PRODUCT INFORMATION PACKET

Model No: E3AB3002313B30D41100
Catalog No: E3AB3002313B30D41100
Made in Italy E3AB30 Series, General Purpose Low Voltage IEC motor IE3, Flameproof, 132,00kW, 3 phase, 2983 RPM, D400/Y690V 50Hz, 315MB Frame B3, 2 Poles, IC411

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Nameplate Specifications

Output HP	175 Hp	Output KW	132.0 kW
Frequency	50 Hz	Voltage	400/690 V
Current	224.0 A	Speed	2983 rpm
Service Factor	1	Phase	3
Efficiency	95.5 %	Power Factor	0.89
Duty	S1	Insulation Class	F
Frame	315MB	Enclosure	Totally Enclosed Fan Cooled
Thermal Protection	No Protection	Ambient Temperature	40 °C
Drive End Bearing Size	6316	Opp Drive End Bearing Size	6316
UL	No	CSA	No
CE	Yes	IP Code	IP55
Number of Speeds	1		

Technical Specifications

Electrical Type	Squirrel Cage	Starting Method	Direct On Line
Poles	2	Rotation	Bi-Directional
Mounting	B3	Motor Orientation	Horizontal
Drive End Bearing	Zz C3	Opp Drive End Bearing	Zz C3
Frame Material	Cast Iron	Shaft Type	Keyed
Overall Length	1475.00 mm	Frame Length	800.00 mm
Shaft Diameter	65.000 mm	Shaft Extension	140 mm
Assembly/Box Mounting	Top		
Connection Drawing	SC-01-T-1v-1a	Outline Drawing	B3A04E8315001A01

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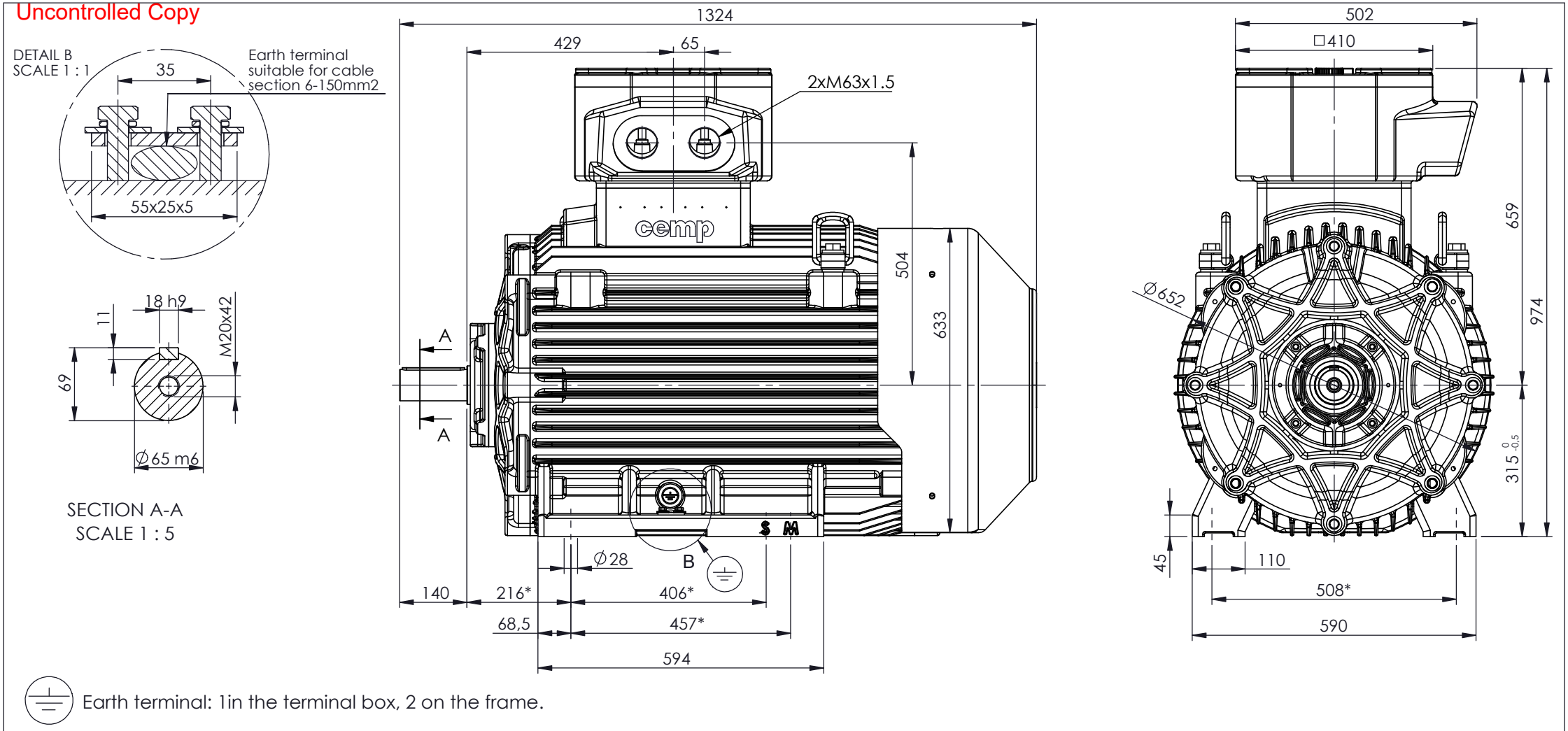

Earth terminal: 1in the terminal box, 2 on the frame.

CUSTOMER REFERENCE AND ADDITIONAL INFORMATION:

MOTOR TYPE AND DESCRIPTION:

DRAWING REVISION	REVISION BY	DATE
ECO	APPROVED BY	DATE
ECO DESCRIPTION		

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TOLERANCES (EXCEPT AS NOTED)
TOLERANCES: ±2
* TOLERANCES: ±0.8

DIMENSIONS ARE IN mm
ACCORDING TO IEC 60072

SERIAL NUMBER

DRAWN BY	LP
DATE	27/12/2016
APPROVED BY	DP
DATE	27/12/2016
REFERENCE	
FIRST ANGLE PROJECTION	

REGAL™ cemp

DESCRIPTION

Motor A315 S/MA/MB/ML (S) 2P B3 IE3

SIZE	DRAWING NUMBER	SHEET
A4	B3A04E8315001A01	1 OF 2

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Schema di collegamento - *Connection diagram*
Schemas de branchement - *Schaltplän*
Esquemas de conéxiòn

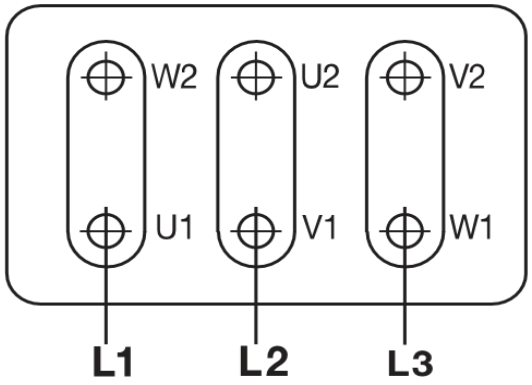
cemp
Flameproof Motors

DTE 01/01/2004
SC - 01 - T - 1v.doc

Motori trifase una velocità - *Single speed, three phase motors* - Moteurs triphasé une vitesse *Drehstrommotor Eine Drehzahlstufe* - Motores trifásico una velocidad

Collegamento - *Connection* - Connexion - *Schaltung* - Conexiòn

Δ



Collegamento - *Connection* - Connexion - *Schaltung* - Conexiòn

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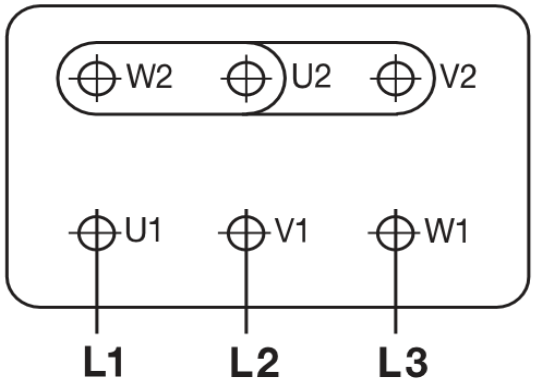

L1 - L2 - L3 = Linea - *Supply* - Reseau - *Netz* - Red

Per invertire la rotazione invertire due fasi - *To change the rotation reverse two phases* - Pour changer le sens de rotation inverser deux phases - *Zur Drehrichtungsänderung zwei Phasen vertauschen* - Para invertir el sentido de rotación invertir dos fases

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Marcatura Morsetti Ausiliari - *Additional terminals marking* (IEC60034-8)

Marcatura *Marking*	No. morsetti *terminals*	**Morsetto ausiliare per:** *Additional terminal for:*
TP1A - TP2A (allarme- *warning)*	2	Termistori PTC (alta velocità) - *Thermistor PTC (high speed)* [*]
TP1B - TP2B (allarme- *warning)*	2	Termistori PTC (bassa velocità) - *Thermistor PTC (low speed)* [*]
R1 - R2 - R3 (I sensore - *sensor)*	3	Termistore PT100 3 fili - *Thermistor PT 100 with 3 wires*
R4 - R5 - R6 (II sensore - *sensor)*	3	
R7 - R8 - R9 (III sensore - *sensor)*	3	
R11 - R12 - R13 (anteriore - *DE*)	3	Termistore PT100 su cuscinetto - *Thermistor PT 100 on bearing*
R21 - R22 - R23 (posteriore - *NDE*)	3	
TB1 - TB2 (allarme- *warning)*	2	Protettore bimetallico normalmente chiuso - *Normally closed bi-metallic switch* (**)
TB3 - TB4 (intervento- *switch off)*	2	
TB8 - TB9 (intervento- *switch off)*	2	Protettore bimetallico del freno normalmente chiuso - *NC brake bi-metallic switch* (**)
TM1 - TM2 (allarme- *warning)*	2	Protettore bimetallico normalmente aperto - *Normally open bi-metallic switch* (**)
TM3 - TM4 (intervento- *switch off)*	2	
HE1- HE2	2	Resistenze riscaldanti - *Space heaters*
U1 - U2	2	Ventilazione ausiliaria monofase - *Single phase forced ventilation*
U - V - W	2	Ventilazione ausiliaria trifase - *Three phase forced ventilation*
colori secondo schema del produttore - *colours according manufacturer*	9	Encoder
CA1 - CA2	2	Condensatore - *Capacitor*
PE	1	Conduttore di terra - *Earth cable*

[*] U nominale - *U rated* = 6V - max 30V

(**) U nominale - *U rated* = 250V

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cemp® Flameproof Motors

FOGLIO DATI PER MOTORI ELETTRICI ASINCRONI TRIFASI : SERIE IEC

DATA SHEET FOR ASYNCHRONOUS THREEPHASE INDUCTION MOTORS: IEC SERIES

Cliente / Customer -	Conferma ordine / Acknowledgment : N° -
Ordine cliente / Customer order : -	Impianto / Plant -
Item : -	

DATI DI PROGETTO - DESIGN DATA

Modo di protezione	II2G	Motore / Frame	Ex-db IIB T4 Gb	IP55
Type of protection		Scatola morsetti / Terminal box	Ex-db IIB Gb	IP55

Tem. Amb. Min. / Min Amb.Temp.	-20 °C	Tem. Amb. Max. / Max Amb. Temp.	40 °C
Umidità relativa / Relative humidity	90%	Altitudine / Altitude	< 1000 mslm / masl
Tensione nominale / Rated Voltage	400 V ± 5%	Frequenza / Frequency	50 Hz ± 2%

DATI FUNZIONALI E COSTRUTTIVI - PERFORMANCE AND CONSTRUCTION DATA

1	Quantità / Quantity		01
2	Motore tipo / Motor type		E3AB30 315MB 2
3	Numero di serie / Serial Number		-
4	Forma costruttiva / Shape		B3
5	Certificato / Certificate	TÜV CY	17 ATEX 0205845 X
6	Altro certificato / Other certificate		
	Dati nominali / Rated data		
7	Poli / Pole	n°	2
8	Potenza nominale / Rated power	kW	132,00
9	Corrente nominale / Rated current	A	223,66
10	Velocità nominale / Full Load speed	1/min	2983
11	Collegamento / Winding connection		D
12	Isolamento / Insulation class		F
13	Sovratemperatura / Temperature rise		80K
14	Raffreddamento / Cooling type		IC411
15	Fattore di servizio / Service factor		1
16			
17	Classe di rendimento / Efficiency level	IEC 34-30	IE3
	Performances elettriche / Electrical performances		

	Carico / Load		4/4	3/4	2/4	
18	Giri / Speed	1/min	2983	2986	2990	
19	Corr. / Curr.	A	223,66	172,59	126,49	
20	Rend / Eff	%	95,5	95,5	94,4	
21	cos φ	-	0,89	0,87	0,80	

	Performances all'avviamento / Starting performances			
22	Ia/In - LRC/FLC		%	710
23	Cosphi a rotore bloccato / LR power factor			0,26
	Tempo a rotore bloccato / LRWT			
24	100% Un	(A caldo / Warm)	sec	3
25		(A freddo / Cold)	sec	27
26	80% Un	(A caldo / Warm)	sec	4
27		(A freddo / Cold)	sec	42
	Tempo di avviamento ammissibile / ART			
28	100% Un		sec	24
29	80% Un		sec	37
	Curva di coppia / Speed-torque values			
30	Coppia nominale / Rated Torque		Nm	422,56
31	Ca/Cn - LRT/FLT		%	180
32	Cmax/Cn - BDT/FLT		%	310
33				
34				
35				
	Varie / Other			
36				
37				
38				
39				

	Servizio / Duty		
40	Servizio / Duty type	-	S1
41	Intermittenza / Cyclic duration factor	-	-
42	Avviamenti-ora / Starting-hour	-	-
43	Tempo ciclo / Time		-
	Cuscinetti / Bearings		
44	Cuscinetto ant / DE bearing	-	6316 ZZ C3
45	Cuscinetto post / NDE bearing	-	6316 ZZ C3
46	Carico radiale max / Max radial load in X1	N	5000
47	Carico assiale max / Max axial load	N	5500
48	Tipo grasso / Grease type		LGHP2 SKF or equivalent
49	Intervallo lubrificazione / Lubrication	h	-
50	Quantità grasso / Quantity grease	gr	-
	Caratteristiche meccaniche / mechanical specification		
51	Massa / Mass	kg	1495,8
52	Momento d'inerzia / Moment of inertia	kgm2	2,0265
53	Rumore a vuoto / Noise at no load (1 m)	Lp dB(A)	84
54	Vibrazioni / Vibration level	IEC 34-14	A
55	Limite norma / Vibration limit	mm/sec	2,80
56			
57			
58			
59			
60			
61			
62			
	Dati entrata cavi - verniciatura / Cable entry and painting		
63	Entrata cavi / Cable entry		2xM63
64	Ciclo verniciatura / Painting cycle		STD
65	Colore finale / Final colour	RAL	5010

66							
67							
68							
69							
70							
71							
	Ausiliari - Auxiliaries						
72	Sonde termiche / Temperature detector					winding	-
73	Sonde termiche / Temperature detector					bearing	-
74	Scaldiglie / Heaters					V / W	-
75	Preparation for SPM sensor						-
76	Pressacavi / Cable glands						NO
77							

Documento preliminare - Preliminary data sheet **MOD. 803**

Prepared by : GC Tolleranze secondo - Tolerances according IEC 60034-1 Rev. 0 Data / Date 24 January 2022

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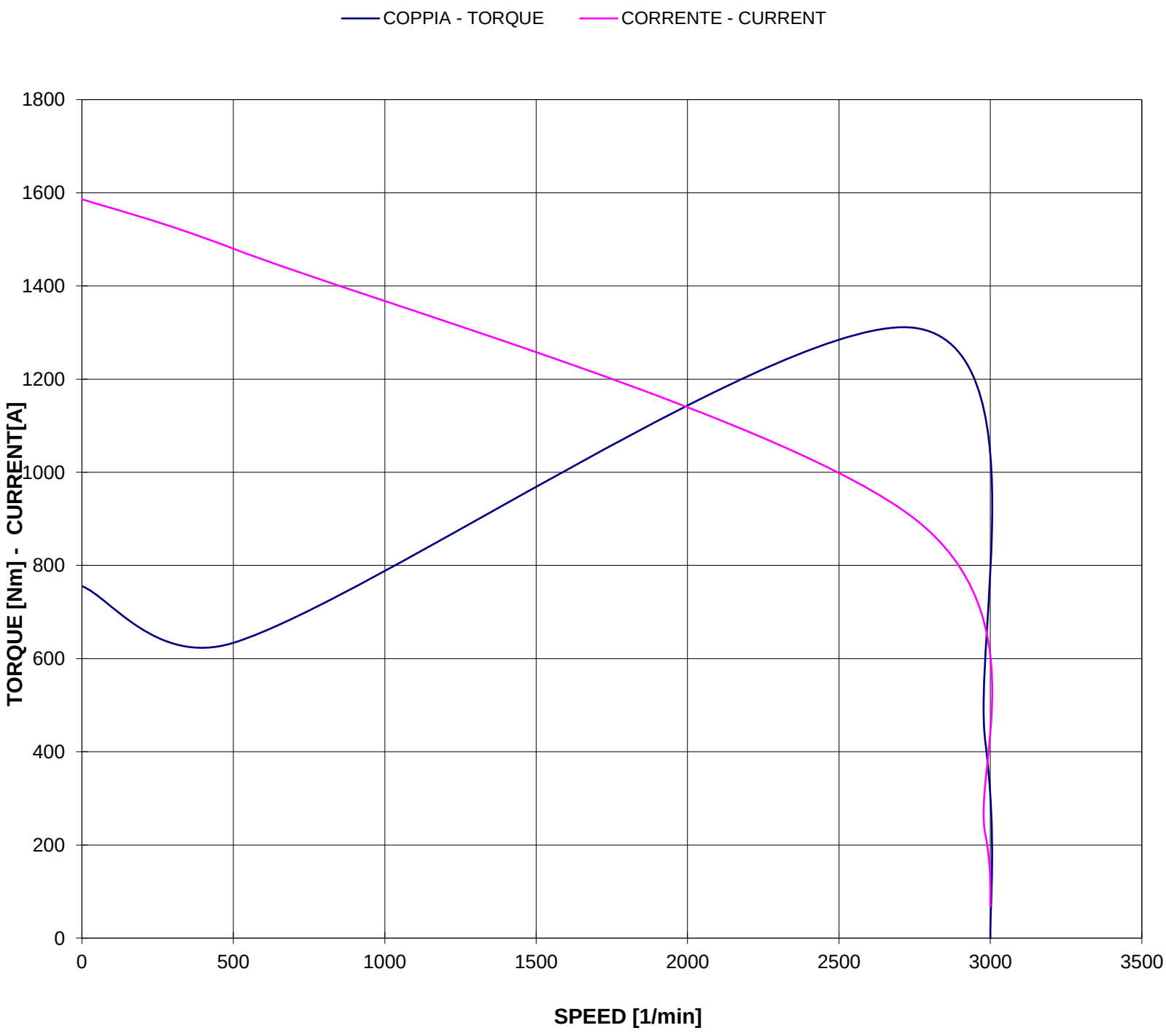
CURVA COPPIA/CORRENTE-GIRI
TORQUE/CURRENT-SPEED DIAGRAM

Cliente / Customer	-
Ordine cliente / Customer order	-
Impianto / Plant	-
ITEM	**-**
Conferma ordine / Acknowledgment	-
Numero di serie / Serial Number	-

Motore / Motor	**E3AB30 315MB 2**	
Potenza nominale / Rated power	132,00	kW
Poli / Pole	2	
Tensione - Frequenza / Voltage - Frequency	400 - 50	V - Hz
Corrente / Rated current	223,66	A
Velocità / Speed	2983	rpm
Coppia / Torque	422,56	Nm



Valori calcolati - Data obtained by calculation method

MOD-600

Data / Date 25 January 2022

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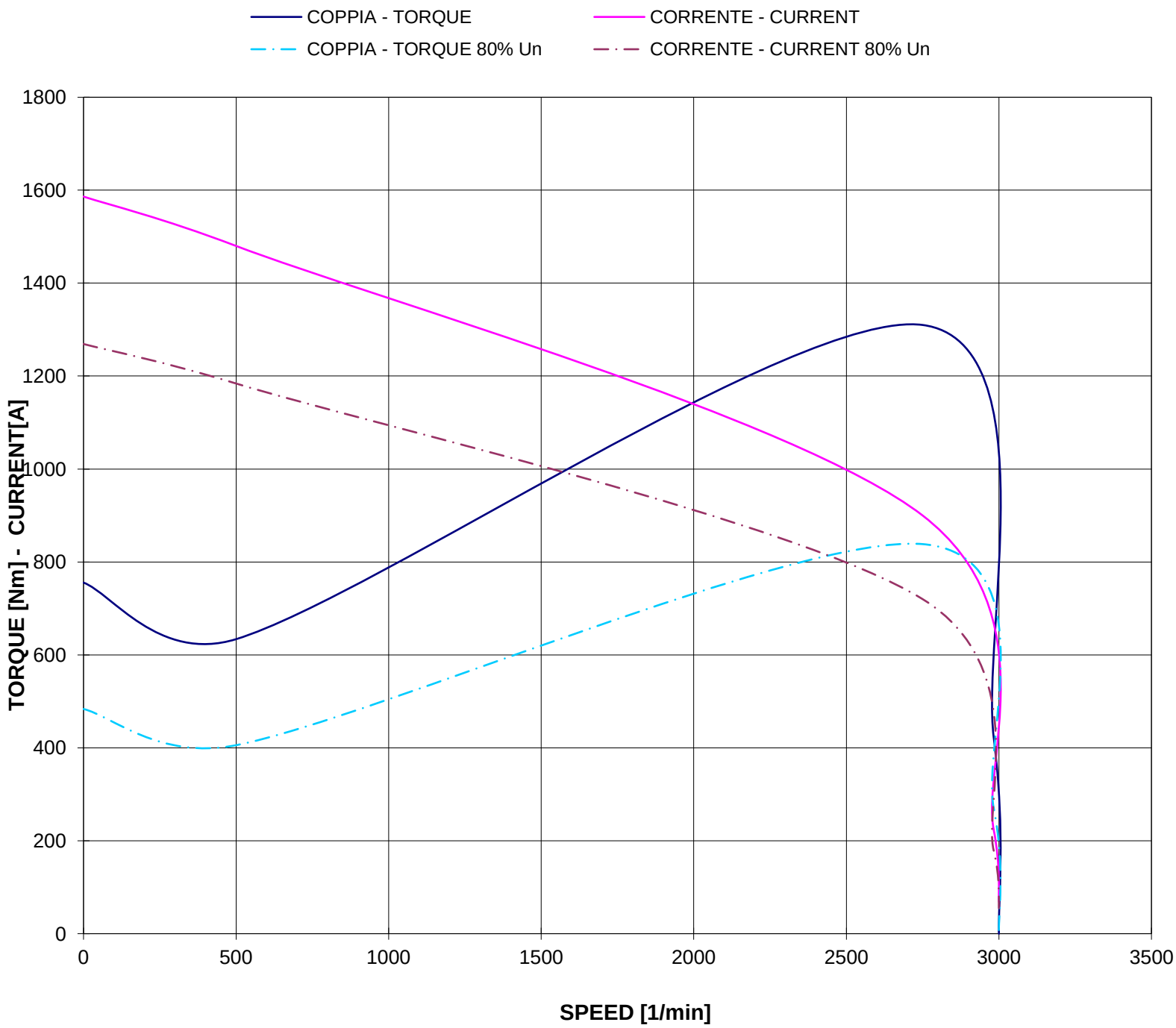
CURVA COPPIA/CORRENTE-GIRI (Tensione ridotta)
TORQUE/CURRENT-SPEED DIAGRAM (Reduced voltage)

Cliente / Customer	-
Ordine cliente / Customer order	-
Impianto / Plant	-
ITEM	**-**
Conferma ordine / Acknowledgment	-
Numero di serie / Serial Number	-

Motore / Motor	**E3AB30 315MB 2**	
Potenza nominale / Rated power	132,00	kW
Poli / Pole	2	
Tensione - Frequenza / Voltage - Frequency	400 - 50	V - Hz
Corrente / Rated current	223,66	A
Velocità / Speed	2983	rpm
Coppia / Torque	422,56	Nm



Valori calcolati - Data obtained by calculation method

MOD-602

Data / Date 25 January 2022

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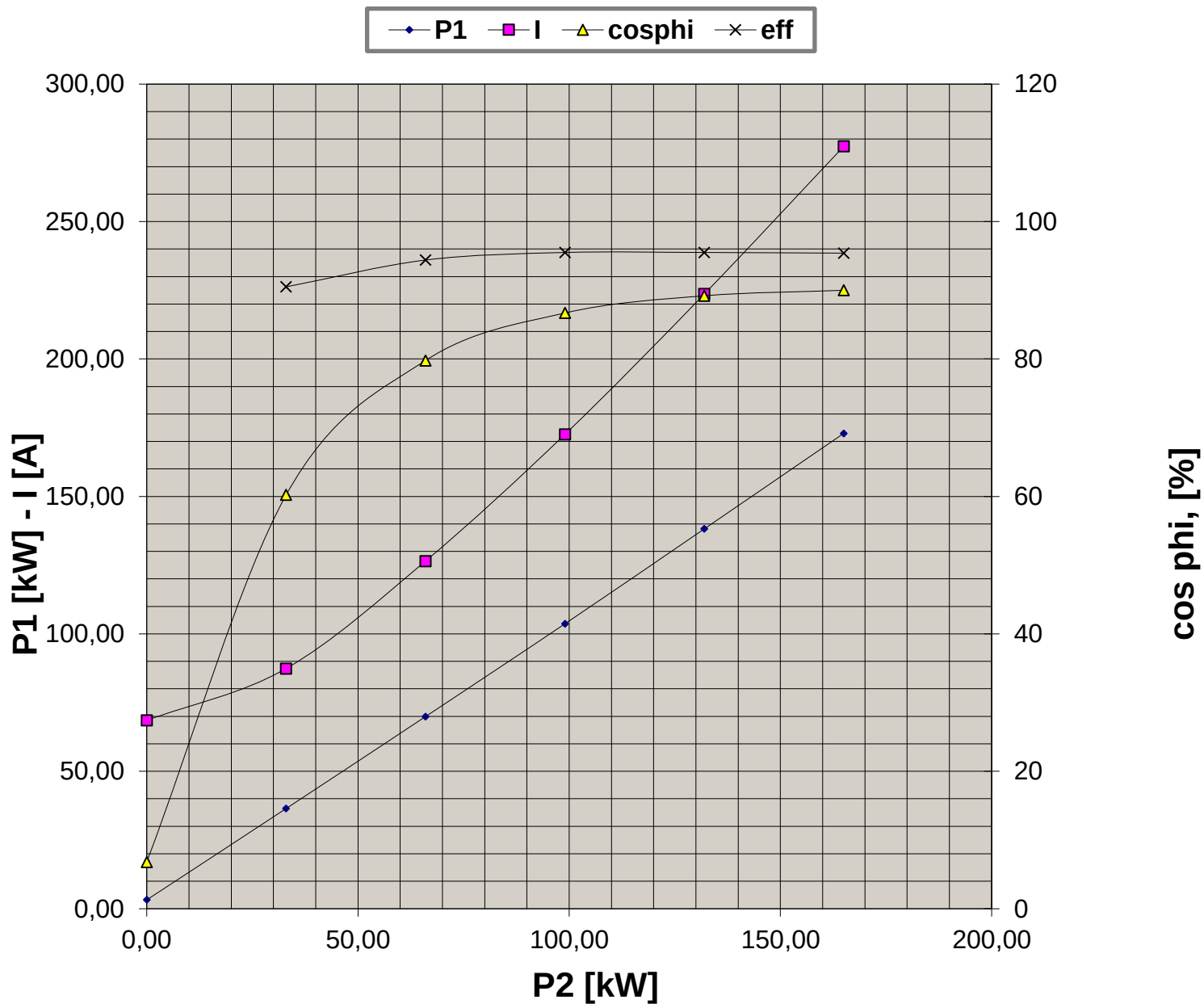
CURVE CARATTERISTICHE
PERFORMANCE CURVES

Cliente / Customer	-
Ordine cliente / Customer order	-
Impianto / Plant	-
ITEM	**-**
Conferma ordine / Acknowledgment	-
Numero di serie / Serial Number	-

Motore / Motor	**E3AB30 315MB 2**	
Potenza nominale / Rated power	132,00	kW
Poli / Pole	2	
Tensione - Frequenza / Voltage - Frequency	400 - 50	V - Hz
Corrente / Rated current	223,66	A
Velocità / Speed	2983	rpm
Coppia / Torque	422,56	Nm



Valori calcolati - Data obtained by calculation method

MOD-700

Data / Date 25 January 2022

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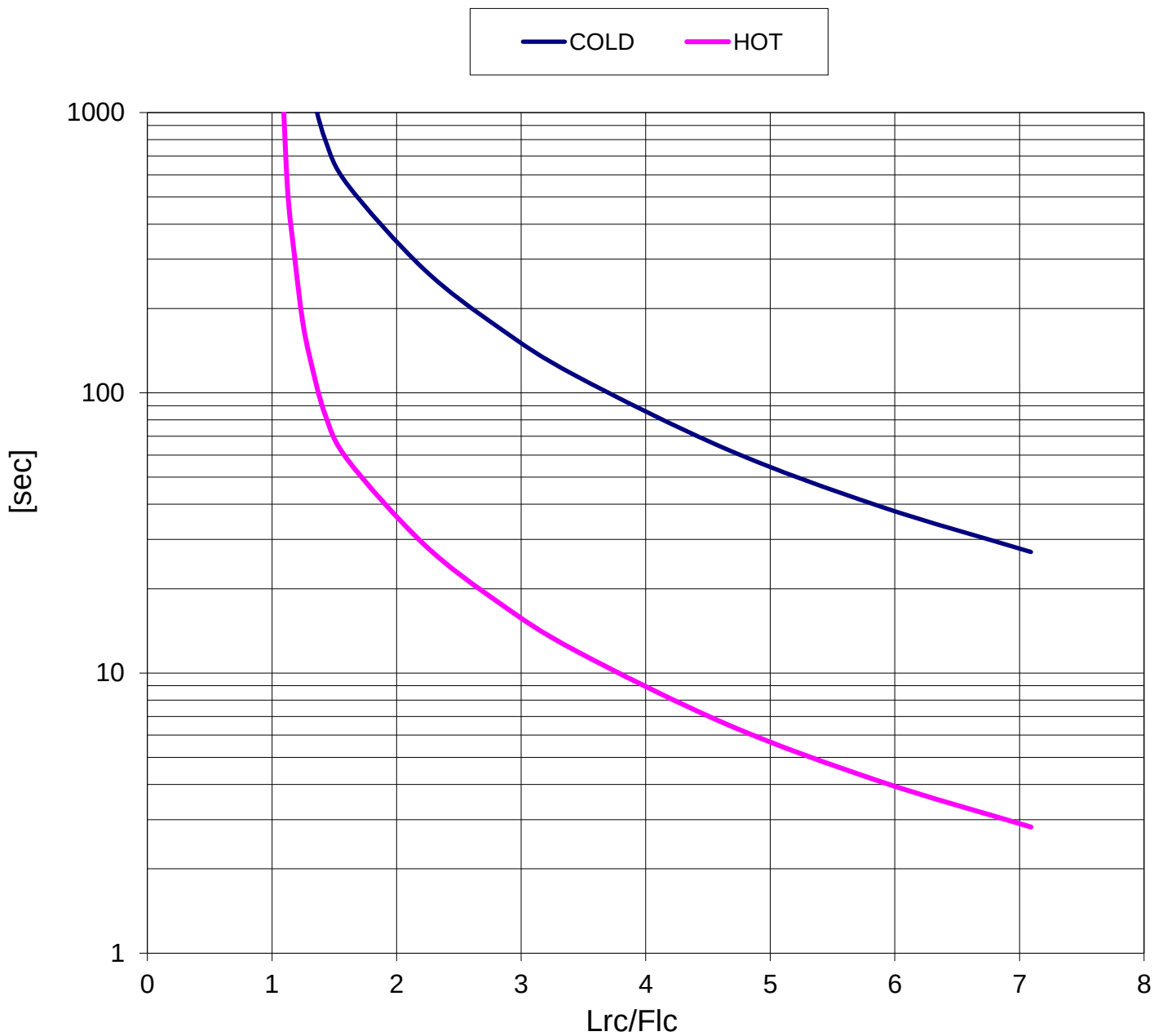
CURVA LIMITE CORRENTE TEMPO
THERMAL WITHSTAND CURVE

Cliente / Customer	-
Ordine cliente / Customer order	-
Impianto / Plant	-
ITEM	**-**
Conferma ordine / Acknowledgment	-
Numero di serie / Serial Number	-

Motore / Motor	**E3AB30 315MB 2**	
Potenza nominale / Rated power	132,00	kW
Poli / Pole	2	
Tensione - Frequenza / Voltage - Frequency	400 - 50	V - Hz
Corrente / Rated current	223,66	A
Velocità / Speed	2983	rpm
Coppia / Torque	422,56	Nm



Valori calcolati - Data obtained by calculation method

MOD-900

Data / Date 25 January 2022

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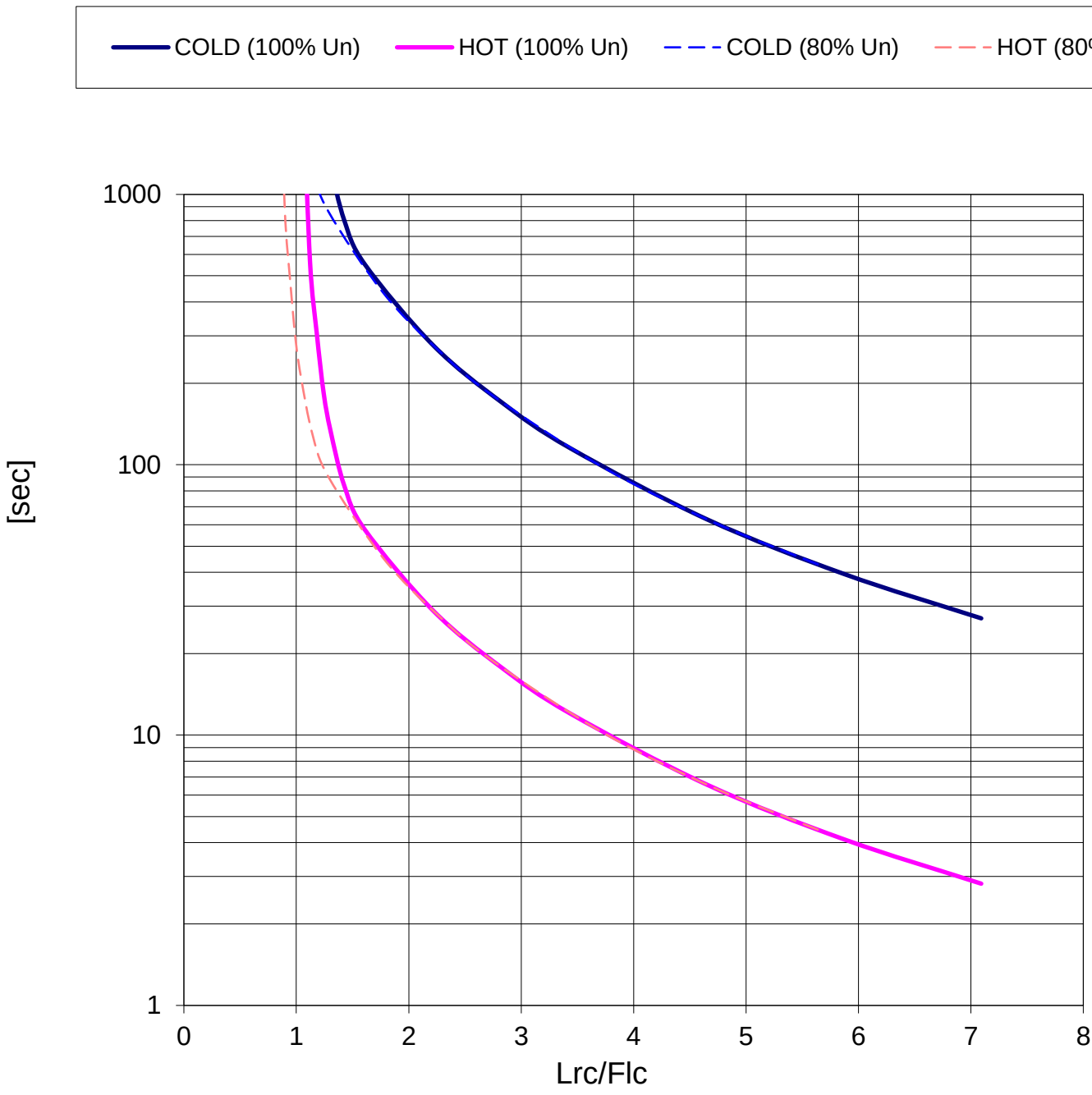
CURVA LIMITE CORRENTE TEMPO (Tensione ridotta)
THERMAL WITHSTAND CURVE (Reduced voltage)

Cliente / Customer	-
Ordine cliente / Customer order	-
Impianto / Plant	-
ITEM	**-**
Conferma ordine / Acknowledgment	-
Numero di serie / Serial Number	-

Motore / Motor	**E3AB30 315MB 2**	
Potenza nominale / Rated power	132,00	kW
Poli / Pole	2	
Tensione - Frequenza / Voltage - Frequency	400 - 50	V - Hz
Corrente / Rated current	223,66	A
Velocità / Speed	2983	rpm
Coppia / Torque	422,56	Nm



Valori calcolati - Data obtained by calculation method

MOD-901

Data / Date 25 January 2022