

PRODUCT INFORMATION PACKET

Model No: E3TN3004133B50D41100

Catalog No: E3TN3004133B50D41100

Made in Italy TCN Series, General Purpose Low Voltage IEC motor, Increased Safety, 5,50 kW,
3 phase, 1463 RPM, D400/Y690V 50Hz, 132SA Frame B5, 4 Poles, IC411



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

©2022 Regal Rexnord Corporation, All Rights Reserved. MC017097E

Nameplate Specifications

Output HP	7.50 Hp	Output KW	5.5 kW
Frequency	50 Hz	Voltage	400/690 V
Current	10.8 A	Speed	1463 rpm
Service Factor	1	Phase	3
Efficiency	89.6 %	Power Factor	0.82
Duty	S1	Insulation Class	F
Frame	132S	Enclosure	Totally Enclosed Fan Cooled
Ambient Temperature	40 °C	Drive End Bearing Size	6308
Opp Drive End Bearing Size	6208	UL	No
CSA	No	CE	Yes
IP Code	IP55	Number of Speeds	1

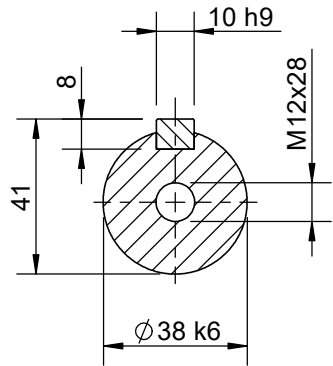
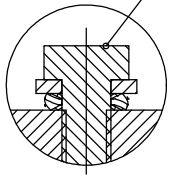
Technical Specifications

Electrical Type	Squirrel Cage	Starting Method	Direct On Line
Poles	4	Rotation	Bi-Directional
Mounting	B5	Motor Orientation	Horizontal
Drive End Bearing	2z-C3	Opp Drive End Bearing	2z-C3
Frame Material	Cast Iron	Shaft Type	Keyed
Overall Length	465.00 mm	Frame Length	202.00 mm
Shaft Diameter	38.000 mm	Shaft Extension	80 mm
Assembly/Box Mounting	Top		
Connection Drawing	SC-01-T-1v-1a	Outline Drawing	B5A04T8135001B01

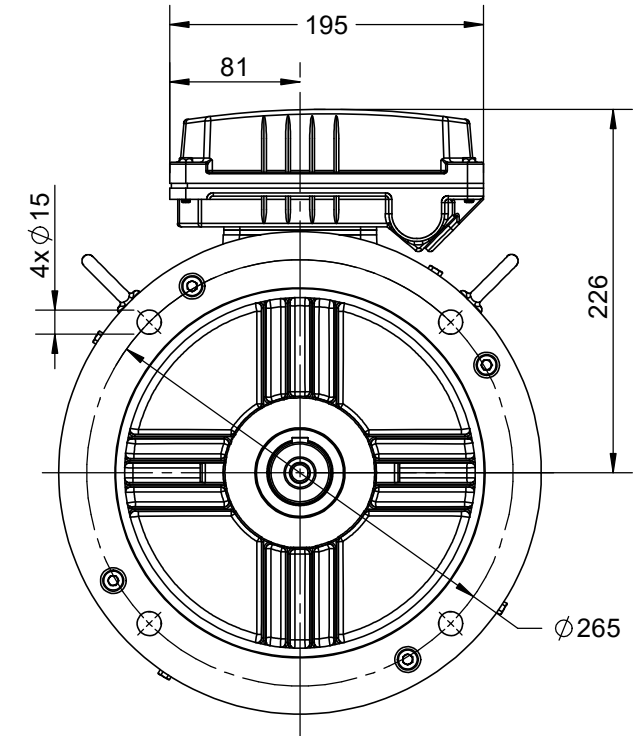
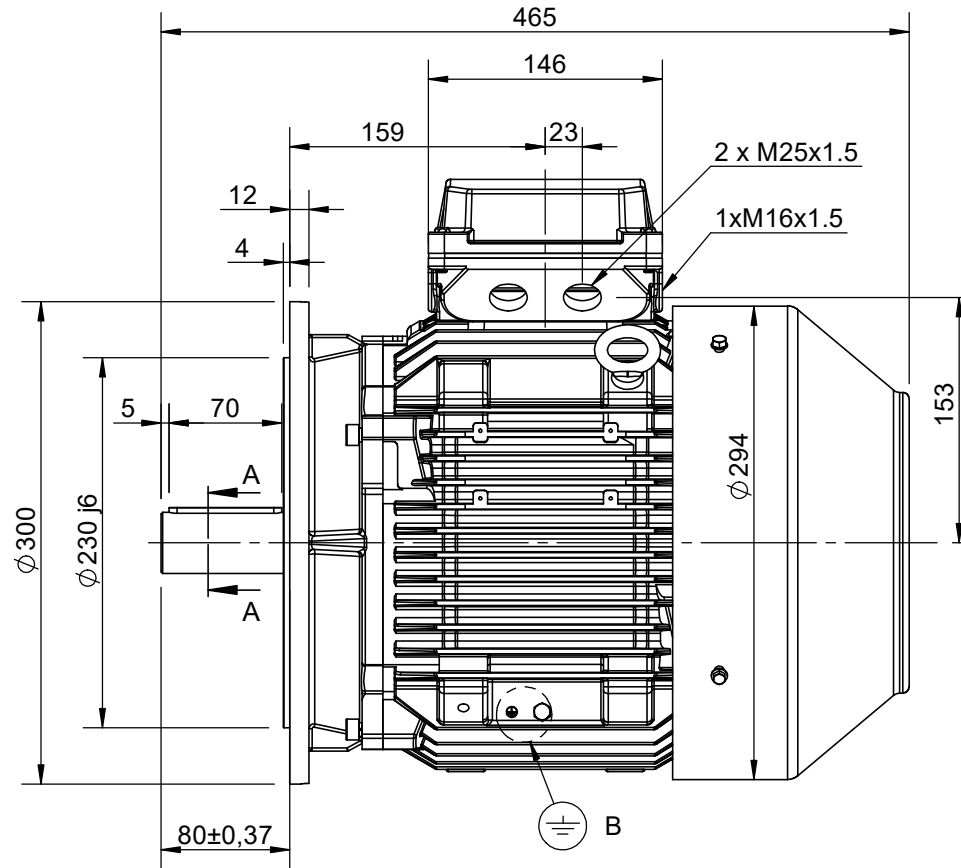
This is an uncontrolled document once printed or downloaded and is subject to change without notice. Date Created:12/02/2022

DETAIL B

Earth Terminal
suitable for cable
section 2.5-35mm²



SECTION A-A
SCALE 1:2



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

MOTOR TYPE AND DESCRIPTION:

DRAWING REVISION	REVISION BY	DATE	TOLERANCES (EXCEPT AS NOTED) TOLERANCES: ±2	DRAWN BY	REGAL™ cemp		
ECO	APPROVED BY	DATE		TN			
ECO DESCRIPTION			DIMENSIONS ARE IN mm ACCORDING TO IEC 60072	DATE	3/11/2021		
				APPROVED BY	LP		
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.				DATE	4/11/2021		
				SERIAL NUMBER	REFERENCE	DESCRIPTION Motor 132 TC (S) B5	
			FIRST ANGLE PROJECTION		SIZE A4		

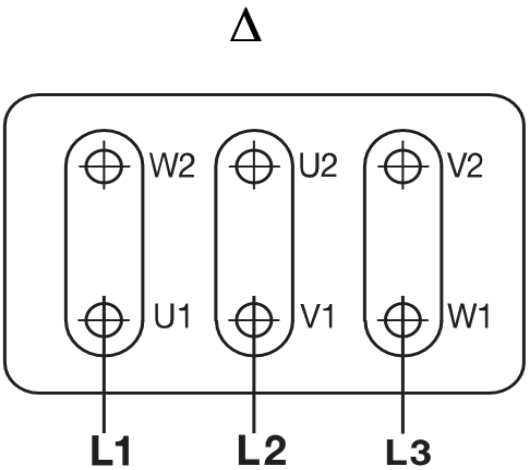
Schema di collegamento - *Connection diagram*
Schemas de branchement - *Schaltplan*
Esquemas de conexión



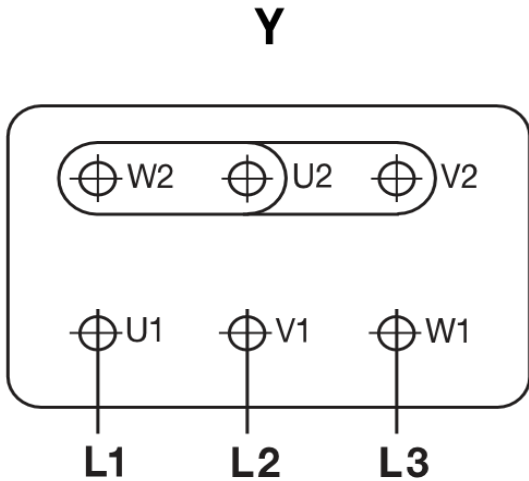
DTE 01/01/2004
SC - 01 - T - 1v.doc

**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	-
Offerta / Offer :	-
Impianto / Plant	-

DATI DI PROGETTO - DESIGN DATA

Modo di protezione	II3G	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%	

Ex ec IIB T3 Gc	IP55
Ex ec IIB Gc	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				TCN 132S4
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°	4
8	Potenza nominale / Rated power			kW	5,50
9	Corrente nominale / Rated current			A	10,81
10	Velocità nominale / Full Load speed			1/min	1463
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	1463	1473	1482
19	Corr. / Curr.	A	10,81	8,46	5,70
20	Rend / Eff	%	89,6	90,4	89,6
21	cos φ	-	0,82	0,78	0,78
Performances all'avviamento / Starting performances					
22	Ia/In - LRC/FLC			%	690
23	Cosphi a rotore bloccato / LR power factor				0,47
	Tempo a rotore bloccato / LRWT				
24	100% Un (A caldo / Warm)			sec	5
25	(A freddo / Cold)			sec	14
26	80% Un (A caldo / Warm)			sec	7
27	(A freddo / Cold)			sec	22
	Tempo di avviamento ammissibile / ART				
28	100% Un			sec	12
29	80% Un			sec	19
Curva di coppia / Speed-torque values					
30	Coppia nominale / Rated Torque			Nm	35,90
31	Ca/Cn - LRT/FLT			%	200
32	Cmax/Cn - BDT/FLT			%	280
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	-	6308 ZZ C3
45	Cuscinetto post / NDE bearing	-	6208 ZZ C3
46	Carico radiale max / Max radial load in X1	N	1908
47	Carico assiale max / Max axial load	N	1249
48	Tipo grasso / Grease type	LGHP2 SKF or equivalent	
49	Intervallo lubrificazione / Lubrication	h	-
50	Quantità grasso / Quantity grease	gr	-
Caratteristiche meccaniche / mechanical specification			
51	Massa / Mass	kg	81
52	Momento d'inerzia / Moment of inertia	kgm2	0,0428
53	Rumore a vuoto / Noise at no load (1 m)	Lp dB(A)	65
54	Vibrazioni / Vibration level	IEC 34-14	A
55	Limite norma / Vibration limit	mm/sec	1,60
56			
57			
Dati entrata cavi - verniciatura / Cable entry and painting			
63	Entrata cavi / Cable entry	IEC 60423	2xM25+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

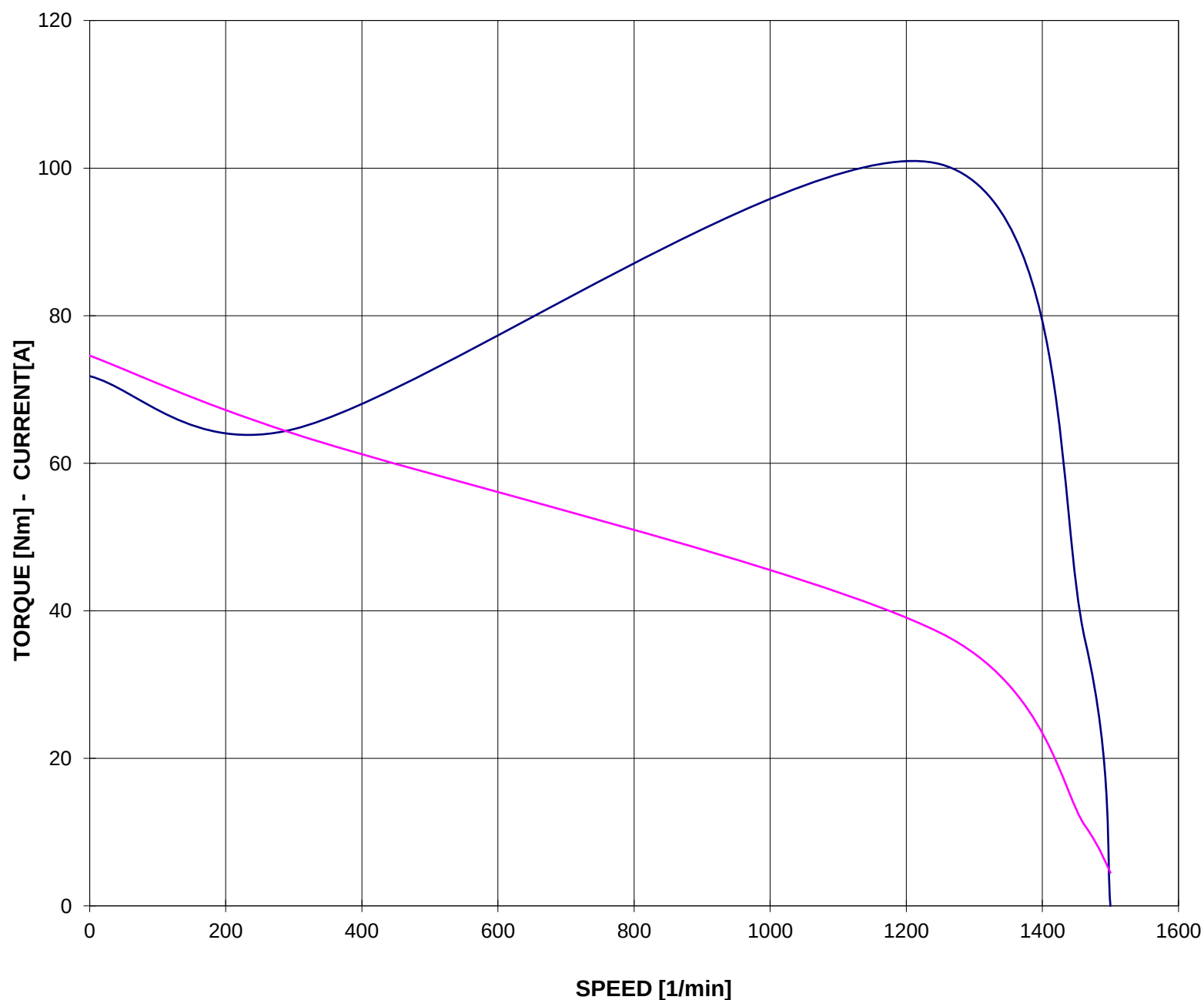
CURVA COPPIA/CORRENTE-GIRI TORQUE/CURRENT-SPEED DIAGRAM

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

Motore / Motor
TCN 132S4

Potenza nominale / Rated power	5,50	kW
Poli / Pole	4	
Tensione - Frequenza / Voltage - Frequency	400 - 50	V - Hz
Corrente / Rated current	10,81	A
Velocità / Speed	1463	rpm
Coppia / Torque	35,90	Nm

— COPPIA - TORQUE — CORRENTE - CURRENT



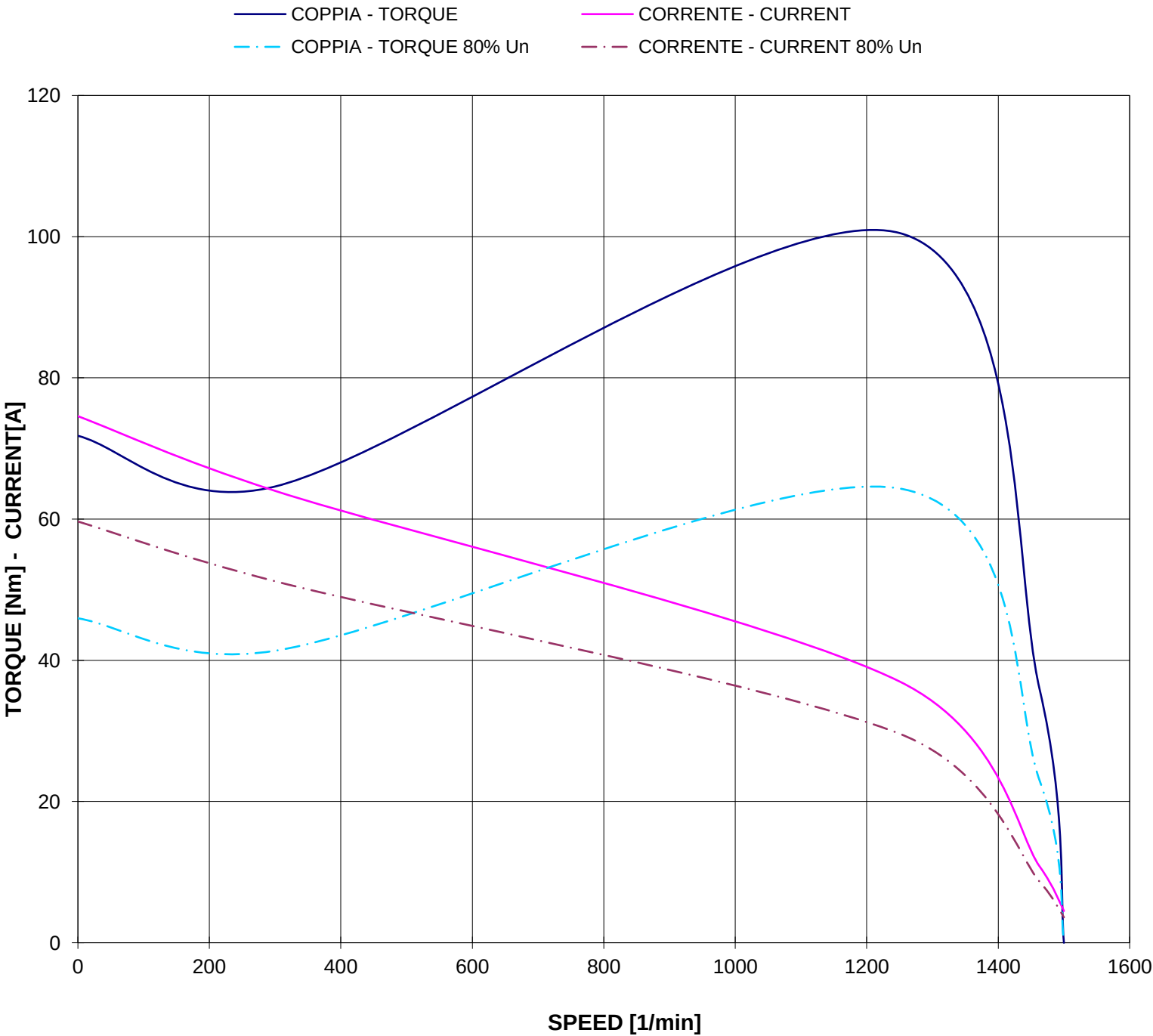
Valori calcolati - Data obtained by calculation method
 Documento preliminare - Preliminary document

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 132S4	
Potenza nominale / Rated power	5,50	kW
Poli / Pole	4	
Tensione - Frequenza / Voltage - Frequency	400 - 50	V - Hz
Corrente / Rated current	10,81	A
Velocità / Speed	1463	rpm
Coppia / Torque	35,90	Nm



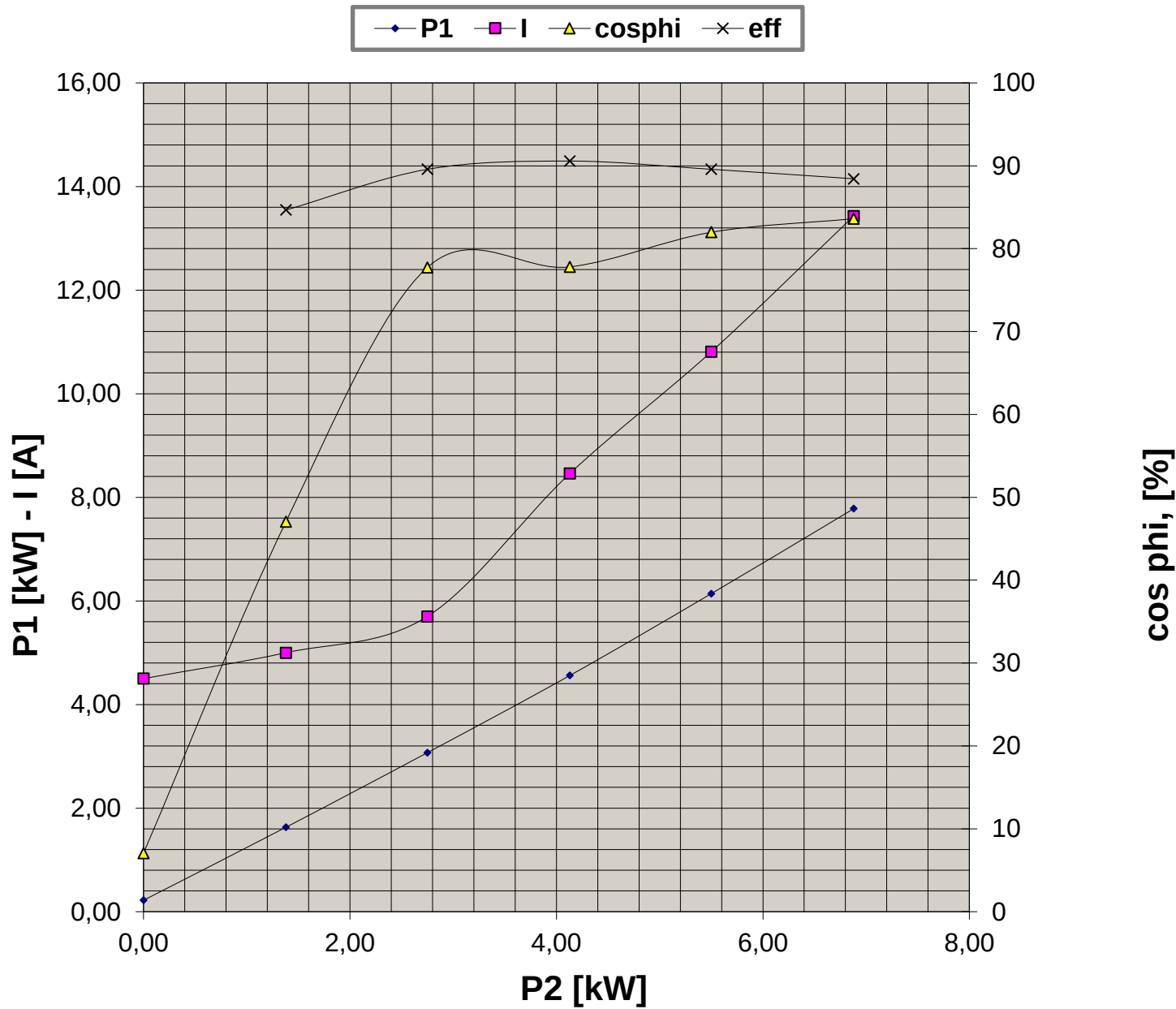
Valori calcolati - Data obtained by calculation method
Documento preliminare - Preliminary document

Data / Date 29-giu-22

CURVE CARATTERISTICHE
PERFORMANCE CURVES

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

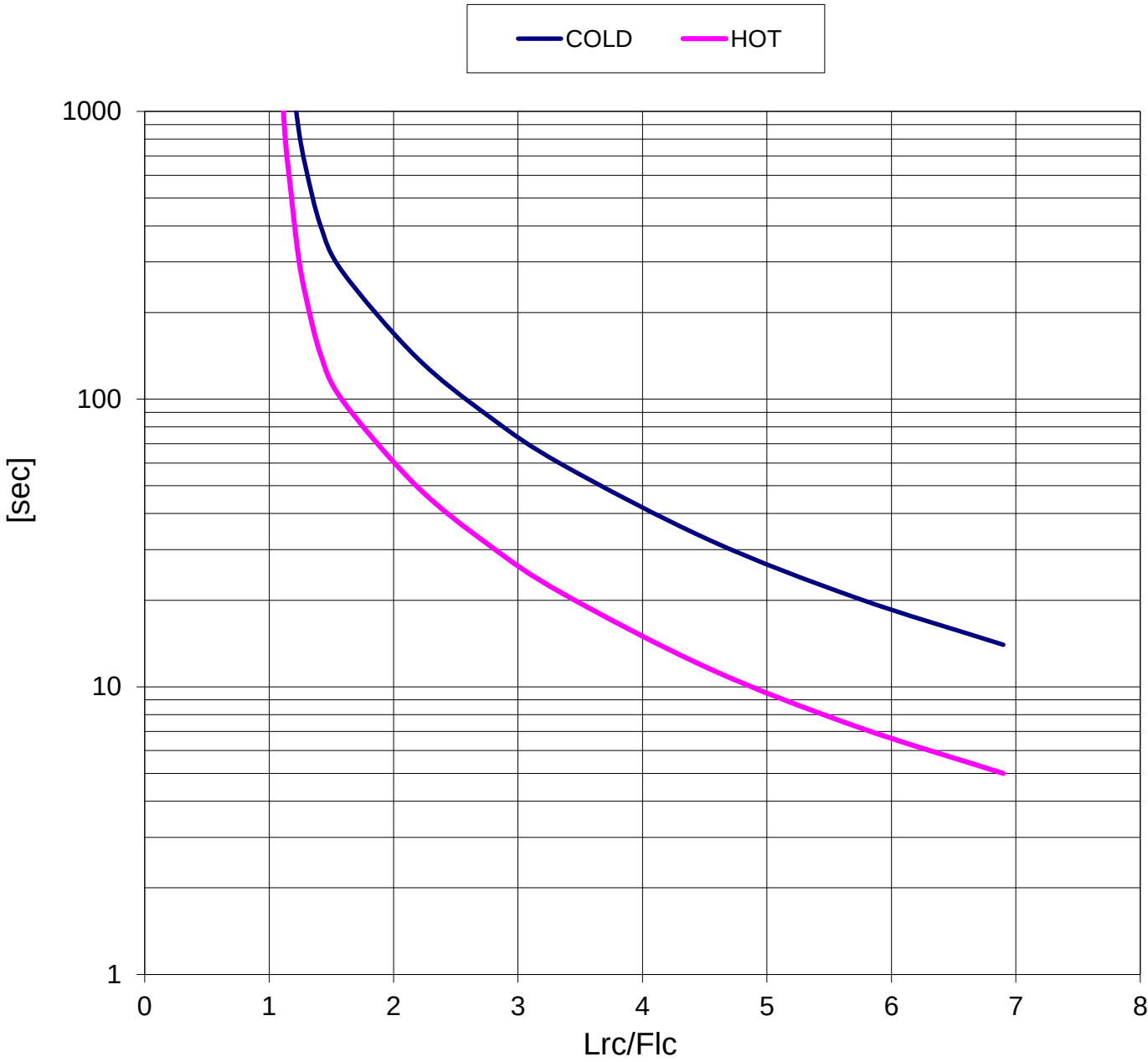
Motore / Motor	TCN 132S4	
Potenza nominale / Rated power	5,50	kW
Poli / Pole	4	
Tensione - Frequenza / Voltage - Frequency	400 - 50	V - Hz
Corrente / Rated current	10,81	A
Velocità / Speed	1463	rpm
Coppia / Torque	35,90	Nm



CURVA LIMITE CORRENTE TEMPO
THERMAL WITHSTAND CURVE

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

Motore / Motor	TCN 132S4	
Potenza nominale / Rated power	5,50	kW
Poli / Pole	4	
Tensione - Frequenza / Voltage - Frequency	400 - 50	V - Hz
Corrente / Rated current	10,81	A
Velocità / Speed	1463	rpm
Coppia / Torque	35,90	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 -

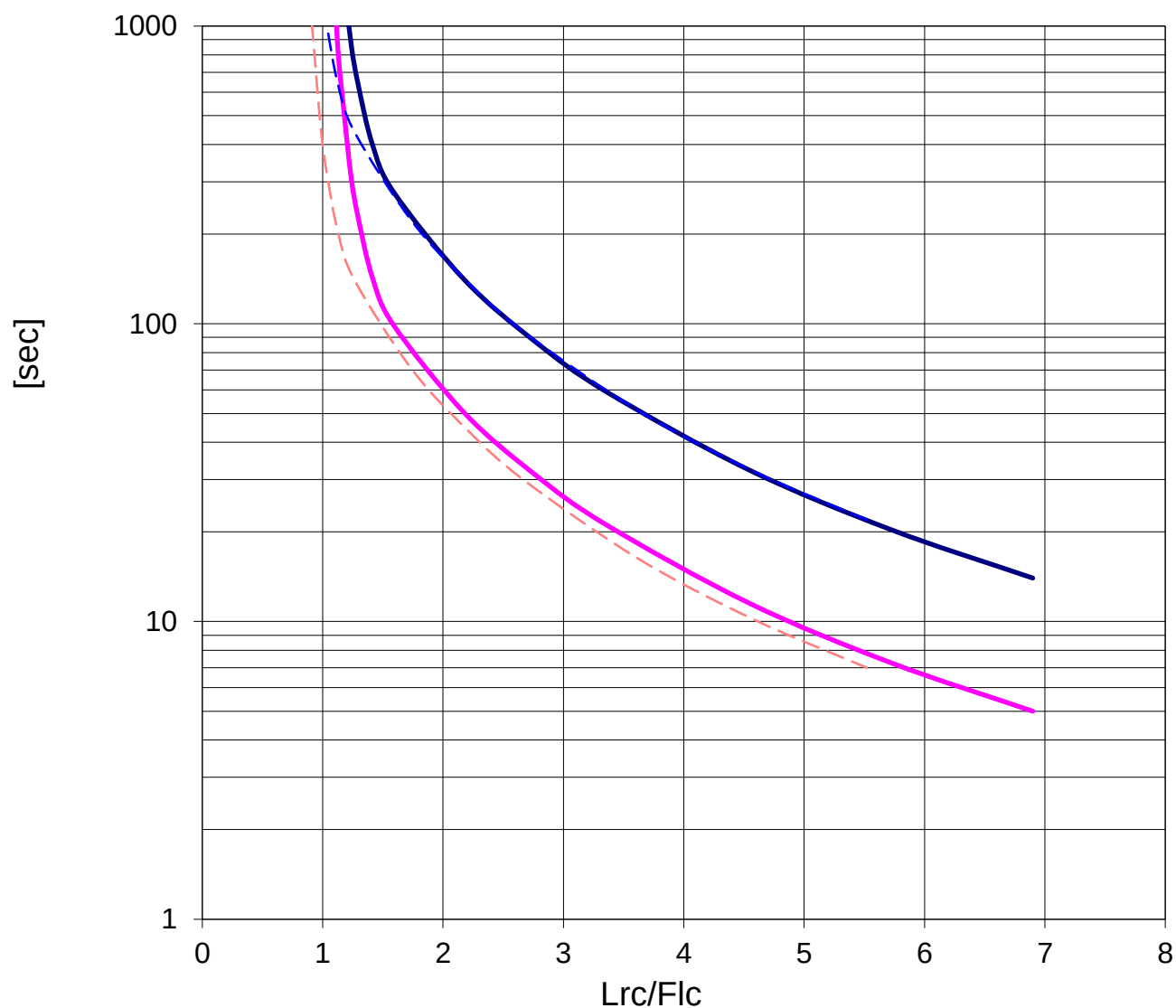
Numero d'offerta / Offer Number -

Motore / Motor

TCN 132S4

Potenza nominale / Rated power	5,50	kW
Poli / Pole	4	
Tensione - Frequenza / Voltage - Frequency	400 - 50	V - Hz
Corrente / Rated current	10,81	A
Velocità / Speed	1463	rpm
Coppia / Torque	35,90	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-giu-22