

PRODUCT INFORMATION PACKET

Model No: E3AB3002355B30D41100

Catalog No: E3AB3002355B30D41100

Made in Italy E3AB30 Series, General Purpose Low Voltage IEC motor IE3, Flameproof, 315,00kW,
3 phase, 2984 RPM, D400/Y690V 50Hz, 355LB Frame B3, 2 Poles, IC411



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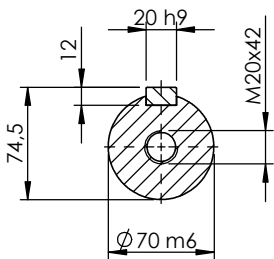
Nameplate Specifications

Output HP	425 Hp	Output KW	315.0 kW
Frequency	50 Hz	Voltage	400/690 V
Current	526.0 A	Speed	2984 rpm
Service Factor	1	Phase	3
Efficiency	95.8 %	Power Factor	0.9
Duty	S1	Insulation Class	F
Frame	355LB	Enclosure	Totally Enclosed Fan Cooled
Thermal Protection	No Protection	Ambient Temperature	40 °C
Drive End Bearing Size	6317	Opp Drive End Bearing Size	6316
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	2	Rotation	Bi-Directional
Mounting	B3	Motor Orientation	Horizontal
Drive End Bearing	C3	Opp Drive End Bearing	C3
Frame Material	Cast Iron	Shaft Type	Keyed
Overall Length	1704.00 mm	Frame Length	935.00 mm
Shaft Diameter	70.000 mm	Shaft Extension	140 mm
Assembly/Box Mounting	Top		
Outline Drawing	B3A048355001A01	Connection Drawing	SC-01-T-1v-1a

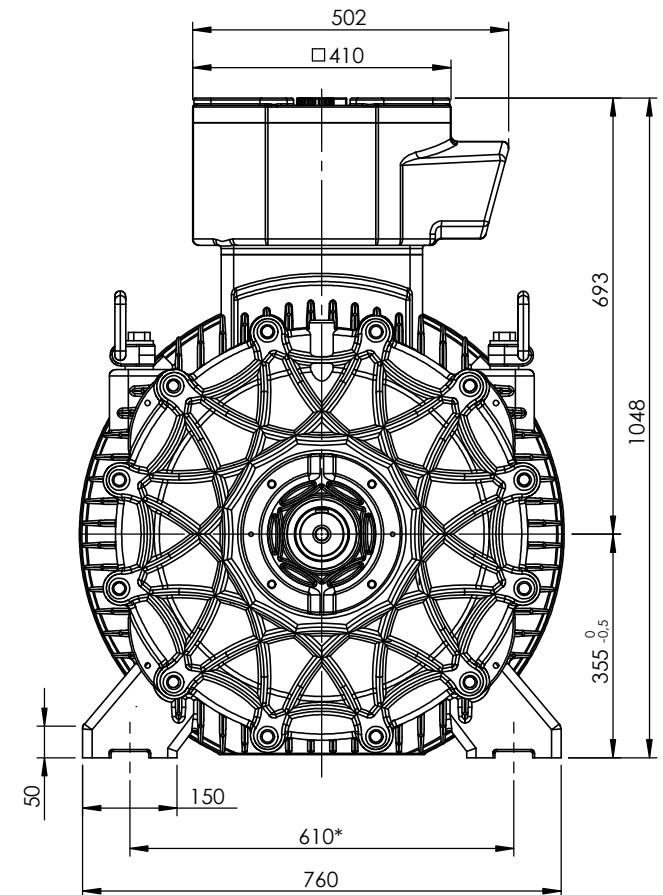
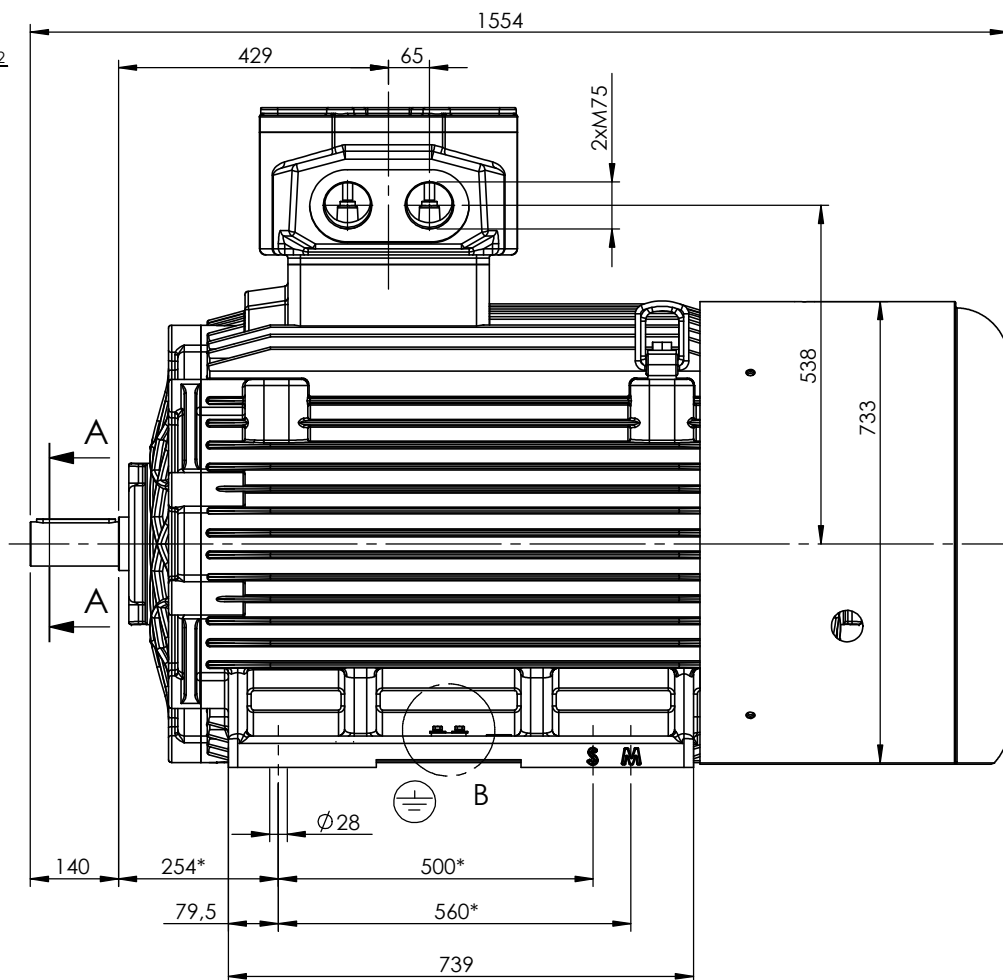
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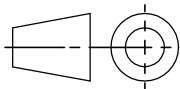
SEZIONE A-A
SCALA 1 : 5



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



N.B.
Dimensions in mm. according to IEC 60072
Tolerances where not differently marked $\pm 2\text{mm}$.
* Tolerances ± 0.8



Dimensions in mm
Tolerances allowed

Cemp - Senago (Italy)

0

Motor type and description

cemp
Flameproof
Motors

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



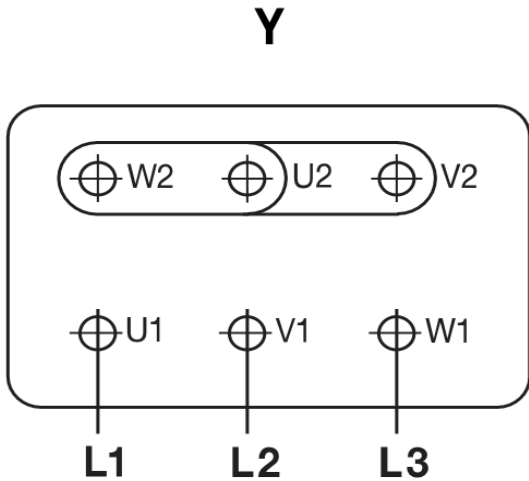
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**Motori trifase una velocità - *Single speed, three phase motors* - Moteurs triphasé une vitesse
Drehstrommotor Eine Drehzahlstufe - Motores trifásico una velocidad**

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		AB30 355LB 2		
3	Numero di serie / Serial Number		-		
4	Forma costruttiva / Shape		B3		
5	Certificato / Certificate	TÜV IT	15 ATEX 040 X		
6	Altro certificato / Other certificate				
Dati nominali / Rated data					
7	Poli / Pole	n°	2		
8	Potenza nominale / Rated power	kW	315,00		
9	Corrente nominale / Rated current	A	531,91		
10	Velocità nominale / Full Load speed	1/min	2983		
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	2983	2988	2992
19	Corr. / Curr.	A	531,91	410,21	295,87
20	Rend / Eff	%	95,8	94,9	93,6
21	cos φ	-	0,89	0,88	0,82
Performances all'avviamento / Starting performances					
22	Ia/In - LRC/FLC	%	695		
23	Cosphi a rotore bloccato / LR power factor		0,35		
	Tempo a rotore bloccato / LRWT				
24	100% Un (A caldo / Warm)	sec	3		
25	(A freddo / Cold)	sec	27		
26	80% Un (A caldo / Warm)	sec	4		
27	(A freddo / Cold)	sec	42		
	Tempo di avviamento ammissibile / ART				
28	100% Un	sec	24		
29	80% Un	sec	37		
Curva di coppia / Speed-torque values					
30	Coppia nominale / Rated Torque	Nm	1008,46		
31	Ca/Cn - LRT/FLT	%	210		
32	Cmax/Cn - BDT/FLT	%	0		
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	-	6317 C3
45	Cuscinetto post / NDE bearing	-	6316 C3
46	Carico radiale max / Max radial load in X1	N	-
47	Carico assiale max / Max axial load	N	-
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	2230
52	Momento d'inerzia / Moment of inertia	kgm2	4,4076
53	Rumore a vuoto / Noise at no load (1 m)	Lp dB(A)	90
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		2xM75
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	-
73	Sonde termiche / Temperature detector	bearing	-
74	Scaldiglie / Heaters	V / W	-
75	Preparation for SPM sensor		-
76	Pressacavi / Cable glands		NO
77			

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

Cliente / Customer CEMP

 Impianto / Plant -
 ITEM -

 Numero d'offerta / Offer Number 2021.
 -

Motore / Motor AB30 355LB 2

Potenza nominale / Rated power 315,00 kW

Poli / Pole 2

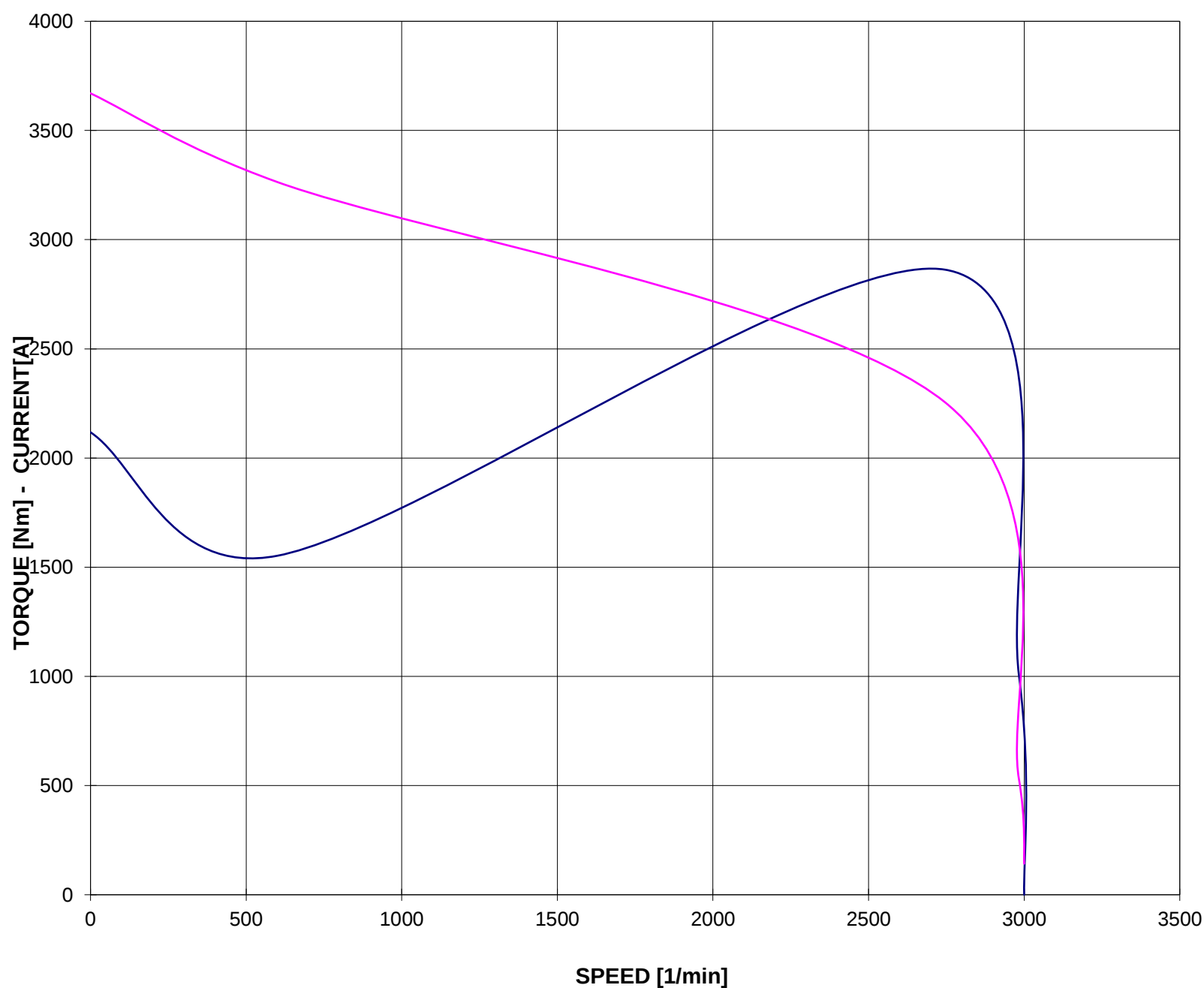
Tensione - Frequenza / Voltage - Frequency 400 - 50 V - Hz

Corrente / Rated current 531,91 A

Velocità / Speed 2983 rpm

Coppia / Torque 1008,46 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 CEMP

Impianto / Plant -
 ITEM -

Numero d'offerta / Offer Number 2021.
 -

Motore / Motor AB30 355LB 2

Potenza nominale / Rated power 315,00 kW

Poli / Pole 2

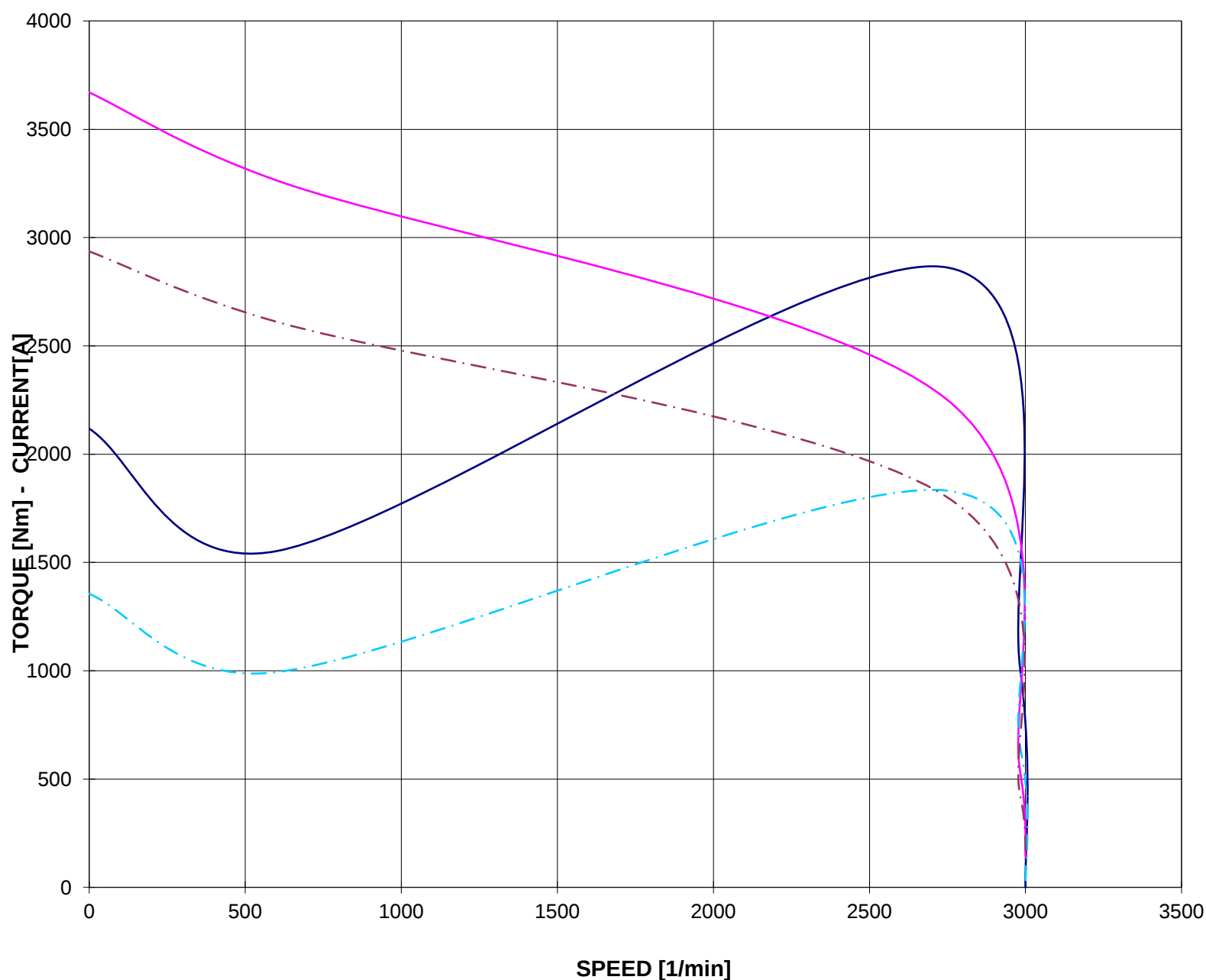
Tensione - Frequenza / Voltage - Frequency 400 - 50 V - Hz

Corrente / Rated current 531,91 A

Velocità / Speed 2983 rpm

Coppia / Torque 1008,46 Nm

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



Valori calcolati - Data obtained by calculation method

CURVE CARATTERISTICHE PERFORMANCE CURVES

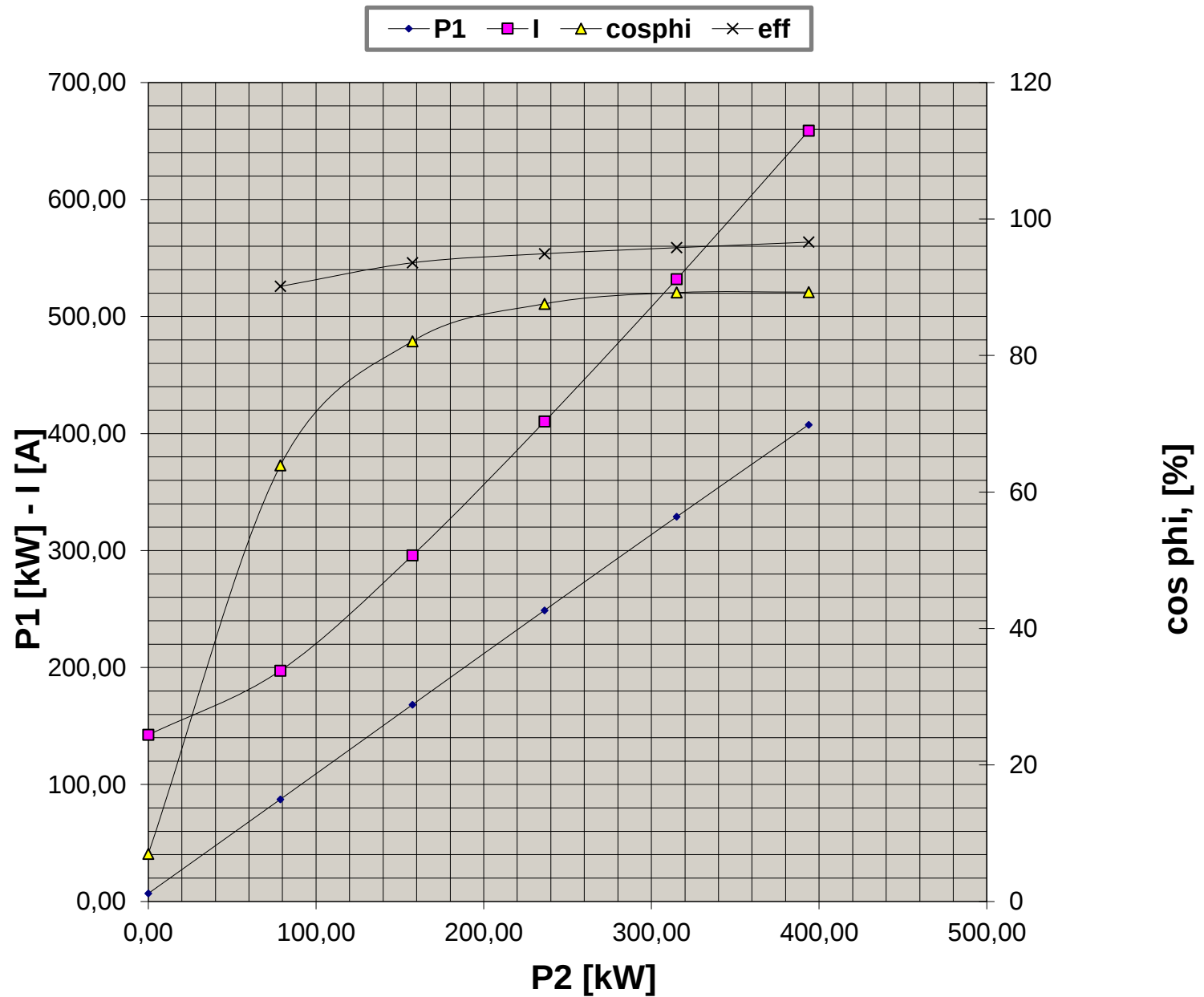
Cliente / Customer CEMP

Impianto / Plant
ITEM -

Numero d'offerta / Offer Number 2021.
-

Motore / Motor **AB30 355LB 2**

Potenza nominale / Rated power	315,00	kW
Poli / Pole	2	
Tensione - Frequenza / Voltage - Frequency	400 - 50	V - Hz
Corrente / Rated current	531,91	A
Velocità / Speed	2983	rpm
Coppia / Torque	1008,46	Nm



Valori calcolati - Data obtained by calculation method

CURVA LIMITE CORRENTE TEMPO THERMAL WITHSTAND CURVE

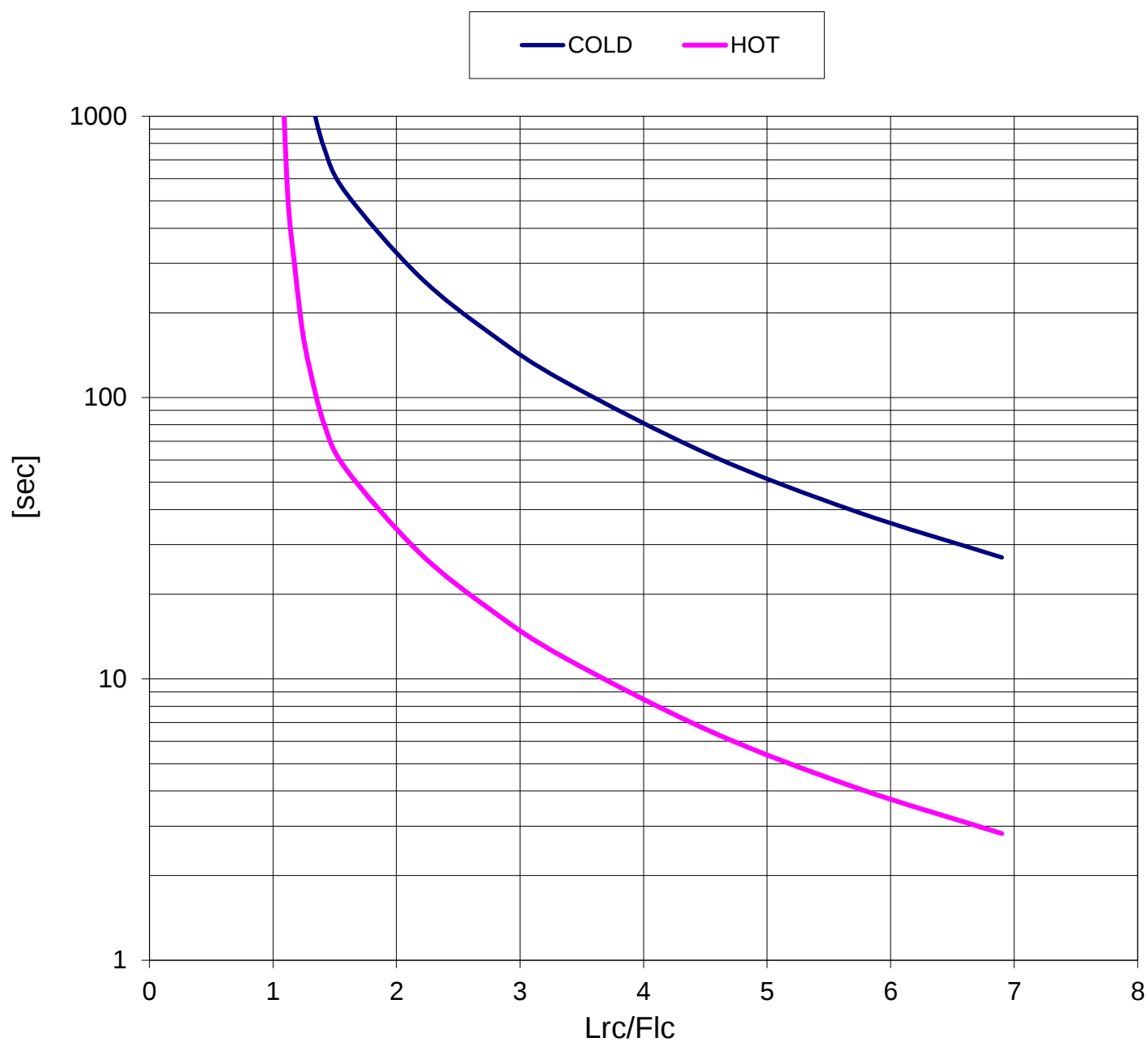
Cliente / Customer CEMP

 Impianto / Plant -
 ITEM -

 Numero d'offerta / Offer Number 2021.
 -

Motore / Motor AB30 355LB 2

Potenza nominale / Rated power	315,00	kW
Poli / Pole	2	
Tensione - Frequenza / Voltage - Frequency	400 - 50	V - Hz
Corrente / Rated current	531,91	A
Velocità / Speed	2983	rpm
Coppia / Torque	1008,46	Nm



Valori calcolati - Data obtained by calculation method

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

Cliente / Customer CEMP

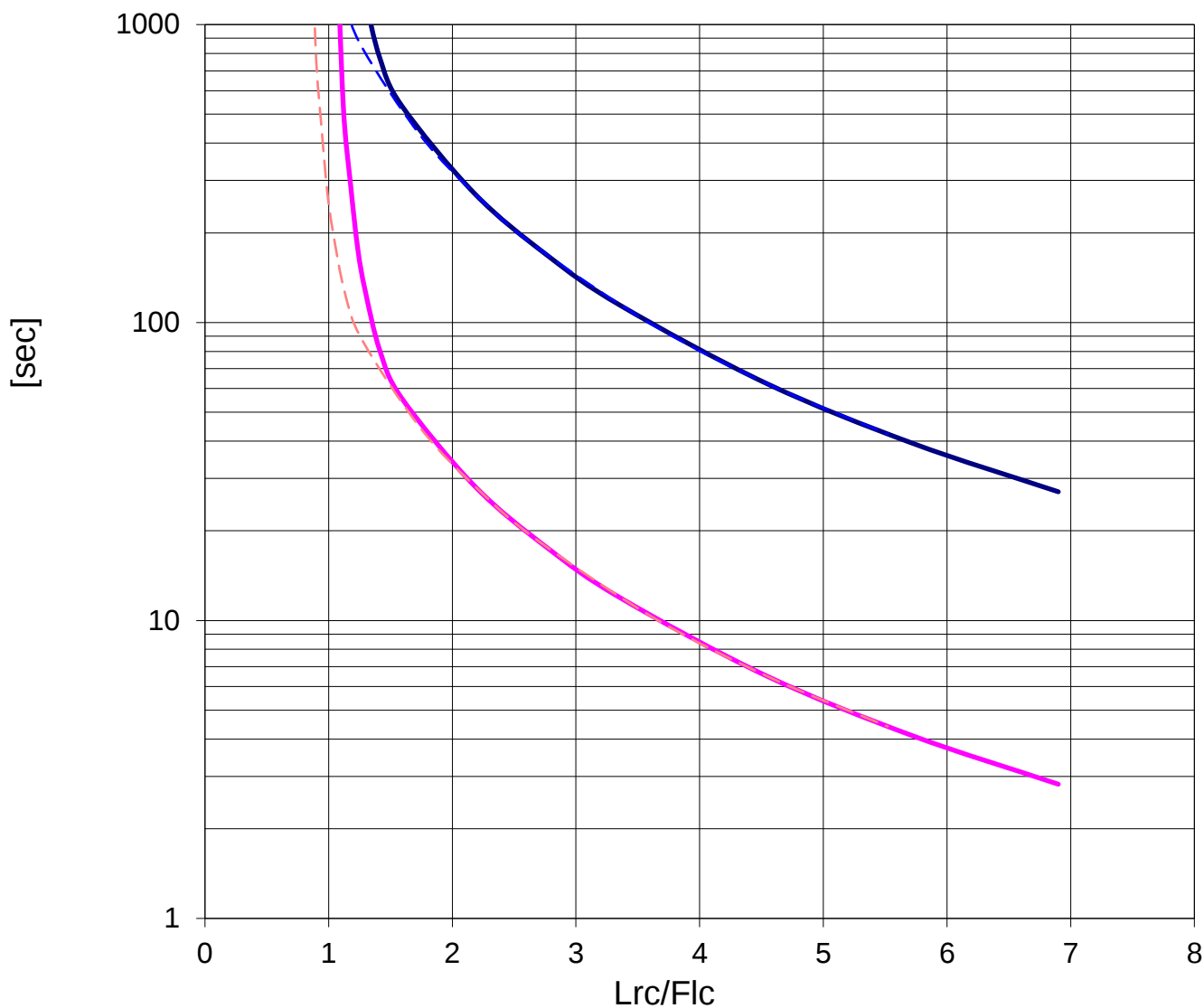
Impianto / Plant -
ITEM -

Numero d'offerta / Offer Number 2021.
-

Motore / Motor AB30 355LB 2

Potenza nominale / Rated power	315,00	kW
Poli / Pole	2	
Tensione - Frequenza / Voltage - Frequency	400 - 50	V - Hz
Corrente / Rated current	531,91	A
Velocità / Speed	2983	rpm
Coppia / Torque	1008,46	Nm

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



Valori calcolati - Data obtained by calculation method