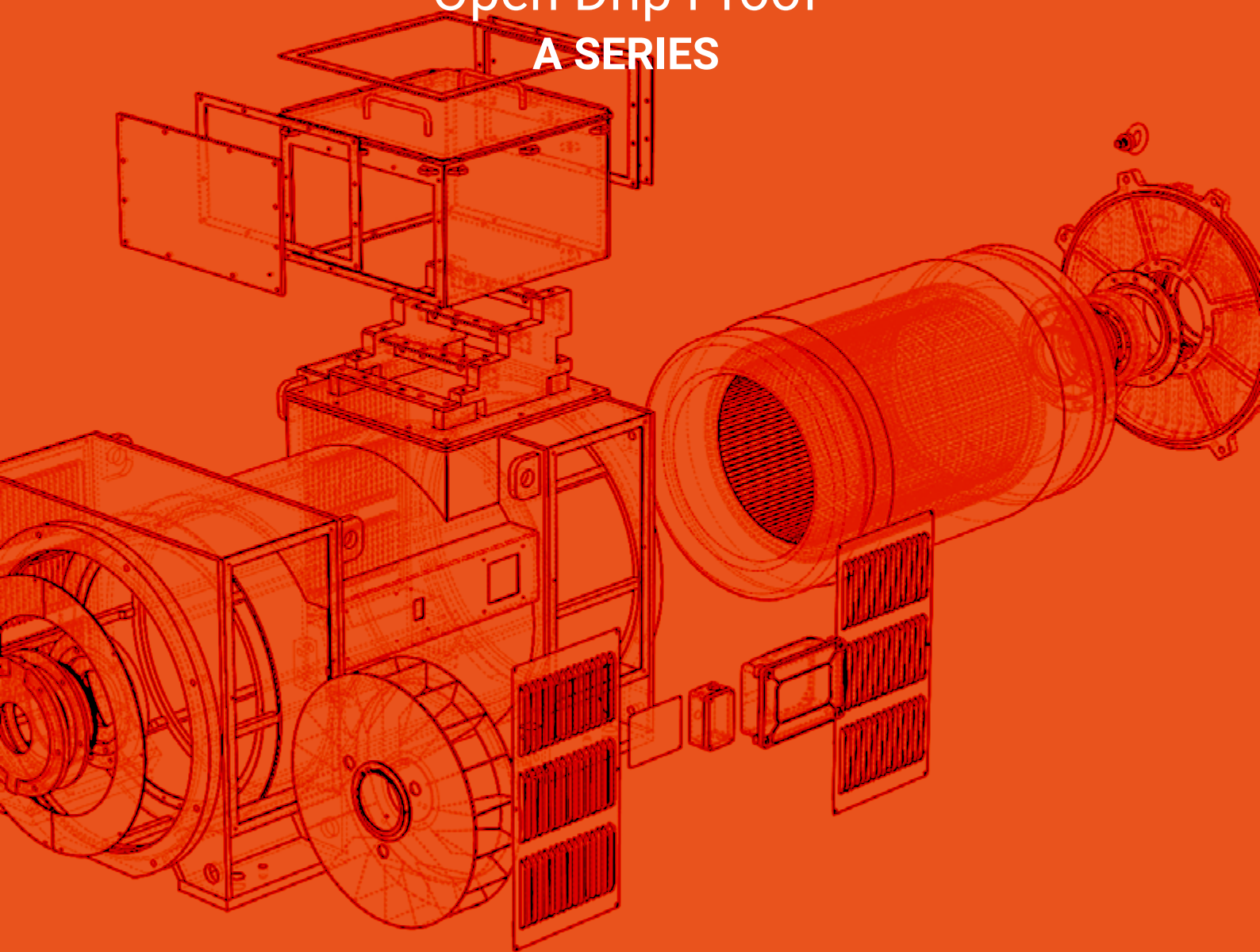


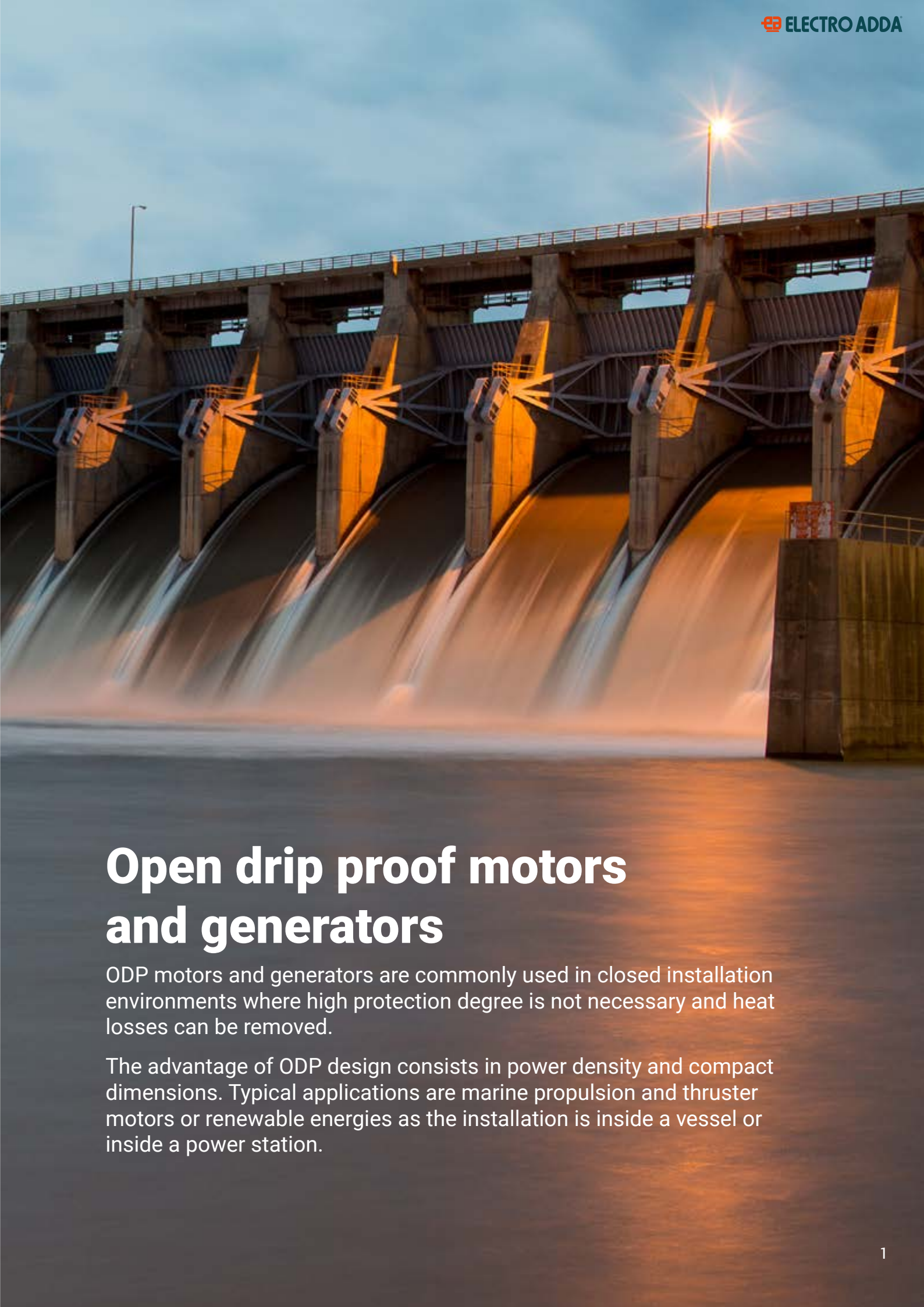
IP23

Open Drip Proof
A SERIES



DESIGNED AND MANUFACTURED IN ITALY

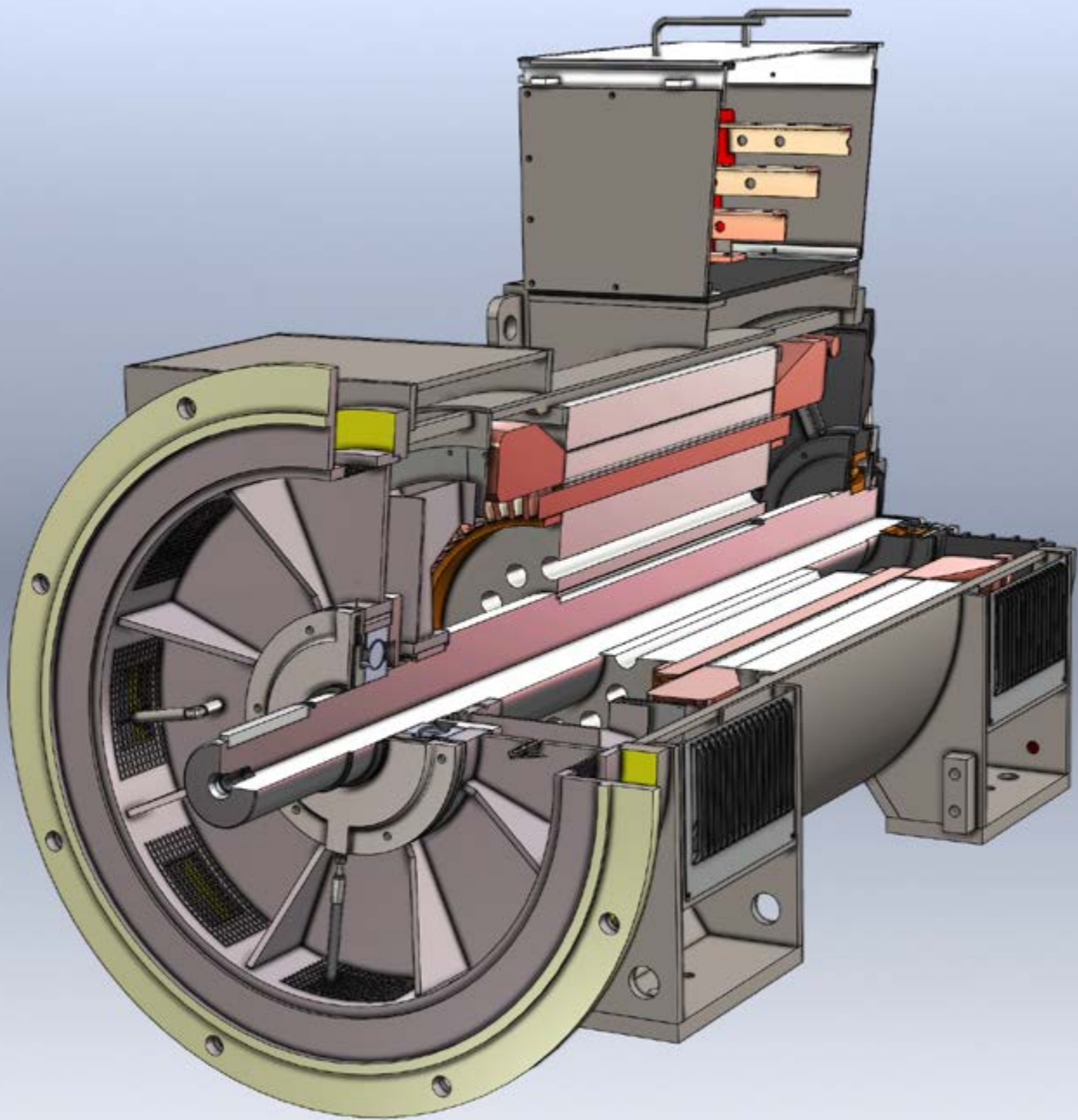




Open drip proof motors and generators

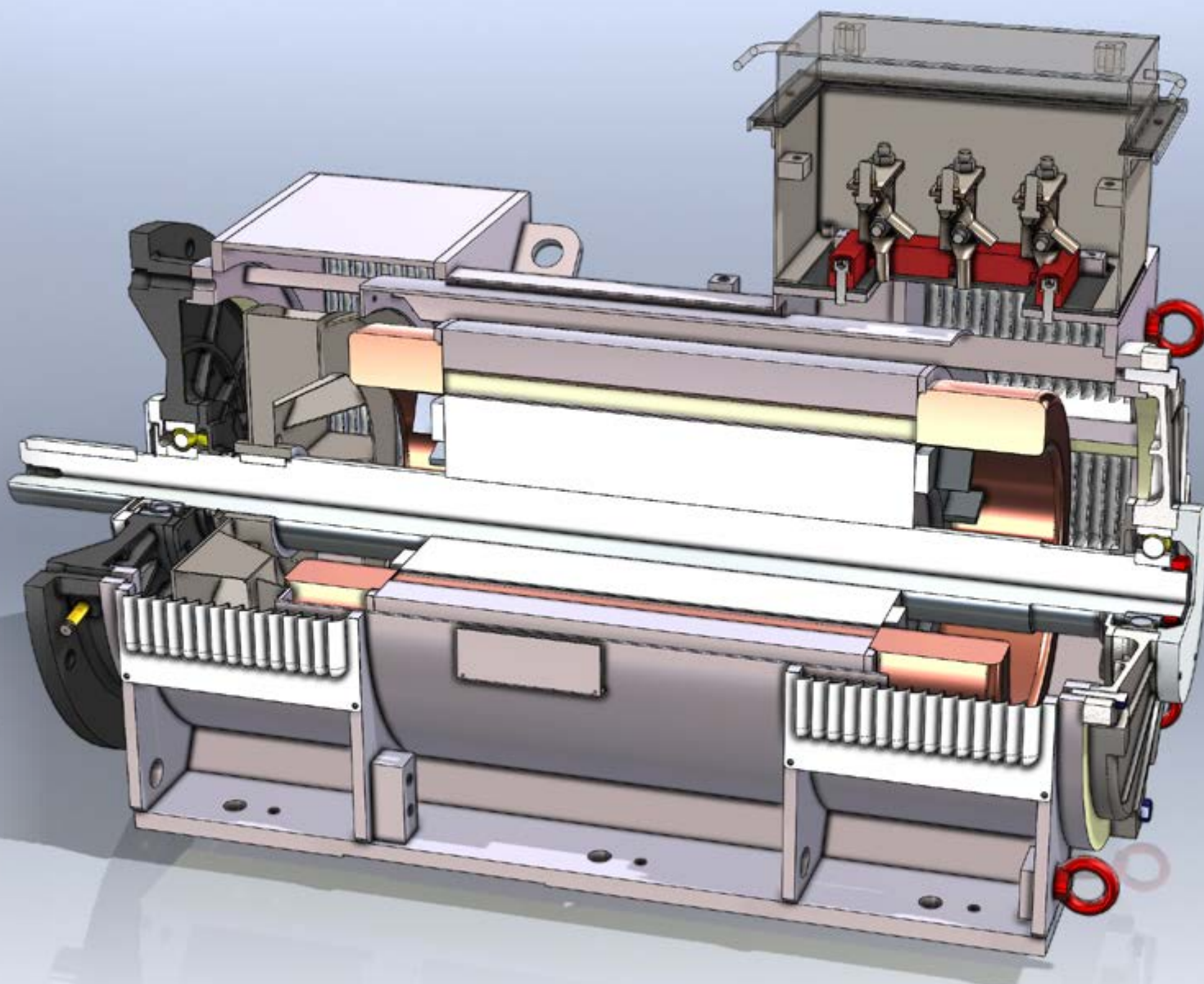
ODP motors and generators are commonly used in closed installation environments where high protection degree is not necessary and heat losses can be removed.

The advantage of ODP design consists in power density and compact dimensions. Typical applications are marine propulsion and thruster motors or renewable energies as the installation is inside a vessel or inside a power station.



CUSTOM DESIGN

ODP electrical rotating machines are typically designed to order to meet the client requirements



3d modular engineering

MAIN OPTIONS

Starting from a clean compact design, the unit can be configured based on application to meet specific requirements with customized design and options:

- Winding and bearing temperature detectors
- Space heaters
- Class H insulation
- Insulated bearing and shaft grounding brush
- Cable glands
- Vibration sensors
- Special painting cycle per ISO 12944
- Special shaft and/or double shaft extension
- Encoder
- Brake
- Type test



MARINE OPTIONS

Compliance with major classification societies is available upon request

Certification for Marine Applications

ClassNK



MECHANICAL DESIGN

Motors and generators are designed with large safety factors to meet demanding requirements of heavy duty applications and guarantee reliability on the long run.

Frame is made of high quality certified fabricated steel. Shaft made in high quality alloy steel. All manufacturing activities are made in house to better control quality and production timing.

In case of renewable energies

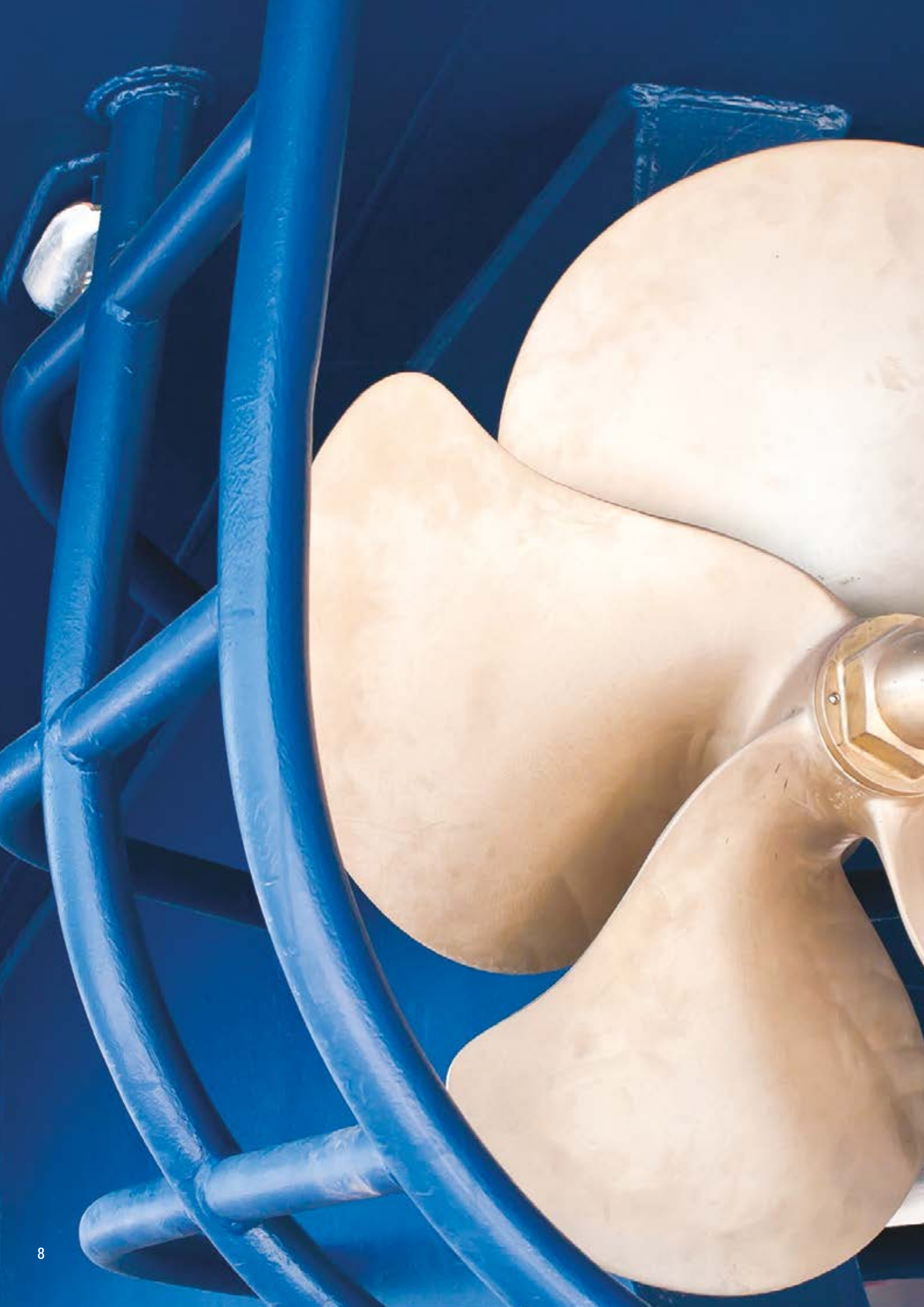
- generator bearings may be designed to withstand external loads due to the impeller weight and hydraulic axial and radial thrusts.
- Shaft end may be designed to directly fit the impeller.
- Hollow shaft can be made for Kaplan turbine.



MADE IN ITALY since 1948

From design to manufacturing the full process is made in Italy in our Head Quarter in Beverate di Brivio, LC Lake of Como Area in Northern Italy.

Engineered the product, from raw material – our punching, machining, electrical and assembly department create the finished unit which will be brought to the testing stations.



Global Service

Electro Adda has developed a global service network to support clients on a world wide scale.

Functional testing marine survey

In house testing capabilities allow to meet both marine classification requirements and customer specific requests.

VARIABLE SPEED OPERATION

In case of variable speed, the electrical stator is built with enhanced insulation system which will be Vacuum Pressure Impregnated with high quality resin.

Partial Discharge are finally verified to confirm quality for the process and void free insulation system.

Bearing insulation and/or shaft grounding is also part of the design and customer requirements.

In case of operation at low rpm e.g. marine dynamic positioning – forced cooling IC06 can be implemented.

RANGE

Voltage 220 to 760 V

Frequency 50 Hz, 60 Hz and variable speed

Continuous duty ratings ratings @ 50Hz 400V 50Hz

A-Series IP 23

Isolamento Classe F
Sovratemperatura Classe F
Servizio S1 - 400 V - 50 Hz
4 poli - 1500 giri/min

*Insulation Class F
Temperature rise Class F
S1 Duty - 400 V - 50 Hz
4 poles - 1.500 rpm*

TIPO Type	Potenza Power	Velocità Speed	Fattore di potenza (Cosfi) Power factor			Corrente Current In (400 V)	Coppia Nominal torque	Forma B3 Peso Mount,B3 Weight
	kW	Giri/min	75%	50%	25%	A	Nm	Kg
355Lx-a	630	1490	0,86	0,78	0,55	1064	4037	1930
355LX-b	710	1490	0,89	0,85	0,68	1185	4550	2080
355Lx-c	800	1490	0,88	0,83	0,66	1334	5127	2170
400Lx-a	900	1491	0,86	0,78	0,54	1514	5764	2720
400Lx-b	1000	1492	0,86	0,78	0,54	1681	6400	2925
400Lx-c	1100	1492	0,90	0,85	0,67	1826	7040	3120
450Lx-a	1250	1493	0,90	0,85	0,67	2046	7995	3780
450Lx-b	1400	1494	0,90	0,85	0,67	2289	8948	4620
500Lx-a	1500	1494	0,90	0,84	0,67	2480	9587	6200
500Lx-b	1800	1494	0,90	0,85	0,67	2976	11505	7000

Remarks.

@60 Hz Power +15% ca.

@ S2 30' Power +20% ca.

A-Series

IP 23

Isolamento Classe F
Sovratemperatura Classe F
Servizio S1 - 400 V - 50 Hz
6 poli - 1000 giri/min

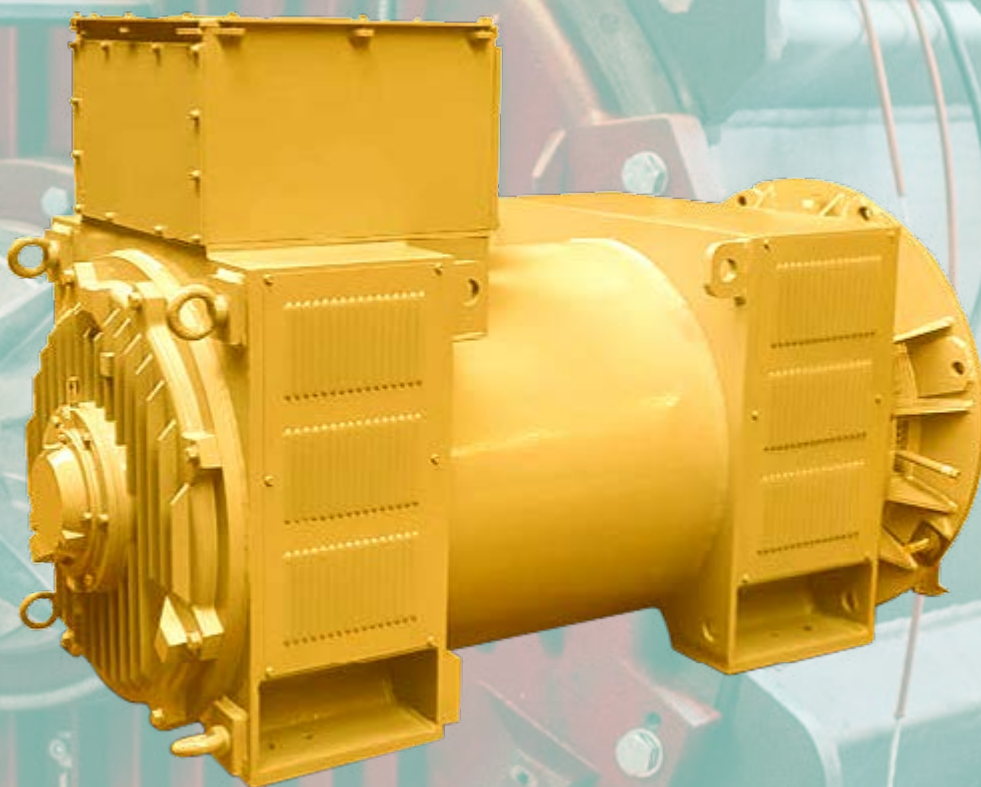
Insulation Class F
Temperature rise Class F
S1 Duty - 400 V - 50 Hz
6 poles - 1.000 rpm

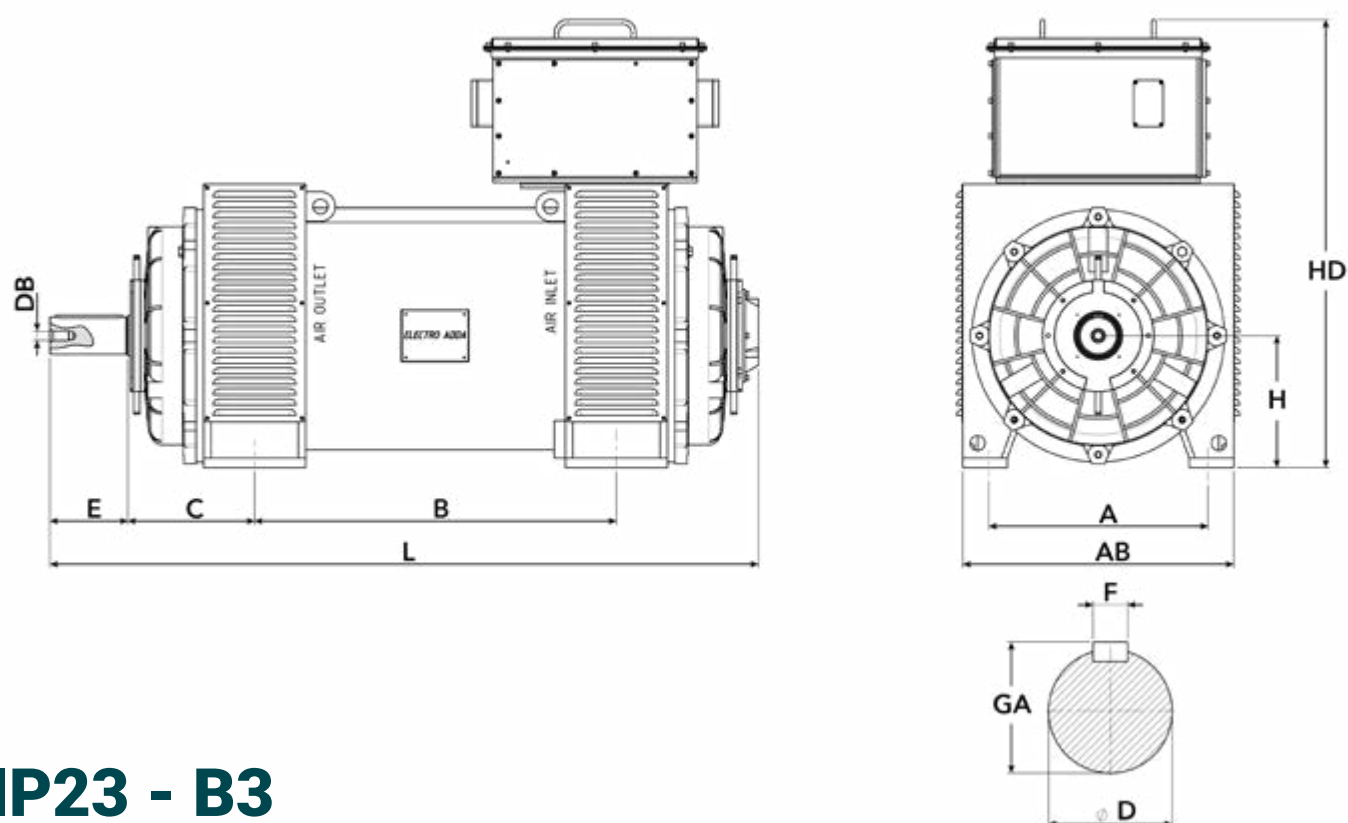
TIPO Type	Potenza Power	Velocità Speed	J	Rendimento Efficiency				Fattore di potenza (Cosfi) Power factor				Corrente Current In (400 V)	Coppia Nominal torque	Forma B3 Peso Mount, B3 Weight
	kW	Giri/min		100%	75%	50%	25%	100%	75%	50%	25%	A	Nm	Kg
315M-a	200	985	7,1	95,0	95,0	94,3	91,5	0,85	0,82	0,77	0,60	357	1939	1070
315M-b	250	989	7,9	95,0	95,1	94,4	91,5	0,86	0,82	0,77	0,60	442	2414	1200
355L-a	280	990	8,3	95,5	95,7	95,4	92,5	0,87	0,84	0,78	0,56	486	2701	1530
355L-b	315	990	9,5	95,5	95,7	95,4	92,5	0,87	0,84	0,78	0,56	547	3038	1610
355L-c	355	991	12,4	95,7	96,4	96,2	94,2	0,86	0,83	0,76	0,54	623	3421	1930
355Lx-a	400	991	14,3	96,0	96,4	96,2	94,2	0,86	0,83	0,76	0,54	699	3854	2130
355Lx-b	500	992	16,8	96,0	96,4	95,8	93,0	0,88	0,85	0,79	0,57	854	4813	2470
400Lx-a	560	992	34,3	96,1	96,5	95,9	93	0,88	0,85	0,78	0,55	956	5391	2970
400Lx-b	630	993	38,6	96,2	96,5	95,9	93	0,88	0,85	0,76	0,53	1074	6058	3160
400Lx-c	710	994	41,3	96,3	96,5	96,2	93,4	0,86	0,83	0,75	0,52	1237	6821	3380
450Lx-a	800	994	63,2	96,3	96,6	96,4	94,3	0,86	0,83	0,76	0,53	1394	7685	3980
450Lx-b	900	995	71,4	96,8	97,0	96,8	95,3	0,88	0,86	0,80	0,57	1525	8637	4470
500Lx-b	1000	995	78	97,3	97,5	97,3	95,8	0,88	0,86	0,8	0,61	1686	9597	4620
500Lx-c	1100	996	90	97,3	97,5	97,3	95,8	0,88	0,86	0,8	0,61	1854	10546	5100

Remarks.

@60 Hz Power +15% ca.
 @ S2 30' Power +20% ca.

DIMENSIONS - Horizontal mounting





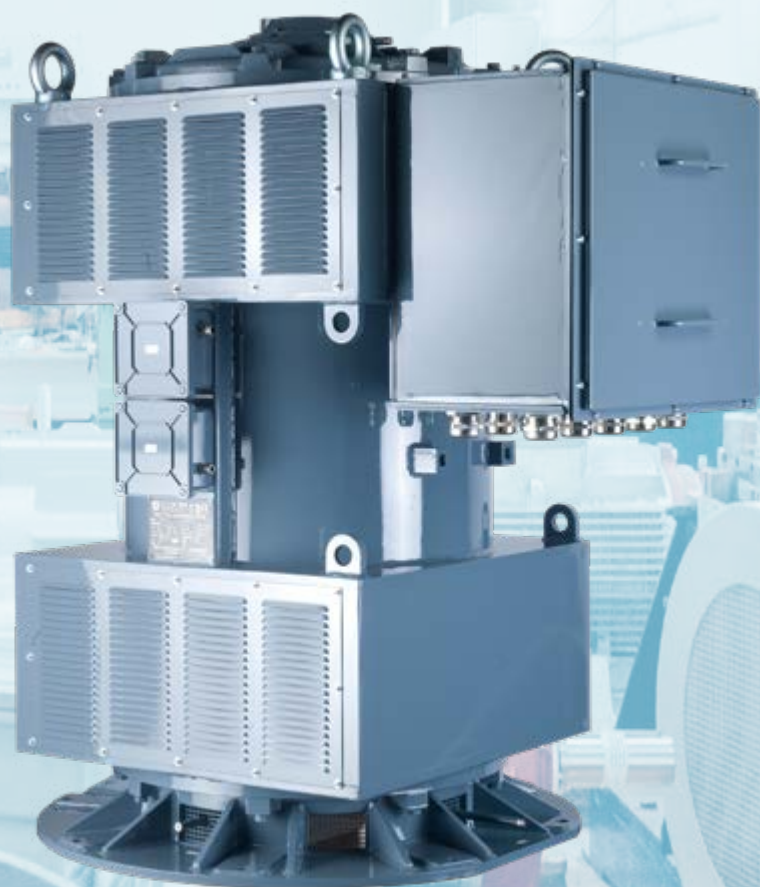
IP23 - B3

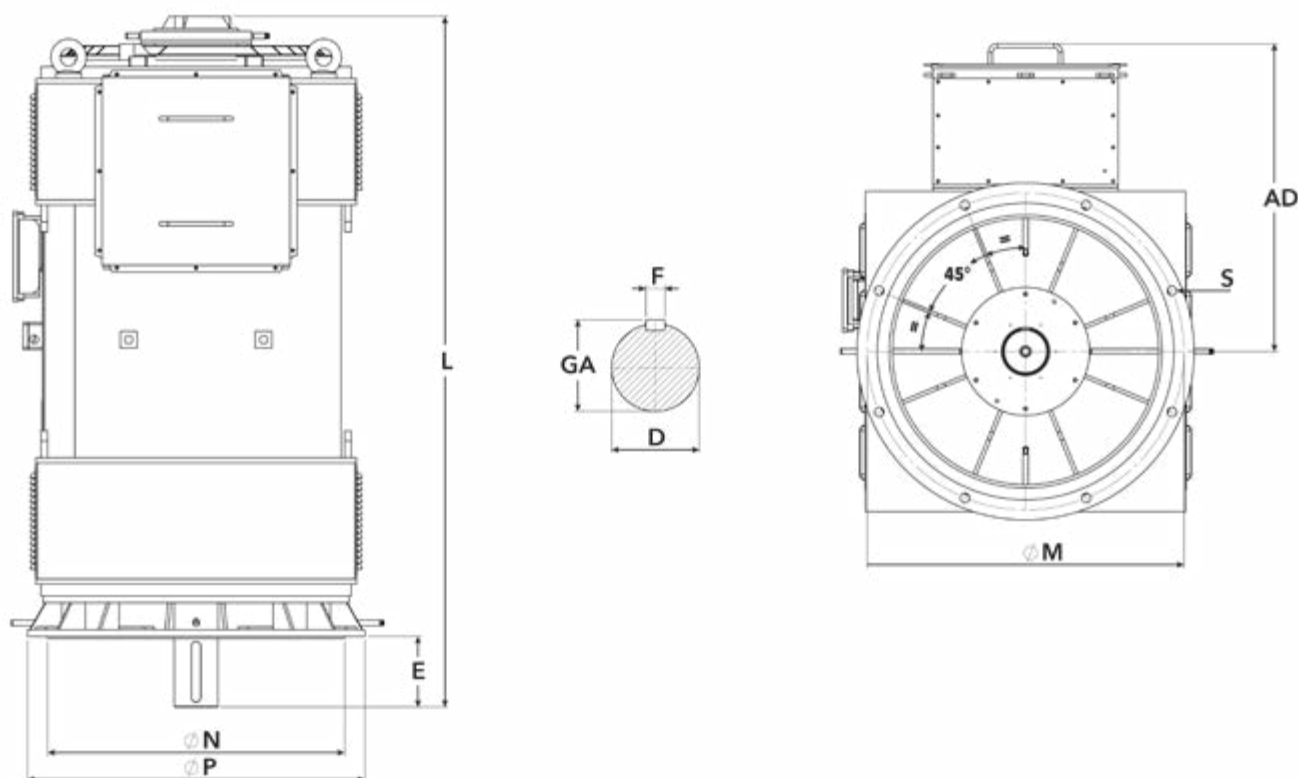
TIPO	A	AB	B	C	H	HD	L	D	E	F	GA	DB
315M	508	600	850	216	315	920	1490	Ø 80 m6	170	22	85	M20x2,5
355L	610	730	1090	254	355	1210	1910	Ø 100 m6	210	28	106	M24x3
355Lx	610	730	1090	254	355	1210	1910	Ø 100 m6	210	28	106	M24x3
400Lx	686	850	1200	280	400	1290	1990	Ø 110 m6	210	28	116	M24x3
450Lx	750	950	1300	315	450	1370	2050	Ø 110 m6	210	28	116	M24x3
500Lx	850	1050	1400	335	500	1450	2200	Ø 130 m6	250	32	137	M24x3

TIPO Type	Mounting B3	
	DE Bearings (B3)	NDE Bearings (B3)
315M-a	6317 C3	6314 C3
315M-b	6317 C3	6314 C3
355L-a	6322 C3	6320 C3
355L-b	6322 C3	6320 C3
355L-c	6322 C3	6320 C3
355Lx-a	6322 C3	6320 C3
355Lx-b	6322 C3	6320 C3

TIPO Type	Mounting B3	
	DE Bearings (B3)	NDE Bearings (B3)
400Lx-a	6324 C3	6324 C3
400Lx-b	6324 C3	6324 C3
400Lx-c	6324 C3	6324 C3
450Lx-a	6324 C3	6324 C3
450Lx-b	6324 C3	6324 C3
500Lx-b	6328 C3	6324 C3
500Lx-c	6328 C3	6324 C3

DIMENSIONS - Vertical mounting





IP23 - V1 (V15 upon request)

TIPO	AD	M	N	P	S	L	D	E	F	GA	DB
315M	600	Ø600	Ø550 h6	Ø660	8x Ø22	1490	Ø 80 m6	170	22	85	M20x2,5
355L	840	Ø740	Ø680 h6	Ø800	8x Ø22	1870	Ø 100 m6	210	28	106	M24x3
355Lx	870	Ø740	Ø680 h6	Ø800	8x Ø22	1930	Ø 100 m6	210	28	106	M24x3
400Lx	890	Ø940	Ø880 h6	Ø1000	8x Ø28	1990	Ø 110 m6	210	28	116	M24x3
450Lx	920	Ø1080	Ø1000 h6	Ø1150	8x Ø28	2050	Ø 110 m6	210	28	116	M24x3
500Lx	950	Ø1080	Ø1000 h6	Ø1150	8x Ø28	2200	Ø 130 m6	250	32	137	M24x3

TIPO Type	Mounting V1	
	DE Bearings (V1)	NDE Bearings (V1)
315M-a	6317 C3	6314 C3
315M-b	6317 C3	6314 C3
355L-a	6322 C3	6322 C3 or 7320
355L-b	6322 C3	6322 C3 or 7320
355L-c	6322 C3	6322 C3 or 7320
355Lx-a	6322 C3	6322 or 7320
355Lx-b	6322 C3	6322 or 7320

TIPO Type	Mounting V1	
	DE Bearings (V1)	NDE Bearings (V1)
400Lx-a	6324 C3	7324
400Lx-b	6324 C3	7324
400Lx-c	6324 C3	7324
450Lx-a	6324 C3	7324
450Lx-b	6324 C3	7324
500Lx-b	6328 C3	7328
500Lx-c	6328 C3	7328



1948 - 2023



Electro Adda S.p.A.
+39 039 53.20.621
info@electroadda.com

Electro Adda S.p.A.
+39 059 45.21.32
commerciale.modena@electroadda.com

Electro Adda GmbH
+49 512 19.359.450
info.de@electroadda.com

Electro Adda UK, Co, Ltd
+44 (0) 161 66.09.533
info@electroadda.co.uk



www.electroadda.com