PRODUCT INFORMATION PACKET

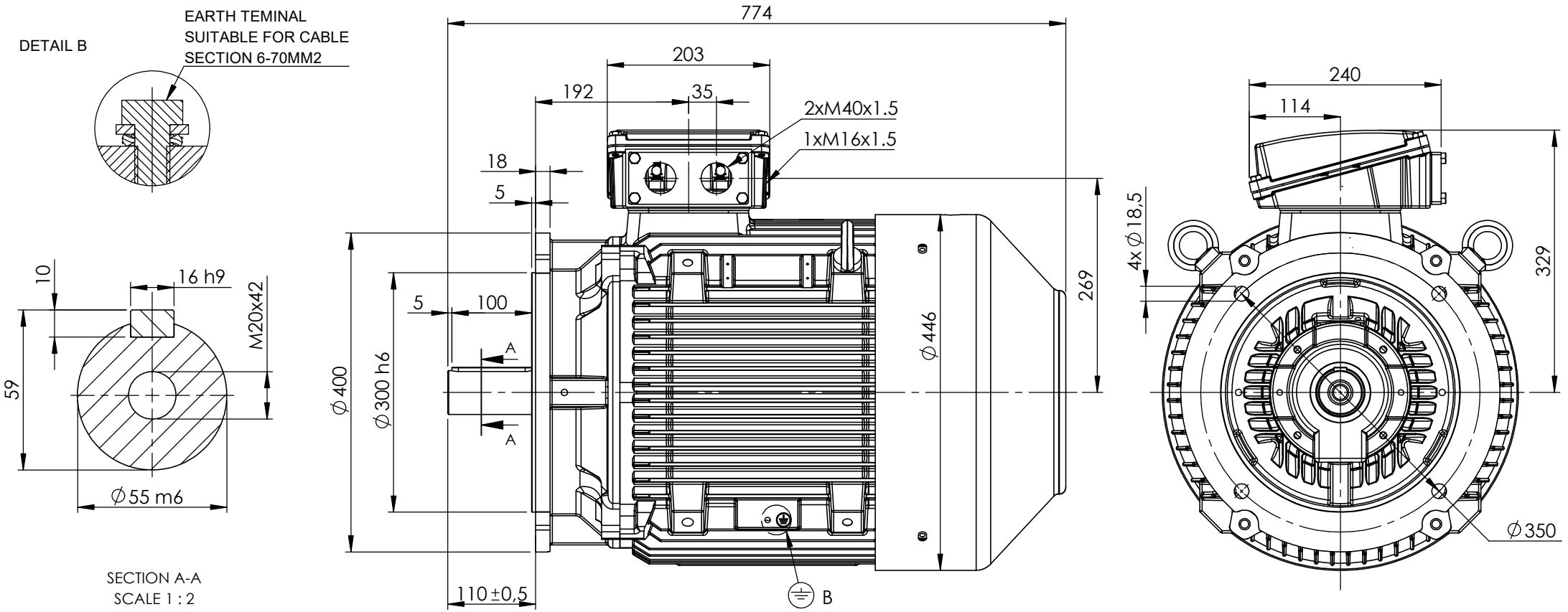
Model No: E3TN3006205B50D41100
Catalog No: E3TN3006205B50D41100
Made in Italy TCN Series, General Purpose Low Voltage IEC motor, Increased Safety, 22,00 kW, 3 phase, 984 RPM, D400/Y690V 50Hz, 200LB Frame B5, 6 Poles, IC411

Nameplate Specifications

Output HP	30 Hp	Output KW	22.0 kW
Frequency	50 Hz	Voltage	400/690 V
Current	42.9 A	Speed	985 rpm
Service Factor	1	Phase	3
Efficiency	92.2 %	Power Factor	0.8
Duty	S1	Insulation Class	F
Frame	200LB	Enclosure	Totally Enclosed Fan Cooled
Ambient Temperature	40 °C	Drive End Bearing Size	6312
Opp Drive End Bearing Size	6212	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	769.00 mm	Frame Length	370.00 mm
Shaft Diameter	55.000 mm	Shaft Extension	110 mm
Assembly/Box Mounting	Top		
Outline Drawing	B5A04T8200001B01	Connection Drawing	SC-01-T-1v-1a



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

CUSTOMER REFERENCE AND ADDITIONAL INFORMATION:

MOTOR TYPE AND DESCRIPTION:

DRAWING REVISION 1	REVISION BY MT	DATE 26/04/2022	TOLERANCES (EXCEPT AS NOTED) TOLERANCES: ±2 * TOLERANCES: ±0.8 DIMENSIONS ARE IN mm ACCORDING TO IEC 60072	DRAWN BY TN	REGAL™ cemp	
ECO	APPROVED BY LP	DATE 27/04/2022		DATE 15/11/2021		
ECO DESCRIPTION				APPROVED BY LP	DESCRIPTION **Motor 200 TC (L) B5**	
				DATE 16/11/2021		
			SERIAL NUMBER	REFERENCE		
				FIRST ANGLE PROJECTION	SIZE A4	DRAWING NUMBER **B5A04T8200001B01**
						SHEET 1 OF 2

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

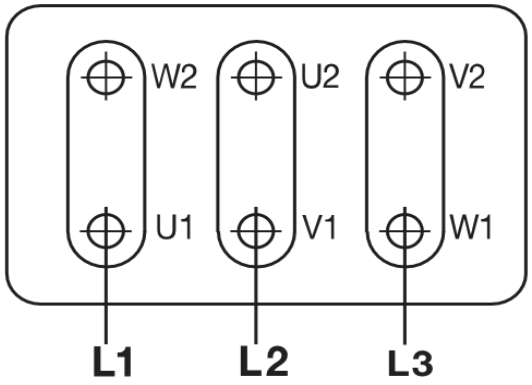
cemp
Flameproof Motors

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

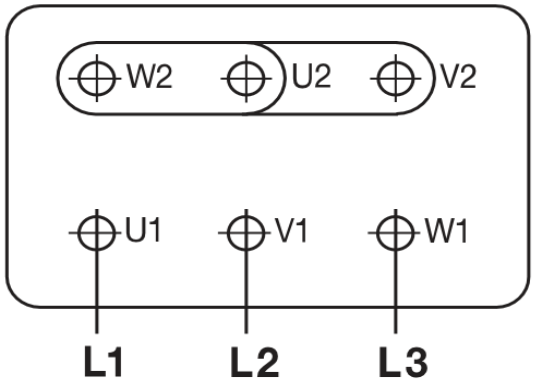
Collegamento - *Connection* - Connexion - *Schaltung* - Conexiòn

Δ



Collegamento - *Connection* - Connexion - *Schaltung* - Conexiòn

Y



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 - *Additional terminals marking* (IEC60034-8)

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

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

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

Regal Rexnord

cemp® Flameproof Motors

FOGLIO DATI PER MOTORI ELETTRICI ASINCRONI TRIFASI : SERIE IEC

DATA SHEET FOR ASYNCHRONOUS THREEPHASE INDUCTION MOTORS: IEC SERIES

Cliente / Customer -	
Offerta / Offer : -	
Impianto / Plant -	

DATI DI PROGETTO - DESIGN DATA

Modo di protezione	II3G	Motore / Frame	Ex ec IIB T3 Gc	IP55
Type of protection		Scatola morsetti / Terminal box	Ex ec IIB Gc	IP55

Tem. Amb. Min. / Min Amb.Temp.	-20 °C	Tem. Amb. Max. / Max Amb. Temp.	40 °C
Umidità relativa / Relative humidity	90%	Altitudine / Altitude	< 1000 mslm / masl
Tensione nominale / Rated Voltage	400 V +/- 10%	Frequenza / Frequency	50 Hz +/- 3%

DATI FUNZIONALI E COSTRUTTIVI - PERFORMANCE AND CONSTRUCTION DATA

1	Quantità / Quantity		01
2	Motore tipo / Motor type		TCN 200LB6
3	Numero di serie / Serial Number		
4	Forma costruttiva / Shape		B5
5	Certificato / Certificate	TÜV IT	20 ATEX 103X
6			
	Dati nominali / Rated data		
7	Poli / Pole	n°	6
8	Potenza nominale / Rated power	kW	22,00
9	Corrente nominale / Rated current	A	42,96
10	Velocità nominale / Full Load speed	1/min	985
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	985	989	993	
19	Corr. / Curr.	A	42,96	34,33	26,97	
20	Rend / Eff	%	92,4	92,6	91,8	
21	cos φ	-	0,80	0,75	0,64	

	Performances all'avviamento / Starting performances		
22	Ia/In - LRC/FLC	%	615
23	Cosphi a rotore bloccato / LR power factor		0,44
	Tempo a rotore bloccato / LRWT		
24	100% Un (A caldo / Warm)	sec	11
25	(A freddo / Cold)	sec	23
26	80% Un (A caldo / Warm)	sec	17
27	(A freddo / Cold)	sec	35
	Tempo di avviamento ammissibile / ART		
28	100% Un	sec	20
29	80% Un	sec	31
	Curva di coppia / Speed-torque values		
30	Coppia nominale / Rated Torque	Nm	213,30
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	-	6312 C3
45	Cuscinetto post / NDE bearing	-	6212 C3
46	Carico radiale max / Max radial load in X1	N	4223
47	Carico assiale max / Max axial load	N	3246
48	Tipo grasso / Grease type		LGHP2 SKF or equivalent
49	Intervallo lubrificazione / Lubrication	h	12000
50	Quantità grasso / Quantity grease	gr	22
	Caratteristiche meccaniche / mechanical specification		
51	Massa / Mass	kg	275
52	Momento d'inerzia / Moment of inertia	kgm2	0,6381
53	Rumore a vuoto / Noise at no load (1 m)	Lp dB(A)	71
54	Vibrazioni / Vibration level	IEC 34-14	A
55	Limite norma / Vibration limit	mm/sec	2,20
56			
57			
58			
59			
60			
61			
62			
	Dati entrata cavi - verniciatura / Cable entry and painting		
63	Entrata cavi / Cable entry	IEC 60423	2xM40+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			

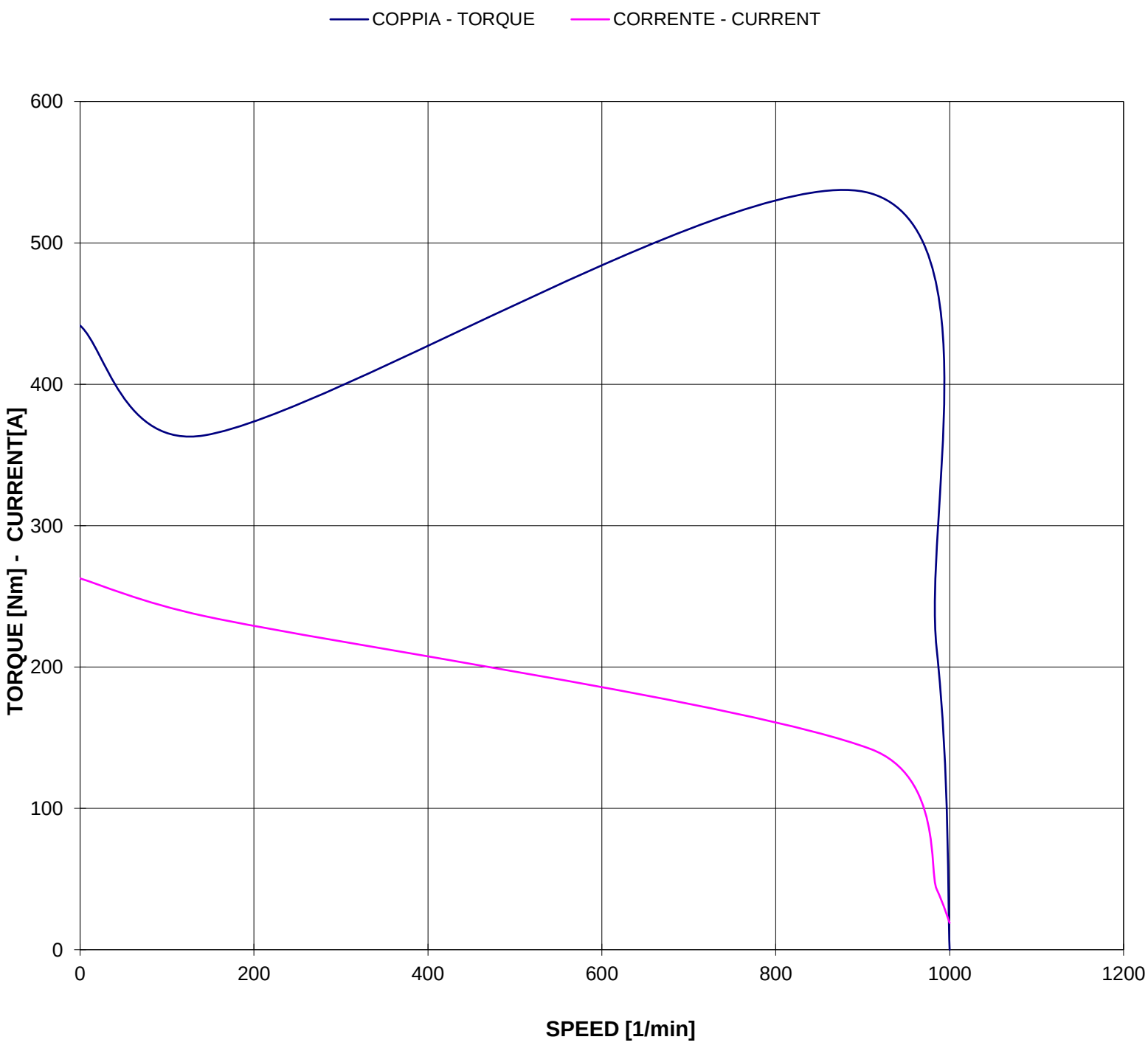
Documento preliminare - Preliminary data sheet

Prepared by : GC Tolleranze secondo - Tolerances according IEC 60034-1 Rev. 0 Data / Date 3 May 2022

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

Cliente / Customer	-
Impianto / Plant	-
ITEM	**-**
Numero d'offerta / Offer Number	-

Motore / Motor	**TCN 200LB6**	
Potenza nominale / Rated power	22,00	kW
Poli / Pole	6	
Tensione - Frequenza / Voltage - Frequency	400 - 50	V - Hz
Corrente / Rated current	42,96	A
Velocità / Speed	985	rpm
Coppia / Torque	213,30	Nm



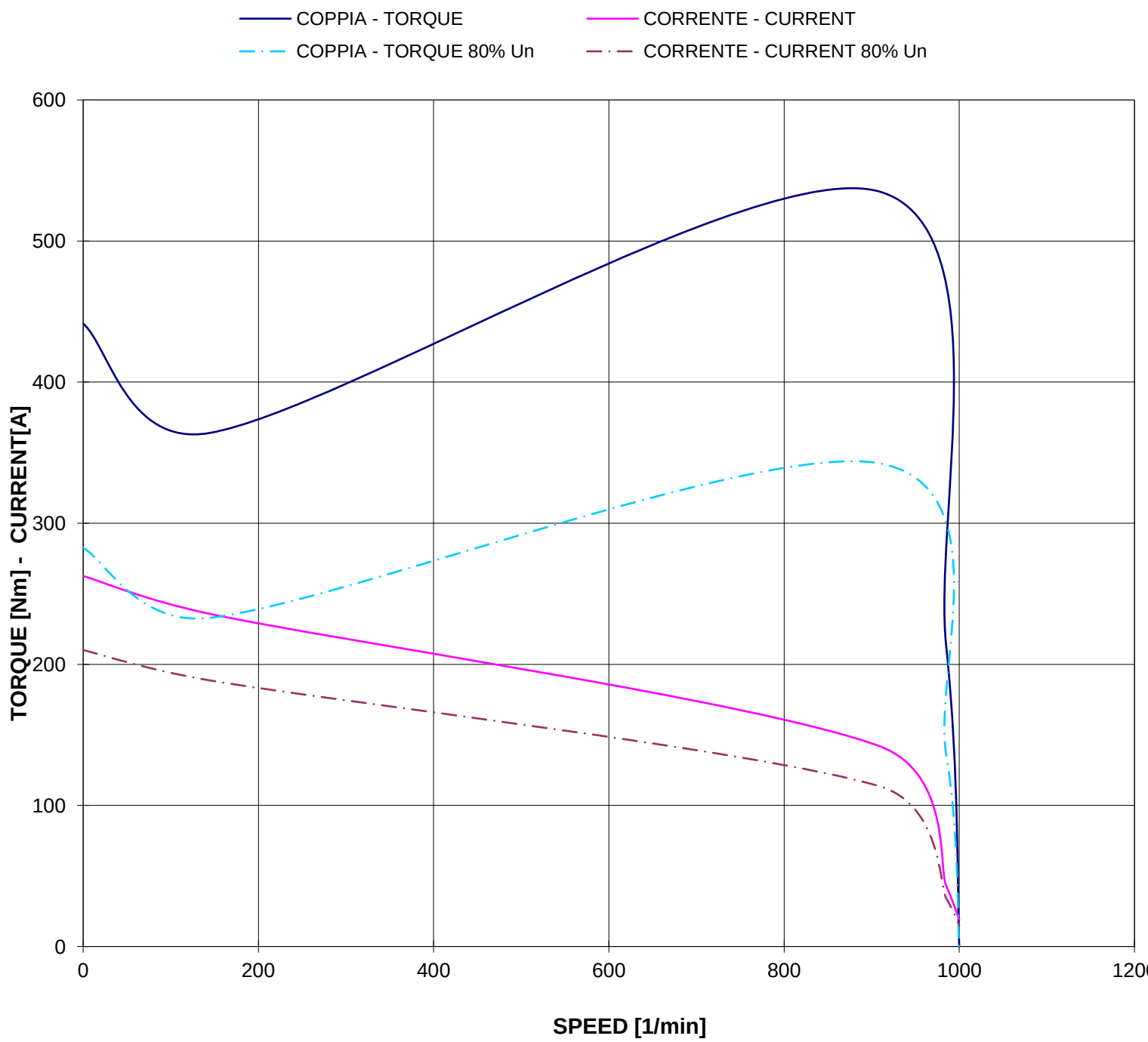
Valori calcolati - Data obtained by calculation method
Documento preliminare - Preliminary document

Data / Date 29-giu-22

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

Cliente / Customer	-
Impianto / Plant	-
ITEM	**-**
Numero d'offerta / Offer Number	-

Motore / Motor	**TCN 200LB6**	
Potenza nominale / Rated power	22,00	kW
Poli / Pole	6	
Tensione - Frequenza / Voltage - Frequency	400 - 50	V - Hz
Corrente / Rated current	42,96	A
Velocità / Speed	985	rpm
Coppia / Torque	213,30	Nm



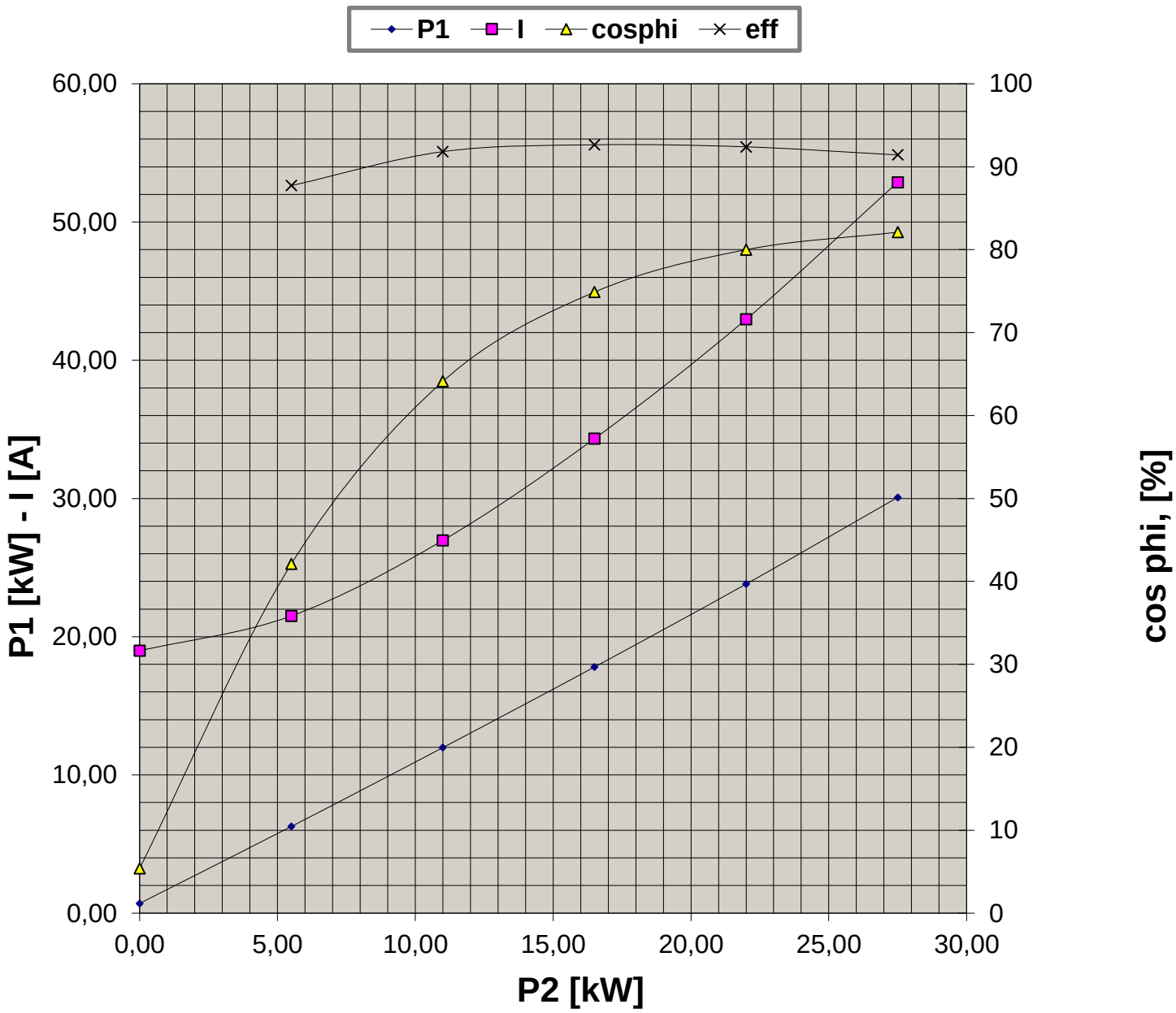
Valori calcolati - Data obtained by calculation method
Documento preliminare - Preliminary document

Data / Date 29-giu-22

CURVE CARATTERISTICHE
PERFORMANCE CURVES

Cliente / Customer	-
Impianto / Plant	-
ITEM	**-**
Numero d'offerta / Offer Number	-

Motore / Motor	**TCN 200LB6**	
Potenza nominale / Rated power	22,00	kW
Poli / Pole	6	
Tensione - Frequenza / Voltage - Frequency	400 - 50	V - Hz
Corrente / Rated current	42,96	A
Velocità / Speed	985	rpm
Coppia / Torque	213,30	Nm



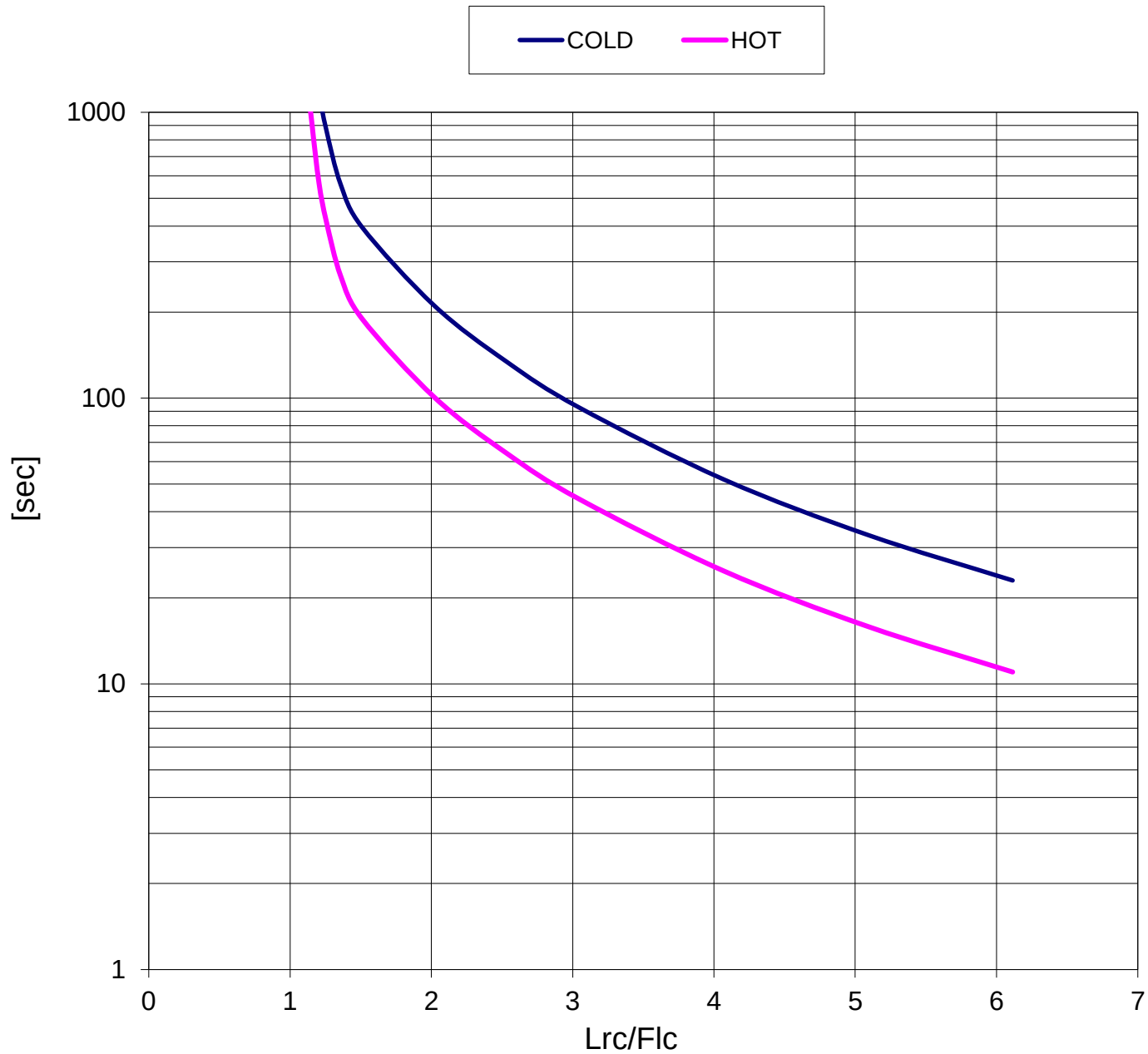
Valori calcolati - Data obtained by calculation method
Documento preliminare - Preliminary document

Data / Date 29-giu-22

CURVA LIMITE CORRENTE TEMPO
THERMAL WITHSTAND CURVE

Cliente / Customer	-
Impianto / Plant	-
ITEM	**-**
Numero d'offerta / Offer Number	-

Motore / Motor	**TCN 200LB6**	
Potenza nominale / Rated power	22,00	kW
Poli / Pole	6	
Tensione - Frequenza / Voltage - Frequency	400 - 50	V - Hz
Corrente / Rated current	42,96	A
Velocità / Speed	985	rpm
Coppia / Torque	213,30	Nm



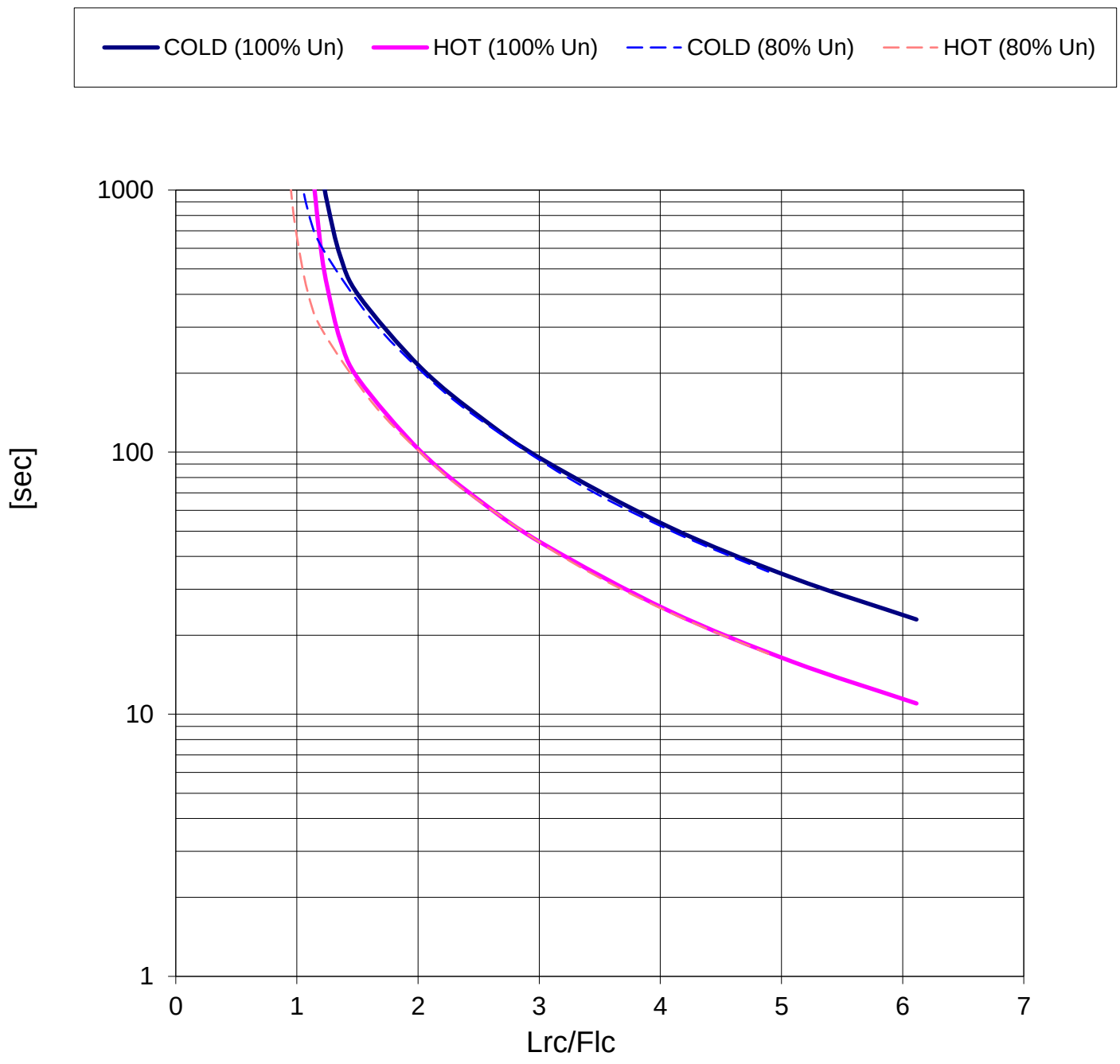
Valori calcolati - Data obtained by calculation method
Documento preliminare - Preliminary document

Data / Date 29-giu-22

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

Cliente / Customer	-
Impianto / Plant	-
ITEM	**-**
Numero d'offerta / Offer Number	-

Motore / Motor	**TCN 200LB6**	
Potenza nominale / Rated power	22,00	kW
Poli / Pole	6	
Tensione - Frequenza / Voltage - Frequency	400 - 50	V - Hz
Corrente / Rated current	42,96	A
Velocità / Speed	985	rpm
Coppia / Torque	213,30	Nm



Valori calcolati - Data obtained by calculation method
Documento preliminare - Preliminary document

Data / Date 29-giu-22