

PRODUCT INFORMATION PACKET

Model No: E3TI3002081B30S41100

Catalog No: E3TI3002081B30S41100

Made in Italy TCI Series, General Purpose Low Voltage IEC motor, Safe Area, 0,75 kW, 3 phase,
2865 RPM, D230/Y400V 50Hz, 80MA Frame B3, 2 Poles, IC411



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Nameplate Specifications

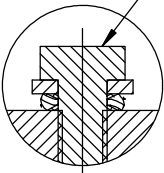
Output HP	1 Hp	Output KW	0.75 kW
Frequency	50 Hz	Voltage	230/400 V
Current	1.6 A	Speed	2865 rpm
Service Factor	1	Phase	3
Efficiency	81.4 %	Power Factor	0.83
Duty	S1	Insulation Class	F
Frame	80MA	Enclosure	Totally Enclosed Fan Cooled
Thermal Protection	No Protection	Ambient Temperature	40 °C
Drive End Bearing Size	6204	Opp Drive End Bearing Size	6204
UL	No	CSA	No
CE	Yes	IP Code	IP55
Number of Speeds	1	Efficiency Class	IE3

Technical Specifications

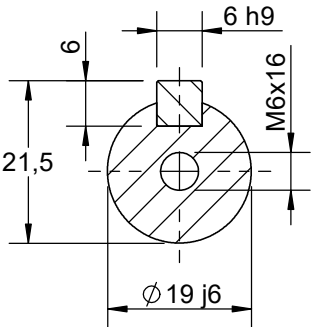
Electrical Type	Squirrel Cage	Starting Method	Direct On Line
Poles	2	Rotation	Bi-Directional
Mounting	B3	Motor Orientation	Horizontal
Drive End Bearing	2z-C3	Opp Drive End Bearing	2z-C3
Frame Material	Cast Iron	Shaft Type	Keyed
Overall Length	281.00 mm	Frame Length	140.00 mm
Shaft Diameter	19.000 mm	Shaft Extension	40 mm
Assembly/Box Mounting	Top		
Connection Drawing	SC-01-T-1v-1a	Outline Drawing	B3A04T8080001A01

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DETAIL B



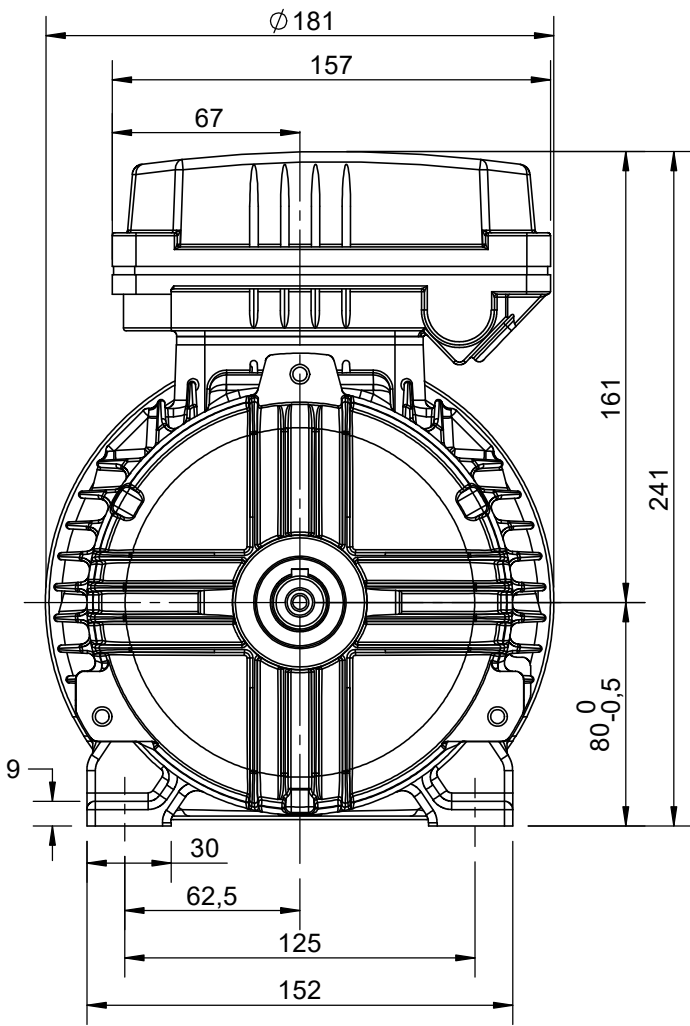
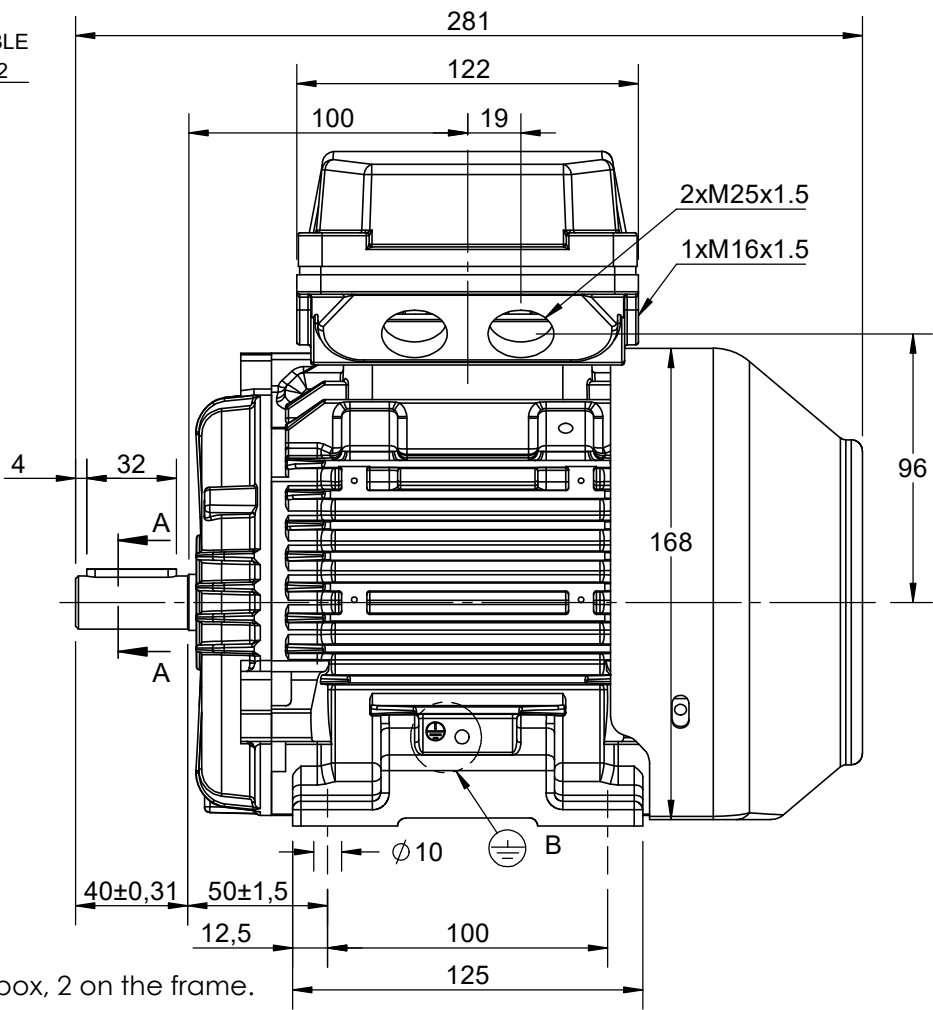
EARTH TERMINAL
SUITABLE FOR CABLE
SECTION 1.5-10MM²



SECTION A-A
SCALE 1:1



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 20/04/2022	TOLERANCES (EXCEPT AS NOTED) TOLERANCES: ±2	DRAWN BY TN	REGAL™ cemp		
ECO	APPROVED BY LP	DATE 21/04/2022		DATE 20/10/2021			
ECO DESCRIPTION				APPROVED BY LP			
				DATE 21/10/2021			
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.			DIMENSIONS ARE IN mm ACCORDING TO IEC 60072	REFERENCE	DESCRIPTION Motor 80 TC (L) B3		
			SERIAL NUMBER	SIZE A4			
			FIRST ANGLE PROJECTION				

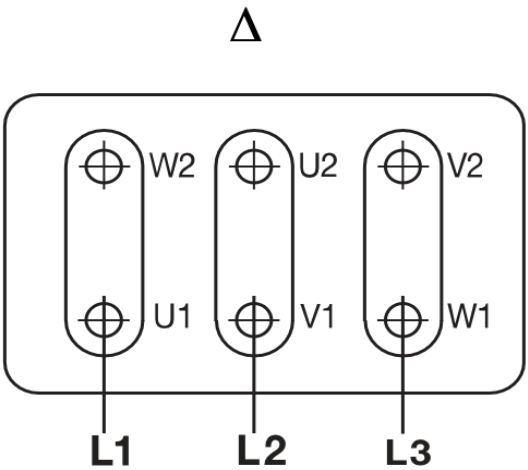
Schema di collegamento - *Connection diagram*
Schemas de branchement - *Schaltplan*
Esquemas de conexión



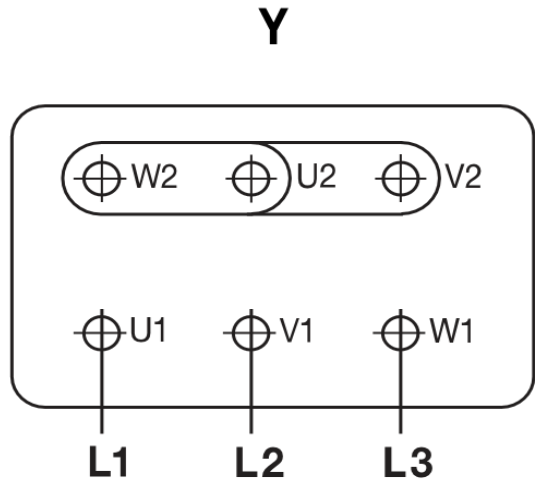
DTE 01/01/2004
SC - 01 - T - 1v.doc

**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	-
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 80MA2
3	Numero di serie / Serial Number		
4	Forma costruttiva / Shape		B3
5			
6			
Dati nominali / Rated data			
7	Poli / Pole	n°	2
8	Potenza nominale / Rated power	kW	0,75
9	Corrente nominale / Rated current	A	1,59
10	Velocità nominale / Full Load speed	1/min	2865
11	Collegamento / Winding connection		Y
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
18	Giri / Speed	1/min	2865
19	Corr. / Curr.	A	1,59
20	Rend / Eff	%	81,4
21	cos φ	-	0,84
Performances all'avviamento / Starting performances			
22	Ia/In - LRC/FLC	%	700
23	Cosphi a rotore bloccato / LR power factor		0,80
	Tempo a rotore bloccato / LRWT		
24	100% Un (A caldo / Warm)	sec	12
25	(A freddo / Cold)	sec	24
26	80% Un (A caldo / Warm)	sec	19
27	(A freddo / Cold)	sec	38
	Tempo di avviamento ammissibile / ART		
28	100% Un	sec	21
29	80% Un	sec	33
Curva di coppia / Speed-torque values			
30	Coppia nominale / Rated Torque	Nm	2,50
31	Ca/Cn - LRT/FLT	%	270
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	6204 ZZ C3
45	Cuscinetto post / NDE bearing	6204 ZZ C3
46	Carico radiale max / Max radial load in X1	629
47	Carico assiale max / Max axial load	392
48	Tipo grasso / Grease type	LGHP2 SKF or equivalent
49	Intervallo lubrificazione / Lubrication	-
50	Quantità grasso / Quantity grease	-
Caratteristiche meccaniche / mechanical specification		
51	Massa / Mass	19
52	Momento d'inerzia / Moment of inertia	0,0012
53	Rumore a vuoto / Noise at no load (1 m)	65
54	Vibrazioni / Vibration level	A
55	Limite norma / Vibration limit	1,60
56		
57		
Dati entrata cavi - verniciatura / Cable entry and painting		
63	Entrata cavi / Cable entry	2xM25+1xM16
64	Ciclo verniciatura / Painting cycle	STD
65	Colore finale / Final colour	5010
66		
67		
68		
69		
70		
71		
Ausiliari - Auxiliaries		
72	Sonde termiche / Temperature detector	PTC
73	Sonde termiche / Temperature detector	-
74	Scaldiglie / Heaters	-
75	Preparation for SPM sensor	-
76	Pressacavi / Cable glands	-
77		

Documento preliminare - Preliminary data sheet

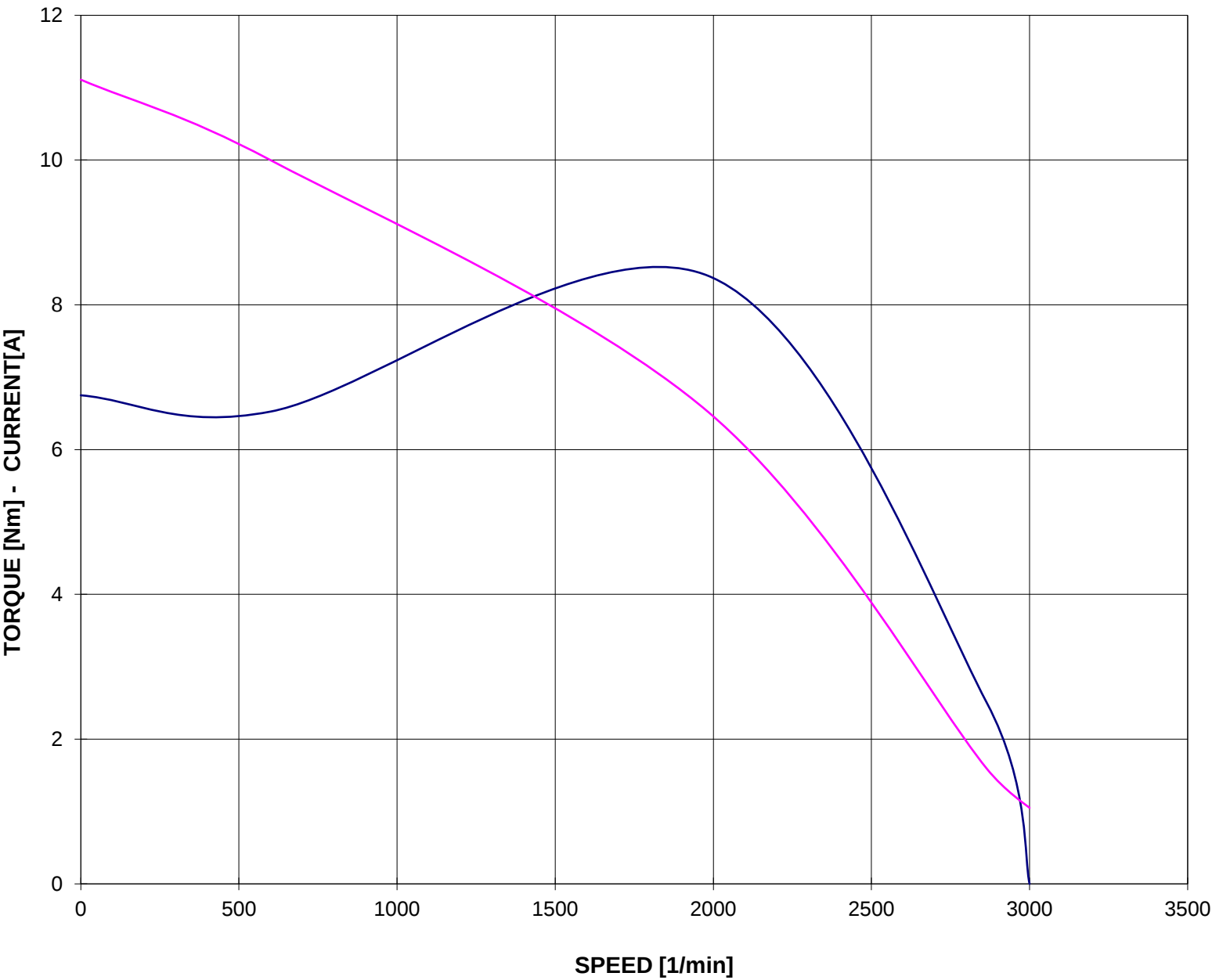


CURVA COPPIA/CORRENTE-GIRI **TORQUE/CURRENT-SPEED DIAGRAM**

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

Motore / Motor	TCI 80MA2	
Potenza nominale / Rated power	0,75	kW
Poli / Pole	2	
Tensione - Frequenza / Voltage - Frequency	400 - 50	V - Hz
Corrente / Rated current	1,59	A
Velocità / Speed	2865	rpm
Coppia / Torque	2,50	Nm

— COPPIA - TORQUE — CORRENTE - CURRENT



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

Data / Date 29-gen-21

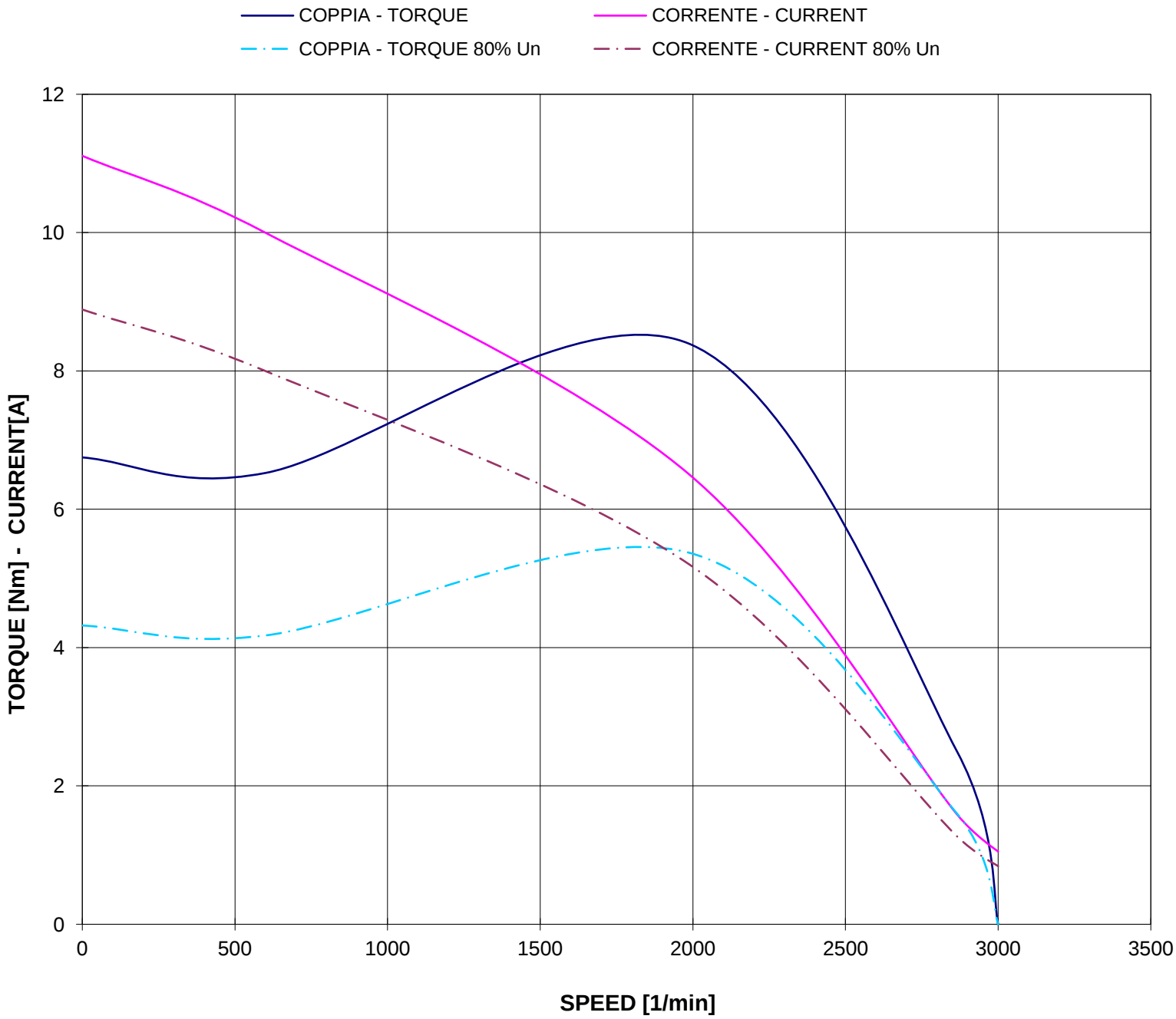


CURVA COPPIA/CORRENTE-GIRI (Tensione ridotta) **TORQUE/CURRENT-SPEED DIAGRAM (Reduced voltage)**

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

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

Motore / Motor	TCI 80MA2	
Potenza nominale / Rated power	0,75	kW
Poli / Pole	2	
Tensione - Frequenza / Voltage - Frequency	400 - 50	V - Hz
Corrente / Rated current	1,59	A
Velocità / Speed	2865	rpm
Coppia / Torque	2,50	Nm



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

Data / Date 29-gen-21

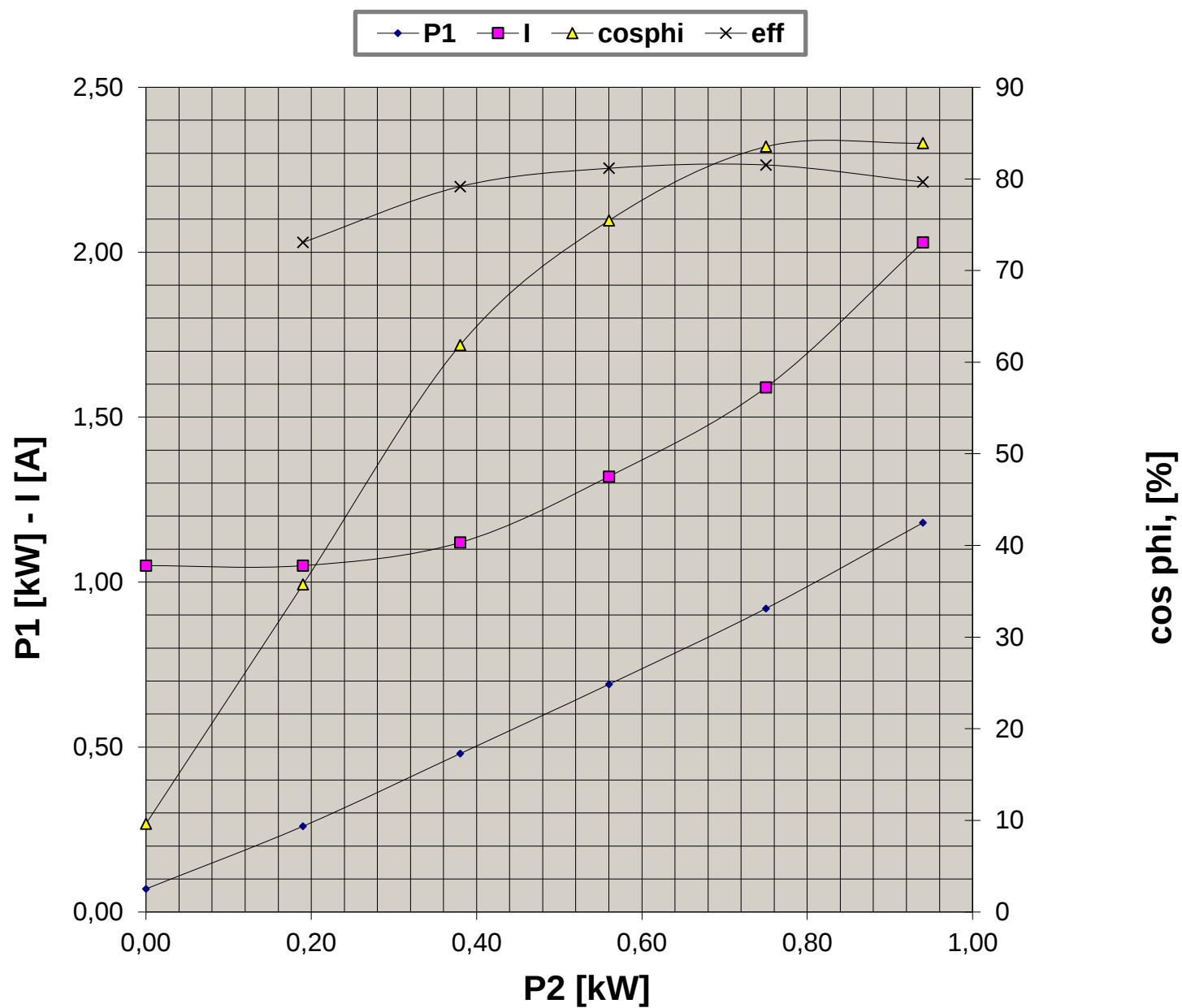


CURVE CARATTERISTICHE PERFORMANCE CURVES

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

Motore / Motor
TCI 80MA2

Potenza nominale / Rated power	0,75	kW
Poli / Pole	2	
Tensione - Frequenza / Voltage - Frequency	400 - 50	V - Hz
Corrente / Rated current	1,59	A
Velocità / Speed	2865	rpm
Coppia / Torque	2,50	Nm



Valori calcolati - Data obtained by calculation method
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Data / Date 29-gen-21

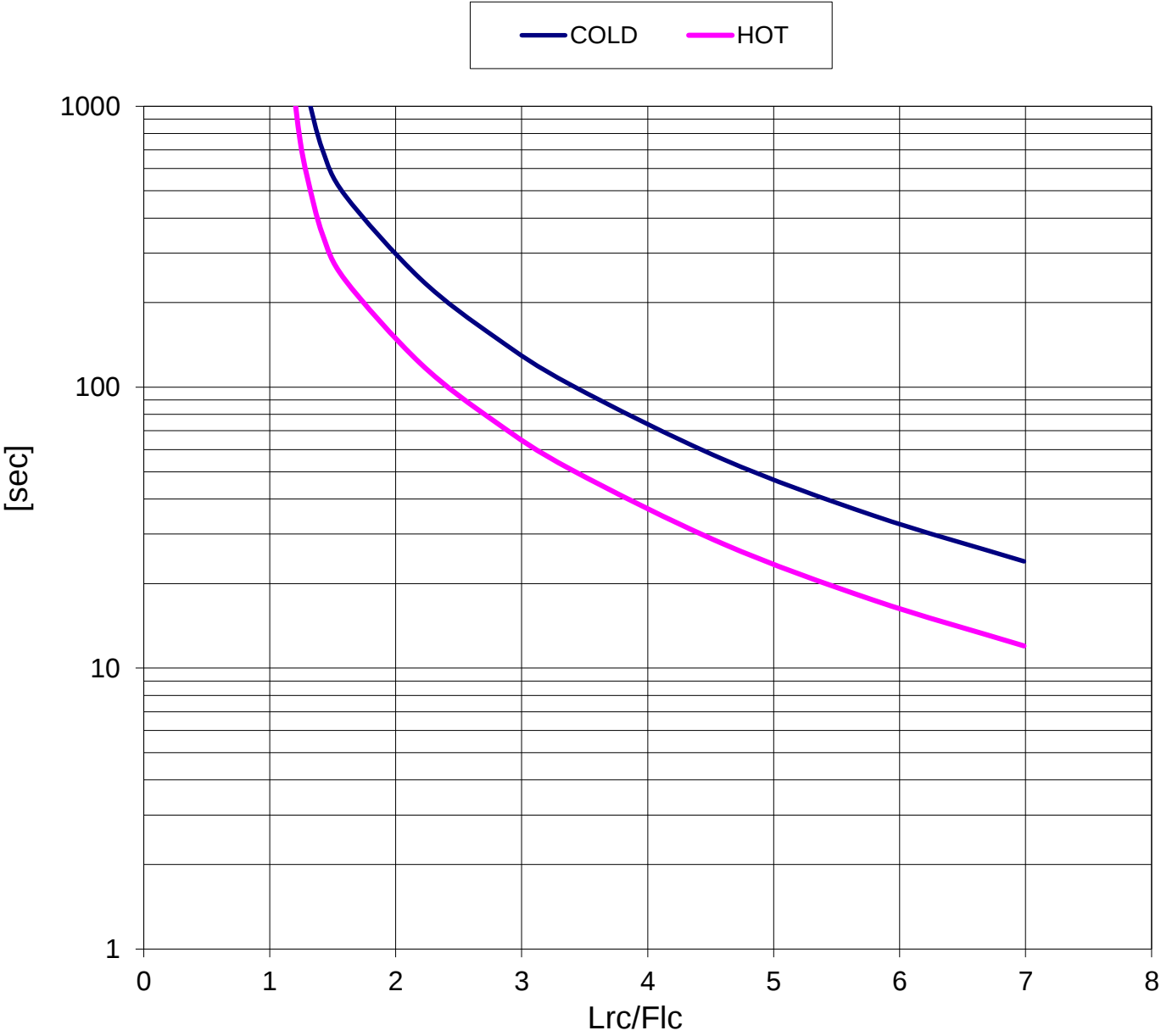


CURVA LIMITE CORRENTE TEMPO
THERMAL WITHSTAND CURVE

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

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

Motore / Motor	TCI 80MA2	
Potenza nominale / Rated power	0,75	kW
Poli / Pole	2	
Tensione - Frequenza / Voltage - Frequency	400 - 50	V - Hz
Corrente / Rated current	1,59	A
Velocità / Speed	2865	rpm
Coppia / Torque	2,50	Nm



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

Data / Date 29-gen-21

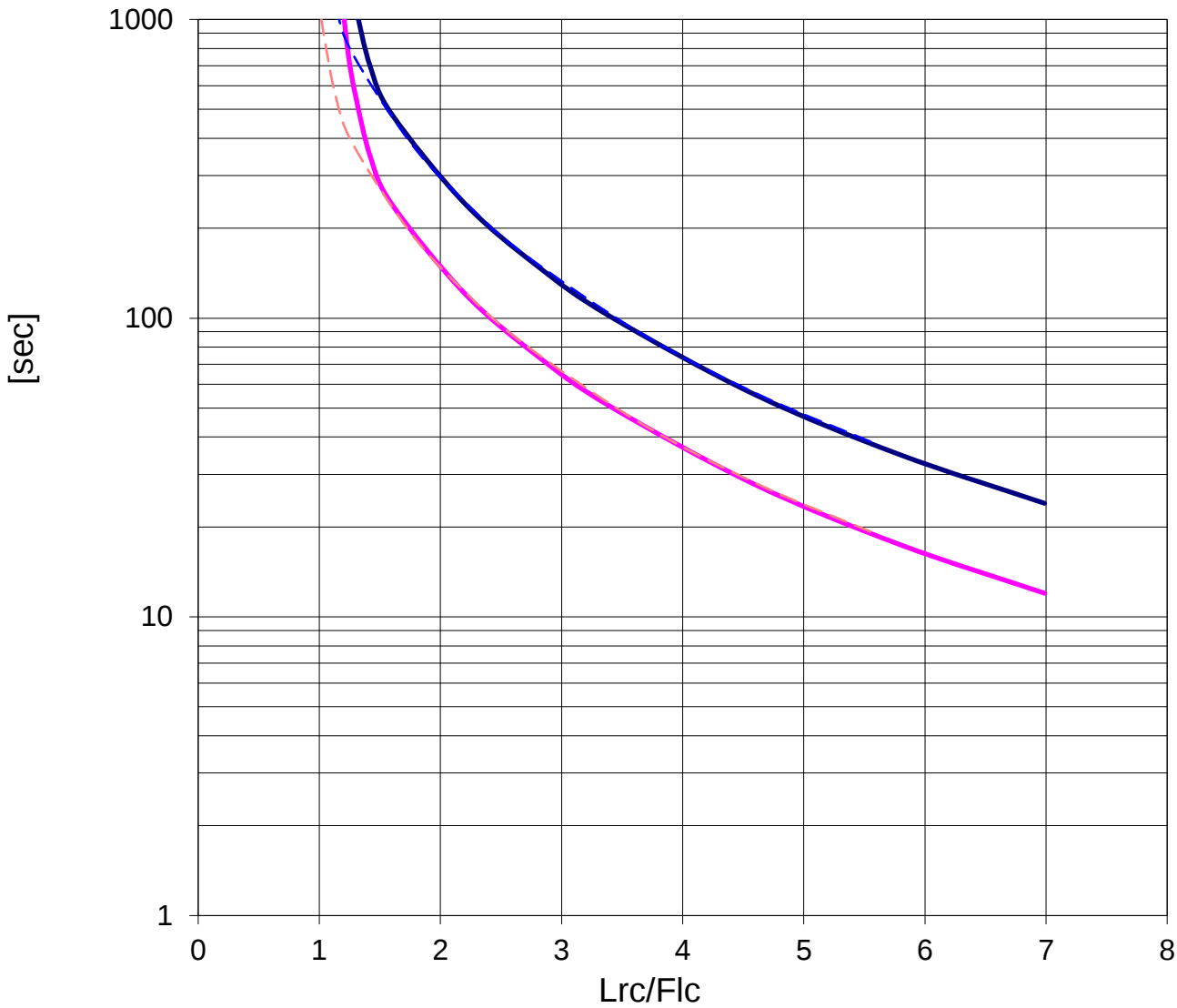


CURVA LIMITE CORRENTE TEMPO (Tensione ridotta)
THERMAL WITHSTAND CURVE (Reduced voltage)

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

Motore / Motor	TCI 80MA2	
Potenza nominale / Rated power	0,75	kW
Poli / Pole	2	
Tensione - Frequenza / Voltage - Frequency	400 - 50	V - Hz
Corrente / Rated current	1,59	A
Velocità / Speed	2865	rpm
Coppia / Torque	2,50	Nm

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



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

Data / Date 29-gen-21