

# PRODUCT INFORMATION PACKET

Model No: E3AC3006257B35D41100

Catalog No: E3AC3006257B35D41100

Made in Italy E3AC30 Series, General Purpose Low Voltage IEC motor IE3, Flameproof, 45,00kW,  
3 phase, 989 RPM, D400/Y690V 50Hz, 250MB Frame B35, 6 Poles, IC411, Higher Output Motor



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### Nameplate Specifications

|                        |         |                            |                             |
|------------------------|---------|----------------------------|-----------------------------|
| Phase                  | 3       | Output HP                  | 60.0 Hp                     |
| Output KW              | 45.0 kW | Voltage                    | 400/690 V                   |
| Speed                  | 989 rpm | Service Factor             | 1                           |
| Frame                  | 250MB   | Enclosure                  | Totally Enclosed Fan Cooled |
| Efficiency             | 93.7 %  | Ambient Temperature        | 40 °C                       |
| Frequency              | 50 Hz   | Power Factor               | 0.82                        |
| Duty                   | S1      | Insulation Class           | F                           |
| Drive End Bearing Size | 6314    | Opp Drive End Bearing Size | 6313                        |
| UL                     | No      | CSA                        | No                          |
| CE                     | Yes     | IP Code                    | IP55                        |
| Number of Speeds       | 1       |                            |                             |

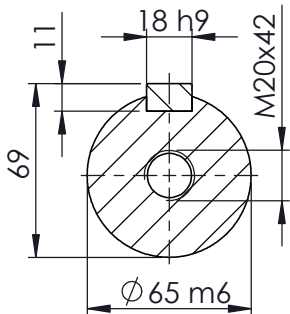
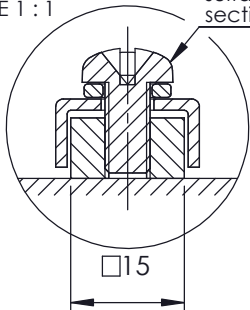
### Technical Specifications

|                       |                  |                       |                |
|-----------------------|------------------|-----------------------|----------------|
| Electrical Type       | Squirrel Cage    | Starting Method       | Direct On Line |
| Poles                 | 6                | Rotation              | Bi-Directional |
| Mounting              | B35              | Motor Orientation     | Horizontal     |
| Drive End Bearing     | Zz C3            | Opp Drive End Bearing | Zz C3          |
| Frame Material        | Cast Iron        | Shaft Type            | Keyed          |
| Overall Length        | 1197.00 mm       | Frame Length          | 560.00 mm      |
| Shaft Diameter        | 65.000 mm        | Shaft Extension       | 140 mm         |
| Assembly/Box Mounting | Top              |                       |                |
| Outline Drawing       | B3A04E8250011D01 | Connection Drawing    | SC-01-T-1v-1a  |

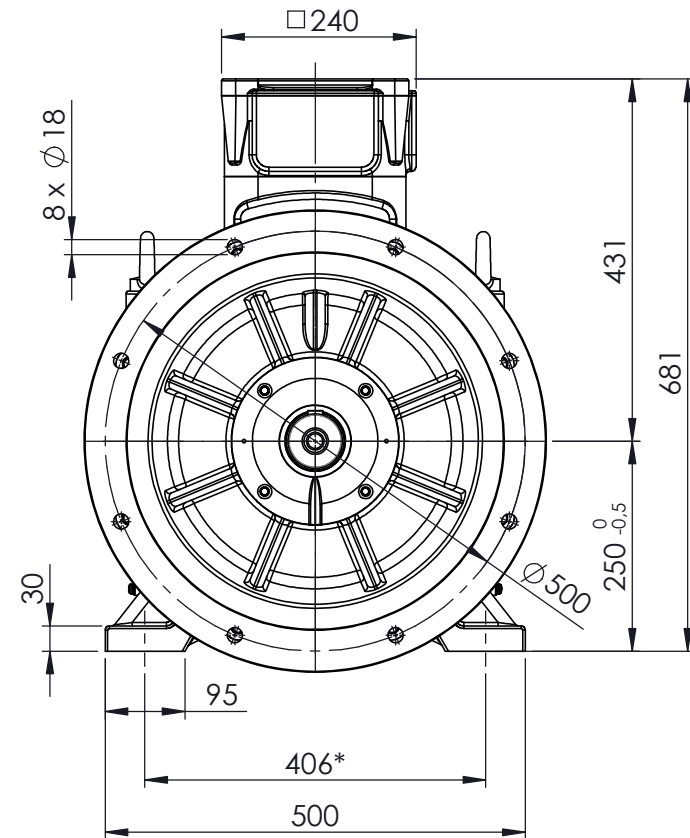
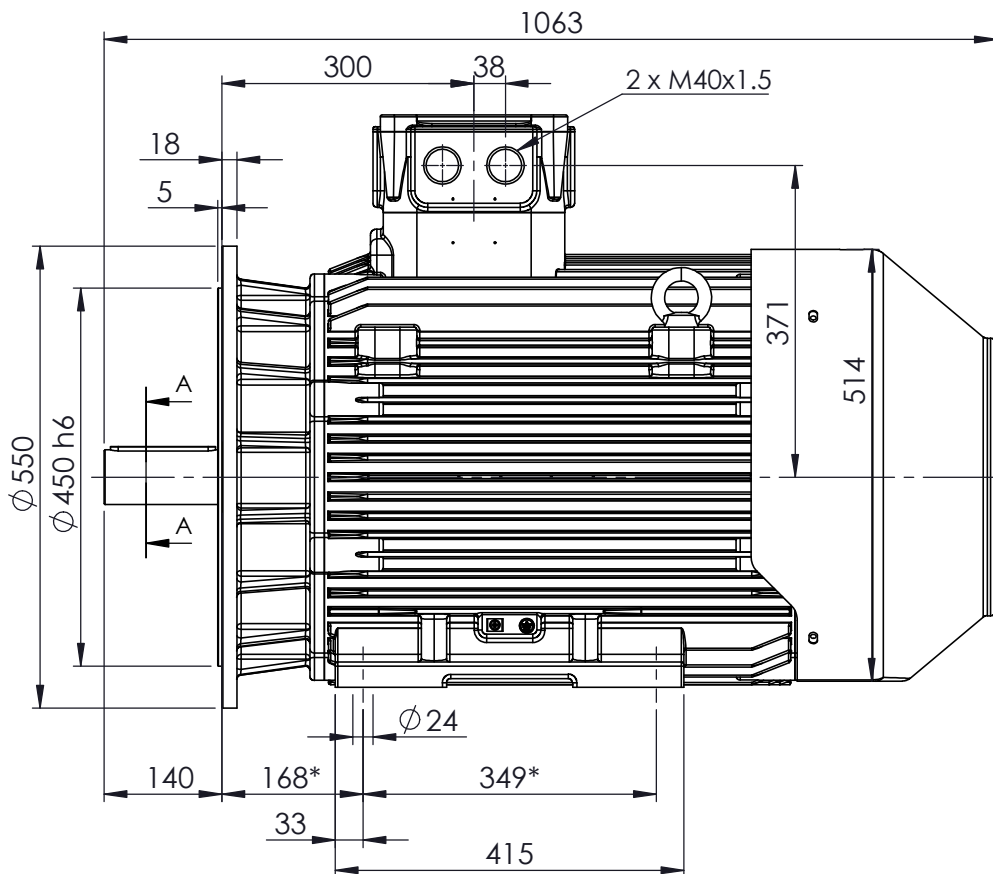
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DETAIL B  
SCALE 1 : 1

Earth Terminal  
suitable for cable  
section 2.5-35mm<sup>2</sup>



SEZIONE A-A  
SCALE 1 : 3



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

CUSTOMER REFERENCE AND ADDITIONAL INFORMATION:

MOTOR TYPE AND DESCRIPTION:

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                   |                    |                                                                                                                            |                                                                                       |                                                  |                                    |                 |  |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|--------------------|----------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|--------------------------------------------------|------------------------------------|-----------------|--|
| DRAWING REVISION<br>1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | REVISION BY<br>MT | DATE<br>29/07/2022 | TOLERANCES (EXCEPT AS NOTED)<br>TOLERANCES: ±2<br>* TOLERANCES: ±0.8<br><br>DIMENSIONS ARE IN mm<br>ACCORDING TO IEC 60072 | DRAWN BY<br>DP                                                                        | <div><div>REGAL™</div><div>cemp</div></div>      |                                    |                 |  |
| ECO                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | APPROVED BY<br>LP | DATE<br>30/07/2022 |                                                                                                                            | DATE<br>05/01/2017                                                                    |                                                  |                                    |                 |  |
| ECO DESCRIPTION                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                   |                    |                                                                                                                            | APPROVED BY<br>DP                                                                     | DESCRIPTION<br><br>Motor A250 MA/MB (M) 4-6P B35 |                                    |                 |  |
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|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                   |                    | SERIAL NUMBER                                                                                                              | REFERENCE                                                                             |                                                  |                                    |                 |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                   |                    | FIRST ANGLE<br>PROJECTION                                                                                                  |  | SIZE<br>A4                                       | DRAWING NUMBER<br>B3A04E8250011D01 | SHEET<br>1 OF 2 |  |

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



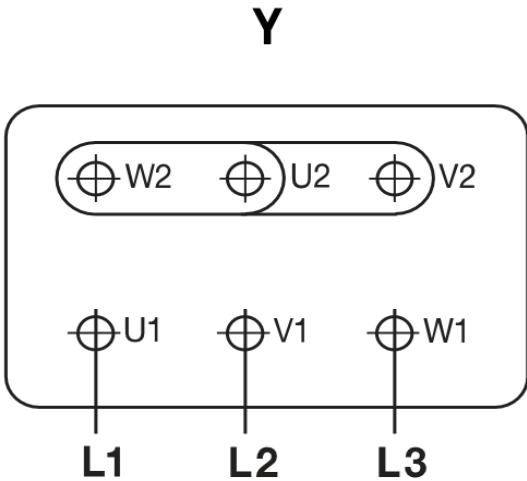
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**Motori trifase una velocità - *Single speed, three phase motors* - Moteurs triphasé une vitesse  
*Drehstrommotor Eine Drehzahlstufe* - Motores trifásico una velocidad**

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<br><i>Marking</i>                                                     | No. morsetti<br><i>terminals</i> | Morsetto ausiliare per:<br><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 -<br><i>Normally closed bi-metallic switch (**)</i>    |
| TB3 - TB4 (intervento- <i>switch off</i> )                                      | 2                                | Protettore bimetallico del freno normalmente chiuso -<br><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 -<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 |
| Offerta / Offer    |
| 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 250MB 6    |
| 3                                                          | Numero di serie / Serial Number            |           | -                 |
| 4                                                          | Forma costruttiva / Shape                  |           | B35               |
| 5                                                          | Certificato / Certificate                  | TÜV CY    | 17 ATEX 0205845 X |
| 6                                                          | Altro certificato / Other certificate      |           |                   |
| <b>Dati nominali / Rated data</b>                          |                                            |           |                   |
| 7                                                          | Poli / Pole                                | n°        | 6                 |
| 8                                                          | Potenza nominale / Rated power             | kW        | 45,00             |
| 9                                                          | Corrente nominale / Rated current          | A         | 84,13             |
| 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               |
| <b>Performances elettriche / Electrical performances</b>   |                                            |           |                   |
| Carico / Load                                              |                                            | 4/4       | 3/4               |
| 18                                                         | Giri / Speed                               | 1/min     | 989               |
| 19                                                         | Corr. / Curr.                              | A         | 84,13             |
| 20                                                         | Rend / Eff                                 | %         | 93,7              |
| 21                                                         | cos φ                                      | -         | 0,82              |
| <b>Performances all'avviamento / Starting performances</b> |                                            |           |                   |
| 22                                                         | Ia/In - LRC/FLC                            | %         | 600               |
| 23                                                         | Cosphi a rotore bloccato / LR power factor |           | 0,34              |
|                                                            | Tempo a rotore bloccato / LRWT             |           |                   |
| 24                                                         | 100% Un (A caldo / Warm)                   | sec       | 9                 |
| 25                                                         | (A freddo / Cold)                          | sec       | 26                |
| 26                                                         | 80% Un (A caldo / Warm)                    | sec       | 14                |
| 27                                                         | (A freddo / Cold)                          | sec       | 40                |
|                                                            | Tempo di avviamento ammissibile / ART      |           |                   |
| 28                                                         | 100% Un                                    | sec       | 22                |
| 29                                                         | 80% Un                                     | sec       | 35                |
| <b>Curva di coppia / Speed-torque values</b>               |                                            |           |                   |
| 30                                                         | Coppia nominale / Rated Torque             | Nm        | 434,53            |
| 31                                                         | Ca/Cn - LRT/FLT                            | %         | 175               |
| 32                                                         | Cmax/Cn - BDT/FLT                          | %         | 250               |
| 33                                                         |                                            |           |                   |
| 34                                                         |                                            |           |                   |
| 35                                                         |                                            |           |                   |
| <b>Varie / Other</b>                                       |                                            |           |                   |
| 36                                                         |                                            |           |                   |
| 37                                                         |                                            |           |                   |
| 38                                                         |                                            |           |                   |
| 39                                                         |                                            |           |                   |

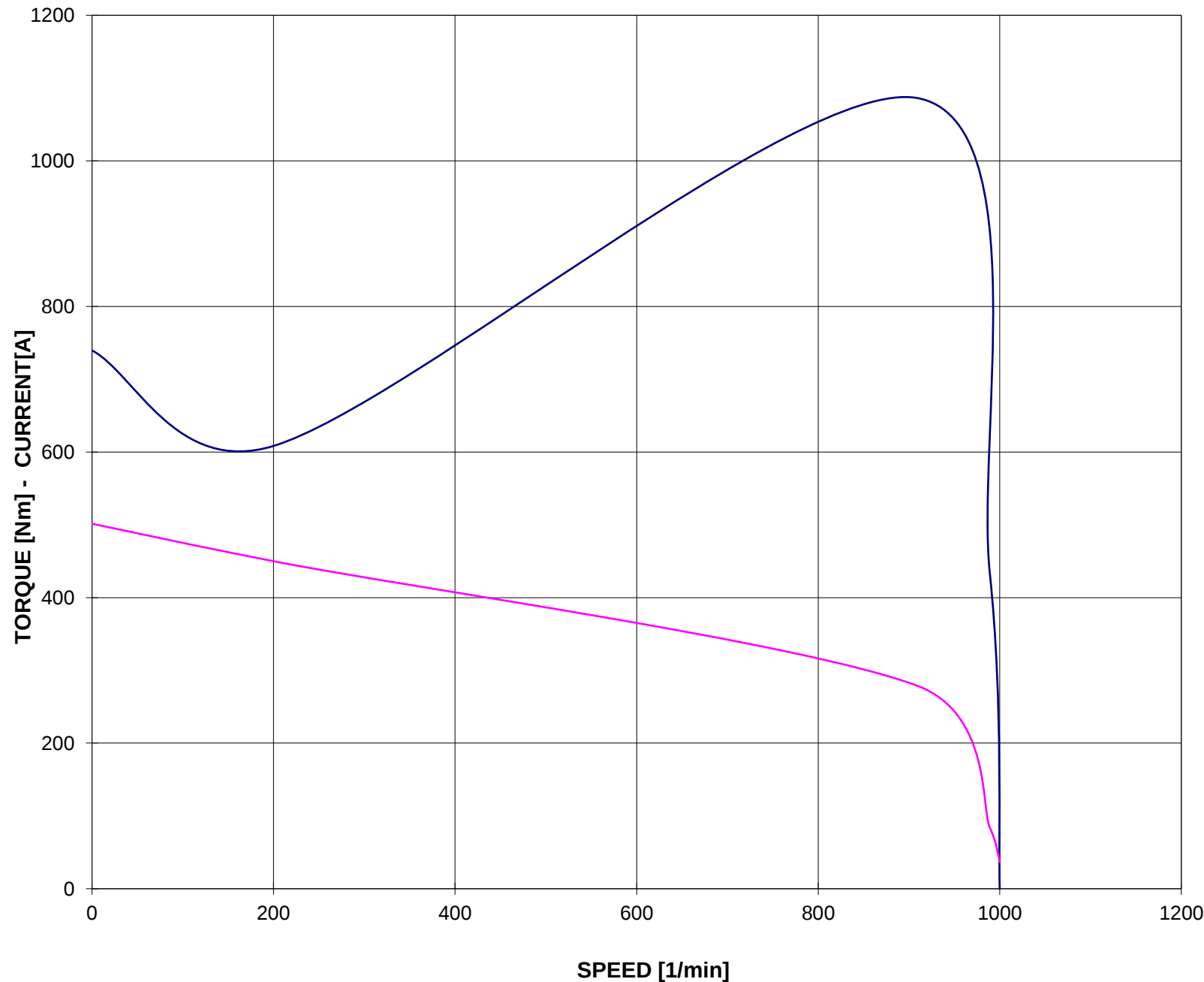
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|--------------------------------------------------------------------|--------------------------------------------|-------------------------|
| <b>Servizio / Duty</b>                                             |                                            |                         |
| 40                                                                 | Servizio / Duty type                       | S1                      |
| 41                                                                 | Intermittenza / Cyclic duration factor     | -                       |
| 42                                                                 | Avviamenti-ora / Starting-hour             | -                       |
| 43                                                                 | Tempo ciclo / Time                         | -                       |
| <b>Cuscinetti / Bearings</b>                                       |                                            |                         |
| 44                                                                 | Cuscinetto ant / DE bearing                | 6314 ZZ C3              |
| 45                                                                 | Cuscinetto post / NDE bearing              | 6313 ZZ C3              |
| 46                                                                 | Carico radiale max / Max radial load in X1 | 5600                    |
| 47                                                                 | Carico assiale max / Max axial load        | 1600                    |
| 48                                                                 | Tipo grasso / Grease type                  | LGHP2 SKF or equivalent |
| 49                                                                 | Intervallo lubrificazione / Lubrication    | h                       |
| 50                                                                 | Quantità grasso / Quantity grease          | gr                      |
| <b>Caratteristiche meccaniche / mechanical specification</b>       |                                            |                         |
| 51                                                                 | Massa / Mass                               | kg                      |
| 52                                                                 | Momento d'inerzia / Moment of inertia      | kgm2                    |
| 53                                                                 | Rumore a vuoto / Noise at no load (1 m)    | Lp dB(A)                |
| 54                                                                 | Vibrazioni / Vibration level               | IEC 34-14               |
| 55                                                                 | Limite norma / Vibration limit             | mm/sec                  |
| 56                                                                 |                                            |                         |
| 57                                                                 |                                            |                         |
| <b>Dati entrata cavi - verniciatura / Cable entry and painting</b> |                                            |                         |
| 63                                                                 | Entrata cavi / Cable entry                 | 2xM40                   |
| 64                                                                 | Ciclo verniciatura / Painting cycle        | STD                     |
| 65                                                                 | Colore finale / Final colour               | RAL 5010                |
|                                                                    |                                            |                         |
| 66                                                                 |                                            |                         |
| 67                                                                 |                                            |                         |
| 68                                                                 |                                            |                         |
| 69                                                                 |                                            |                         |
| 70                                                                 |                                            |                         |
| 71                                                                 |                                            |                         |
| <b>Ausiliari - Auxiliaries</b>                                     |                                            |                         |
| 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 -  
Impianto / Plant -  
ITEM -  
Numero d'offerta / Offer Number -

|                                            |                |        |
|--------------------------------------------|----------------|--------|
| Motore / Motor                             | E3AC30 250MB 6 |        |
| Potenza nominale / Rated power             | 45,00          | kW     |
| Poli / Pole                                | 6              |        |
| Tensione - Frequenza / Voltage - Frequency | 400 - 50       | V - Hz |
| Corrente / Rated current                   | 84,13          | A      |
| Velocità / Speed                           | 989            | rpm    |
| Coppia / Torque                            | 434,53         | Nm     |

COPPIA - TORQUECORRENTE - CURRENT



Valori calcolati - Data obtained by calculation method

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

Cliente / Customer

-

Impianto / Plant

-

**ITEM**

-

Numero d'offerta / Offer Number

-

-

**Motore / Motor**

**E3AC30 250MB 6**

Potenza nominale / Rated power

45,00

kW

Poli / Pole

6

Tensione - Frequenza / Voltage - Frequency

400 - 50

V - Hz

Corrente / Rated current

84,13

A

Velocità / Speed

989

rpm

Coppia / Torque

434,53

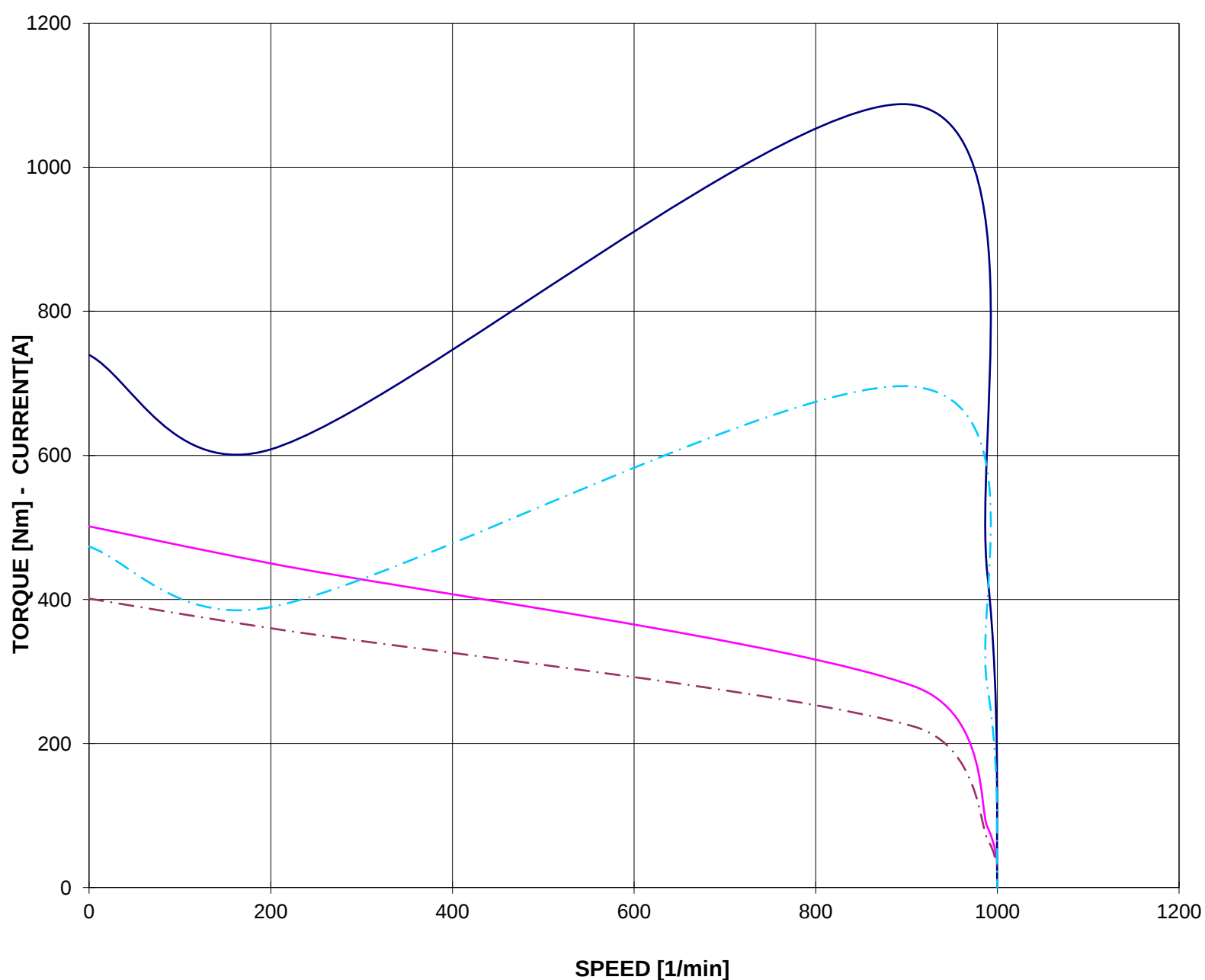
Nm

— COPPIA - TORQUE

— CORRENTE - CURRENT

- - - COPPIA - TORQUE 80% Un

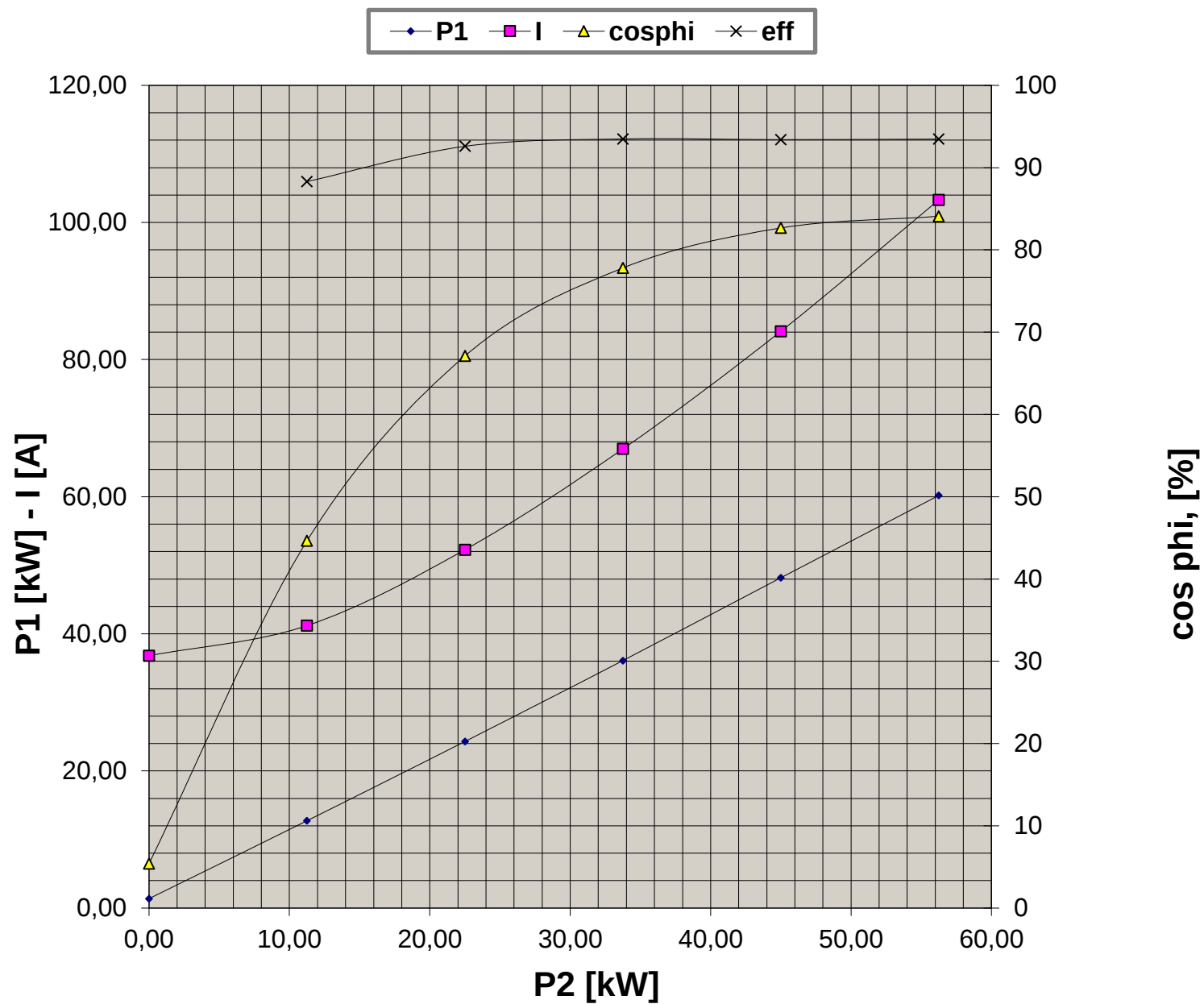
- - - CORRENTE - CURRENT 80% Un



Valori calcolati - Data obtained by calculation method

CURVE CARATTERISTICHE  
PERFORMANCE CURVES

|                                            |                       |
|--------------------------------------------|-----------------------|
| Cliente / Customer                         | -                     |
| Impianto / Plant                           | -                     |
| ITEM                                       | -                     |
| Numero d'offerta / Offer Number            | -                     |
| <b>Motore / Motor</b>                      | <b>E3AC30 250MB 6</b> |
| Potenza nominale / Rated power             | 45,00 kW              |
| Poli / Pole                                | 6                     |
| Tensione - Frequenza / Voltage - Frequency | 400 - 50 V - Hz       |
| Corrente / Rated current                   | 84,13 A               |
| Velocità / Speed                           | 989 rpm               |
| Coppia / Torque                            | 434,53 Nm             |

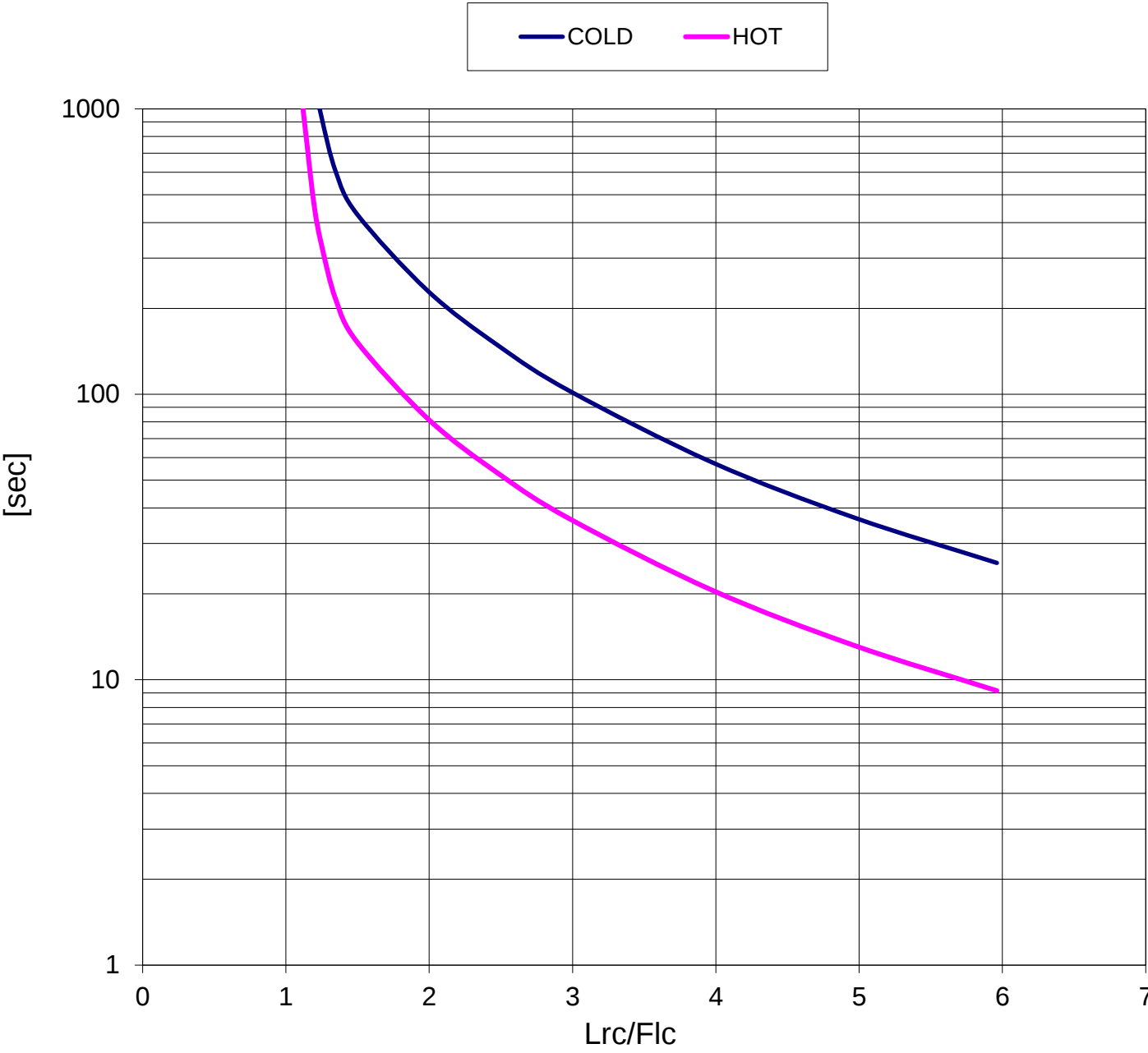


Valori calcolati - Data obtained by calculation method

Data / Date 28 January 2022

CURVA LIMITE CORRENTE TEMPO  
THERMAL WITHSTAND CURVE

|                                            |                |        |
|--------------------------------------------|----------------|--------|
| Cliente / Customer                         | -              |        |
| Impianto / Plant                           | -              |        |
| ITEM                                       | -              |        |
| Numero d'offerta / Offer Number            | -              |        |
|                                            |                |        |
| Motore / Motor                             | E3AC30 250MB 6 |        |
| Potenza nominale / Rated power             | 45,00          | kW     |
| Poli / Pole                                | 6              |        |
| Tensione - Frequenza / Voltage - Frequency | 400 - 50       | V - Hz |
| Corrente / Rated current                   | 84,13          | A      |
| Velocità / Speed                           | 989            | rpm    |
| Coppia / Torque                            | 434,53         | Nm     |



Valori calcolati - Data obtained by calculation method

Data / Date 28 January 2022

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

Cliente / Customer -

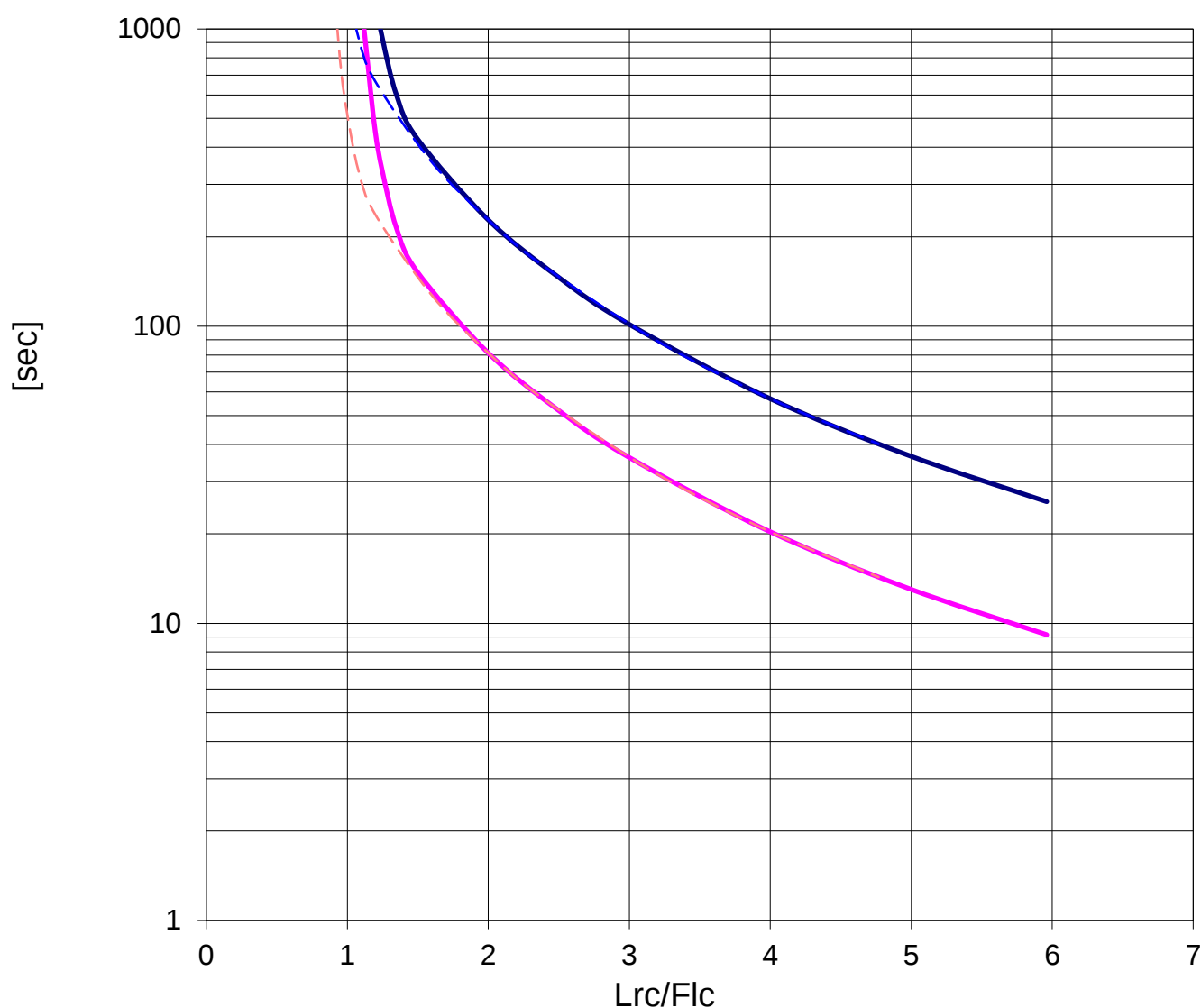
Impianto / Plant -  
**ITEM** -

Numero d'offerta / Offer Number -  
-

**Motore / Motor E3AC30 250MB 6**

|                                            |          |        |
|--------------------------------------------|----------|--------|
| Potenza nominale / Rated power             | 45,00    | kW     |
| Poli / Pole                                | 6        |        |
| Tensione - Frequenza / Voltage - Frequency | 400 - 50 | V - Hz |
| Corrente / Rated current                   | 84,13    | A      |
| Velocità / Speed                           | 989      | rpm    |
| Coppia / Torque                            | 434,53   | Nm     |

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



Valori calcolati - Data obtained by calculation method