

PRODUCT INFORMATION PACKET

Model No: E3TI3006317B50D41100

Catalog No: E3TI3006317B50D41100

Made in Italy TCI Series, General Purpose Low Voltage IEC motor, Safe Area, 132,00 kW, 3 phase,
990 RPM, D400/Y690V 50Hz, 315LC Frame B5, 6 Poles, IC411



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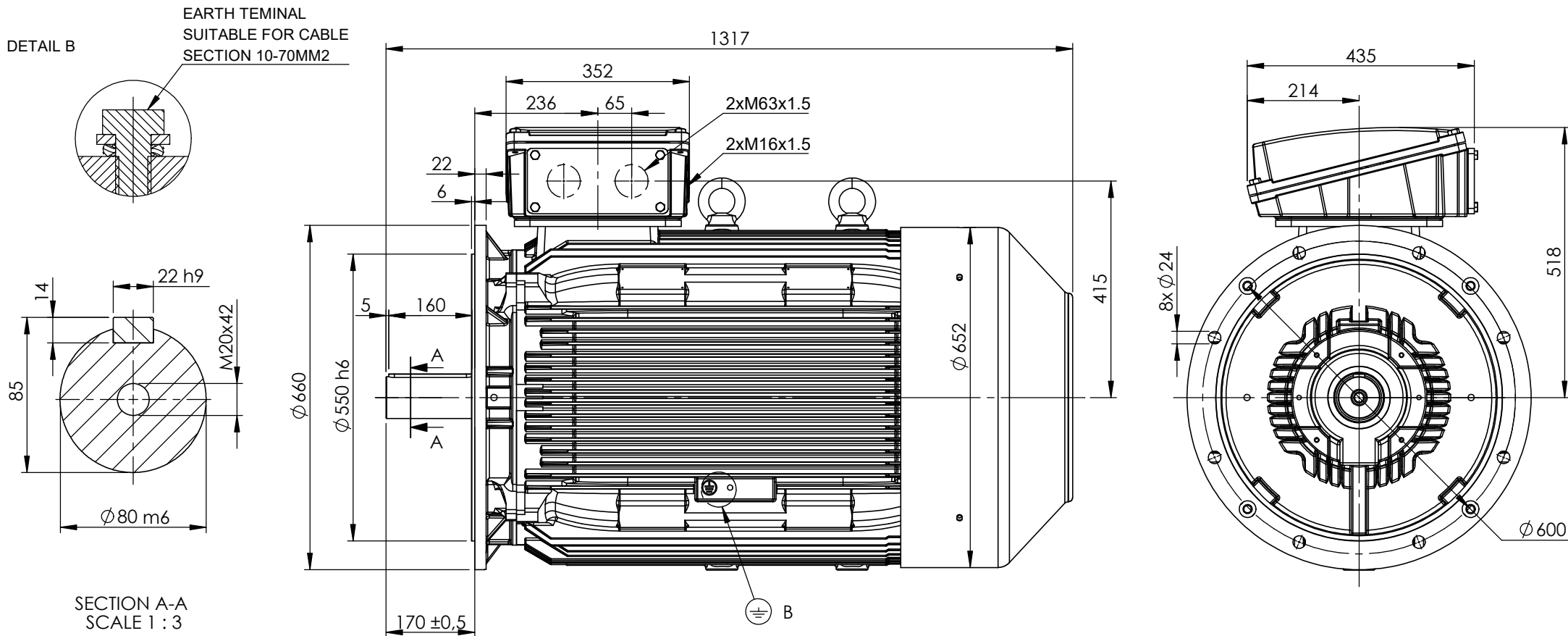
Nameplate Specifications

Output HP	175 Hp	Output KW	132.0 kW
Frequency	50 Hz	Voltage	400/690 V
Current	244.2 A	Speed	990 rpm
Service Factor	1	Phase	3
Efficiency	95.5 %	Power Factor	0.82
Duty	S1	Insulation Class	F
Frame	315LC	Enclosure	Totally Enclosed Fan Cooled
Thermal Protection	No Protection	Ambient Temperature	40 °C
Drive End Bearing Size	6319	Opp Drive End Bearing Size	6319
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	1317.00 mm	Frame Length	840.00 mm
Shaft Diameter	80.000 mm	Shaft Extension	170 mm
Assembly/Box Mounting	Top		
Outline Drawing	B5A04T8310011B01	Connection Drawing	SC-01-T-1v-1a

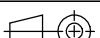
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⊕ Earth terminal: 1 in the terminal box, 2 on the frame.

CUSTOMER REFERENCE AND ADDITIONAL INFORMATION:

MOTOR TYPE AND DESCRIPTION:

DRAWING REVISION 1	REVISION BY TN	DATE 18/05/2022	TOLERANCES (EXCEPT AS NOTED) TOLERANCES: ±2 * TOLERANCES: ±0.8 DIMENSIONS ARE IN mm ACCORDING TO IEC 60072	DRAWN BY TN	REGAL™ cemp DESCRIPTION Motor 315 4-6P TC (M/L) B5				
ECO	APPROVED BY LP	DATE 19/05/2022		DATE 01/12/2021					
ECO DESCRIPTION				APPROVED BY LP					
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			SERIAL NUMBER						REFERENCE
						FIRST ANGLE PROJECTION		SIZE A4	DRAWING NUMBER B5A04T8310011B01

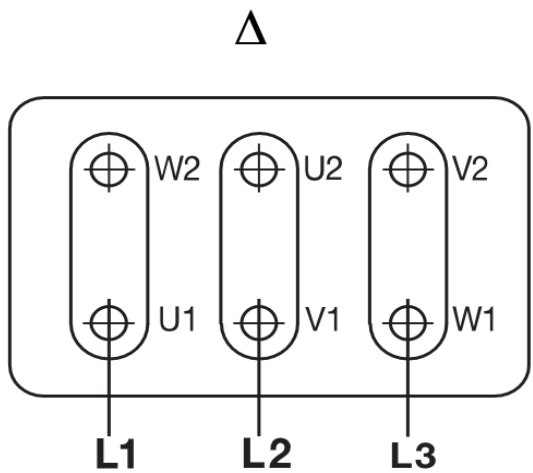
Schema di collegamento - *Connection diagram*
Schemas de branchement - *Schaltpl n*
Esquemas de conexi n



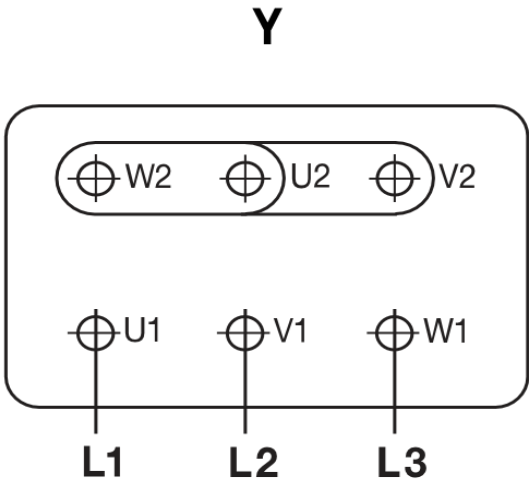
DTE 01/01/2004
SC - 01 - T - 1v.doc

**Motori trifase una velocit  - *Single speed, three phase motors* - Moteurs triphas  une vitesse
Drehstrommotor Eine Drehzahlstufe - Motores trif sico una velocidad**

Collegamento - *Connection* - Connexion - *Schaltung* - Conexi n



Collegamento - *Connection* - Connexion - *Schaltung* - Conexi n



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 Drehrichtungs nderung zwei Phasen vertauschen* - Para invertir el sentido de rotaci n 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	
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		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 +/- 10%	

	IP55
	IP55
Tem. Amb. Max. / Max Amb. Temp.	40 °C
Altitudine / Altitude	< 1000 mslm / masl
Frequenza / Frequency	50 Hz +/- 3%

DATI FUNZIONALI E COSTRUTTIVI - PERFORMANCE AND CONSTRUCTION DATA

1	Quantità / Quantity				01	
2	Motore tipo / Motor type				TCI 315LC6	
3	Numero di serie / Serial Number					
4	Forma costruttiva / Shape				B5	
5						
6						
Dati nominali / Rated data						
7	Poli / Pole			n°	6	
8	Potenza nominale / Rated power			kW	132,00	
9	Corrente nominale / Rated current			A	244,19	
10	Velocità nominale / Full Load speed			1/min	990	
11	Collegamento / Winding connection				D	
12	Isolamento / Insulation class				F	
13	Sovratemperatura / Temperature rise				DT80K	
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	990	993	995	
19	Corr. / Curr.	A	244,19	184,50	137,64	
20	Rend / Eff	%	95,1	95,5	95,2	
21	cos φ	-	0,82	0,81	0,73	
Performances all'avviamento / Starting performances						
22	Ia/In - LRC/FLC			%	655	
23	Cosphi a rotore bloccato / LR power factor				0,34	
	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				51	
28	100% Un			sec	80	
29	80% Un			sec		
Curva di coppia / Speed-torque values						
30	Coppia nominale / Rated Torque			Nm	1273,33	
31	Ca/Cn - LRT/FLT			%	210	
32	Cmax/Cn - BDT/FLT			%	250	
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	-	6319 C3
45	Cuscinetto post / NDE bearing	-	6319 C3
46	Carico radiale max / Max radial load in X1	N	7286
47	Carico assiale max / Max axial load	N	5048
48	Tipo grasso / Grease type	LGHP2 SKF or equivalent	
49	Intervallo lubrificazione / Lubrication	h	5000
50	Quantità grasso / Quantity grease	gr	45
Caratteristiche meccaniche / mechanical specification			
51	Massa / Mass	kg	1121
52	Momento d'inerzia / Moment of inertia	kgm2	6,4560
53	Rumore a vuoto / Noise at no load (1 m)	Lp dB(A)	70
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	IEC 60423	2xM63+1xM16
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	PTC
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

Prepared by : GC

Tolleranze secondo - Tolerances according IEC 60034-1

Rev. 0

Data / Date 21 February 2022

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 -

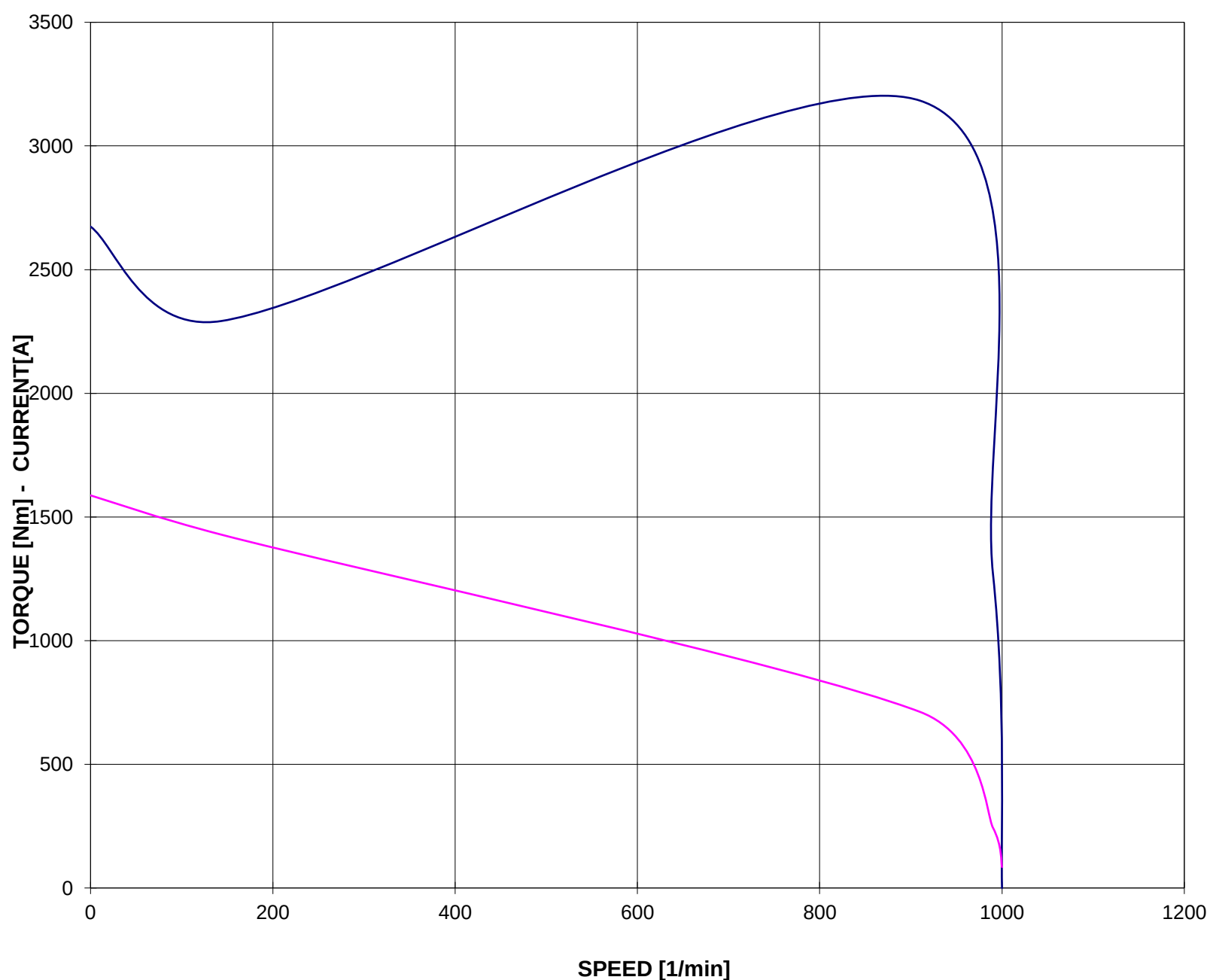
Motore / Motor

Potenza nominale / Rated power
Poli / Pole
Tensione - Frequenza / Voltage - Frequency
Corrente / Rated current
Velocità / Speed
Coppia / Torque

TCI 315LC6

132,00 kW
6
400 - 50 V - Hz
244,19 A
990 rpm
1273,33 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 -

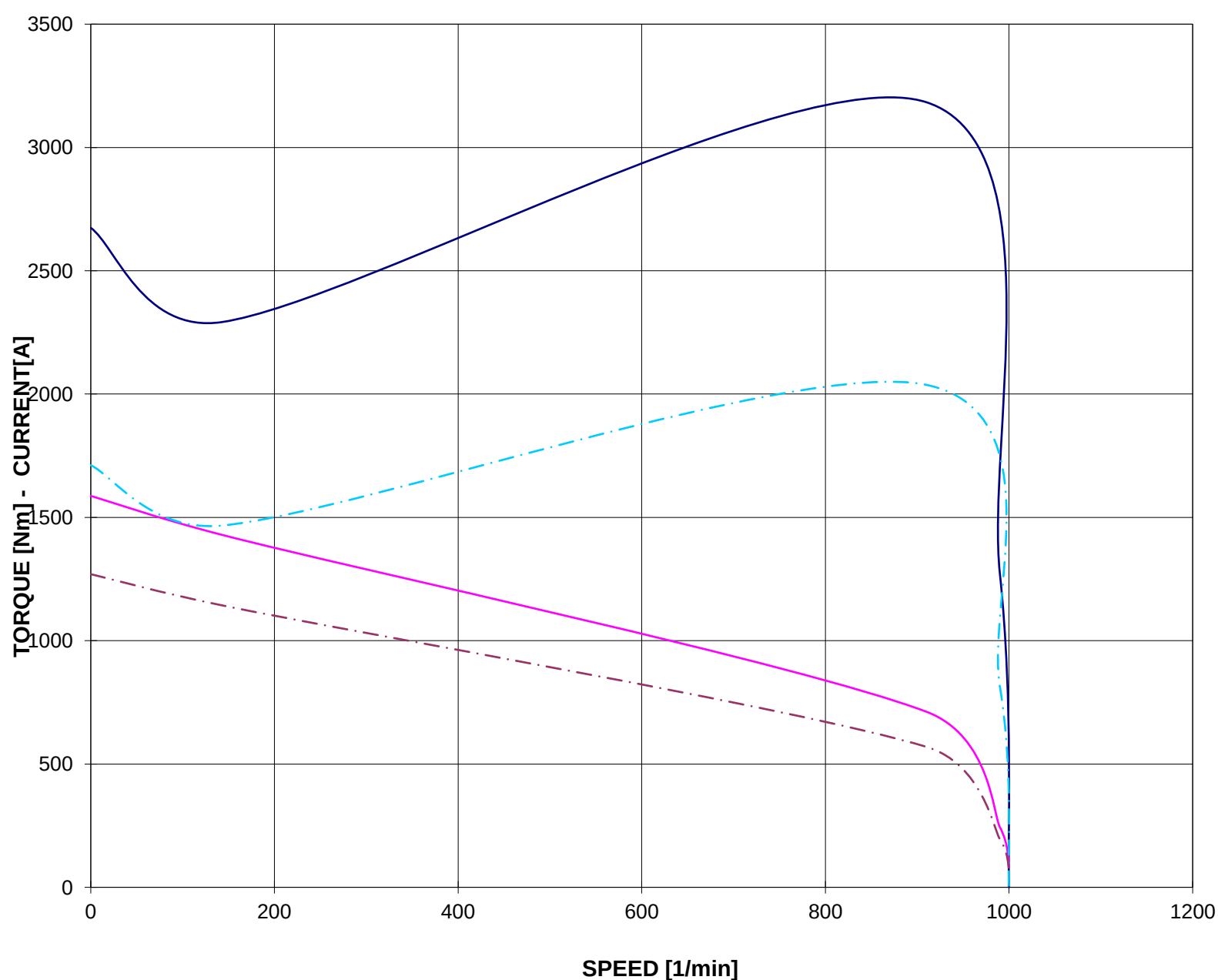
Conferma ordine / Acknowledgment -
Numero di serie / Serial Number -

Motore / Motor

TCI 315LC6

Potenza nominale / Rated power 132,00 kW
Poli / Pole 6
Tensione - Frequenza / Voltage - Frequency 400 - 50 V - Hz
Corrente / Rated current 244,19 A
Velocità / Speed 990 rpm
Coppia / Torque 1273,33 Nm

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



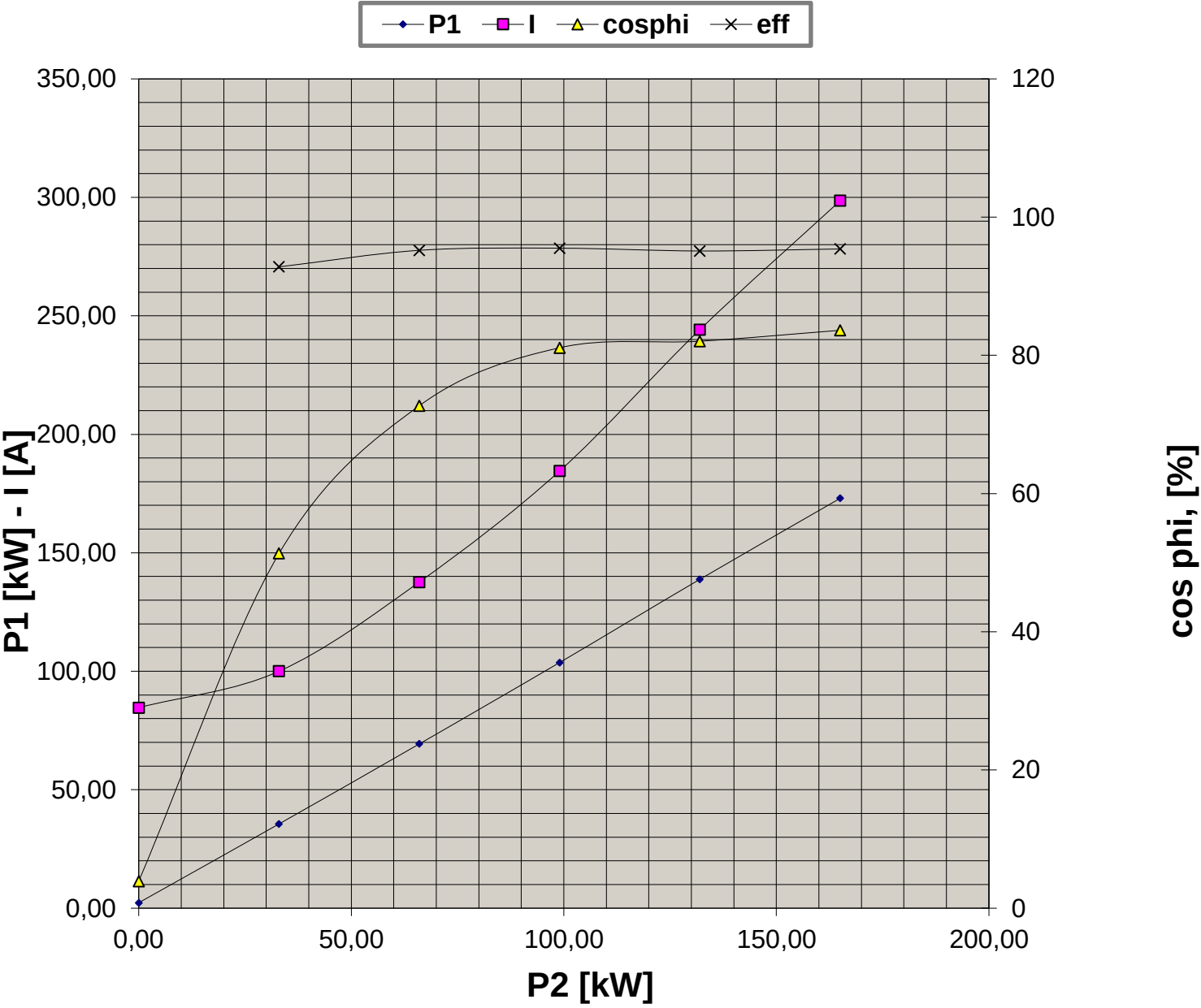
Valori calcolati - Data obtained by calculation method

CURVE CARATTERISTICHE
PERFORMANCE CURVES

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

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

Motore / Motor	TCI 315LC6	
Potenza nominale / Rated power	132,00	kW
Poli / Pole	6	
Tensione - Frequenza / Voltage - Frequency	400 - 50	V - Hz
Corrente / Rated current	244,19	A
Velocità / Speed	990	rpm
Coppia / Torque	1273,33	Nm



Valori calcolati - Data obtained by calculation method

CURVA LIMITE CORRENTE TEMPO THERMAL WITHSTAND CURVE

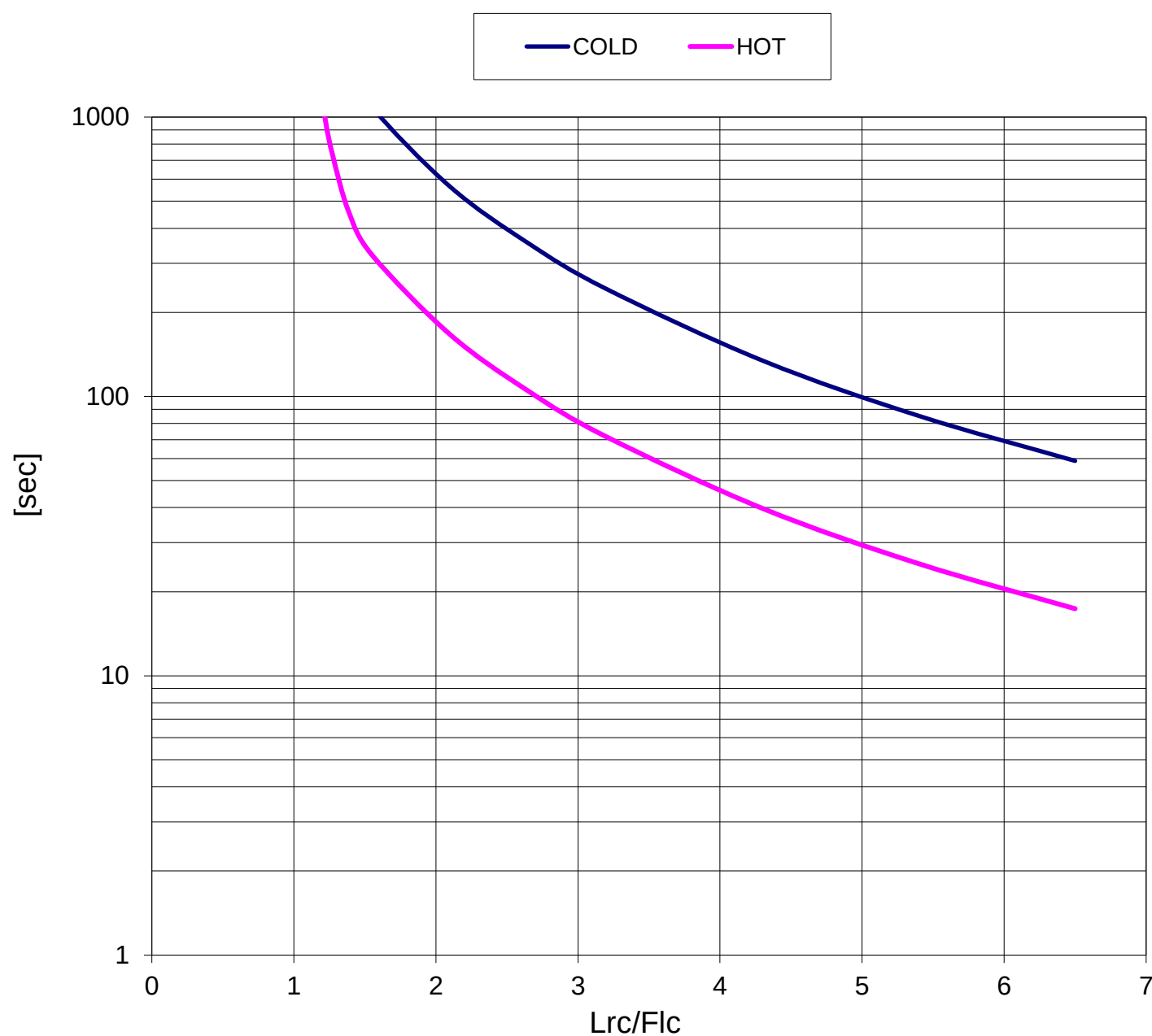
Cliente / Customer -
Ordine cliente / Customer order -
Impianto / Plant -
ITEM -

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

Motore / Motor

TCI 315LC6

Potenza nominale / Rated power	132,00	kW
Poli / Pole	6	
Tensione - Frequenza / Voltage - Frequency	400 - 50	V - Hz
Corrente / Rated current	244,19	A
Velocità / Speed	990	rpm
Coppia / Torque	1273,33	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 -

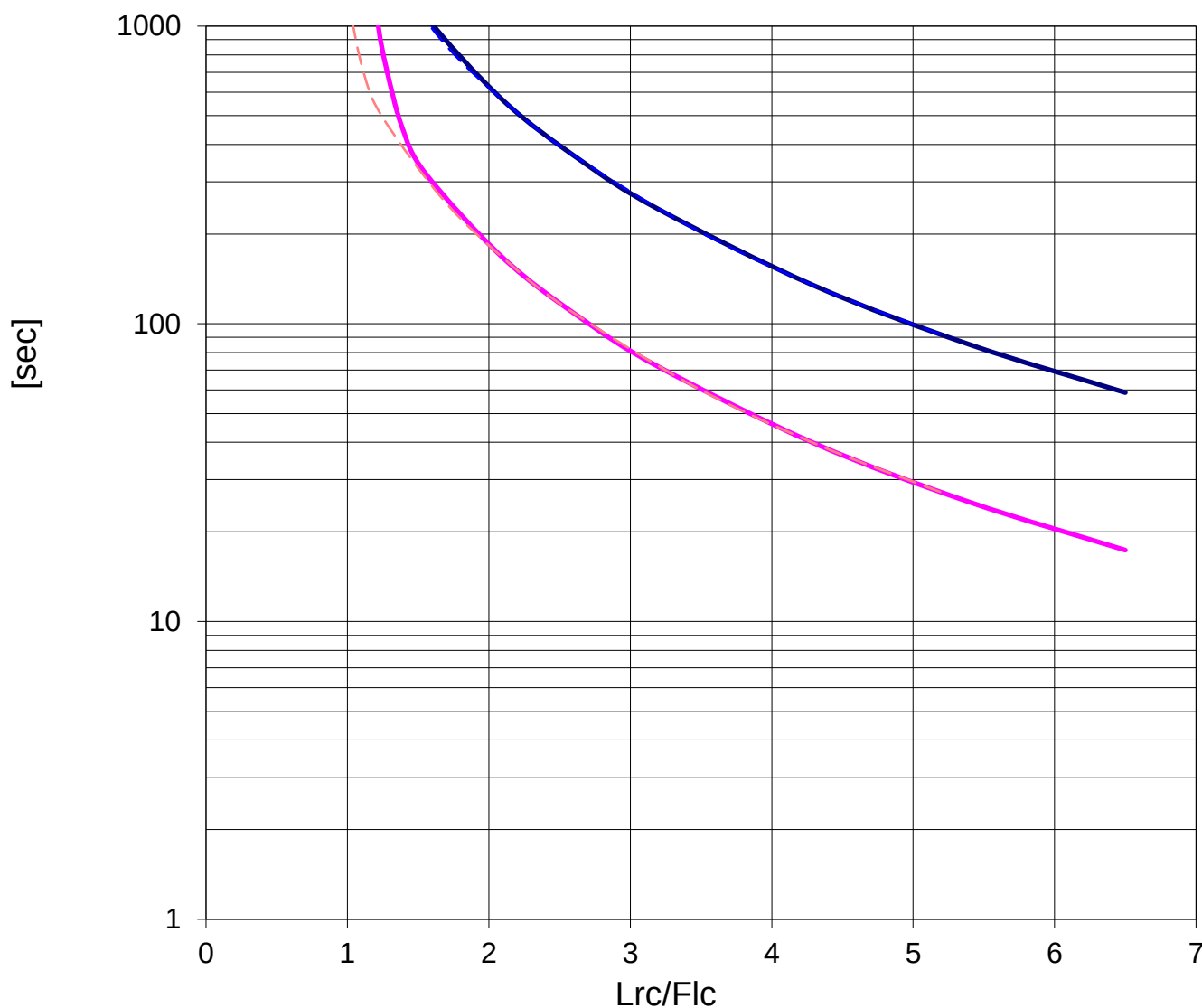
Conferma ordine / Acknowledgment -
Numero di serie / Serial Number -

Motore / Motor

TCI 315LC6

Potenza nominale / Rated power	132,00	kW
Poli / Pole	6	
Tensione - Frequenza / Voltage - Frequency	400 - 50	V - Hz
Corrente / Rated current	244,19	A
Velocità / Speed	990	rpm
Coppia / Torque	1273,33	Nm

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



Valori calcolati - Data obtained by calculation method