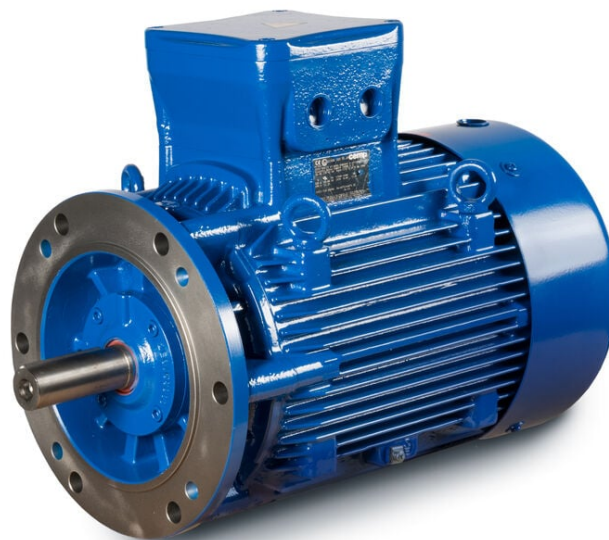


# PRODUCT INFORMATION PACKET

Model No: E3AC3006285B50D41100

Catalog No: E3AC3006285B50D41100

Made in Italy E3AC30 Series, General Purpose Low Voltage IEC motor IE3, Flameproof, 55,00kW,  
3 phase, 989 RPM, D400/Y690V 50Hz, 280SM Frame B5, 6 Poles, IC411



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### Nameplate Specifications

|                            |                |                        |                                    |
|----------------------------|----------------|------------------------|------------------------------------|
| Phase                      | <b>3</b>       | Output HP              | <b>75 Hp</b>                       |
| Output KW                  | <b>55.0 kW</b> | Voltage                | <b>400/690 V</b>                   |
| Speed                      | <b>989 rpm</b> | Service Factor         | <b>1</b>                           |
| Frame                      | <b>280SM</b>   | Enclosure              | <b>Totally Enclosed Fan Cooled</b> |
| Efficiency                 | <b>94.1 %</b>  | Ambient Temperature    | <b>40 °C</b>                       |
| Frequency                  | <b>50 Hz</b>   | Current                | <b>101.0 A</b>                     |
| Power Factor               | <b>0.84</b>    | Duty                   | <b>S1</b>                          |
| Insulation Class           | <b>F</b>       | Drive End Bearing Size | <b>6316</b>                        |
| Opp Drive End Bearing Size | <b>6316</b>    | UL                     | <b>No</b>                          |
| CSA                        | <b>No</b>      | CE                     | <b>Yes</b>                         |
| IP Code                    | <b>IP55</b>    | Number of Speeds       | <b>1</b>                           |

### Technical Specifications

|                       |                      |                       |                         |
|-----------------------|----------------------|-----------------------|-------------------------|
| Electrical Type       | <b>Squirrel Cage</b> | Starting Method       | <b>Direct On Line</b>   |
| Poles                 | <b>6</b>             | Rotation              | <b>Bi-Directional</b>   |
| Mounting              | <b>B5</b>            | Motor Orientation     | <b>Horizontal</b>       |
| Drive End Bearing     | <b>Zz C3</b>         | Opp Drive End Bearing | <b>Zz C3</b>            |
| Frame Material        | <b>Cast Iron</b>     | Shaft Type            | <b>Keyed</b>            |
| Overall Length        | <b>1389.00 mm</b>    | Frame Length          | <b>675.00 mm</b>        |
| Shaft Diameter        | <b>75.000 mm</b>     | Shaft Extension       | <b>140 mm</b>           |
| Assembly/Box Mounting | <b>Top</b>           |                       |                         |
| Connection Drawing    | <b>SC-01-T-1v-1a</b> | Outline Drawing       | <b>B5A04E8285011B01</b> |

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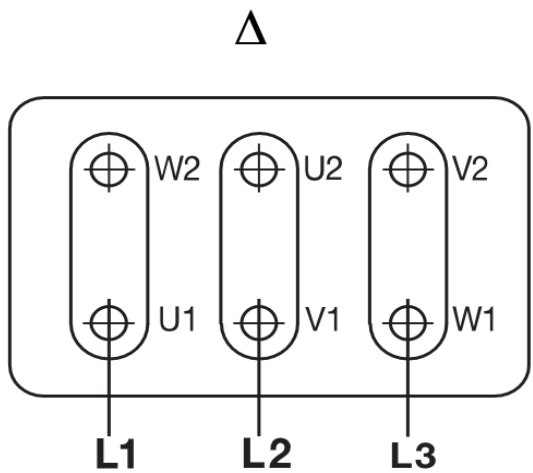
Schema di collegamento - *Connection diagram*  
Schemas de branchement - *Schaltplan*  
Esquemas de conexión



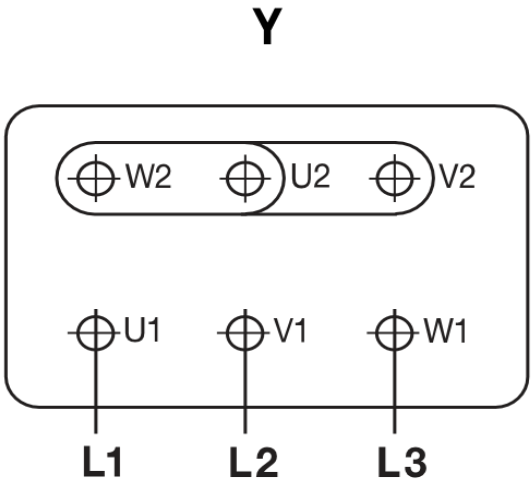
DTE 01/01/2004  
SC - 01 - T - 1v.doc

**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

| <b>Marcatura Morsetti Ausiliari - <i>Additional terminals marking (IEC60034-8)</i></b> |                                              |                                                                                                  |
|----------------------------------------------------------------------------------------|----------------------------------------------|--------------------------------------------------------------------------------------------------|
| <b>Marcatura<br/><i>Marking</i></b>                                                    | <b>No.<br/>morsetti<br/><i>terminals</i></b> | <b>Morsetto ausiliare per:<br/><i>Additional terminal for:</i></b>                               |
| 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 -<br><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 -<br><i>NC brake bi-metallic switch (**)</i> |
| TM1 - TM2 (allarme- <i>warning</i> )                                                   | 2                                            | Protettore bimetallico normalmente aperto -<br><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 -<br><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 IIC T4 Gb                 | IP55               |
| Ex-db IIC 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                   |           | E3AC30 280SM 6    |
| 3                                                   | Numero di serie / Serial Number            |           | -                 |
| 4                                                   | Forma costruttiva / Shape                  |           | B5                |
| 5                                                   | Certificato / Certificate                  | TÜV CY    | 17 ATEX 0205845 X |
| 6                                                   | Altro certificato / Other certificate      |           |                   |
| Dati nominali / Rated data                          |                                            |           |                   |
| 7                                                   | Poli / Pole                                | n°        | 6                 |
| 8                                                   | Potenza nominale / Rated power             | kW        | 55,00             |
| 9                                                   | Corrente nominale / Rated current          | A         | 100,91            |
| 10                                                  | Velocità nominale / Full Load speed        | 1/min     | 989               |
| 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               |
| 18                                                  | Giri / Speed                               | 1/min     | 989               |
| 19                                                  | Corr. / Curr.                              | A         | 100,91            |
| 20                                                  | Rend / Eff                                 | %         | 94,1              |
| 21                                                  | cos φ                                      | -         | 0,84              |
| Performances all'avviamento / Starting performances |                                            |           |                   |
| 22                                                  | Ia/In - LRC/FLC                            | %         | 605               |
| 23                                                  | Cosphi a rotore bloccato / LR power factor |           | 0,34              |
|                                                     | Tempo a rotore bloccato / LRWT             |           |                   |
| 24                                                  | 100% Un (A caldo / Warm)                   | sec       | 5                 |
| 25                                                  | (A freddo / Cold)                          | sec       | 16                |
| 26                                                  | 80% Un (A caldo / Warm)                    | sec       | 9                 |
| 27                                                  | (A freddo / Cold)                          | sec       | 25                |
|                                                     | Tempo di avviamento ammissibile / ART      |           |                   |
| 28                                                  | 100% Un                                    | sec       | 14                |
| 29                                                  | 80% Un                                     | sec       | 21                |
| Curva di coppia / Speed-torque values               |                                            |           |                   |
| 30                                                  | Coppia nominale / Rated Torque             | Nm        | 531,09            |
| 31                                                  | Ca/Cn - LRT/FLT                            | %         | 180               |
| 32                                                  | Cmax/Cn - BDT/FLT                          | %         | 240               |
| 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                | -                       | 6316 ZZ C3 |
| 45                                                          | Cuscinetto post / NDE bearing              | -                       | 6316 ZZ C3 |
| 46                                                          | Carico radiale max / Max radial load in X1 | N                       | 6300       |
| 47                                                          | Carico assiale max / Max axial load        | N                       | 4550       |
| 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                      | 990,4      |
| 52                                                          | Momento d'inerzia / Moment of inertia      | kgm2                    | 2,3543     |
| 53                                                          | Rumore a vuoto / Noise at no load (1 m)    | Lp dB(A)                | 72         |
| 54                                                          | Vibrazioni / Vibration level               | IEC 34-14               | A          |
| 55                                                          | Limite norma / Vibration limit             | mm/sec                  | 2,20       |
| 56                                                          |                                            |                         |            |
| 57                                                          |                                            |                         |            |
| Dati entrata cavi - verniciatura / Cable entry and painting |                                            |                         |            |
| 63                                                          | Entrata cavi / Cable entry                 |                         | 2xM63      |
| 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                                                          |                                            |                         |            |

Documento preliminare - Preliminary data sheet

MOD. 803

Prepared by : GC

Tolleranze secondo - Tolerances according IEC 60034-1

Rev. 0

Data / Date

25 January 2022

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

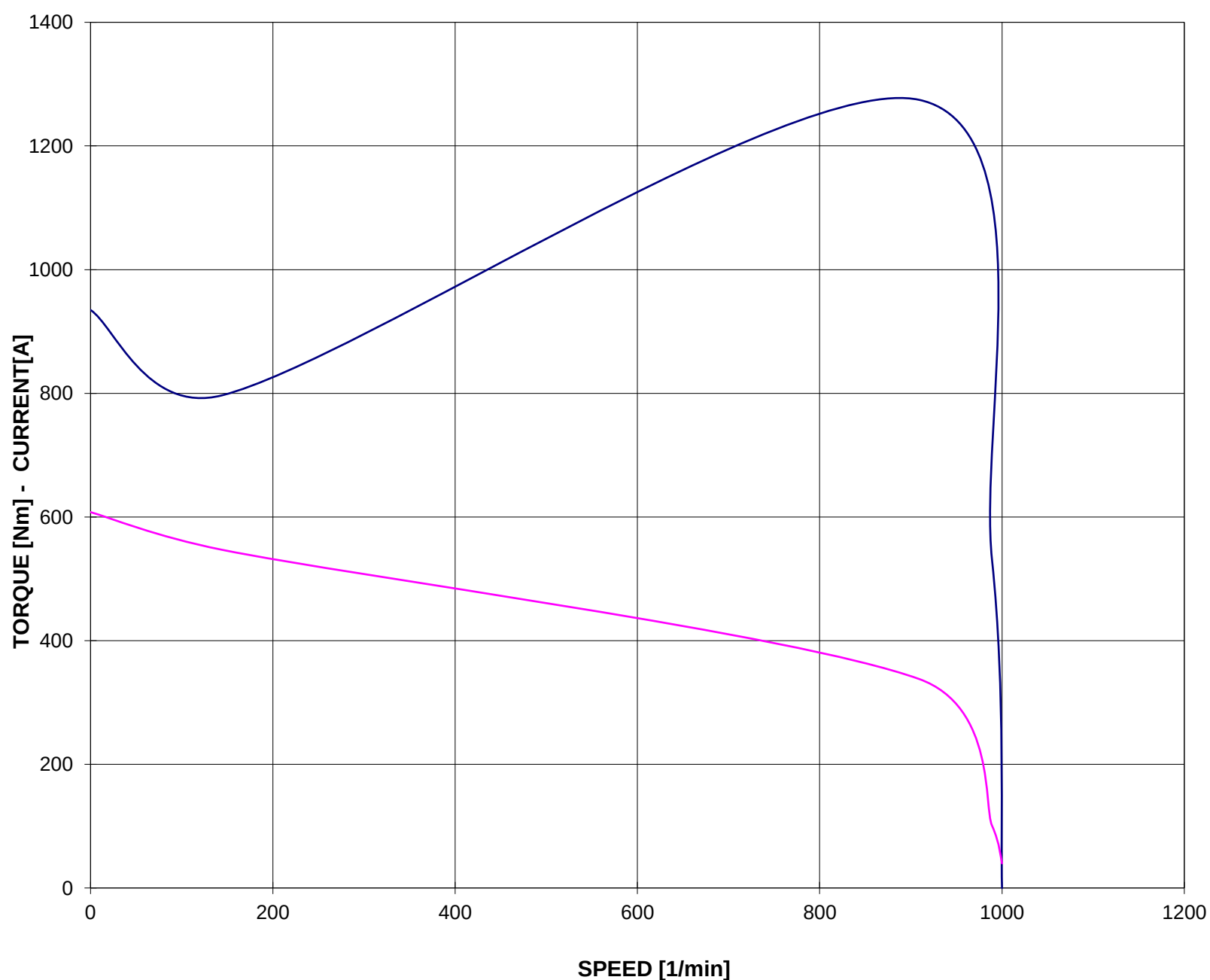
Cliente / Customer -  
Ordine cliente / Customer order -  
Impianto / Plant -  
**ITEM** -

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

**Motore / Motor** **E3AC30 280SM 6**

|                                            |          |        |
|--------------------------------------------|----------|--------|
| Potenza nominale / Rated power             | 55,00    | kW     |
| Poli / Pole                                | 6        |        |
| Tensione - Frequenza / Voltage - Frequency | 400 - 50 | V - Hz |
| Corrente / Rated current                   | 100,91   | A      |
| Velocità / Speed                           | 989      | rpm    |
| Coppia / Torque                            | 531,09   | Nm     |

— COPPIA - TORQUE — CORRENTE - CURRENT



Valori calcolati - Data obtained by calculation method

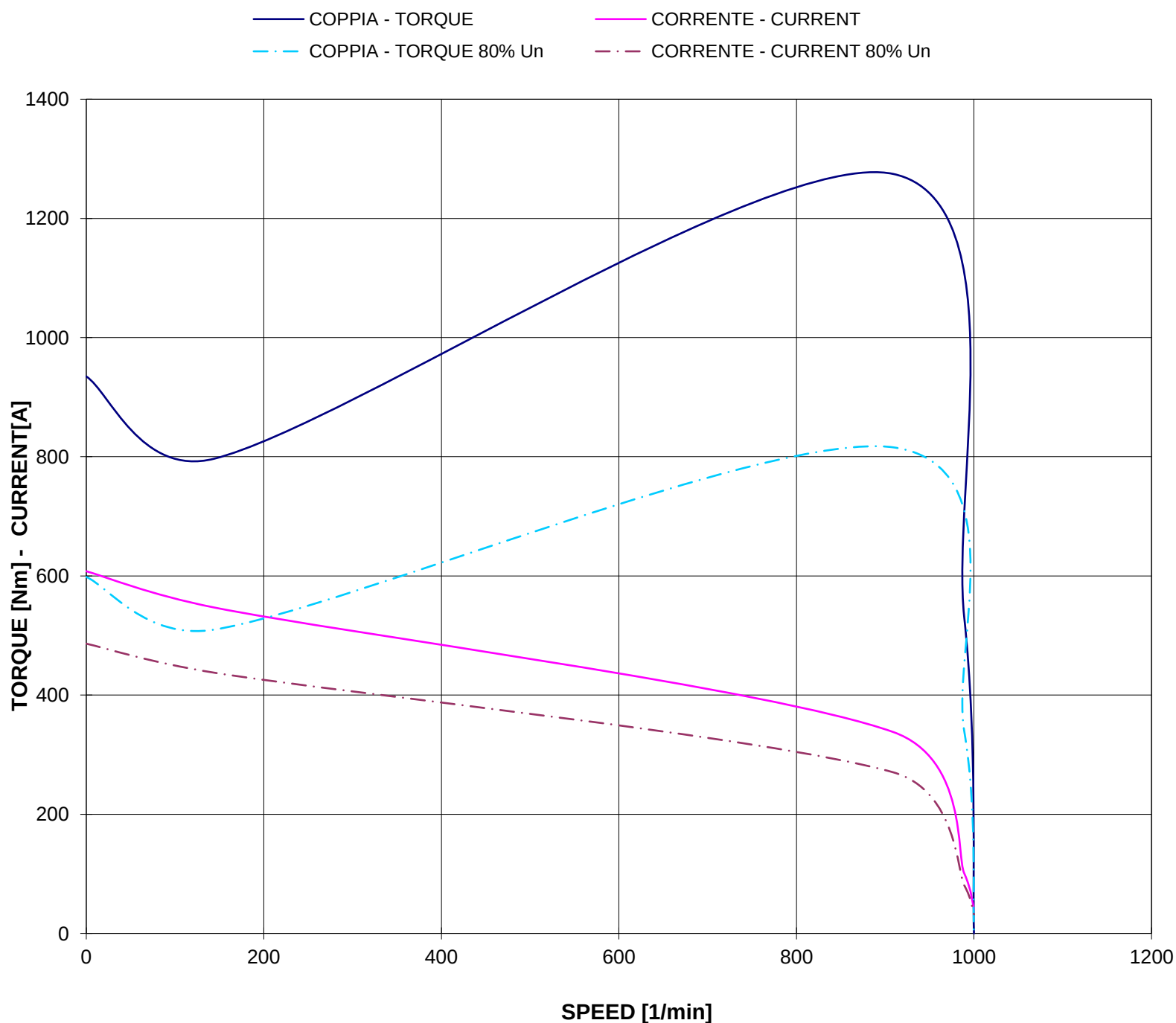
**CURVA COPPIA/CORRENTE-GIRI (Tensione ridotta)**  
**TORQUE/CURRENT-SPEED DIAGRAM (Reduced voltage)**

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

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

**Motore / Motor E3AC30 280SM 6**

|                                            |          |        |
|--------------------------------------------|----------|--------|
| Potenza nominale / Rated power             | 55,00    | kW     |
| Poli / Pole                                | 6        |        |
| Tensione - Frequenza / Voltage - Frequency | 400 - 50 | V - Hz |
| Corrente / Rated current                   | 100,91   | A      |
| Velocità / Speed                           | 989      | rpm    |
| Coppia / Torque                            | 531,09   | Nm     |



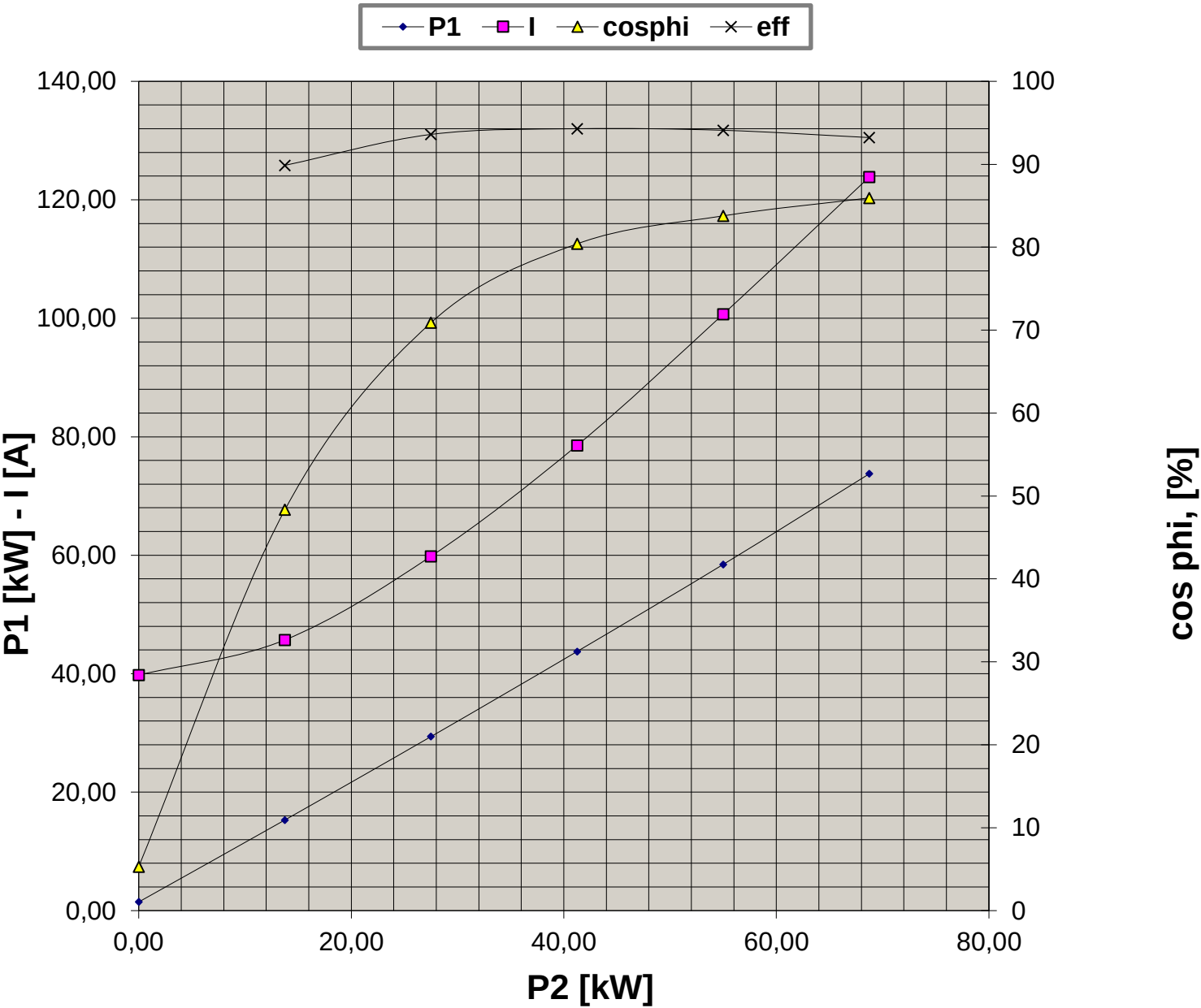
Valori calcolati - Data obtained by calculation method



CURVE CARATTERISTICHE  
PERFORMANCE CURVES

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

|                                            |                       |        |
|--------------------------------------------|-----------------------|--------|
| <b>Motore / Motor</b>                      | <b>E3AC30 280SM 6</b> |        |
| Potenza nominale / Rated power             | 55,00                 | kW     |
| Poli / Pole                                | 6                     |        |
| Tensione - Frequenza / Voltage - Frequency | 400 - 50              | V - Hz |
| Corrente / Rated current                   | 100,91                | A      |
| Velocità / Speed                           | 989                   | rpm    |
| Coppia / Torque                            | 531,09                | Nm     |



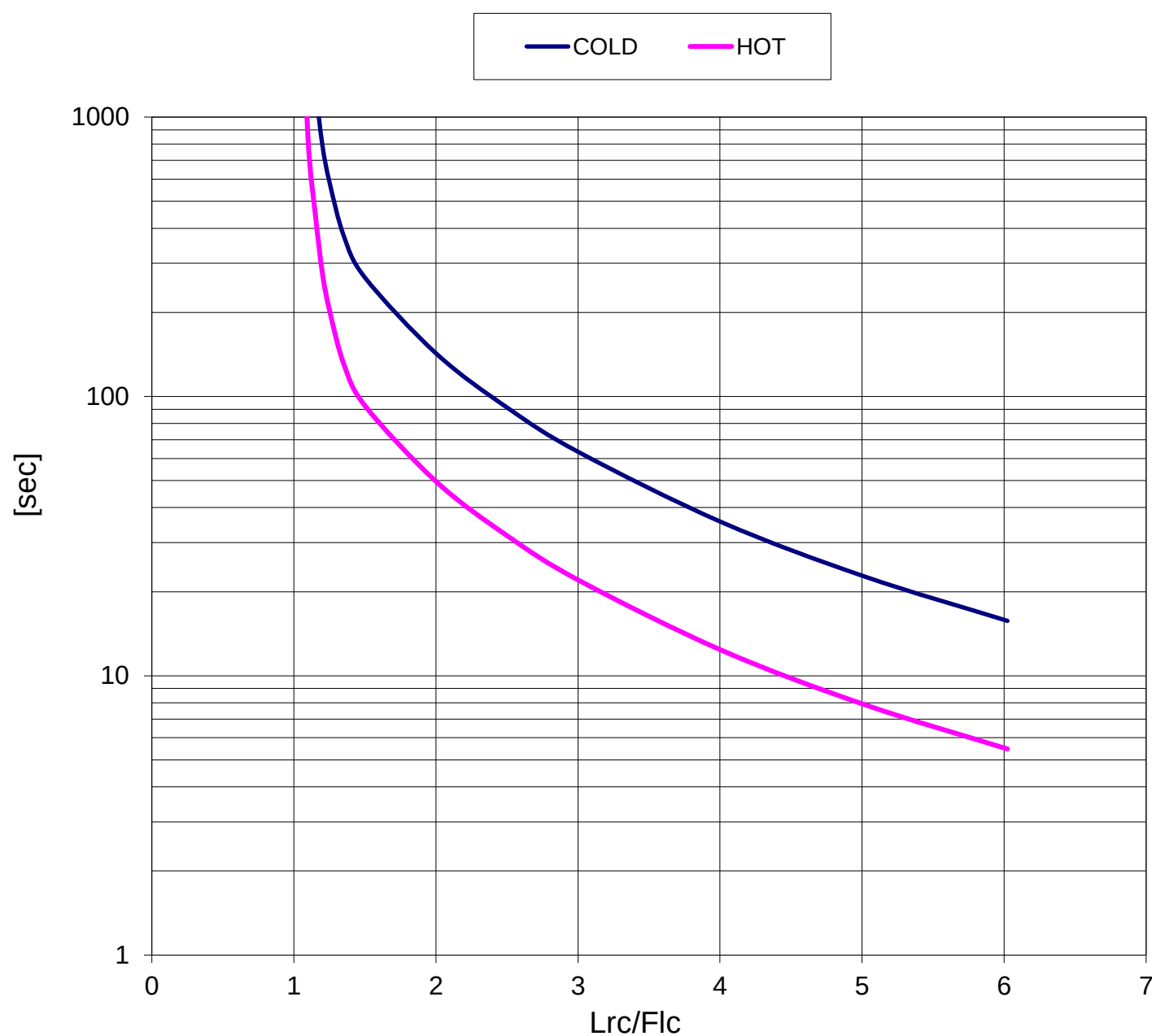
Valori calcolati - Data obtained by calculation method

## CURVA LIMITE CORRENTE TEMPO THERMAL WITHSTAND CURVE

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

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

|                                            |                       |        |
|--------------------------------------------|-----------------------|--------|
| <b>Motore / Motor</b>                      | <b>E3AC30 280SM 6</b> |        |
| Potenza nominale / Rated power             | 55,00                 | kW     |
| Poli / Pole                                | 6                     |        |
| Tensione - Frequenza / Voltage - Frequency | 400 - 50              | V - Hz |
| Corrente / Rated current                   | 100,91                | A      |
| Velocità / Speed                           | 989                   | rpm    |
| Coppia / Torque                            | 531,09                | Nm     |



Valori calcolati - Data obtained by calculation method

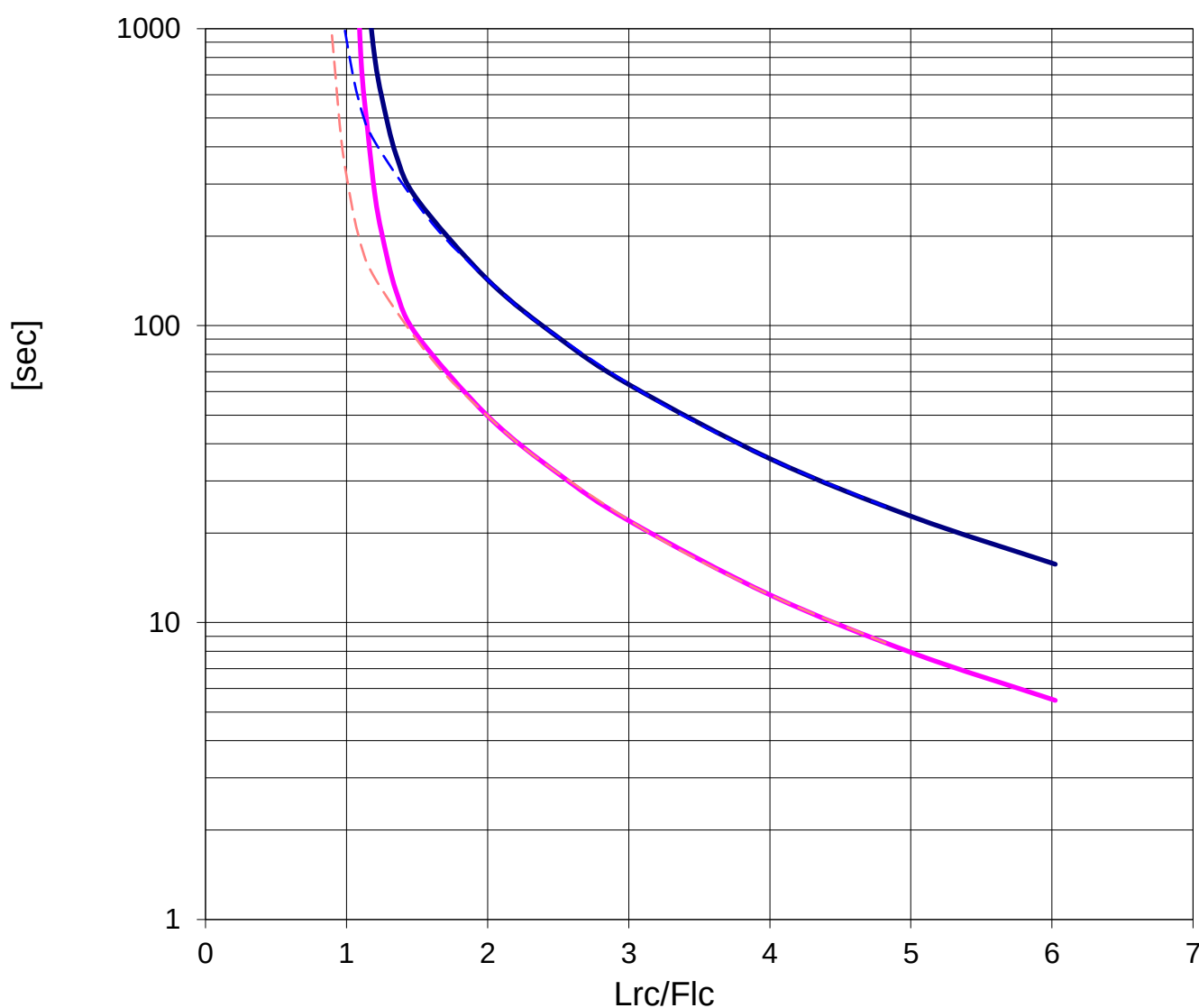
**CURVA LIMITE CORRENTE TEMPO (Tensione ridotta)**  
**THERMAL WITHSTAND CURVE (Reduced voltage)**

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

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

|                                            |                       |        |
|--------------------------------------------|-----------------------|--------|
| <b>Motore / Motor</b>                      | <b>E3AC30 280SM 6</b> |        |
| Potenza nominale / Rated power             | 55,00                 | kW     |
| Poli / Pole                                | 6                     |        |
| Tensione - Frequenza / Voltage - Frequency | 400 - 50              | V - Hz |
| Corrente / Rated current                   | 100,91                | A      |
| Velocità / Speed                           | 989                   | rpm    |
| Coppia / Torque                            | 531,09                | Nm     |

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



Valori calcolati - Data obtained by calculation method