

PRODUCT INFORMATION PACKET

Model No: E3AB3006351B50D41100

Catalog No: E3AB3006351B50D41100

Made in Italy E3AB30 Series, General Purpose Low Voltage IEC motor IE3, Flameproof, 160,00kW,
3 phase, 992 RPM, D400/Y690V 50Hz, 355MA Frame B5, 6 Poles, IC411



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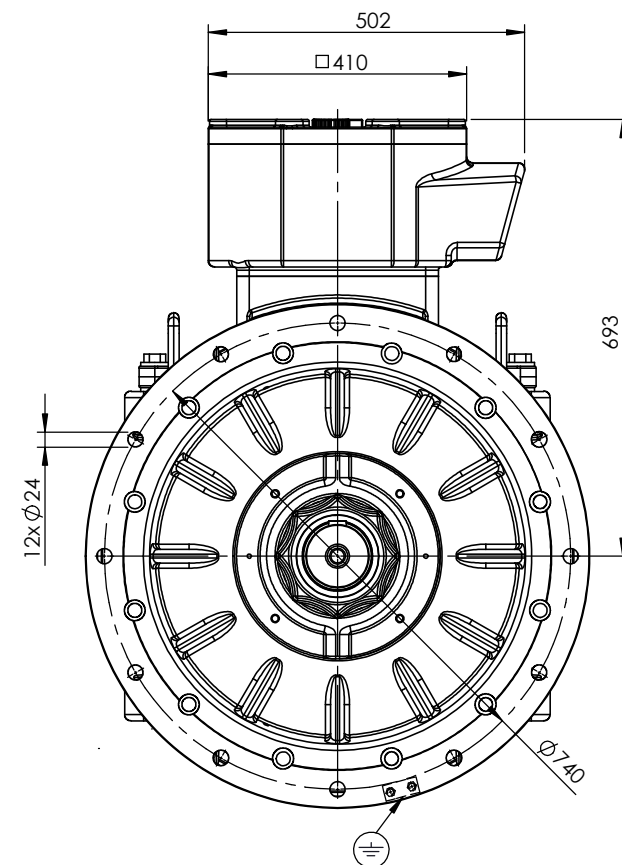
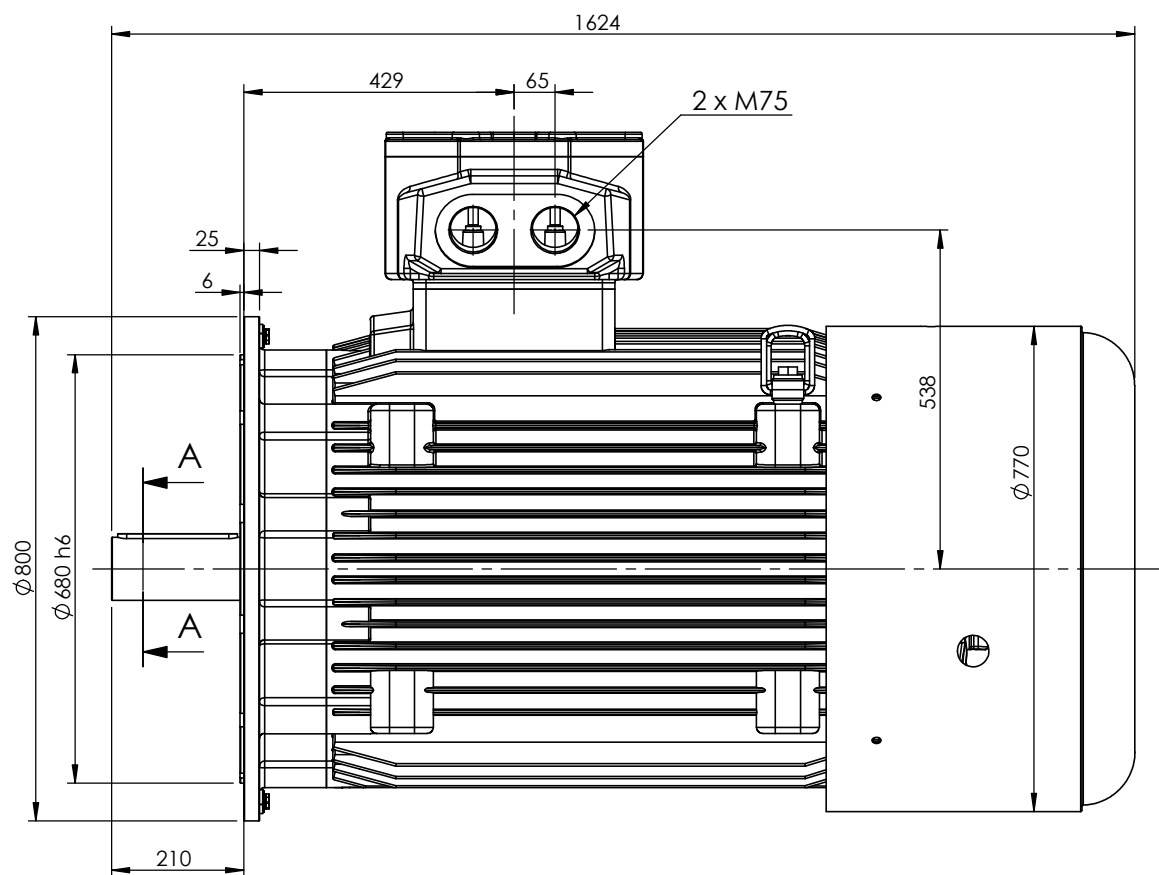
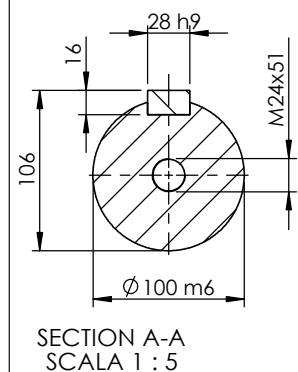
Nameplate Specifications

Output HP	215 Hp	Output KW	160.0 kW
Frequency	50 Hz	Voltage	400/690 V
Current	287.0 A	Speed	992 rpm
Service Factor	1	Phase	3
Efficiency	95.8 %	Power Factor	0.84
Duty	S1	Insulation Class	F
Frame	355MA	Enclosure	Totally Enclosed Fan Cooled
Ambient Temperature	40 °C	Drive End Bearing Size	6322
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	6	Rotation	Bi-Directional
Mounting	B5	Motor Orientation	Horizontal
Drive End Bearing	C3	Opp Drive End Bearing	C3
Frame Material	Cast Iron	Shaft Type	Keyed
Overall Length	1844.00 mm	Frame Length	935.00 mm
Shaft Diameter	100.000 mm	Shaft Extension	210 mm
Assembly/Box Mounting	Top		
Connection Drawing	SC-01-T-1v-1a	Outline Drawing	B5A048355021B01

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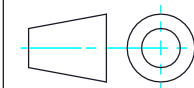


N.B.
Dimensions in mm. according to IEC 60072
Tolerances where not differently marked $\pm 2\text{mm}$.
* Tolerances ± 0.8



Earth terminal: 1 in the terminal box, 2 on the Flange

Customer reference and additional information:



Dimensions in mm
Tolerances allowed

Frame size: A 355 S-M 4-8 Poles

Document N. **B5A048355021B01** - Date 18/02/2016

Issued by L.P. - Approved by D.P.

Cemp - Senago (Italy)

Rev.	Motor type and description
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cemp
Flameproof
Motors

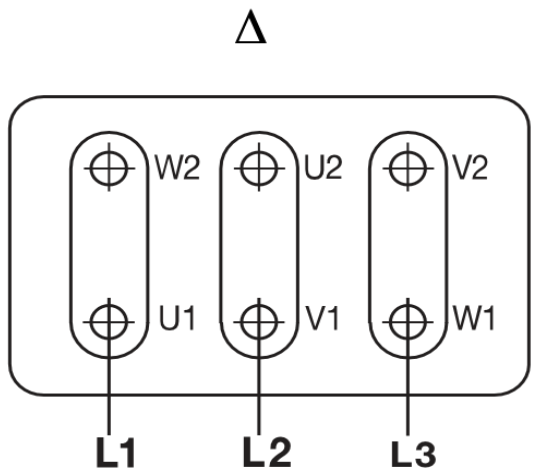
Schema di collegamento - *Connection diagram*
Schemas de branchement - *Schaltplan*
Esquemas de conexión



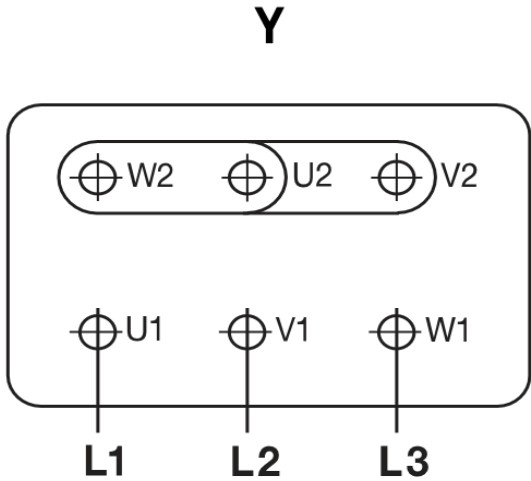
DTE 01/01/2004
SC - 01 - T - 1v.doc

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

Collegamento - *Connection* - Connexion - *Schaltung* - Conexión



Collegamento - *Connection* - Connexion - *Schaltung* - Conexión



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

Marcatura Morsetti Ausiliari - <i>Additional terminals marking (IEC60034-8)</i>		
Marcatura <i>Marking</i>	No. morsetti <i>terminals</i>	Morsetto ausiliare per: <i>Additional terminal for:</i>
TP1A - TP2A (allarme- <i>warning</i>)	2	Termistori PTC (alta velocità) - <i>Thermistor PTC (high speed) [*]</i>
TP1B - TP2B (allarme- <i>warning</i>)	2	Termistori PTC (bassa velocità) - <i>Thermistor PTC (low speed) [*]</i>
R1 - R2 - R3 (I sensore - <i>sensor</i>)	3	Termistore PT100 3 fili - <i>Thermistor PT 100 with 3 wires</i>
R4 - R5 - R6 (II sensore - <i>sensor</i>)	3	
R7 - R8 - R9 (III sensore - <i>sensor</i>)	3	
R11 - R12 - R13 (anteriore - <i>DE</i>)	3	Termistore PT100 su cuscinetto - <i>Thermistor PT 100 on bearing</i>
R21 - R22 - R23 (posteriore - <i>NDE</i>)	3	
TB1 - TB2 (allarme- <i>warning</i>)	2	Protettore bimetallico normalmente chiuso - <i>Normally closed bi-metallic switch (**)</i>
TB3 - TB4 (intervento- <i>switch off</i>)	2	Protettore bimetallico del freno normalmente chiuso - <i>NC brake bi-metallic switch (**)</i>
TB8 - TB9 (intervento- <i>switch off</i>)	2	
TM1 - TM2 (allarme- <i>warning</i>)	2	Protettore bimetallico normalmente aperto - <i>Normally open bi-metallic switch (**)</i>
TM3 - TM4 (intervento- <i>switch off</i>)	2	
HE1- HE2	2	Resistenze riscaldanti - <i>Space heaters</i>
U1 - U2	2	Ventilazione ausiliaria monofase - <i>Single phase forced ventilation</i>
U - V - W	2	Ventilazione ausiliaria trifase - <i>Three phase forced ventilation</i>
colori secondo schema del produttore - <i>colours according manufacturer</i>	9	Encoder
CA1 - CA2	2	Condensatore - <i>Capacitor</i>
PE	1	Conduttore di terra - <i>Earth cable</i>

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

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

FOGLIO DATI PER MOTORI ELETTRICI ASINCRONI TRIFASI : SERIE IEC
DATA SHEET FOR ASYNCHRONOUS THREEPHASE INDUCTION MOTORS: IEC SERIES

Cliente / Customer	-
Ordine cliente / Customer order	-
Item	-

Conferma ordine / Acknowledgment	N° -
Impianto / Plant	-

DATI DI PROGETTO - DESIGN DATA

Modo di protezione	II2G	Motore / Frame
Type of protection		Scatola morsetti / Terminal box
Tem. Amb. Min. / Min Amb. Temp.	-20	°C
Umidità relativa / Relative humidity	90%	
Tensione nominale / Rated Voltage	400 V ± 5%	

Ex-db IIB T4 Gb	IP55
Ex-db IIB Gb	IP55
Tem. Amb. Max. / Max Amb. Temp.	40 °C
Altitudine / Altitude	< 1000 mslm / masl
Frequenza / Frequency	50 Hz ± 2%

DATI FUNZIONALI E COSTRUTTIVI - PERFORMANCE AND CONSTRUCTION DATA

1	Quantità / Quantity				01
2	Motore tipo / Motor type				AB30 355MA 6
3	Numero di serie / Serial Number				-
4	Forma costruttiva / Shape				B5
5	Certificato / Certificate			TÜV IT	15 ATEX 040 X
6	Altro certificato / Other certificate				
Dati nominali / Rated data					
7	Poli / Pole			n°	6
8	Potenza nominale / Rated power			kW	160,00
9	Corrente nominale / Rated current			A	274,53
10	Velocità nominale / Full Load speed			1/min	992
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	992	995	996
19	Corr. / Curr.	A	274,53	212,71	148,43
20	Rend / Eff	%	96,0	93,8	94,6
21	cos φ	-	0,88	0,87	0,82
Performances all'avviamento / Starting performances					
22	Ia/In - LRC/FLC			%	670
23	Cosphi a rotore bloccato / LR power factor				0,31
	Tempo a rotore bloccato / LRWT				
24	100% Un (A caldo / Warm)			sec	17
25	(A freddo / Cold)			sec	59
26	80% Un (A caldo / Warm)			sec	27
27	(A freddo / Cold)			sec	92
	Tempo di avviamento ammissibile / ART				
28	100% Un			sec	51
29	80% Un			sec	80
Curva di coppia / Speed-torque values					
30	Coppia nominale / Rated Torque			Nm	1540,26
31	Ca/Cn - LRT/FLT			%	200
32	Cmax/Cn - BDT/FLT			%	0
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	-	6322 C3
45	Cuscinetto post / NDE bearing	-	6316 C3
46	Carico radiale max / Max radial load in X1	N	-
47	Carico assiale max / Max axial load	N	-
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	2015
52	Momento d'inerzia / Moment of inertia	kgm2	9,5950
53	Rumore a vuoto / Noise at no load (1 m)	Lp dB(A)	75
54	Vibrazioni / Vibration level	IEC 34-14	A
55	Limite norma / Vibration limit	mm/sec	2,80
56			
57			
Dati entrata cavi - verniciatura / Cable entry and painting			
63	Entrata cavi / Cable entry		2xM75
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			

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

Cliente / Customer CEMP

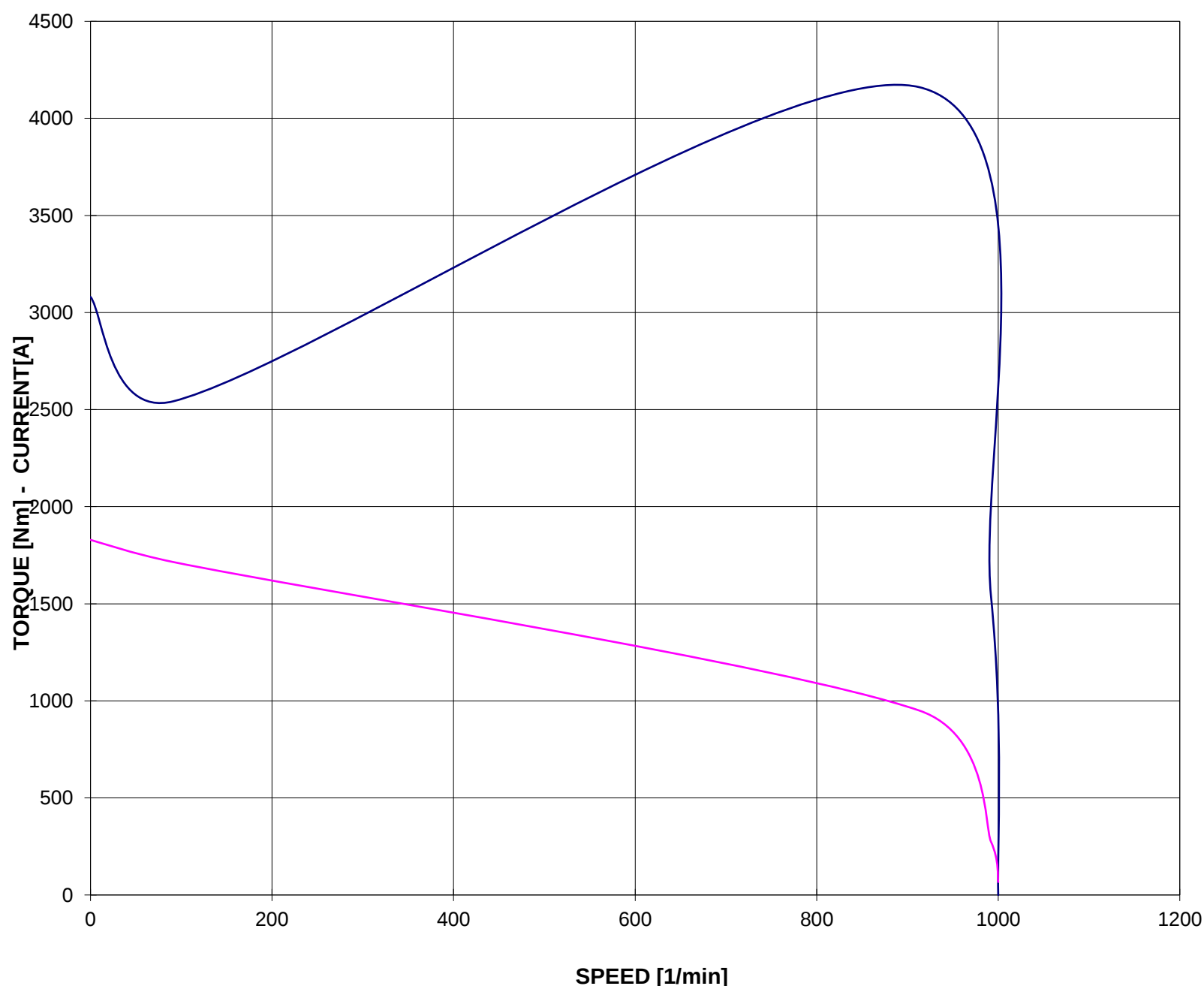
Impianto / Plant -
ITEM -

Numero d'offerta / Offer Number 2021.
-

Motore / Motor AB30 355MA 6

Potenza nominale / Rated power	160,00	kW
Poli / Pole	6	
Tensione - Frequenza / Voltage - Frequency	400 - 50	V - Hz
Corrente / Rated current	274,53	A
Velocità / Speed	992	rpm
Coppia / Torque	1540,26	Nm

— COPPIA - TORQUE — CORRENTE - CURRENT



Valori calcolati - Data obtained by calculation method

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

Cliente / Customer CEMP

Impianto / Plant -
ITEM -

Numero d'offerta / Offer Number 2021.
-

Motore / Motor AB30 355MA 6

Potenza nominale / Rated power 160,00 kW

Poli / Pole 6

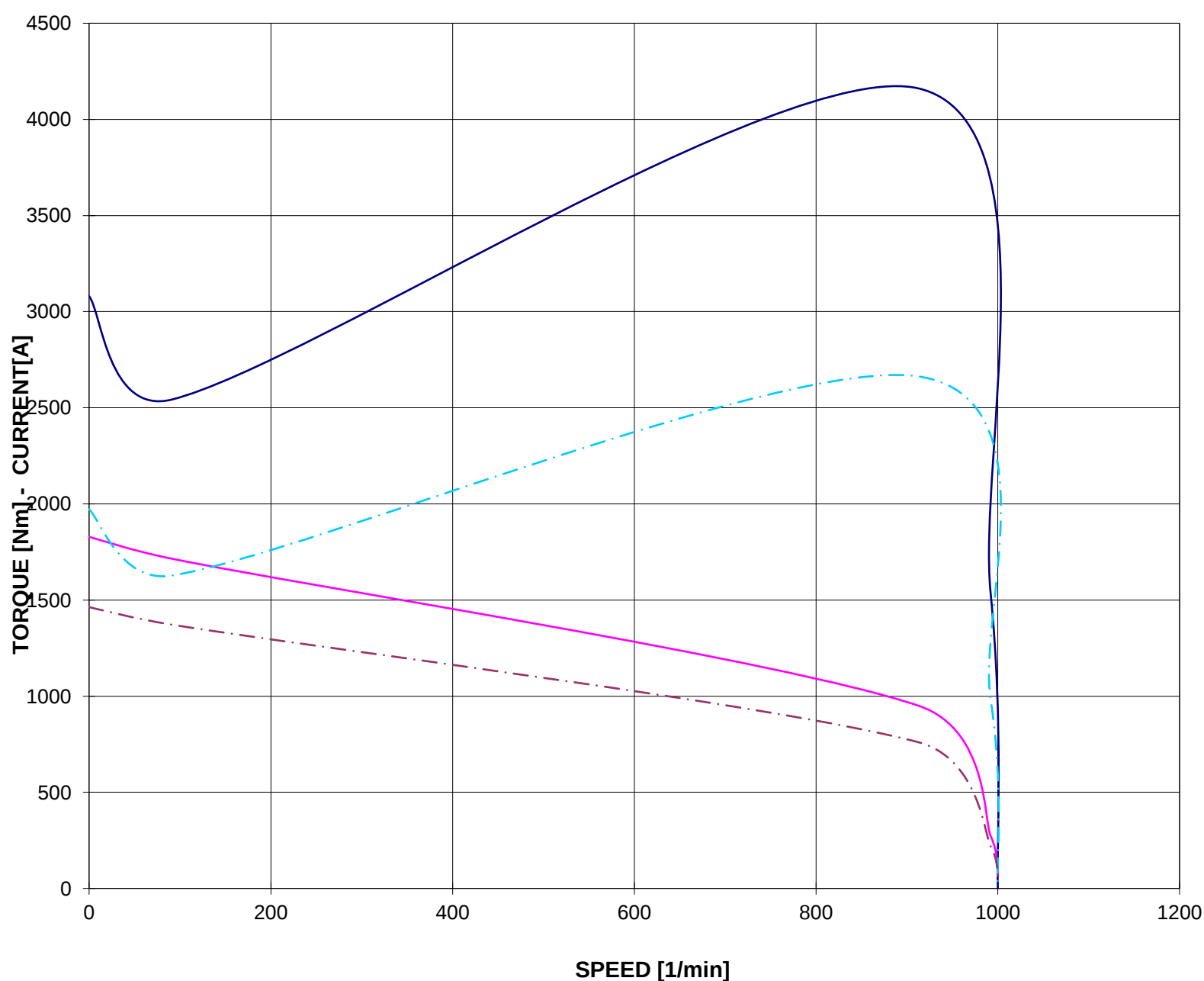
Tensione - Frequenza / Voltage - Frequency 400 - 50 V - Hz

Corrente / Rated current 274,53 A

Velocità / Speed 992 rpm

Coppia / Torque 1540,26 Nm

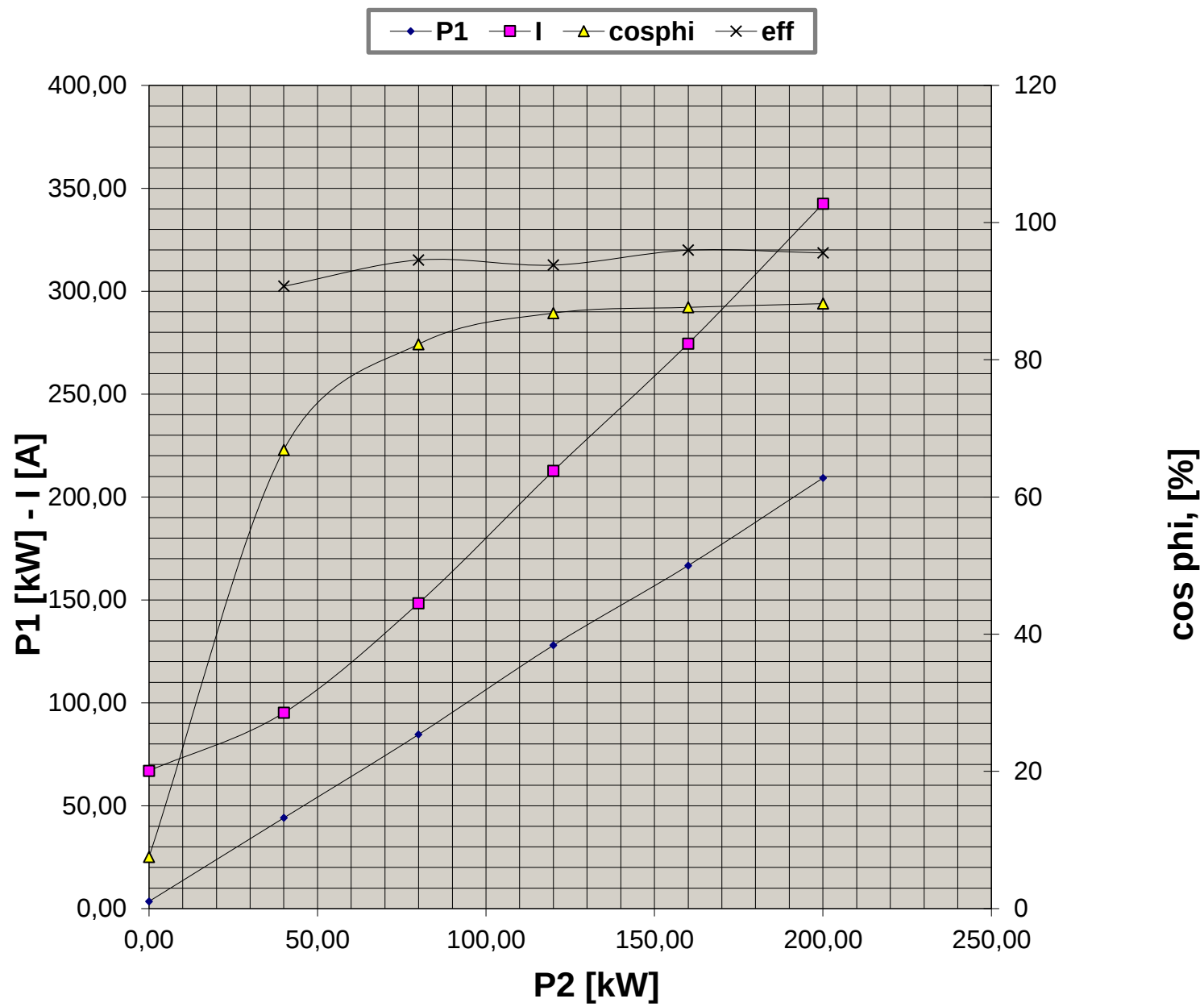
— COPPIA - TORQUE — CORRENTE - CURRENT
- - - COPPIA - TORQUE 80% Un - - - CORRENTE - CURRENT 80% Un



Valori calcolati - Data obtained by calculation method

CURVE CARATTERISTICHE
PERFORMANCE CURVES

Cliente / Customer	CEMP	
Impianto / Plant	-	
ITEM	-	
Numero d'offerta / Offer Number	2021.	
	-	
Motore / Motor	AB30 355MA 6	
Potenza nominale / Rated power	160,00	kW
Poli / Pole	6	
Tensione - Frequenza / Voltage - Frequency	400 - 50	V - Hz
Corrente / Rated current	274,53	A
Velocità / Speed	992	rpm
Coppia / Torque	1540,26	Nm



Valori calcolati - Data obtained by calculation method

Data / Date 28 January 2022

CURVA LIMITE CORRENTE TEMPO THERMAL WITHSTAND CURVE

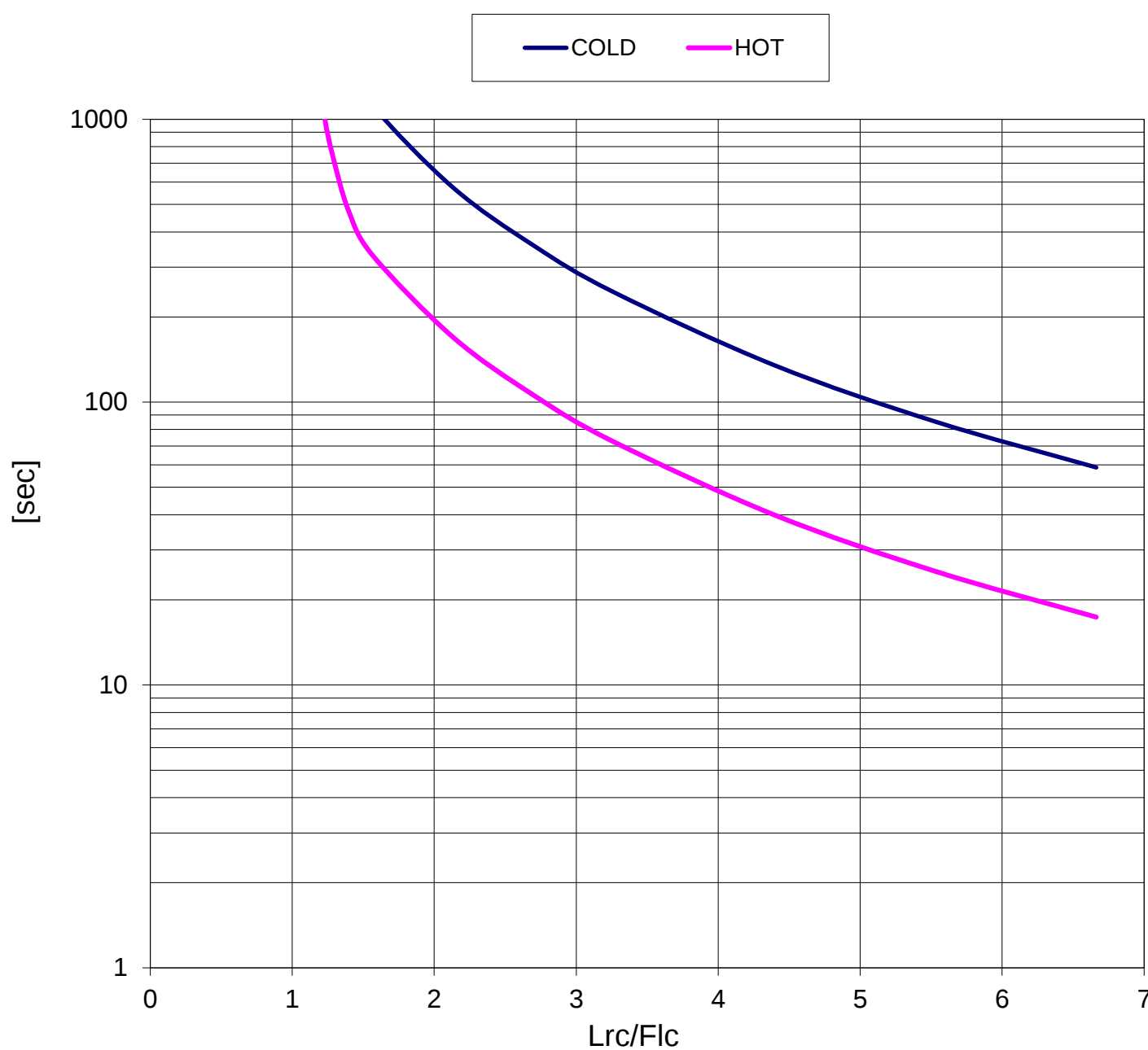
Cliente / Customer CEMP

Impianto / Plant -
ITEM -

Numero d'offerta / Offer Number 2021.
-

Motore / Motor AB30 355MA 6

Potenza nominale / Rated power	160,00	kW
Poli / Pole	6	
Tensione - Frequenza / Voltage - Frequency	400 - 50	V - Hz
Corrente / Rated current	274,53	A
Velocità / Speed	992	rpm
Coppia / Torque	1540,26	Nm



Valori calcolati - Data obtained by calculation method

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

Cliente / Customer CEMP

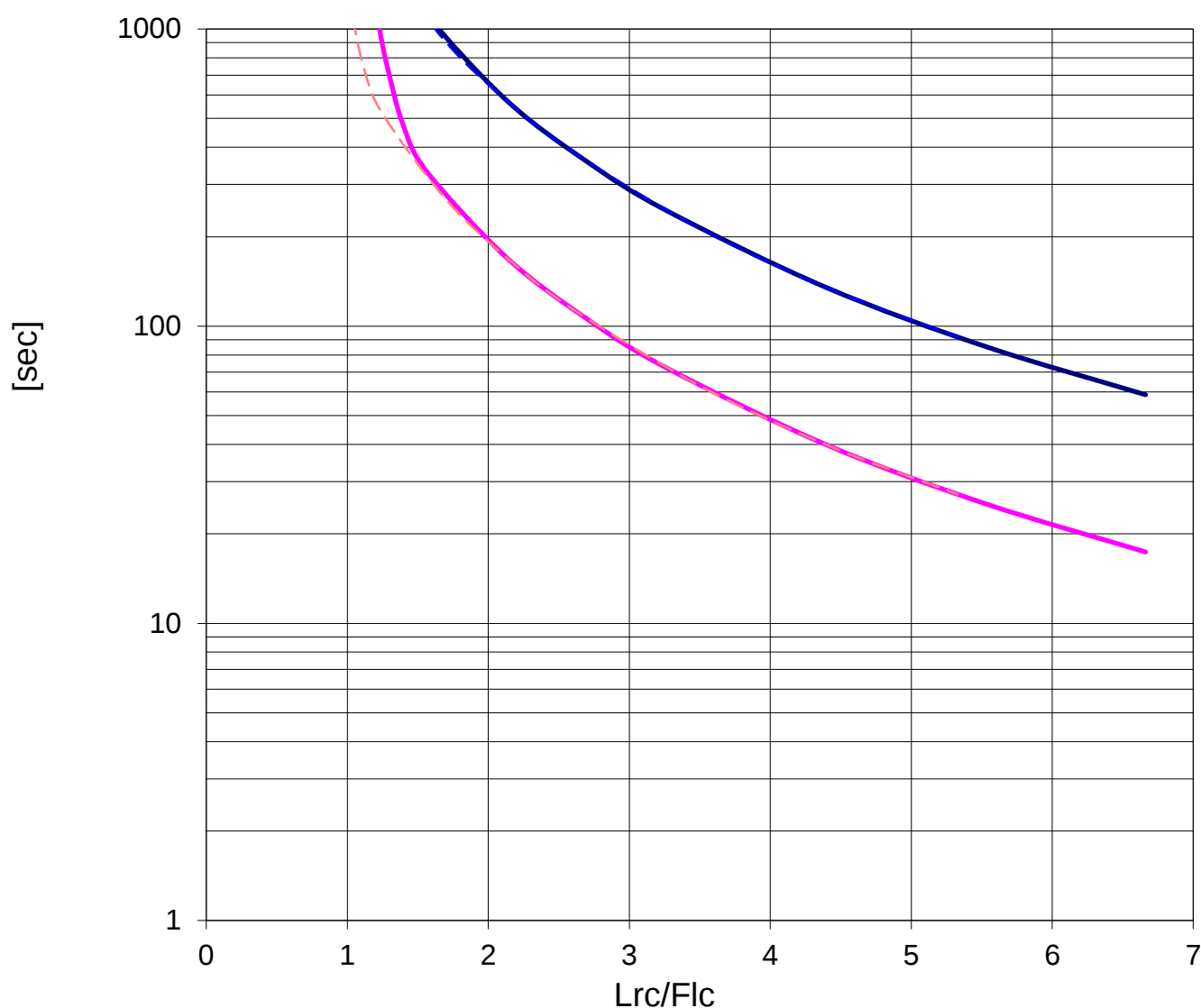
Impianto / Plant -
ITEM -

Numero d'offerta / Offer Number 2021.
-

Motore / Motor AB30 355MA 6

Potenza nominale / Rated power	160,00	kW
Poli / Pole	6	
Tensione - Frequenza / Voltage - Frequency	400 - 50	V - Hz
Corrente / Rated current	274,53	A
Velocità / Speed	992	rpm
Coppia / Torque	1540,26	Nm

— COLD (100% Un) — HOT (100% Un) - - COLD (80% Un) - - HOT (80% Un)



Valori calcolati - Data obtained by calculation method