

PRODUCT INFORMATION PACKET

Model No: E3AB3002169B30D41100

Catalog No: E3AB3002169B30D41100

Made in Italy E3AB30 Series, General Purpose Low Voltage IEC motor IE3, Flameproof, 22,00kW,
3 phase, 2963 RPM, D400/Y690V 50Hz, 160LB Frame B3, 2 Poles, IC411, Higher Output Motor



Regal and CEMP are trademarks of Regal Rexnord Corporation or one of its affiliated companies.

©2022 Regal Rexnord Corporation, All Rights Reserved. MC017097E

Nameplate Specifications

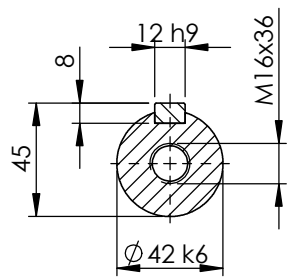
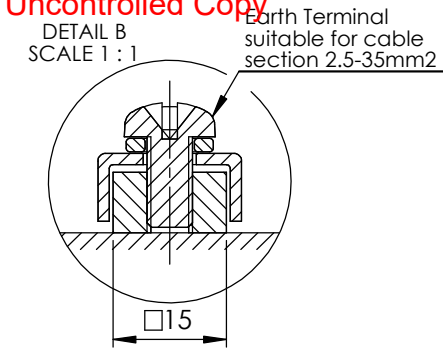
Output HP	30 Hp	Output KW	22.0 kW
Frequency	50 Hz	Voltage	400/690 V
Current	38.7 A	Speed	2963 rpm
Service Factor	1	Phase	3
Efficiency	92.7 %	Power Factor	0.88
Duty	S1	Insulation Class	F
Frame	160LB	Enclosure	Totally Enclosed Fan Cooled
Thermal Protection	No Protection	Ambient Temperature	40 °C
Drive End Bearing Size	6309	Opp Drive End Bearing Size	6309
UL	No	CSA	Yes
CE	Yes	IP Code	IP55
Number of Speeds	1		

Technical Specifications

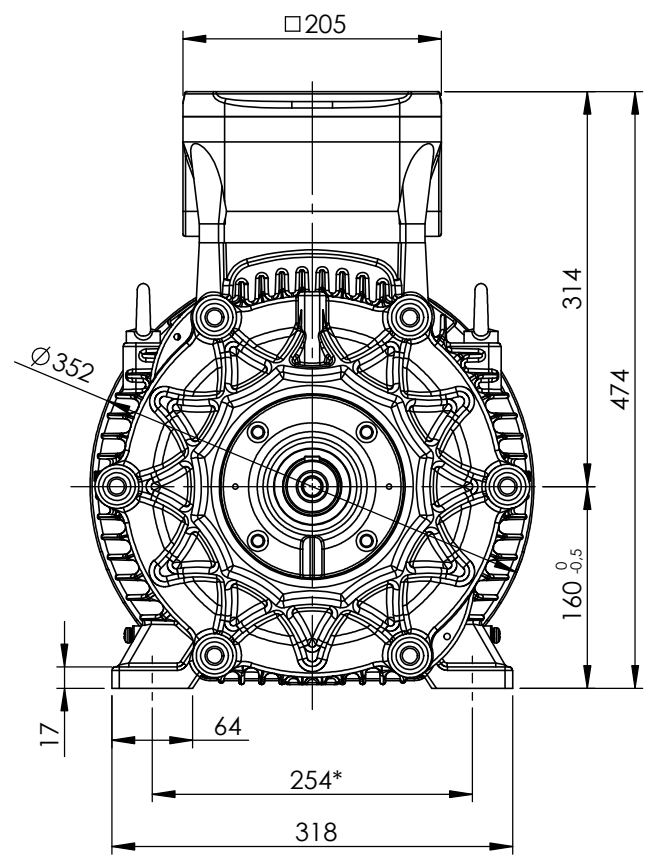
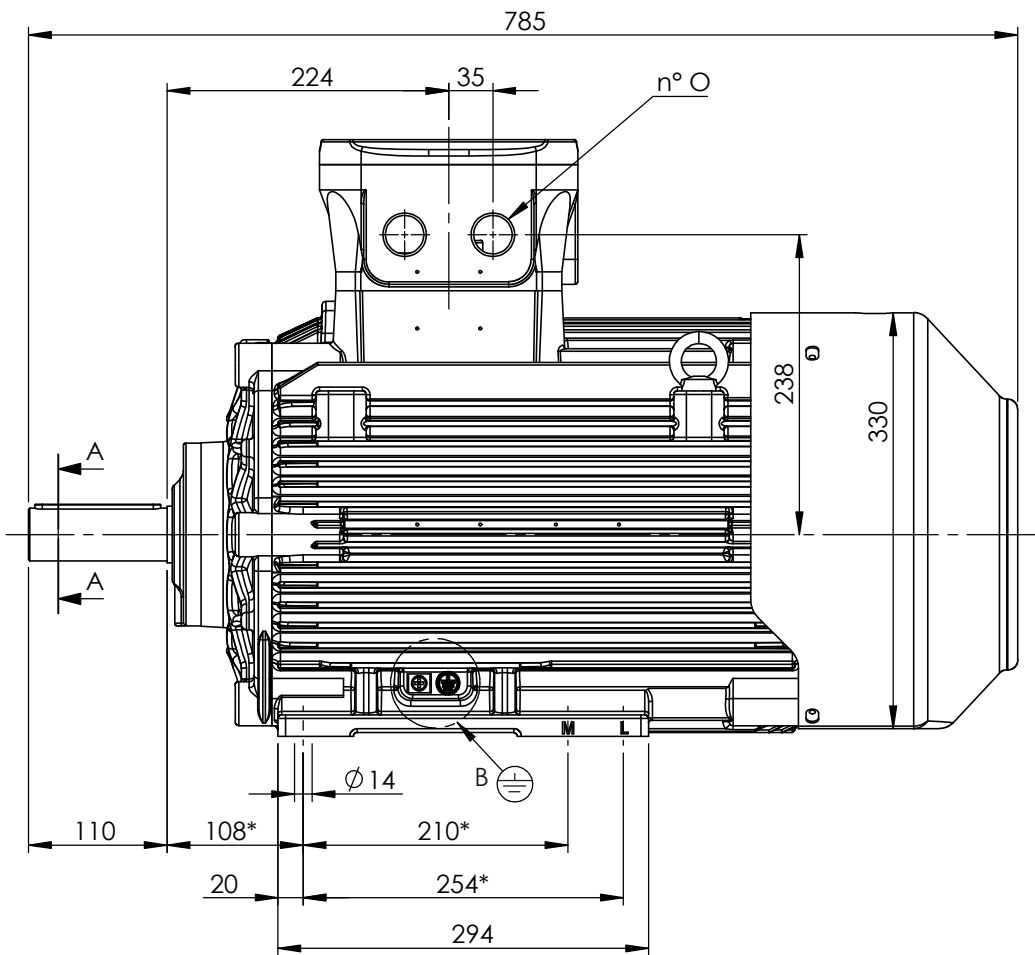
Electrical Type	Squirrel Cage	Starting Method	Direct On Line
Poles	2	Rotation	Bi-Directional
Mounting	B3	Motor Orientation	Horizontal
Drive End Bearing	Zz C3	Opp Drive End Bearing	Zz C3
Frame Material	Cast Iron	Shaft Type	Keyed
Overall Length	933.00 mm	Frame Length	420.00 mm
Shaft Diameter	42.000 mm	Shaft Extension	110 mm
Assembly/Box Mounting	Top		
Connection Drawing	SC-01-T-1v-1a	Outline Drawing	B3A04E8160001A01

This is an uncontrolled document once printed or downloaded and is subject to change without notice. Date Created:12/02/2022

Uncontrolled Copy
DETAIL B
SCALE 1 : 1



SECTION A-A
SCALE 1 : 3



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

CUSTOMER REFERENCE AND ADDITIONAL INFORMATION: MOTOR TYPE AND DESCRIPTION:

DRAWING REVISION	REVISION BY	DATE	TOLERANCES (EXCEPT AS NOTED) TOLERANCES: ±2 * TOLERANCES: ±0.8 DIMENSIONS ARE IN mm ACCORDING TO IEC 60072	DRAWN BY LP	 			
ECO	APPROVED BY	DATE		DATE 27/12/2016				
ECO DESCRIPTION				APPROVED BY DP	DESCRIPTION Motor A160 LA/LB (L) B3			
COPYRIGHT CEMP Srl. ALL RIGHTS RESERVED. PROPRIETARY AND CONFIDENTIAL INFORMATION - THIS DOCUMENT IS THE PROPERTY OF CEMP Srl. ("OWNER") AND CONTAINS OWNER'S PROPRIETARY INFORMATION. ANY PERSON, CORPORATION OR OTHER FIRM RECEIVING IT IS DEEMED, BY RECEIVING IT, TO AGREE THAT IT, AND/OR ANY PART OF IT, SHALL NOT BE DISCLOSED TO ANY PERSON, CORPORATION OR OTHER ENTITY, DUPLICATED, AND/OR USED, EXCEPT AS EXPRESSLY APPROVED IN WRITING IN ADVANCE BY OWNER. THIS DOCUMENT SHALL BE RETURNED TO OWNER UPON REQUEST. IT MAY BE SUBJECT TO CERTAIN RESTRICTIONS UNDER APPLICABLE EXPORT CONTROL LAWS AND REGULATIONS.				DATE 27/12/2016				
			SERIAL NUMBER	REFERENCE	SIZE  A4 DRAWING NUMBER B3A04E8160001A01 SHEET 1 OF 2			
			FIRST ANGLE PROJECTION					

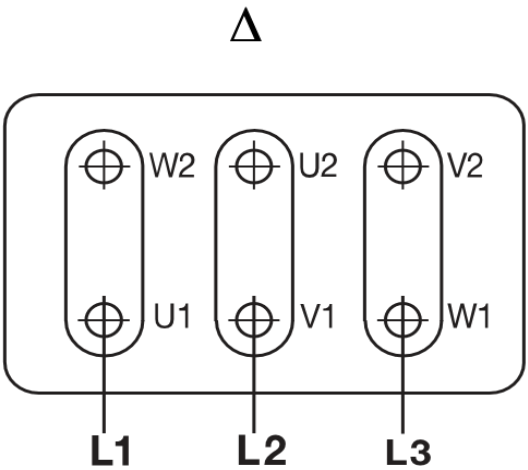
Schema di collegamento - *Connection diagram*
Schemas de branchement - *Schaltplan*
Esquemas de conexión



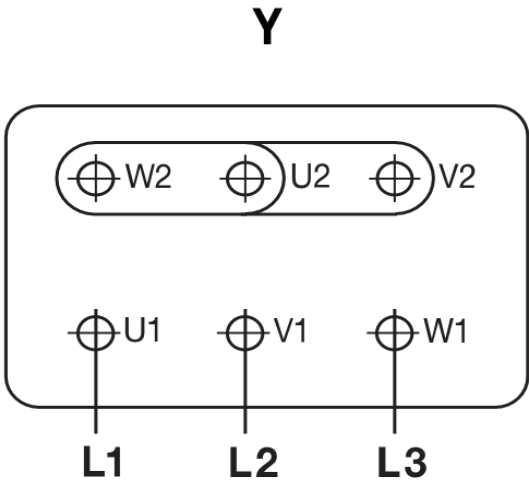
DTE 01/01/2004
SC - 01 - T - 1v.doc

**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	CEMP
Offerta / Offer : 2021.	
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		E3AB30 160LB 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	22,00
9	Corrente nominale / Rated current	A	38,75
10	Velocità nominale / Full Load speed	1/min	2963
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
18	Giri / Speed	1/min	2963
19	Corr. / Curr.	A	38,75
20	Rend / Eff	%	92,7
21	cos φ	-	0,88
Performances all'avviamento / Starting performances			
22	Ia/In - LRC/FLC	%	785
23	Cosphi a rotore bloccato / LR power factor		0,44
	Tempo a rotore bloccato / LRWT		
24	100% Un (A caldo / Warm)	sec	6
25	(A freddo / Cold)	sec	19
26	80% Un (A caldo / Warm)	sec	9
27	(A freddo / Cold)	sec	30
	Tempo di avviamento ammissibile / ART		
28	100% Un	sec	17
29	80% Un	sec	26
Curva di coppia / Speed-torque values			
30	Coppia nominale / Rated Torque	Nm	70,90
31	Ca/Cn - LRT/FLT	%	210
32	Cmax/Cn - BDT/FLT	%	340
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	6309 ZZ C3
45	Cuscinetto post / NDE bearing	6309 ZZ C3
46	Carico radiale max / Max radial load in X1	2470
47	Carico assiale max / Max axial load	750
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
52	Momento d'inerzia / Moment of inertia	kgm2
53	Rumore a vuoto / Noise at no load (1 m)	Lp dB(A)
54	Vibrazioni / Vibration level	IEC 34-14
55	Limite norma / Vibration limit	mm/sec
56		
57		
Dati entrata cavi - verniciatura / Cable entry and painting		
63	Entrata cavi / Cable entry	2xM32
64	Ciclo verniciatura / Painting cycle	STD
65	Colore finale / Final colour	RAL
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 E3AB30 160LB 2

Potenza nominale / Rated power 22,00 kW

Poli / Pole 2

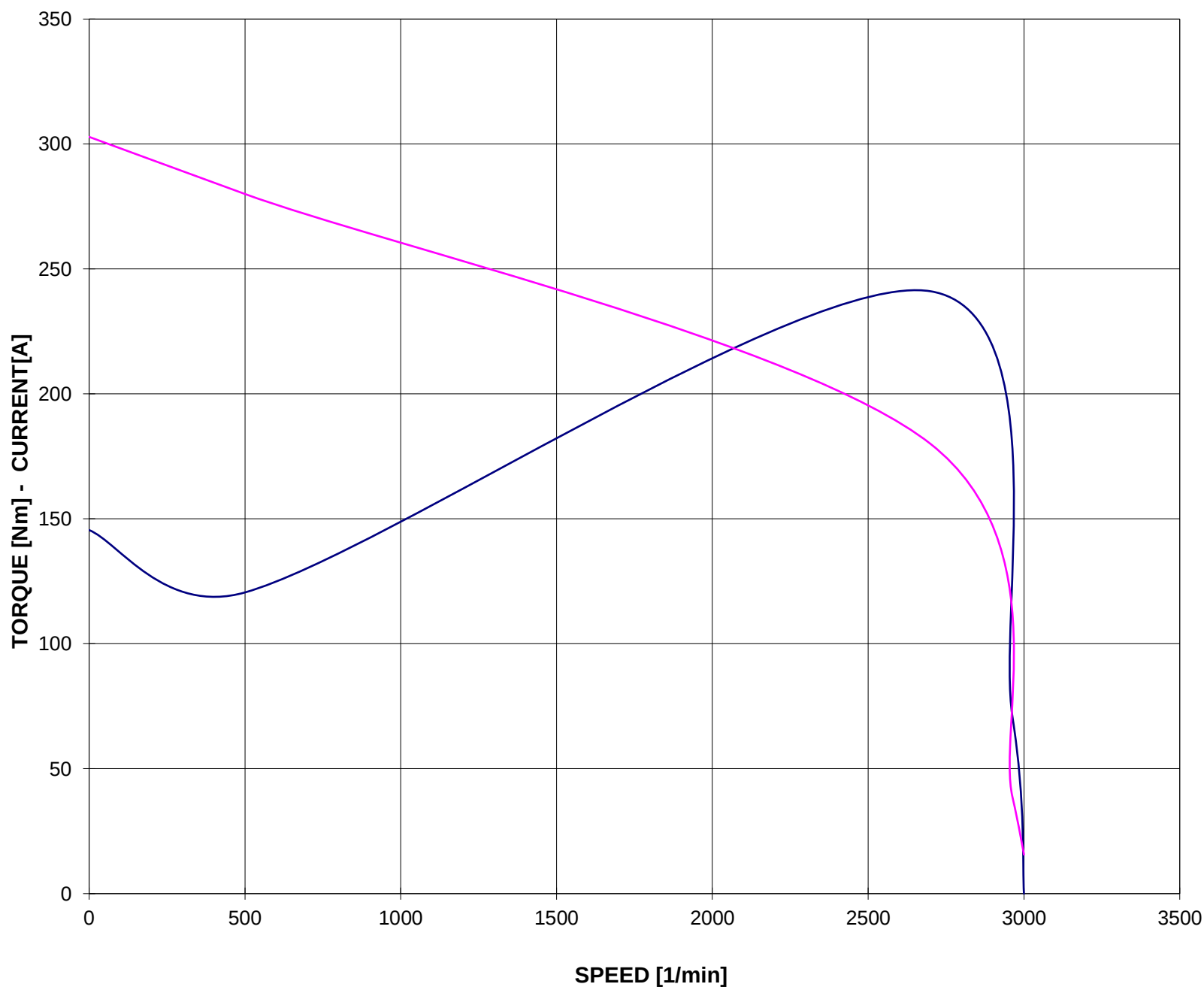
Tensione - Frequenza / Voltage - Frequency 400 - 50 V - Hz

Corrente / Rated current 38,75 A

Velocità / Speed 2963 rpm

Coppia / Torque 70,90 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 E3AB30 160LB 2

Potenza nominale / Rated power 22,00 kW

Poli / Pole 2

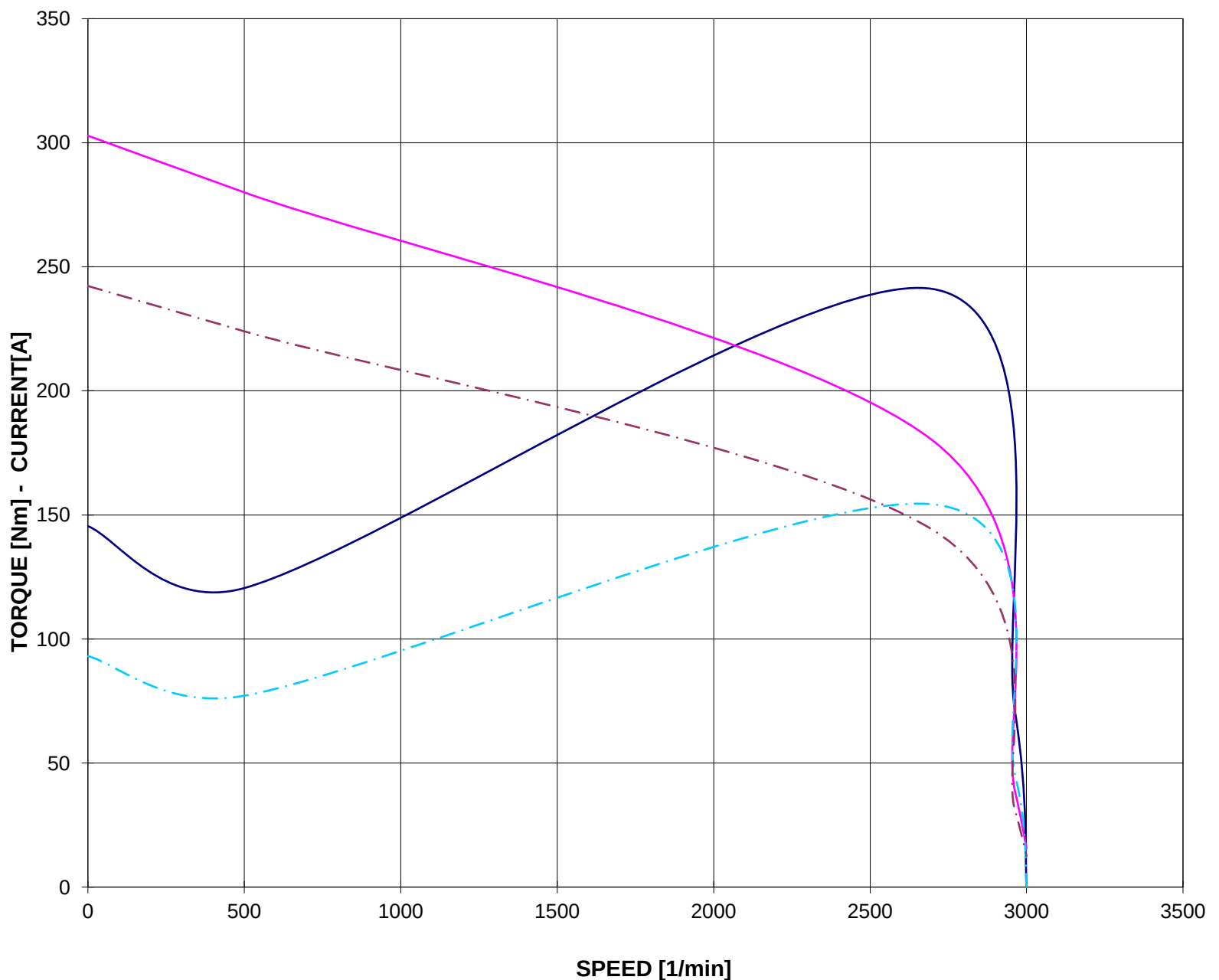
Tensione - Frequenza / Voltage - Frequency 400 - 50 V - Hz

Corrente / Rated current 38,75 A

Velocità / Speed 2963 rpm

Coppia / Torque 70,90 Nm

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



Valori calcolati - Data obtained by calculation method

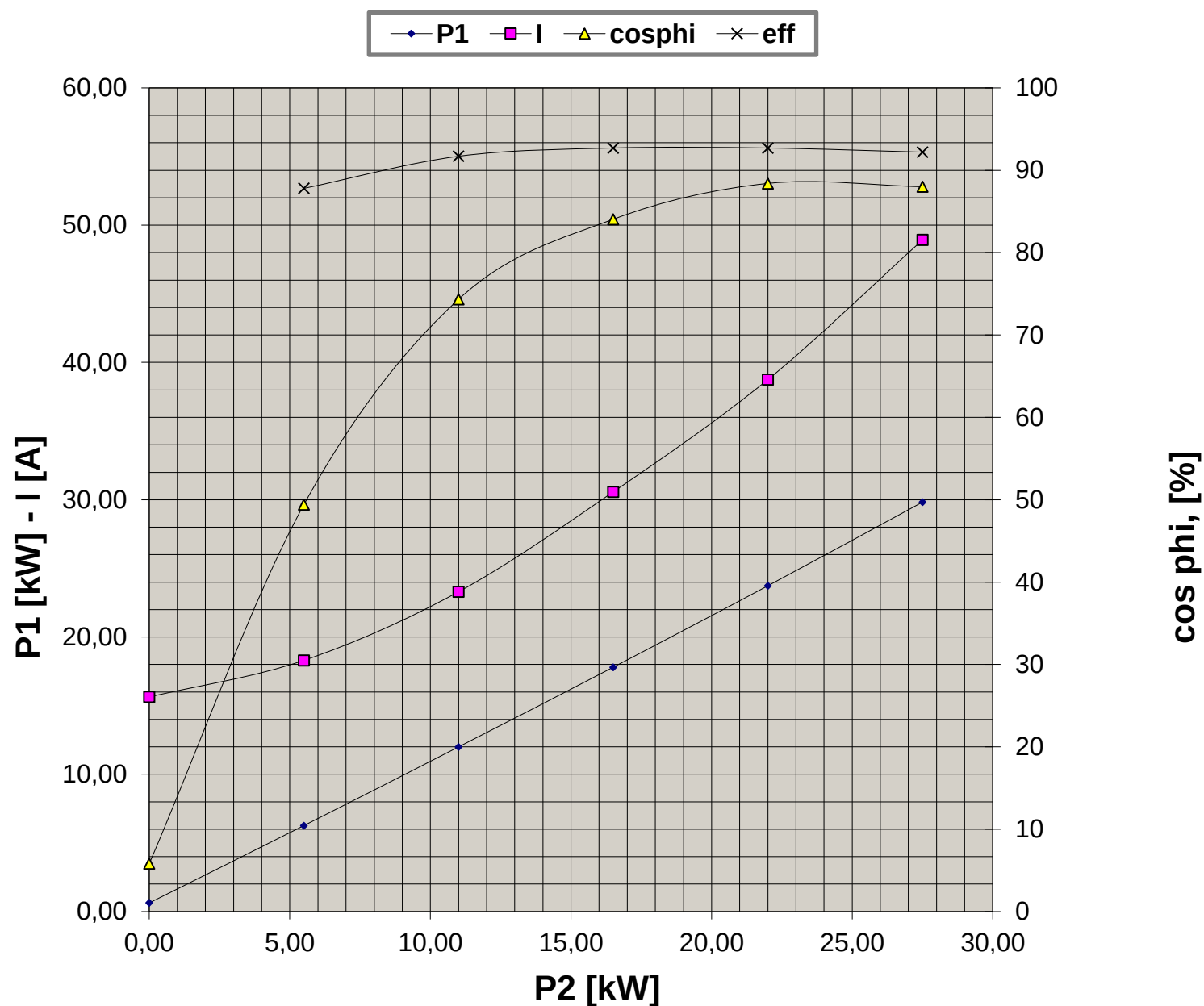
CURVE CARATTERISTICHE
PERFORMANCE CURVES

Cliente / Customer CEMP

 Impianto / Plant -
 ITEM -

 Numero d'offerta / Offer Number 2021.
 -

Motore / Motor	E3AB30 160LB 2	
Potenza nominale / Rated power	22,00	kW
Poli / Pole	2	
Tensione - Frequenza / Voltage - Frequency	400 - 50	V - Hz
Corrente / Rated current	38,75	A
Velocità / Speed	2963	rpm
Coppia / Torque	70,90	Nm



Valori calcolati - Data obtained by calculation method

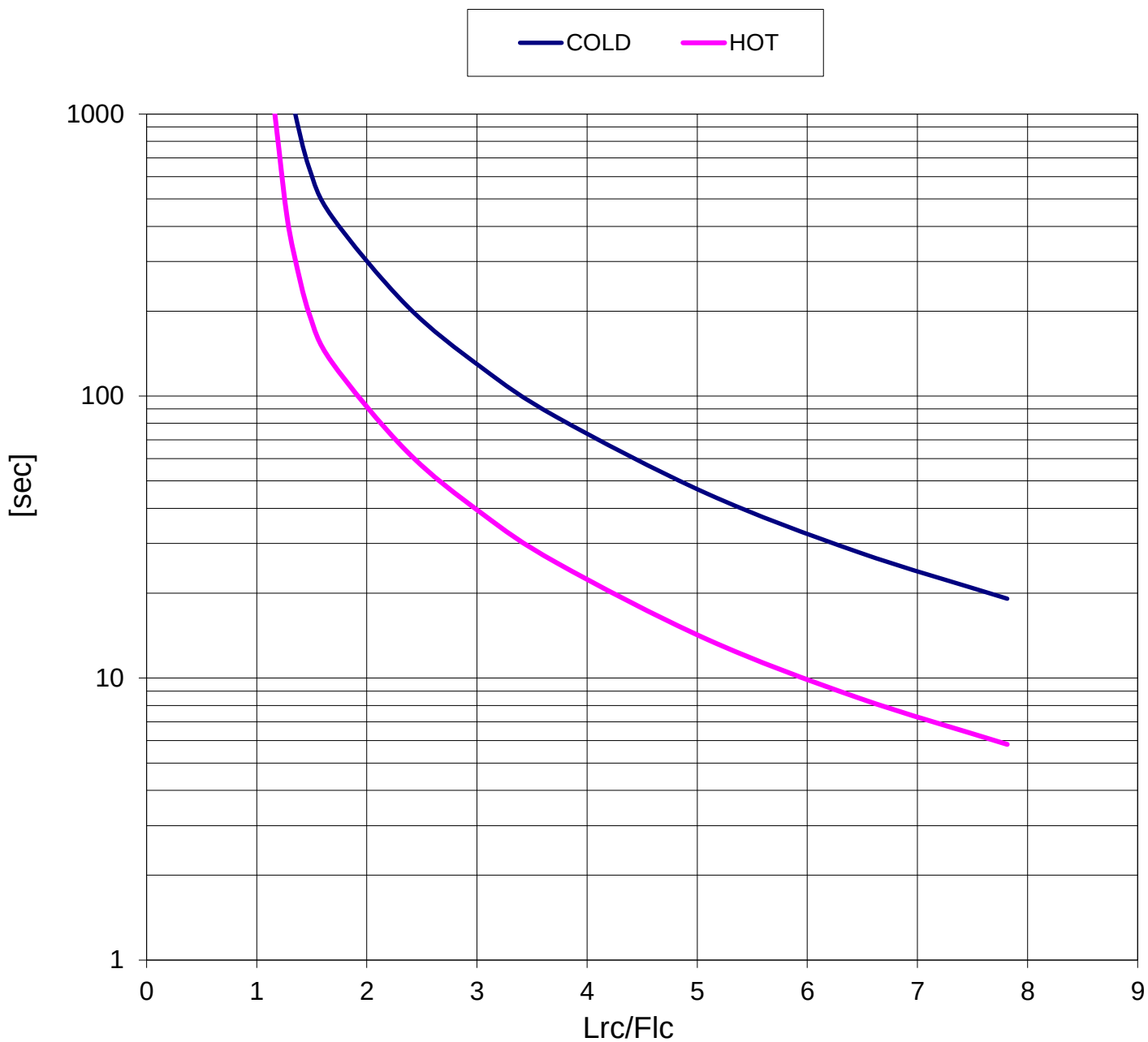
CURVA LIMITE CORRENTE TEMPO
THERMAL WITHSTAND CURVE

Cliente / Customer CEMP

Impianto / Plant -
ITEM -

Numero d'offerta / Offer Number 2021.
-

Motore / Motor	E3AB30 160LB 2	
Potenza nominale / Rated power	22,00	kW
Poli / Pole	2	
Tensione - Frequenza / Voltage - Frequency	400 - 50	V - Hz
Corrente / Rated current	38,75	A
Velocità / Speed	2963	rpm
Coppia / Torque	70,90	Nm



Valori calcolati - Data obtained by calculation method

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

Cliente / Customer CEMP

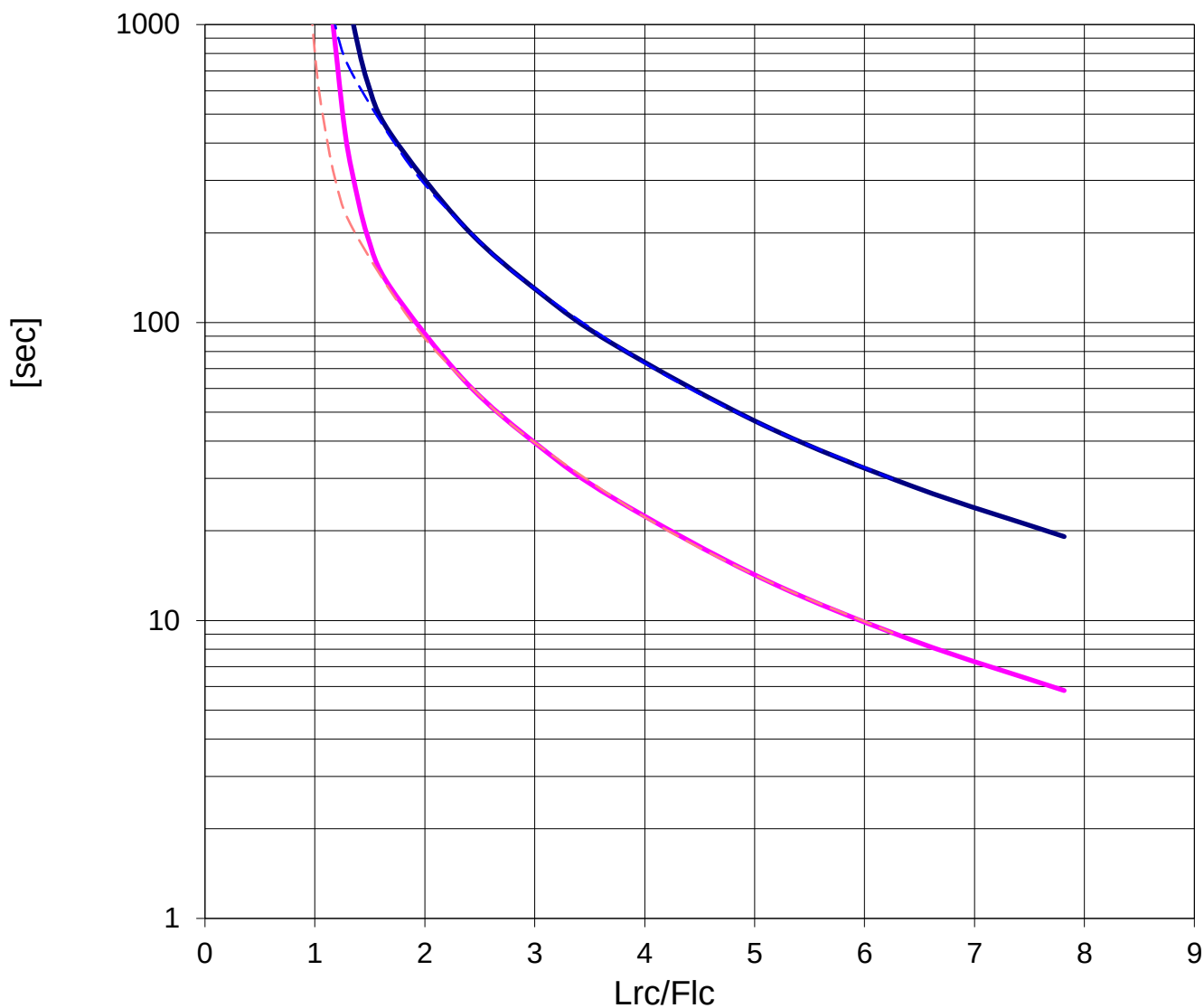
Impianto / Plant -
ITEM -

Numero d'offerta / Offer Number 2021.
-

Motore / Motor E3AB30 160LB 2

Potenza nominale / Rated power	22,00	kW
Poli / Pole	2	
Tensione - Frequenza / Voltage - Frequency	400 - 50	V - Hz
Corrente / Rated current	38,75	A
Velocità / Speed	2963	rpm
Coppia / Torque	70,90	Nm

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



Valori calcolati - Data obtained by calculation method