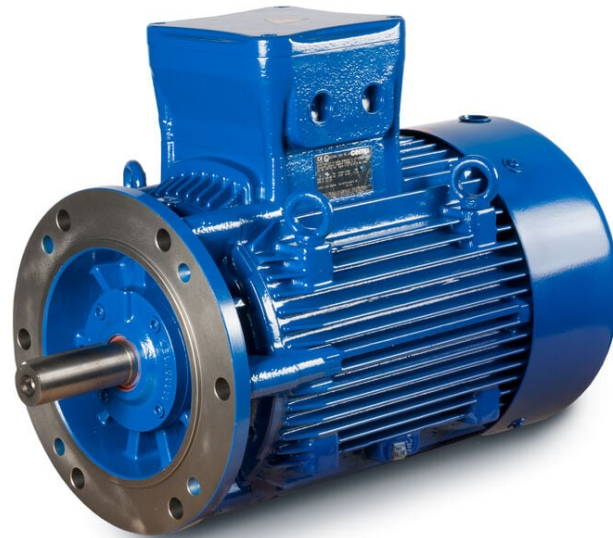


# PRODUCT INFORMATION PACKET

Model No: E3AC3002161B50D41100

Catalog No: E3AC3002161B50D41100

Made in Italy E3AC30 Series, General Purpose Low Voltage IEC motor IE3, Flameproof, 11,00kW,  
3 phase, 2951 RPM, D400/Y690V 50Hz, 160MB Frame B5, 2 Poles, IC411



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

©2023 Regal Rexnord Corporation, All Rights Reserved. MC017097E

### Nameplate Specifications

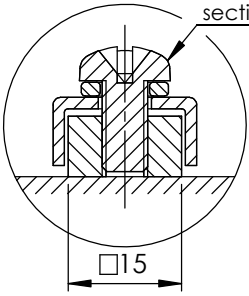
Phase	<b>3</b>	Output HP	<b>15 Hp</b>
Output KW	<b>11.0 kW</b>	Voltage	<b>400/690 V</b>
Speed	<b>2951 rpm</b>	Service Factor	<b>1</b>
Frame	<b>160MB</b>	Enclosure	<b>Totally Enclosed Fan Cooled</b>
Efficiency	<b>91.2 %</b>	Ambient Temperature	<b>40 °C</b>
Frequency	<b>50 Hz</b>	Current	<b>19.9 A</b>
Power Factor	<b>0.87</b>	Duty	<b>S1</b>
Insulation Class	<b>F</b>	Drive End Bearing Size	<b>6309</b>
Opp Drive End Bearing Size	<b>6309</b>	UL	<b>No</b>
CSA	<b>Yes</b>	CE	<b>Yes</b>
IP Code	<b>IP55</b>	Number of Speeds	<b>1</b>

### Technical Specifications

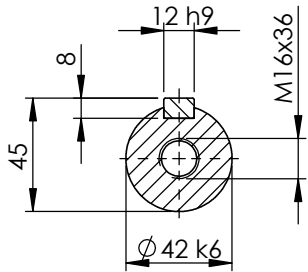
Electrical Type	<b>Squirrel Cage</b>	Starting Method	<b>Direct On Line</b>
Poles	<b>2</b>	Rotation	<b>Bi-Directional</b>
Mounting	<b>B5</b>	Motor Orientation	<b>Horizontal</b>
Drive End Bearing	<b>Zz C3</b>	Opp Drive End Bearing	<b>Zz C3</b>
Frame Material	<b>Cast Iron</b>	Shaft Type	<b>Keyed</b>
Overall Length	<b>853.00 mm</b>	Frame Length	<b>370.00 mm</b>
Shaft Diameter	<b>42.000 mm</b>	Shaft Extension	<b>110 mm</b>
Assembly/Box Mounting	<b>Top</b>		
Outline Drawing	<b>B5A04E8165001B01</b>	Connection Drawing	<b>SC-01-T-1v-1a</b>

This is an uncontrolled document once printed or downloaded and is subject to change without notice. Date Created:05/03/2023

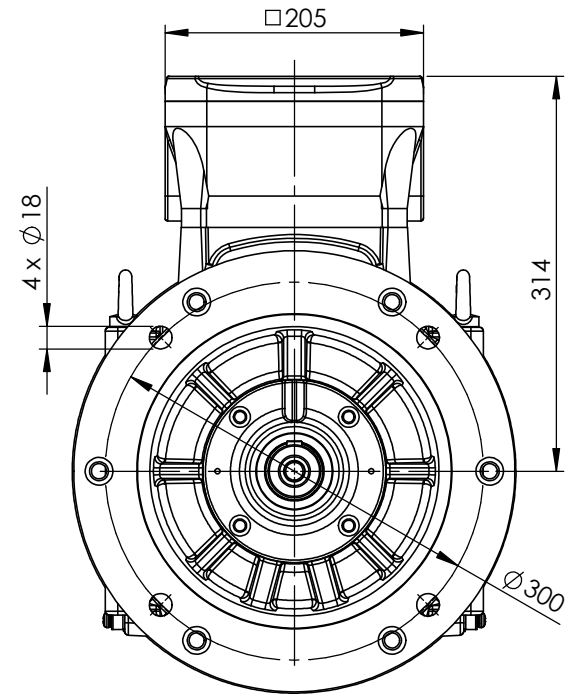
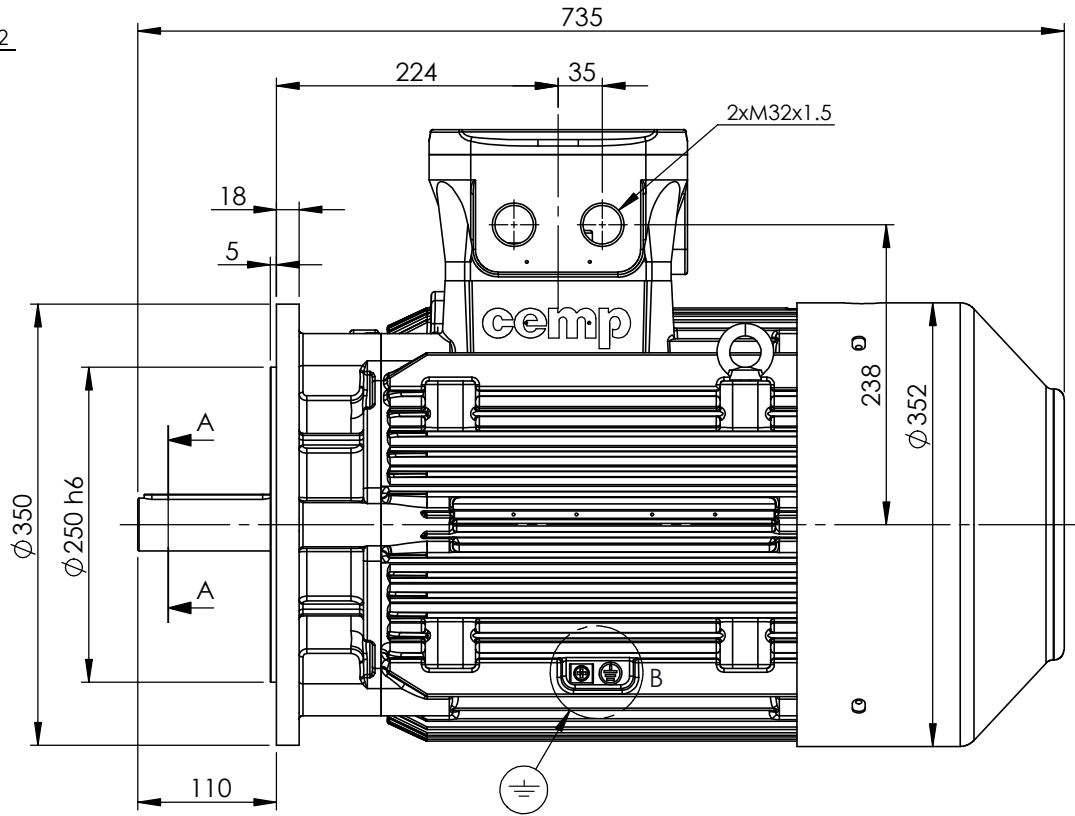
DETAIL B  
SCALE 1 : 1



Earth Terminal  
suitable for cable  
section 2.5-35mm<sup>2</sup>



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
ECO	APPROVED BY	DATE

ECO DESCRIPTION

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.

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

DESCRIPTION		<b>Motor A160 M/MB/MC (S) B5 IE3</b>	
SIZE	DRAWING NUMBER	SHEET	
<b>A4</b>	<b>B5A04E8165001B01</b>	<b>1 OF 2</b>	

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



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

<b>Marcatura Morsetti Ausiliari - <i>Additional terminals marking (IEC60034-8)</i></b>		
<b>Marcatura <i>Marking</i></b>	<b>No. morsetti <i>terminals</i></b>	<b>Morsetto ausiliare per: <i>Additional terminal for:</i></b>
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	
TB8 - TB9 (intervento- <i>switch off</i> )	2	Protettore bimetallico del freno normalmente chiuso - <i>NC brake bi-metallic switch (**)</i>
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 IIC T4 Gb	IP55
Ex-db IIC 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		E3AC30 160MB 2
3	Numero di serie / Serial Number		-
4	Forma costruttiva / Shape		B5
5	Certificato / Certificate	TÜV CY	17 ATEX 0205845 X
6	Altro certificato / Other certificate		
<b>Dati nominali / Rated data</b>			
7	Poli / Pole	n°	2
8	Potenza nominale / Rated power	kW	11,00
9	Corrente nominale / Rated current	A	19,94
10	Velocità nominale / Full Load speed	1/min	2951
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
<b>Performances elettriche / Electrical performances</b>			
Carico / Load		4/4	3/4
18	Giri / Speed	1/min	2951
19	Corr. / Curr.	A	19,94
20	Rend / Eff	%	91,2
21	cos φ	-	0,88
<b>Performances all'avviamento / Starting performances</b>			
22	Ia/In - LRC/FLC	%	790
23	Cosphi a rotore bloccato / LR power factor		0,45
Tempo a rotore bloccato / LRWT			
24	100% Un (A caldo / Warm)	sec	5
25	(A freddo / Cold)	sec	15
26	80% Un (A caldo / Warm)	sec	8
27	(A freddo / Cold)	sec	24
Tempo di avviamento ammissibile / ART			
28	100% Un	sec	13
29	80% Un	sec	21
<b>Curva di coppia / Speed-torque values</b>			
30	Coppia nominale / Rated Torque	Nm	35,60
31	Ca/Cn - LRT/FLT	%	230
32	Cmax/Cn - BDT/FLT	%	360
33			
34			
35			
<b>Varie / Other</b>			
36			
37			
38			
39			

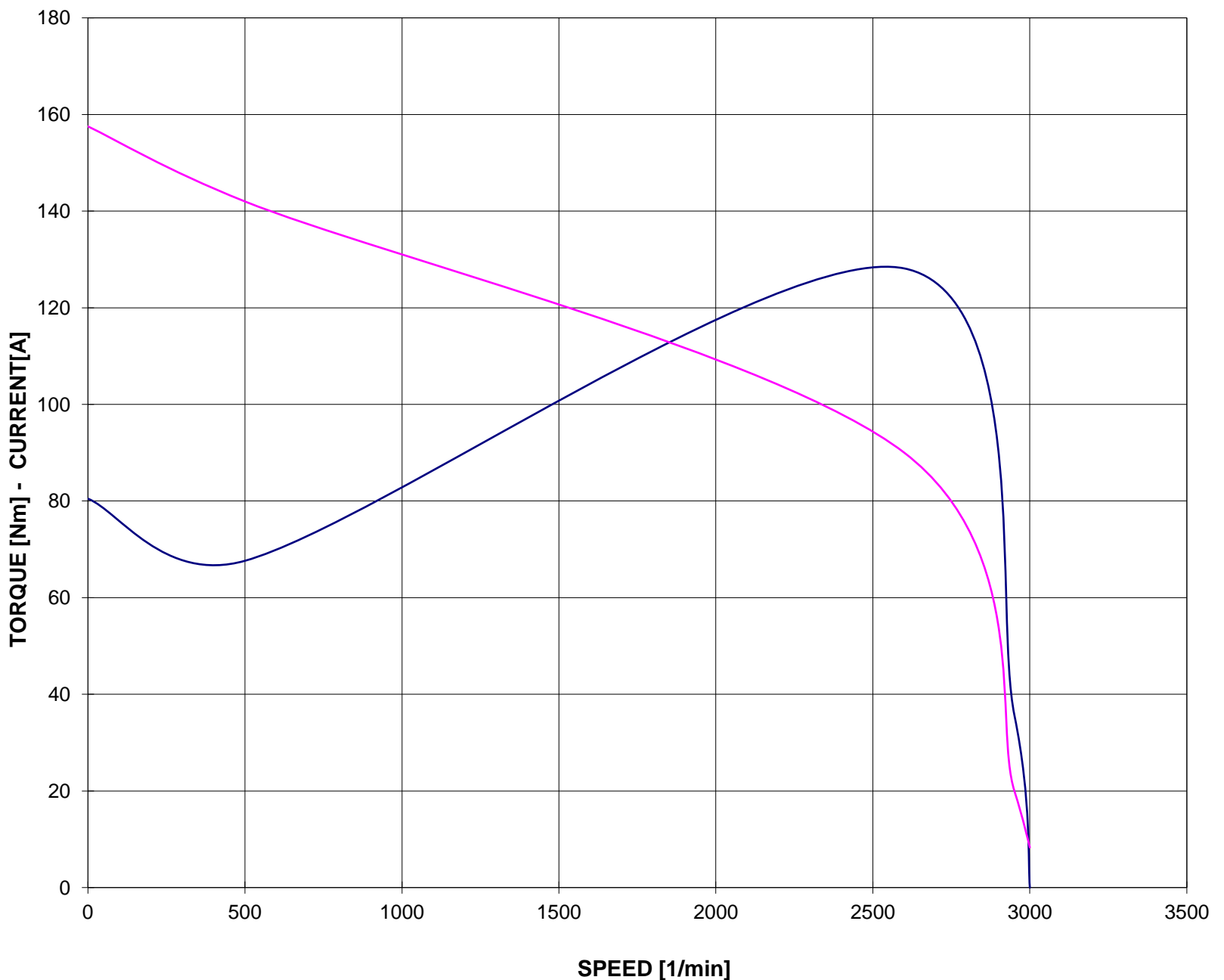
<b>Servizio / Duty</b>			
40	Servizio / Duty type	-	S1
41	Intermittenza / Cyclic duration factor	-	-
42	Avviamenti-ora / Starting-hour	-	-
43	Tempo ciclo / Time		-
<b>Cuscinetti / Bearings</b>			
44	Cuscinetto ant / DE bearing	-	6309 ZZ C3
45	Cuscinetto post / NDE bearing	-	6309 ZZ C3
46	Carico radiale max / Max radial load in X1	N	2470
47	Carico assiale max / Max axial load	N	750
48	Tipo grasso / Grease type	LGHP2 SKF or equivalent	
49	Intervallo lubrificazione / Lubrication	h	-
50	Quantità grasso / Quantity grease	gr	-
<b>Caratteristiche meccaniche / mechanical specification</b>			
51	Massa / Mass	kg	193,8
52	Momento d'inerzia / Moment of inertia	kgm2	0,0553
53	Rumore a vuoto / Noise at no load (1 m)	Lp dB(A)	76
54	Vibrazioni / Vibration level	IEC 34-14	A
55	Limite norma / Vibration limit	mm/sec	2,20
56			
57			
<b>Dati entrata cavi - verniciatura / Cable entry and painting</b>			
63	Entrata cavi / Cable entry		2xM32
64	Ciclo verniciatura / Painting cycle		STD
65	Colore finale / Final colour	RAL	5010
66			
67			
68			
69			
70			
71			
<b>Ausiliari - Auxiliaries</b>			
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 -  
 Ordine cliente / Customer order -  
 Impianto / Plant -  
**ITEM** -  
 Conferma ordine / Acknowledgment -  
 Numero di serie / Serial Number -

**Motore / Motor** **E3AC30 160MB 2**  
 Potenza nominale / Rated power 11,00 kW  
 Poli / Pole 2  
 Tensione - Frequenza / Voltage - Frequency 400 - 50 V - Hz  
 Corrente / Rated current 19,94 A  
 Velocità / Speed 2951 rpm  
 Coppia / Torque 35,60 Nm

— COPPIA - TORQUE — CORRENTE - CURRENT



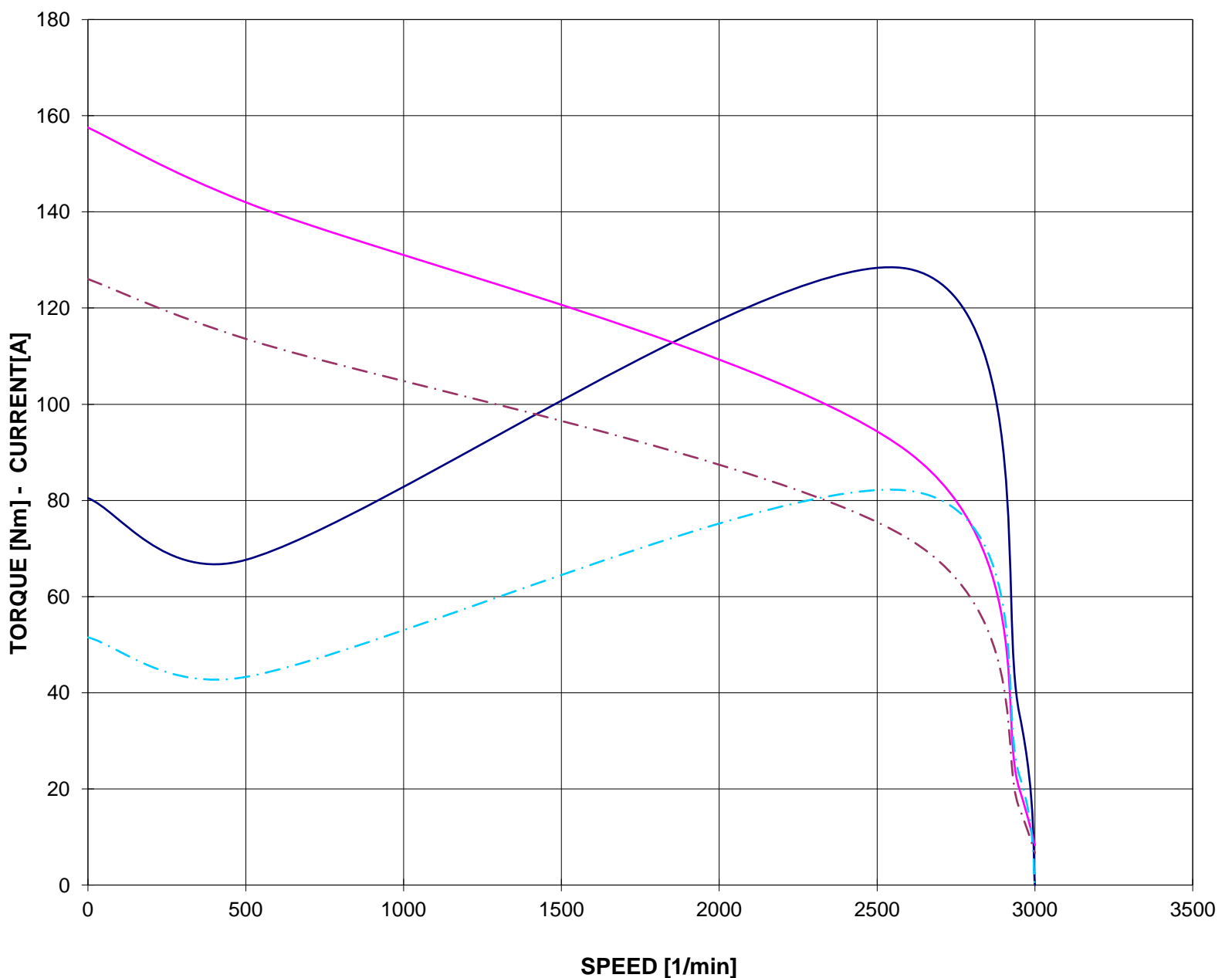
Valori calcolati - Data obtained by calculation method

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

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

**Motore / Motor** **E3AC30 160MB 2**  
 Potenza nominale / Rated power 11,00 kW  
 Poli / Pole 2  
 Tensione - Frequenza / Voltage - Frequency 400 - 50 V - Hz  
 Corrente / Rated current 19,94 A  
 Velocità / Speed 2951 rpm  
 Coppia / Torque 35,60 Nm

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



Valori calcolati - Data obtained by calculation method

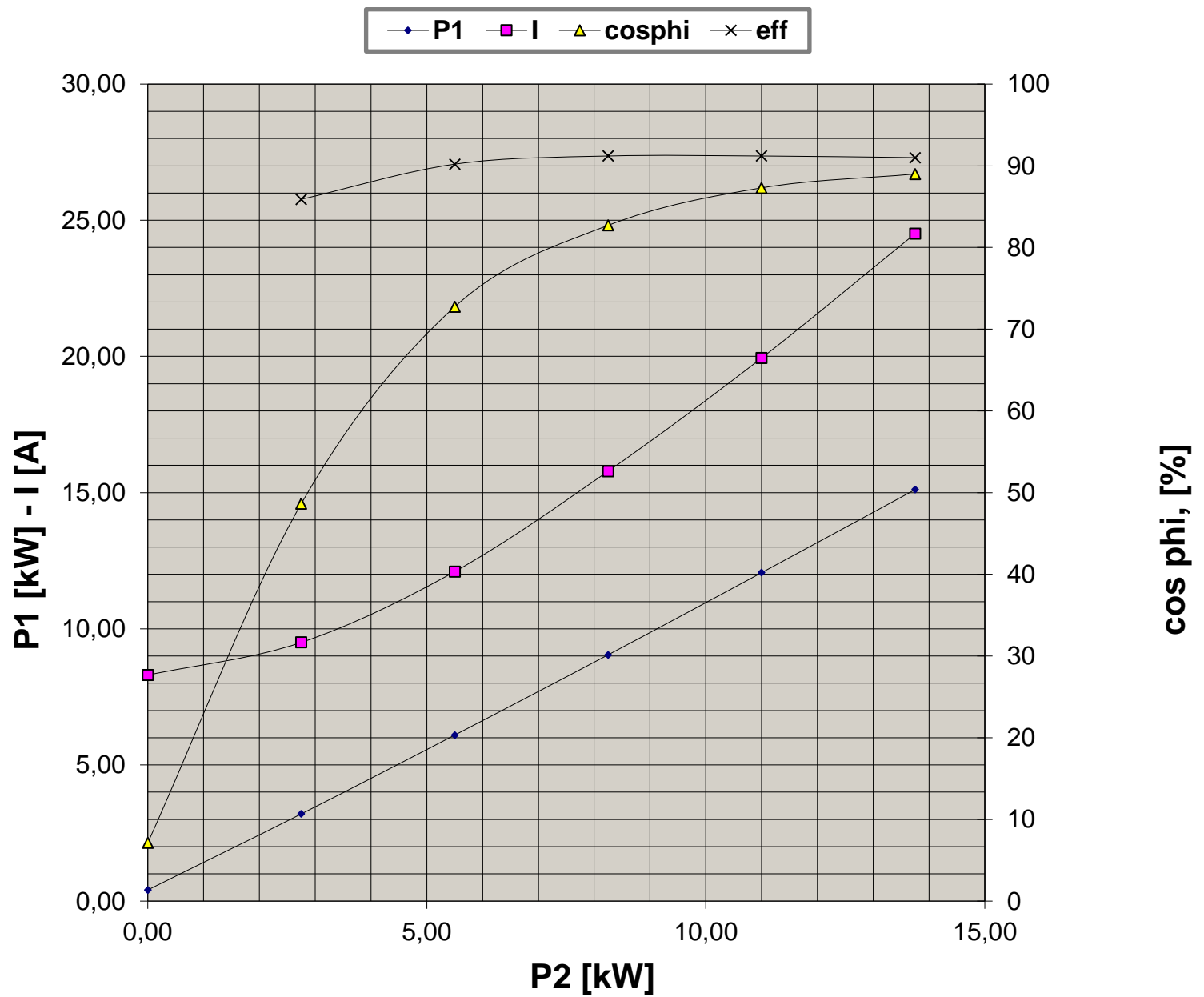


**CURVE CARATTERISTICHE  
PERFORMANCE CURVES**

Cliente / Customer -  
Ordine cliente / Customer order -  
Impianto / Plant -  
**ITEM** -

Conferma ordine / Acknowledgment -  
Numero di serie / Serial Number -

<b>Motore / Motor</b>	<b>E3AC30 160MB 2</b>	
Potenza nominale / Rated power	11,00	kW
Poli / Pole	2	
Tensione - Frequenza / Voltage - Frequency	400 - 50	V - Hz
Corrente / Rated current	19,94	A
Velocità / Speed	2951	rpm
Coppia / Torque	35,60	Nm

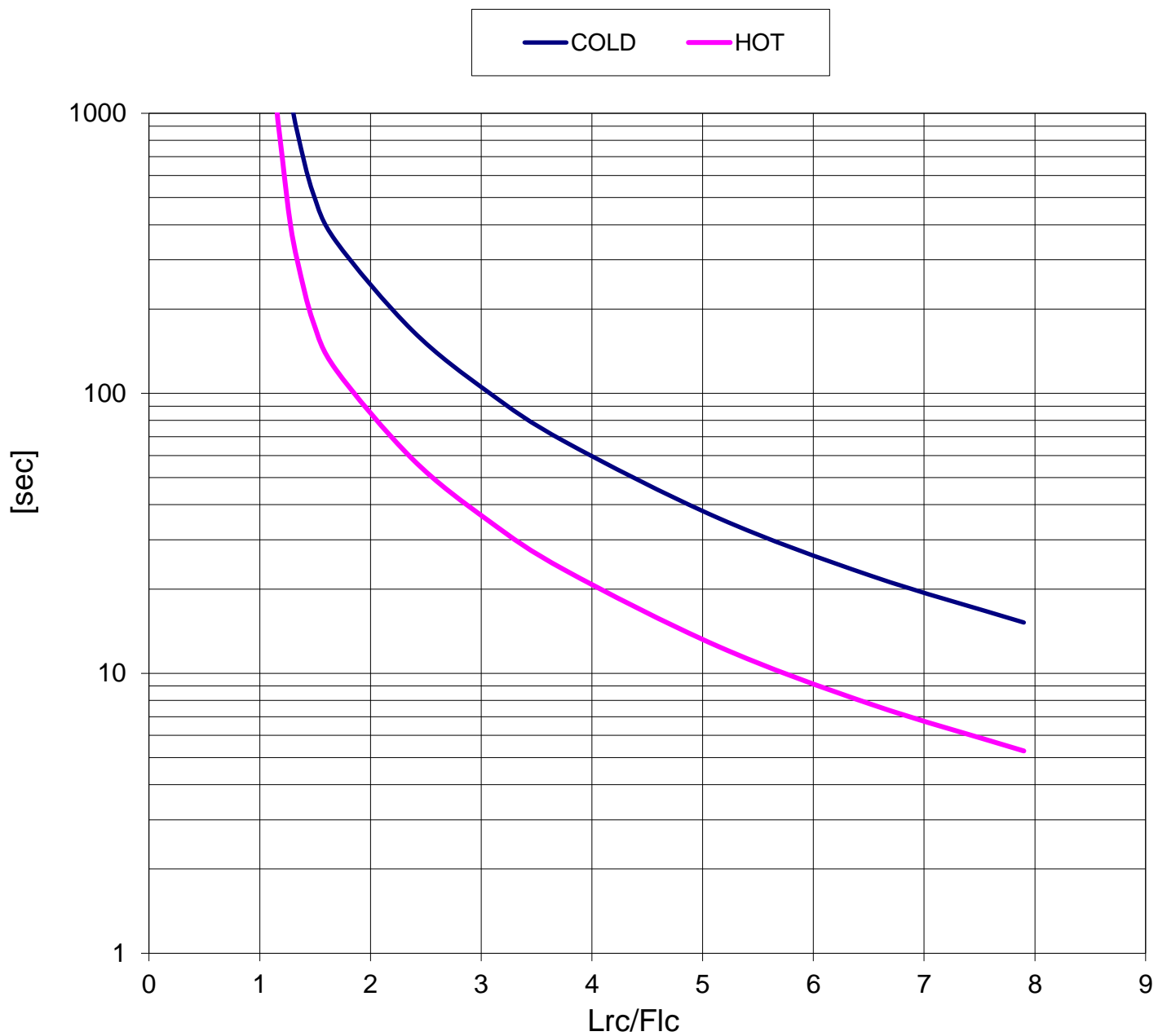


Valori calcolati - Data obtained by calculation method

**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** **E3AC30 160MB 2**  
 Potenza nominale / Rated power 11,00 kW  
 Poli / Pole 2  
 Tensione - Frequenza / Voltage - Frequency 400 - 50 V - Hz  
 Corrente / Rated current 19,94 A  
 Velocità / Speed 2951 rpm  
 Coppia / Torque 35,60 Nm

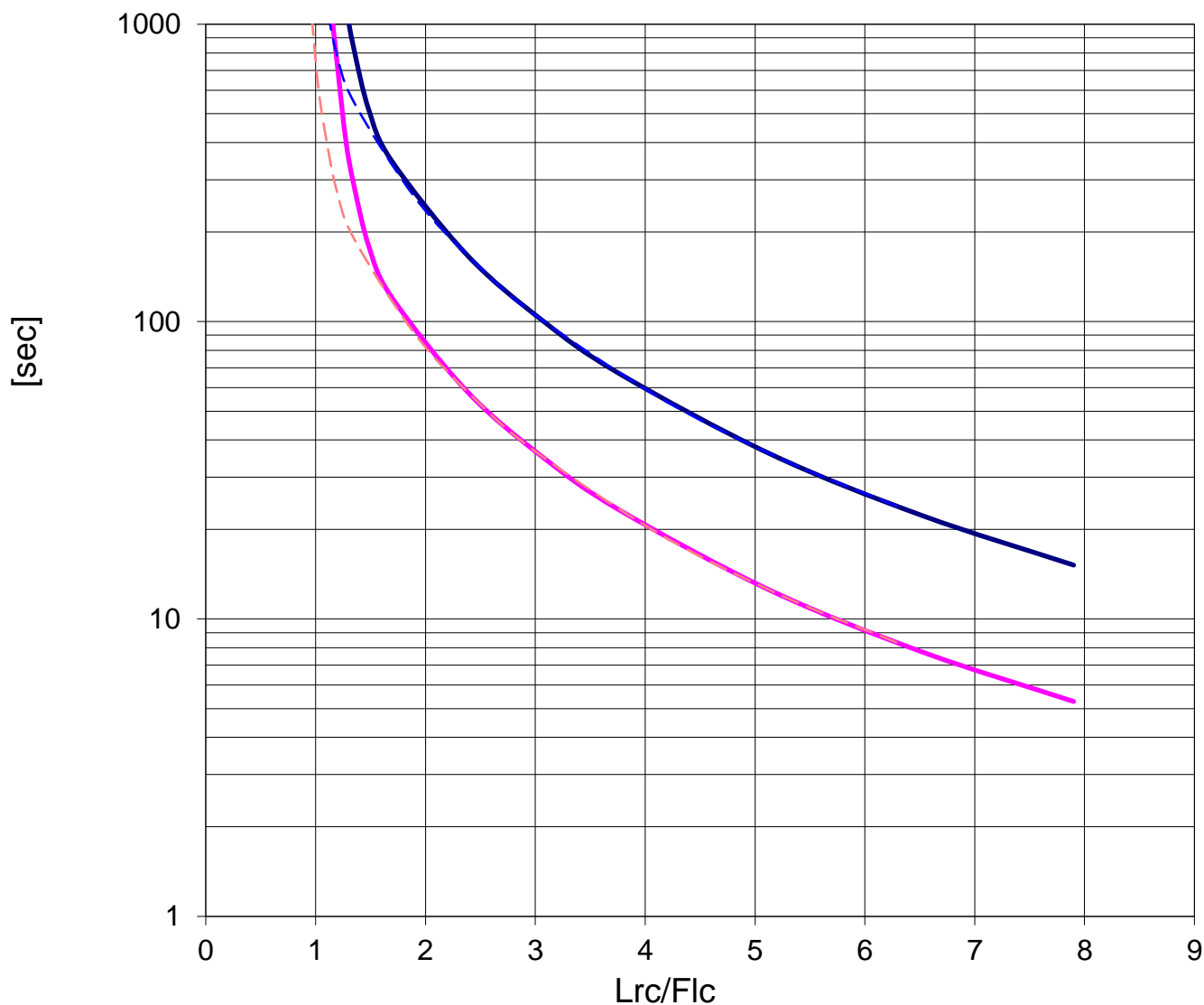
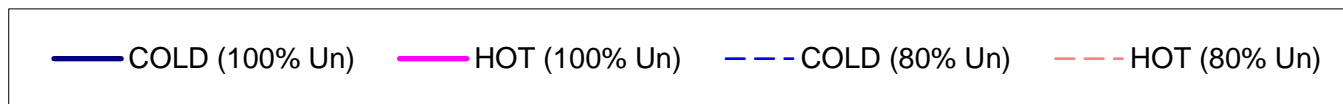


Valori calcolati - Data obtained by calculation method

**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** **E3AC30 160MB 2**  
 Potenza nominale / Rated power 11,00 kW  
 Poli / Pole 2  
 Tensione - Frequenza / Voltage - Frequency 400 - 50 V - Hz  
 Corrente / Rated current 19,94 A  
 Velocità / Speed 2951 rpm  
 Coppia / Torque 35,60 Nm



Valori calcolati - Data obtained by calculation method