

PRODUCT INFORMATION PACKET

Model No: E3AB3002163B50D41100

Catalog No: E3AB3002163B50D41100

Made in Italy E3AB30 Series, General Purpose Low Voltage IEC motor IE3, Flameproof, 15,00kW,
3 phase, 2944 RPM, D400/Y690V 50Hz, 160MC Frame B5, 2 Poles, IC411



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Nameplate Specifications

Output HP	20 Hp	Output KW	15.0 kW
Frequency	50 Hz	Voltage	400/690 V
Current	26.4 A	Speed	2944 rpm
Service Factor	1	Phase	3
Efficiency	91.9 %	Power Factor	0.89
Duty	S1	Insulation Class	F
Frame	160MC	Enclosure	Totally Enclosed Fan Cooled
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	B5	Motor Orientation	Horizontal
Drive End Bearing	Zz C3	Opp Drive End Bearing	Zz C3
Frame Material	Cast Iron	Shaft Type	Keyed
Overall Length	853.00 mm	Frame Length	370.00 mm
Shaft Diameter	42.000 mm	Shaft Extension	110 mm
Assembly/Box Mounting	Top		
Outline Drawing	B5A04E8165001B01	Connection Drawing	SC-01-T-1v-1a

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



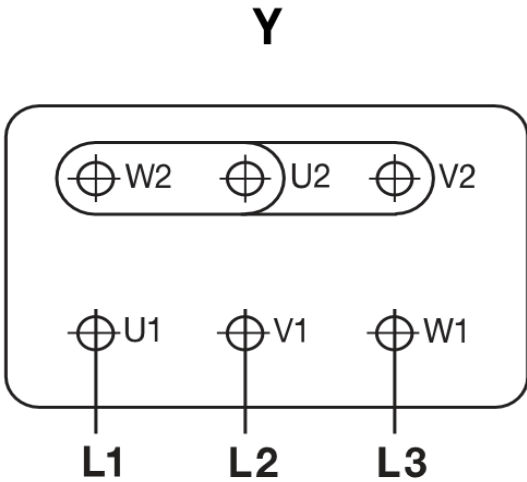
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**Motori trifase una velocità - *Single speed, three phase motors* - Moteurs triphasé une vitesse
Drehstrommotor Eine Drehzahlstufe - Motores trifásico una velocidad**

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		E3AB30 160MC 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				
Dati nominali / Rated data					
7	Poli / Pole	n°	2		
8	Potenza nominale / Rated power	kW	15,00		
9	Corrente nominale / Rated current	A	26,41		
10	Velocità nominale / Full Load speed	1/min	2944		
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	2944	2963	2976
19	Corr. / Curr.	A	26,41	20,47	14,97
20	Rend / Eff	%	91,9	91,9	91,5
21	cos φ	-	0,89	0,86	0,79
Performances all'avviamento / Starting performances					
22	Ia/In - LRC/FLC	%	825		
23	Cosphi a rotore bloccato / LR power factor		0,45		
	Tempo a rotore bloccato / LRWT				
24	100% Un (A caldo / Warm)	sec	6		
25	(A freddo / Cold)	sec	15		
26	80% Un (A caldo / Warm)	sec	9		
27	(A freddo / Cold)	sec	24		
	Tempo di avviamento ammissibile / ART				
28	100% Un	sec	13		
29	80% Un	sec	21		
Curva di coppia / Speed-torque values					
30	Coppia nominale / Rated Torque	Nm	48,65		
31	Ca/Cn - LRT/FLT	%	220		
32	Cmax/Cn - BDT/FLT	%	350		
33					
34					
35					
Varie / Other					
36					
37					
38					
39					

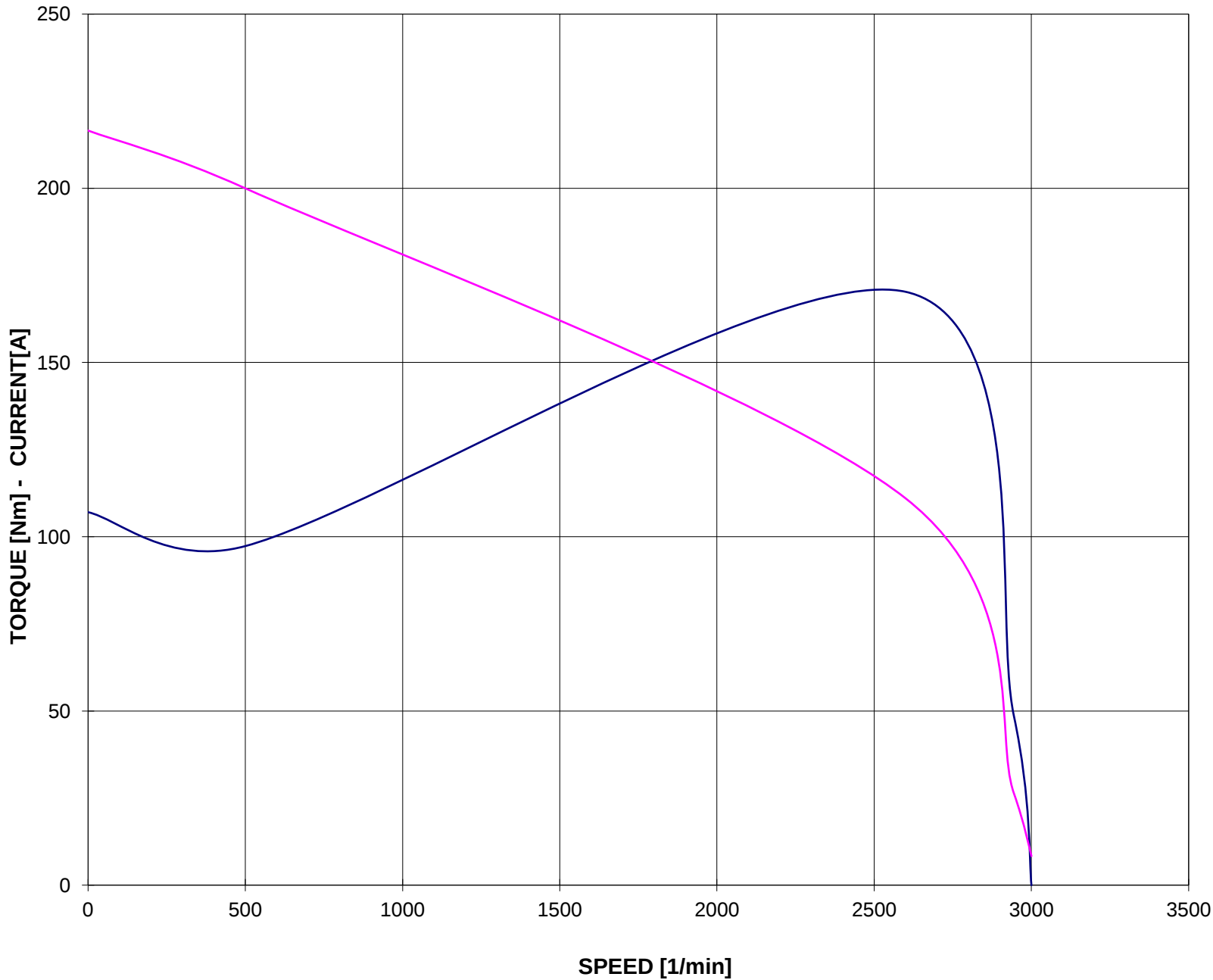
Servizio / Duty			
40	Servizio / Duty type	-	S1
41	Intermittenza / Cyclic duration factor	-	-
42	Avviamenti-ora / Starting-hour	-	-
43	Tempo ciclo / Time		-

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 160MC 2
Potenza nominale / Rated power	15,00 kW
Poli / Pole	2
Tensione - Frequenza / Voltage - Frequency	400 - 50 V - Hz
Corrente / Rated current	26,41 A
Velocità / Speed	2944 rpm
Coppia / Torque	48,65 Nm

— COPPIA - TORQUE — CORRENTE - CURRENT



Valori calcolati - Data obtained by calculation method

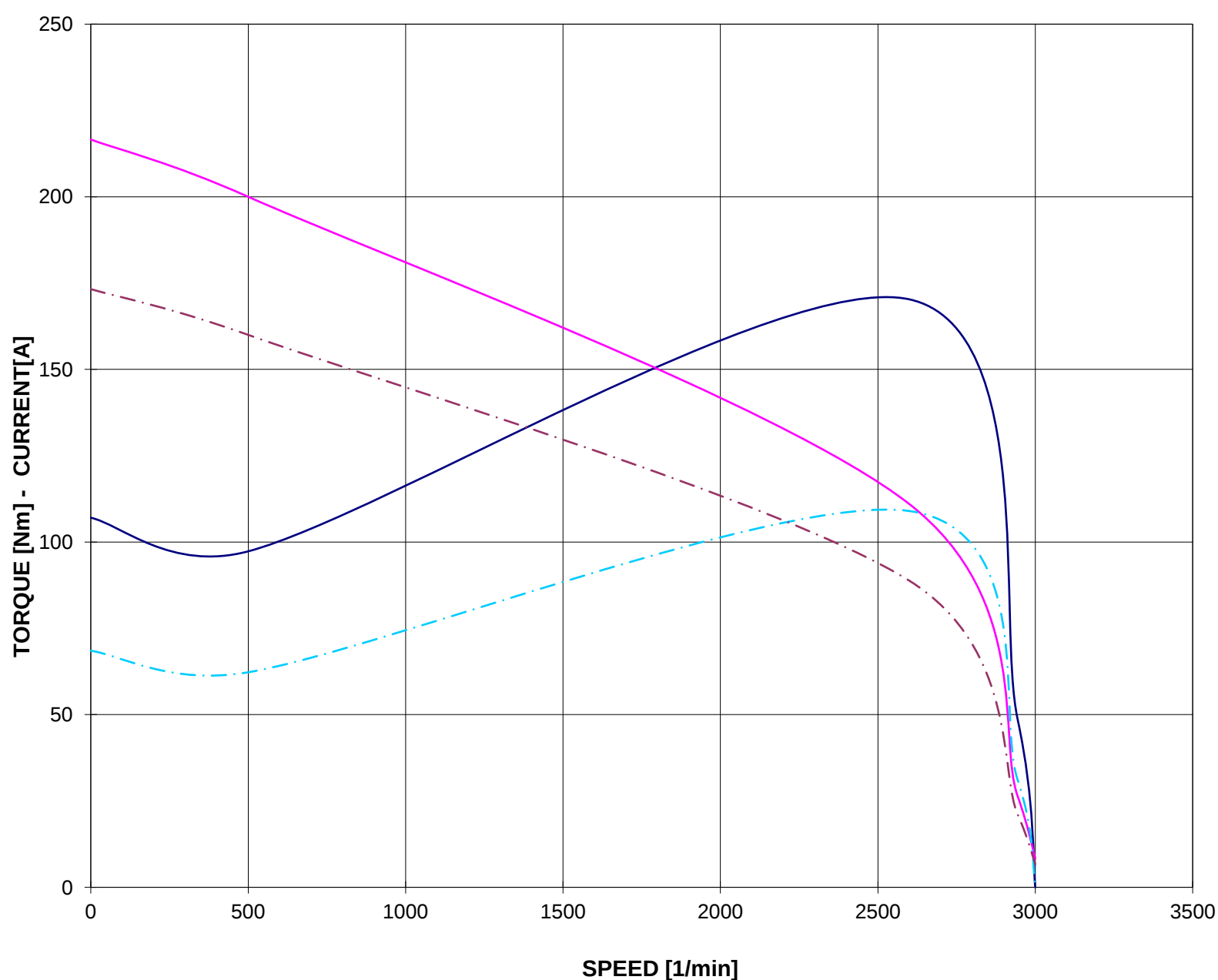
CURVA COPPIA/CORRENTE-GIRI (Tensione ridotta)
TORQUE/CURRENT-SPEED DIAGRAM (Reduced voltage)

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

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

Motore / Motor **E3AB30 160MC 2**
Potenza nominale / Rated power 15,00 kW
Poli / Pole 2
Tensione - Frequenza / Voltage - Frequency 400 - 50 V - Hz
Corrente / Rated current 26,41 A
Velocità / Speed 2944 rpm
Coppia / Torque 48,65 Nm

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



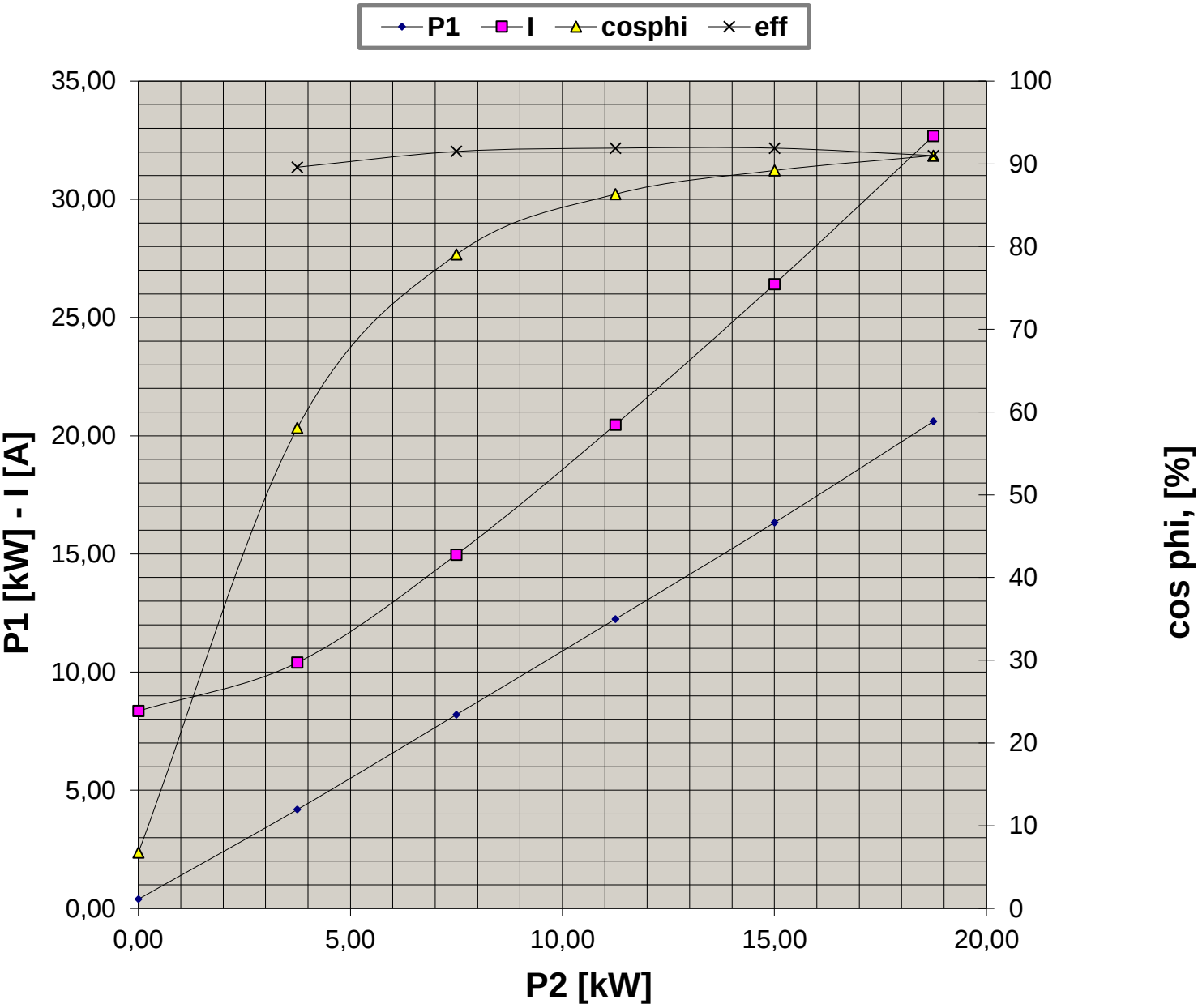
Valori calcolati - Data obtained by calculation method

CURVE CARATTERISTICHE
PERFORMANCE CURVES

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

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

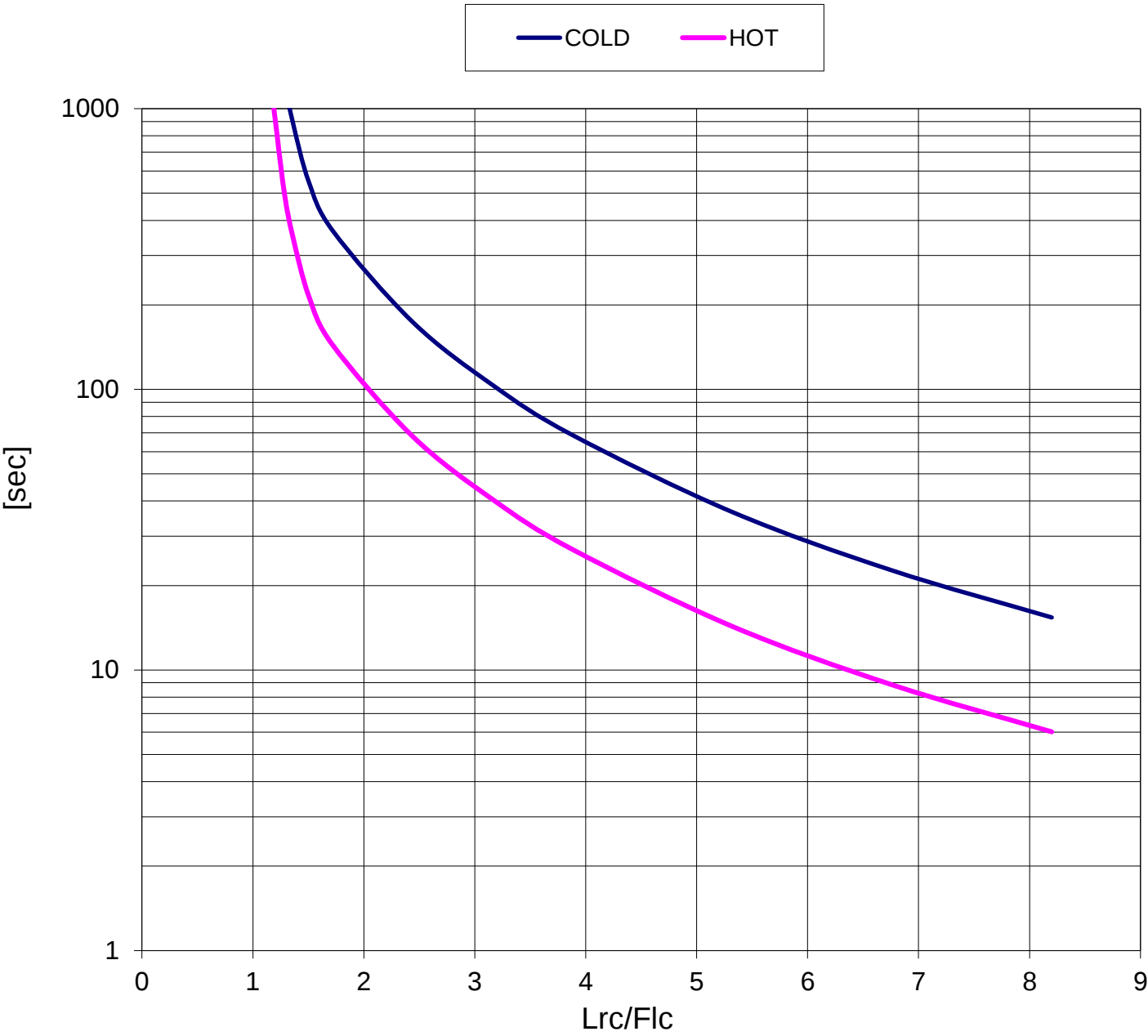
Motore / Motor	E3AB30 160MC 2	
Potenza nominale / Rated power	15,00	kW
Poli / Pole	2	
Tensione - Frequenza / Voltage - Frequency	400 - 50	V - Hz
Corrente / Rated current	26,41	A
Velocità / Speed	2944	rpm
Coppia / Torque	48,65	Nm



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	E3AB30 160MC 2
Potenza nominale / Rated power	15,00 kW
Poli / Pole	2
Tensione - Frequenza / Voltage - Frequency	400 - 50 V - Hz
Corrente / Rated current	26,41 A
Velocità / Speed	2944 rpm
Coppia / Torque	48,65 Nm



Valori calcolati - Data obtained by calculation method

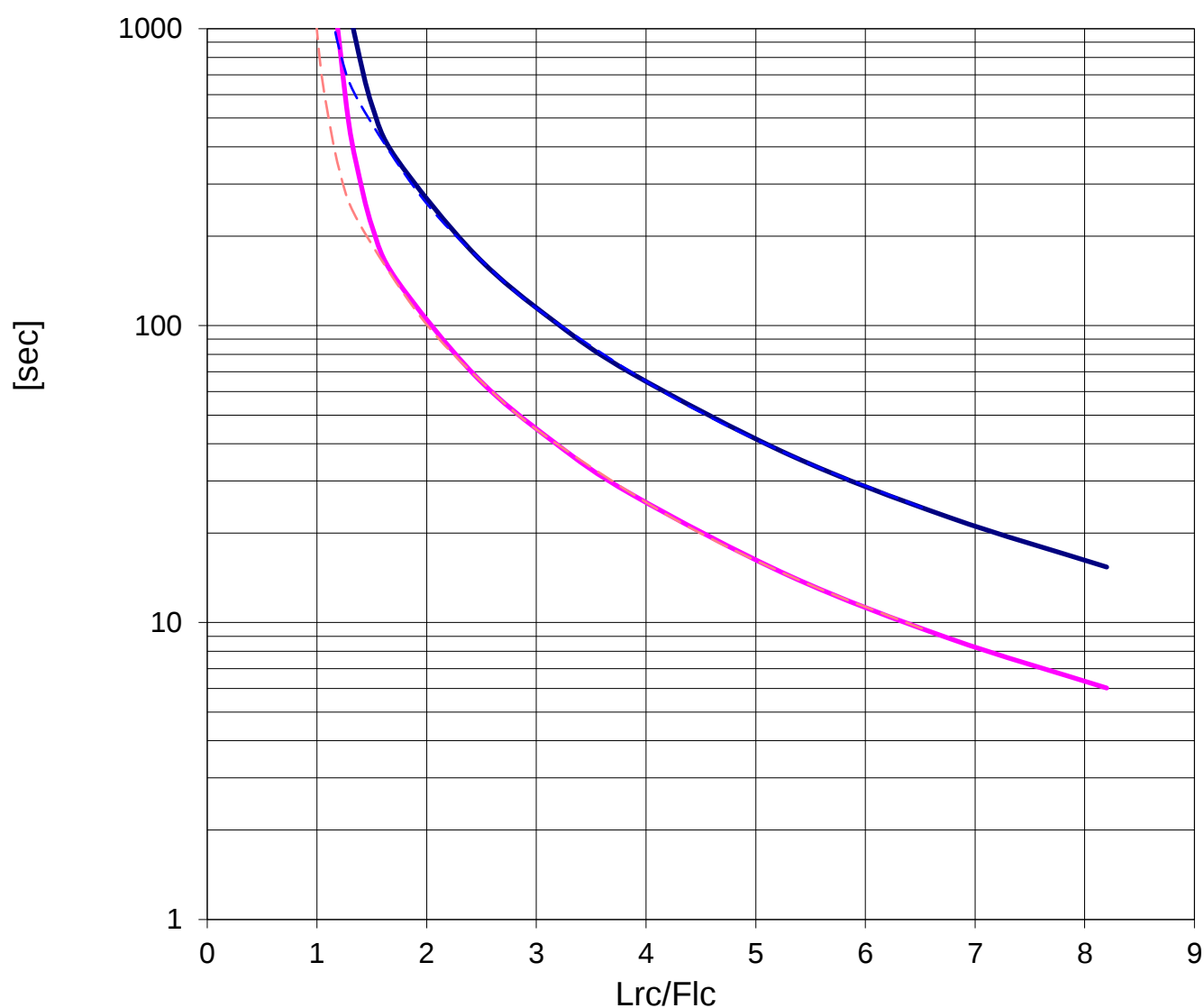
CURVA LIMITE CORRENTE TEMPO (Tensione ridotta)
THERMAL WITHSTAND CURVE (Reduced voltage)

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

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

Motore / Motor	E3AB30 160MC 2	
Potenza nominale / Rated power	15,00	kW
Poli / Pole	2	
Tensione - Frequenza / Voltage - Frequency	400 - 50	V - Hz
Corrente / Rated current	26,41	A
Velocità / Speed	2944	rpm
Coppia / Torque	48,65	Nm

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



Valori calcolati - Data obtained by calculation method