# PRODUCT INFORMATION PACKET

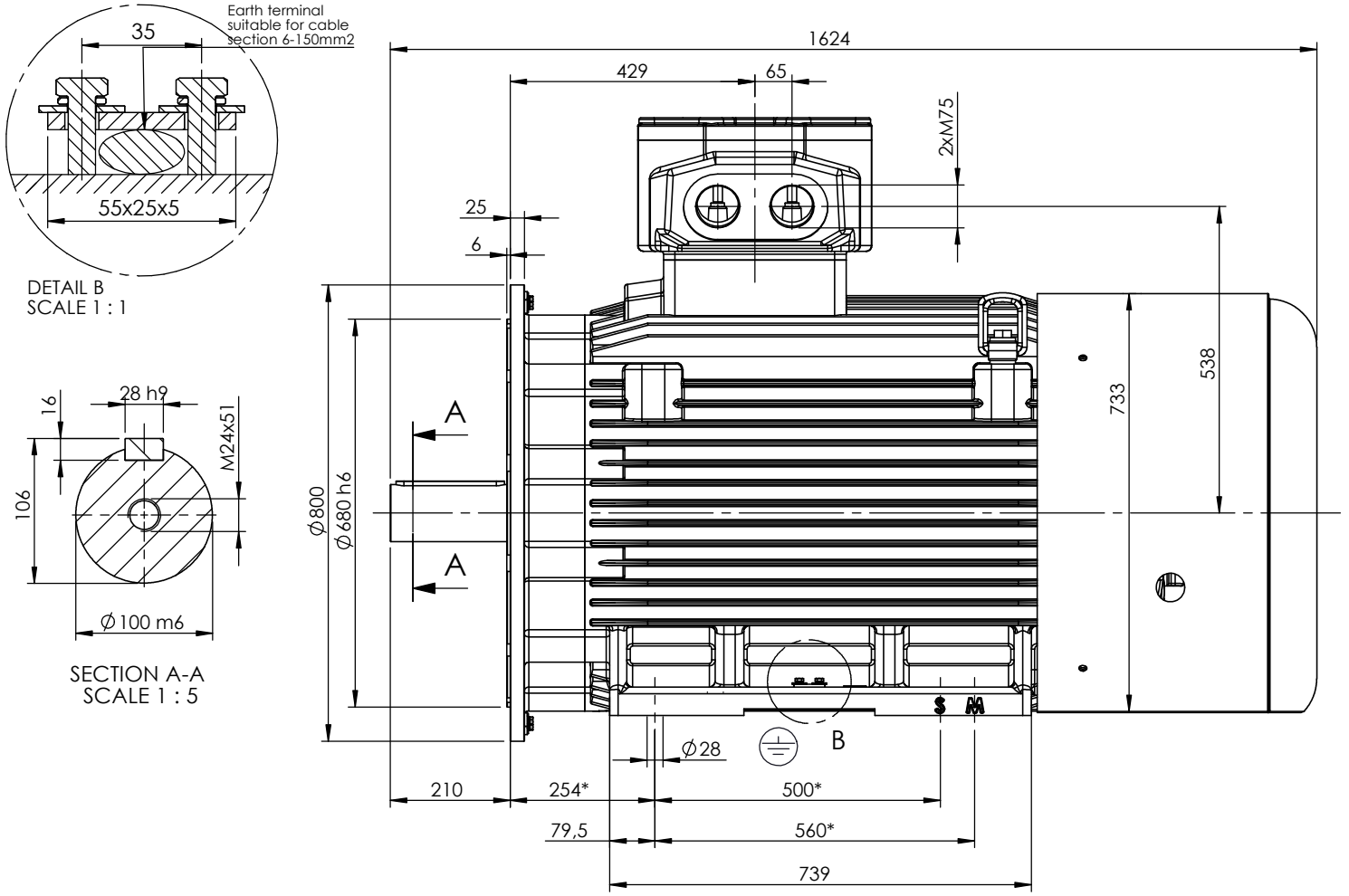
Model No: E3AC3006353B35D41100
Catalog No: E3AC3006353B35D41100
Made in Italy E3AC30 Series, General Purpose Low Voltage IEC motor IE3, Flameproof, 200,00kW, 3 phase, 992 RPM, D400/Y690V 50Hz, 355MB Frame B35, 6 Poles, IC411

## Nameplate Specifications

| | | | |
|---|---|---|---|
| Phase | 3 | Output HP | 270.0 Hp |
| Output KW | 200.0 kW | Voltage | 400/690 V |
| Speed | 992 rpm | Service Factor | 1 |
| Frame | 355MB | Enclosure | Totally Enclosed Fan Cooled |
| Efficiency | 95.8 % | Ambient Temperature | 40 °C |
| Frequency | 50 Hz | Power Factor | 0.84 |
| Duty | S1 | Insulation Class | F |
| Drive End Bearing Size | 6322 | 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 | 6 | Rotation | Bi-Directional |
| Mounting | B35 | Motor Orientation | Horizontal |
| Drive End Bearing | C3 | Opp Drive End Bearing | C3 |
| Frame Material | Cast Iron | Shaft Type | Keyed |
| Overall Length | 1844.00 mm | Frame Length | 935.00 mm |
| Shaft Diameter | 100.000 mm | Shaft Extension | 210 mm |
| Assembly/Box Mounting | Top | | |
| Outline Drawing | B3A048355021D01 | Connection Drawing | SC-01-T-1v-1a |




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 ±2mm.
* Tolerances ±0.8

**Customer reference and additional information:**

Dimensions in mm
Tolerances allowed

**Frame size:** **A 355 S-M 4-8 Poles**
Document N.**B3A048355021D01** - Date 20/10/2022
Issued by M.T. - Approved by L.P.
Cemp - Senago (Italy)

**Rev.**
0

**Motor type and description**

cemp
Flameproof Motors

Schema di collegamento - *Connection diagram*
Schemas de branchement - *Schaltplän*
Esquemas de conéxiòn

cemp
Flameproof Motors

DTE 01/01/2004
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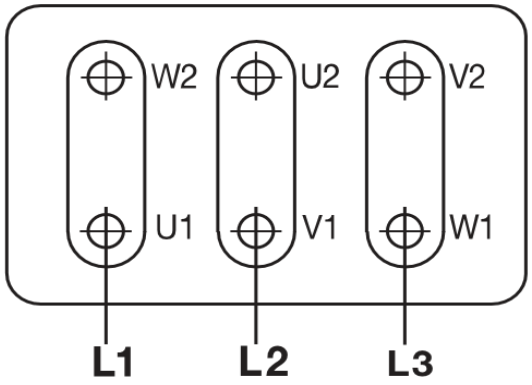
## Motori trifase una velocità - *Single speed, three phase motors* - Moteurs triphasé une vitesse *Drehstrommotor Eine Drehzahlstufe* - Motores trifásico una velocidad

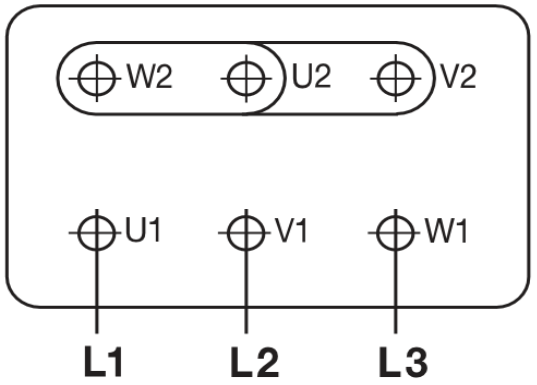
Collegamento - *Connection* - Connexion - *Schaltung* - Conexiòn

Δ




Collegamento - *Connection* - Connexion - *Schaltung* - Conexiòn

Y




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 - *Additional terminals marking* (IEC60034-8)

| **Marcatura** *Marking* | No. morsetti *terminals* | **Morsetto ausiliare per:** *Additional terminal for:* |
|---|---|---|
| TP1A - TP2A (allarme- *warning)* | 2 | Termistori PTC (alta velocità) - *Thermistor PTC (high speed)* [*] |
| TP1B - TP2B (allarme- *warning)* | 2 | Termistori PTC (bassa velocità) - *Thermistor PTC (low speed)* [*] |
| R1 - R2 - R3 (I sensore - *sensor)* | 3 | Termistore PT100 3 fili - *Thermistor PT 100 with 3 wires* |
| R4 - R5 - R6 (II sensore - *sensor)* | 3 | |
| R7 - R8 - R9 (III sensore - *sensor)* | 3 | |
| R11 - R12 - R13 (anteriore - *DE*) | 3 | Termistore PT100 su cuscinetto - *Thermistor PT 100 on bearing* |
| R21 - R22 - R23 (posteriore - *NDE*) | 3 | |
| TB1 - TB2 (allarme- *warning)* | 2 | Protettore bimetallico normalmente chiuso - *Normally closed bi-metallic switch* (**) |
| TB3 - TB4 (intervento- *switch off)* | 2 | |
| TB8 - TB9 (intervento- *switch off)* | 2 | Protettore bimetallico del freno normalmente chiuso - *NC brake bi-metallic switch* (**) |
| TM1 - TM2 (allarme- *warning)* | 2 | Protettore bimetallico normalmente aperto - *Normally open bi-metallic switch* (**) |
| TM3 - TM4 (intervento- *switch off)* | 2 | |
| HE1- HE2 | 2 | Resistenze riscaldanti - *Space heaters* |
| U1 - U2 | 2 | Ventilazione ausiliaria monofase - *Single phase forced ventilation* |
| U - V - W | 2 | Ventilazione ausiliaria trifase - *Three phase forced ventilation* |
| colori secondo schema del produttore - *colours according manufacturer* | 9 | Encoder |
| CA1 - CA2 | 2 | Condensatore - *Capacitor* |
| PE | 1 | Conduttore di terra - *Earth cable* |

[*] 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 | Conferma ordine / Acknowledgment : N° - |
| Ordine cliente / Customer order | Impianto / Plant - |
| Item | |

**DATI DI PROGETTO - DESIGN DATA**

| | | | | |
|---|---|---|---|---|
| Modo di protezione | II2G | Motore / Frame | Ex-db IIC T4 Gb | IP55 |
| Type of protection | | Scatola morsetti / Terminal box | Ex-db IIC Gb | IP55 |

| | | | |
|---|---|---|---|
| Tem. Amb. Min. / Min Amb.Temp. | -20 °C | Tem. Amb. Max. / Max Amb. Temp. | 40 °C |
| Umidità relativa / Relative humidity | 90% | Altitudine / Altitude | < 1000 mslm / masl |
| Tensione nominale / Rated Voltage | 400 V ± 5% | Frequenza / Frequency | 50 Hz ± 2% |

**DATI FUNZIONALI E COSTRUTTIVI - PERFORMANCE AND CONSTRUCTION DATA**

| | | | |
|---|---|---|---|
| 1 | Quantità / Quantity | | 01 |
| 2 | Motore tipo / Motor type | | AC30 355MB 6 |
| 3 | Numero di serie / Serial Number | | - |
| 4 | Forma costruttiva / Shape | | B35 |
| 5 | Certificato / Certificate | TÜV IT | 15 ATEX 023 X |
| 6 | Altro certificato / Other certificate | | |
| | **Dati nominali / Rated data** | | |
| 7 | Poli / Pole | n° | 6 |
| 8 | Potenza nominale / Rated power | kW | 200,00 |
| 9 | Corrente nominale / Rated current | A | 362,38 |
| 10 | Velocità nominale / Full Load speed | 1/min | 992 |
| 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 | 992 | 995 | 998 | |
| 19 | Corr. / Curr. | A | 362,38 | 269,05 | 188,73 | |
| 20 | Rend / Eff | % | 95,8 | 95,8 | 95,6 | |
| 21 | cos φ | - | 0,83 | 0,83 | 0,78 | |

**Performances all'avviamento / Starting performances**

| | | | |
|---|---|---|---|
| 22 | Ia/In - LRC/FLC | % | 680 |
| 23 | Cosphi a rotore bloccato / LR power factor | | 0,23 |
| | Tempo a rotore bloccato / LRWT | | |
| 24 | 100% Un (A caldo / Warm) | sec | 17 |
| 25 | (A freddo / Cold) | sec | 59 |
| 26 | 80% Un (A caldo / Warm) | sec | 27 |
| 27 | (A freddo / Cold) | sec | 92 |
| | Tempo di avviamento ammissibile / ART | | |
| 28 | 100% Un | sec | 51 |
| 29 | 80% Un | sec | 80 |

**Curva di coppia / Speed-torque values**

| | | | |
|---|---|---|---|
| 30 | Coppia nominale / Rated Torque | Nm | 1925,33 |
| 31 | Ca/Cn - LRT/FLT | % | 210 |
| 32 | Cmax/Cn - BDT/FLT | % | 270 |
| 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 | - | 6322 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 | 2155 |
| 52 | Momento d'inerzia / Moment of inertia | kgm2 | 11,2140 |
| 53 | Rumore a vuoto / Noise at no load (1 m) | Lp dB(A) | 75 |
| 54 | Vibrazioni / Vibration level | IEC 34-14 | A |
| 55 | Limite norma / Vibration limit | mm/sec | 2,80 |
| 56 | | | |
| 57 | | | |
| 58 | | | |
| 59 | | | |
| 60 | | | |
| 61 | | | |
| 62 | | | |

**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 | | | |

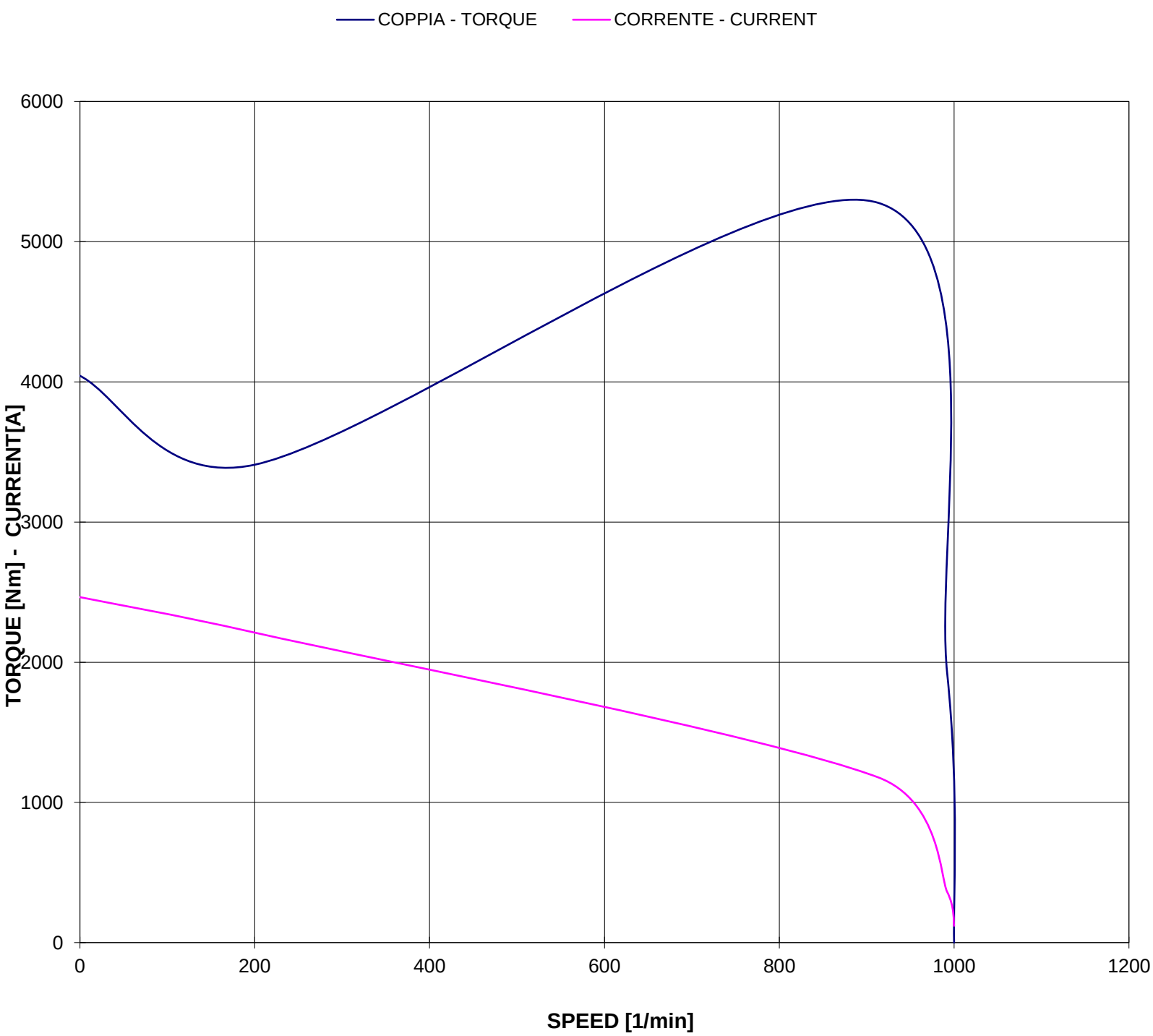
**Documento preliminare - Preliminary data sheet** **MOD. 803**

Prepared by : GC Tolleranze secondo - Tolerances according IEC 60034-1 Rev. 0 Data / Date 19 October 2022

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

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

| **Motore / Motor** | **AC30 355MB 6** | |
|---|---|---|
| Potenza nominale / Rated power | 200,00 | kW |
| Poli / Pole | 6 | |
| Tensione - Frequenza / Voltage - Frequency | 400 - 50 | V - Hz |
| Corrente / Rated current | 362,38 | A |
| Velocità / Speed | 992 | rpm |
| Coppia / Torque | 1925,33 | Nm |




Valori calcolati - Data obtained by calculation method

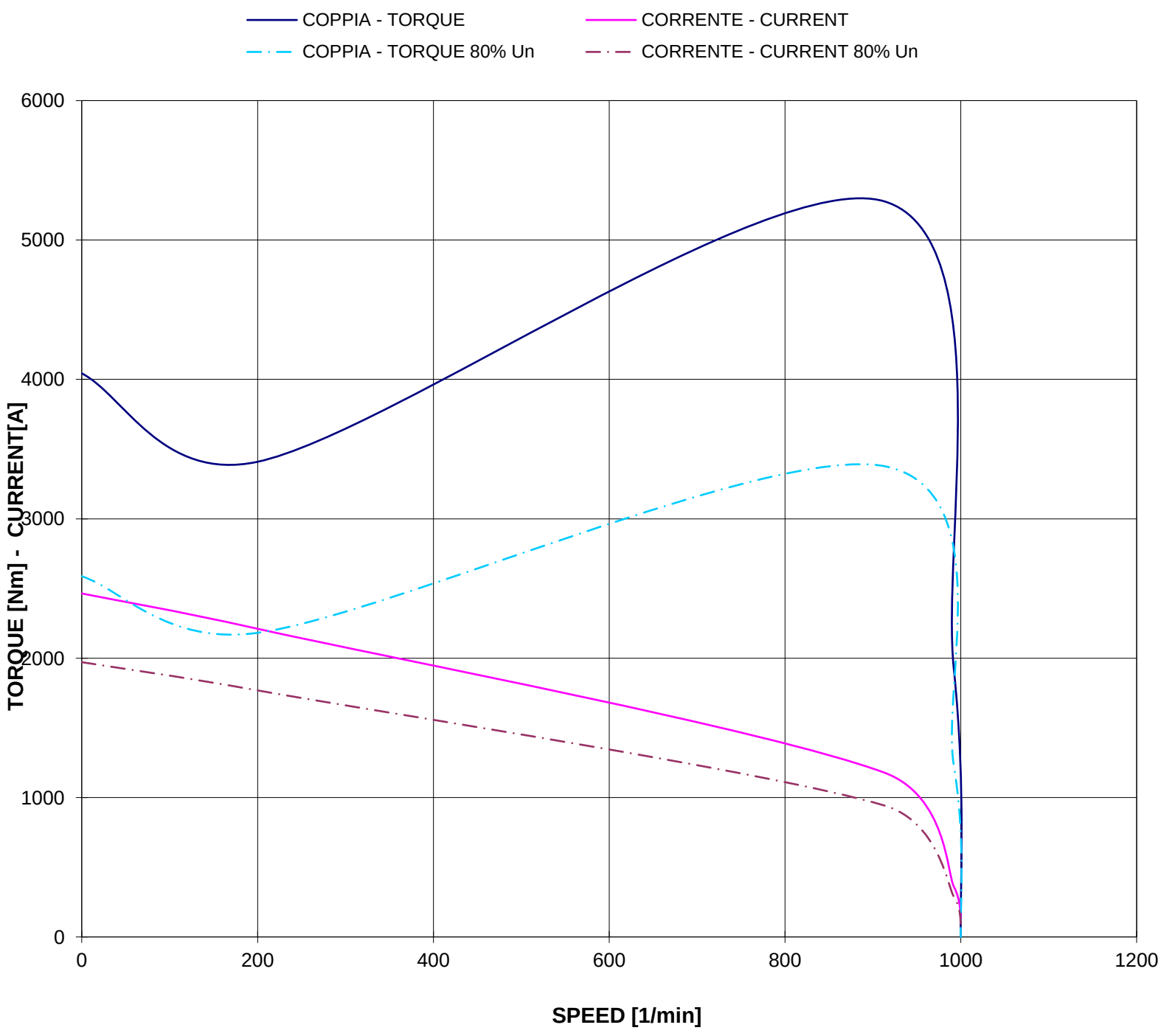
**MOD-600**

Data / Date 28 January 2022

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

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

| **Motore / Motor** | **AC30 355MB 6** | |
|---|---|---|
| Potenza nominale / Rated power | 200,00 | kW |
| Poli / Pole | 6 | |
| Tensione - Frequenza / Voltage - Frequency | 400 - 50 | V - Hz |
| Corrente / Rated current | 362,38 | A |
| Velocità / Speed | 992 | rpm |
| Coppia / Torque | 1925,33 | Nm |




Valori calcolati - Data obtained by calculation method

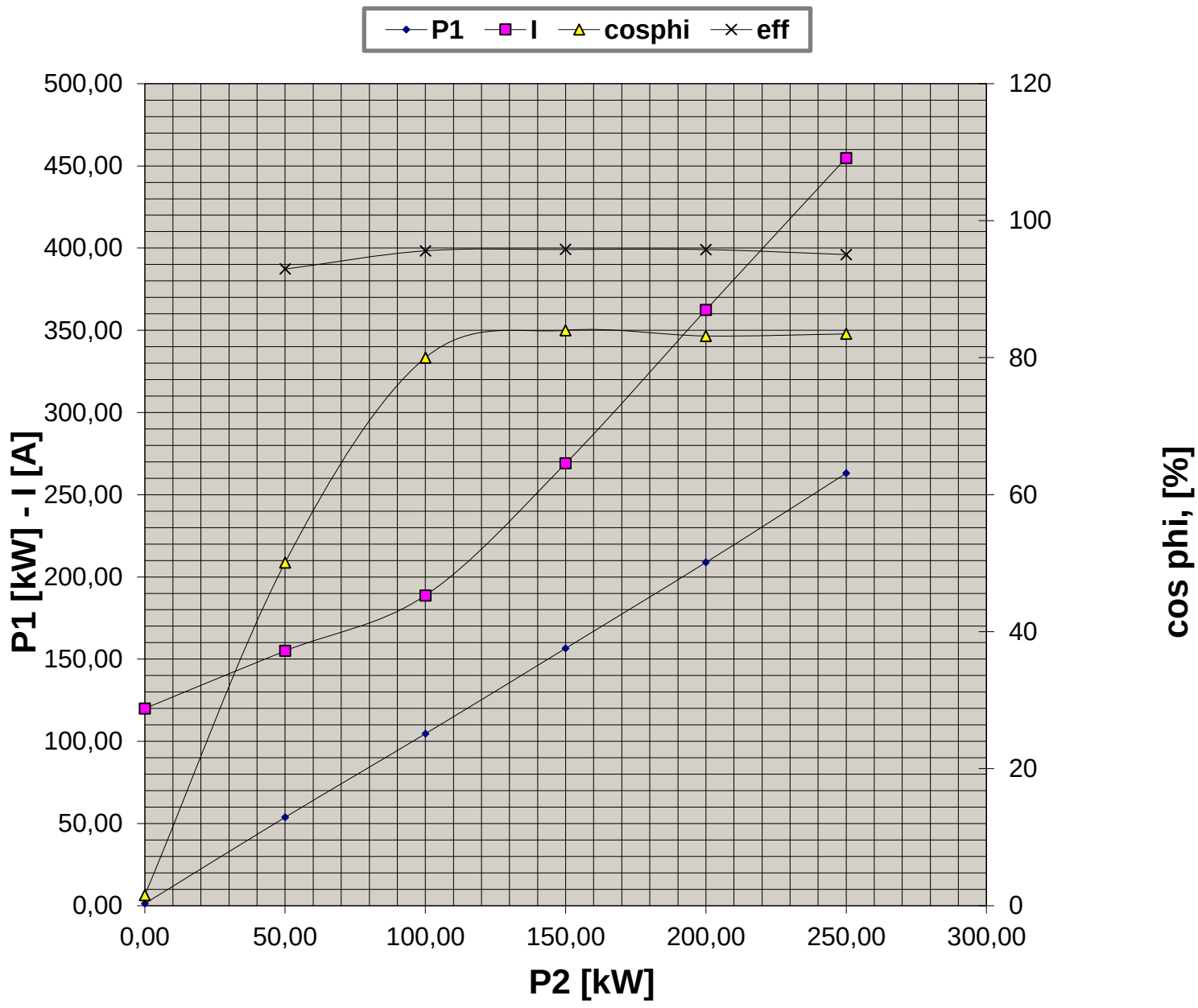
**MOD-602**

Data / Date 28 January 2022

# CURVE CARATTERISTICHE
## *PERFORMANCE CURVES*

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

| **Motore / Motor** | **AC30 355MB 6** | |
|---|---|---|
| Potenza nominale / Rated power | 200,00 | kW |
| Poli / Pole | 6 | |
| Tensione - Frequenza / Voltage - Frequency | 400 - 50 | V - Hz |
| Corrente / Rated current | 362,38 | A |
| Velocità / Speed | 992 | rpm |
| Coppia / Torque | 1925,33 | Nm |




Valori calcolati - Data obtained by calculation method

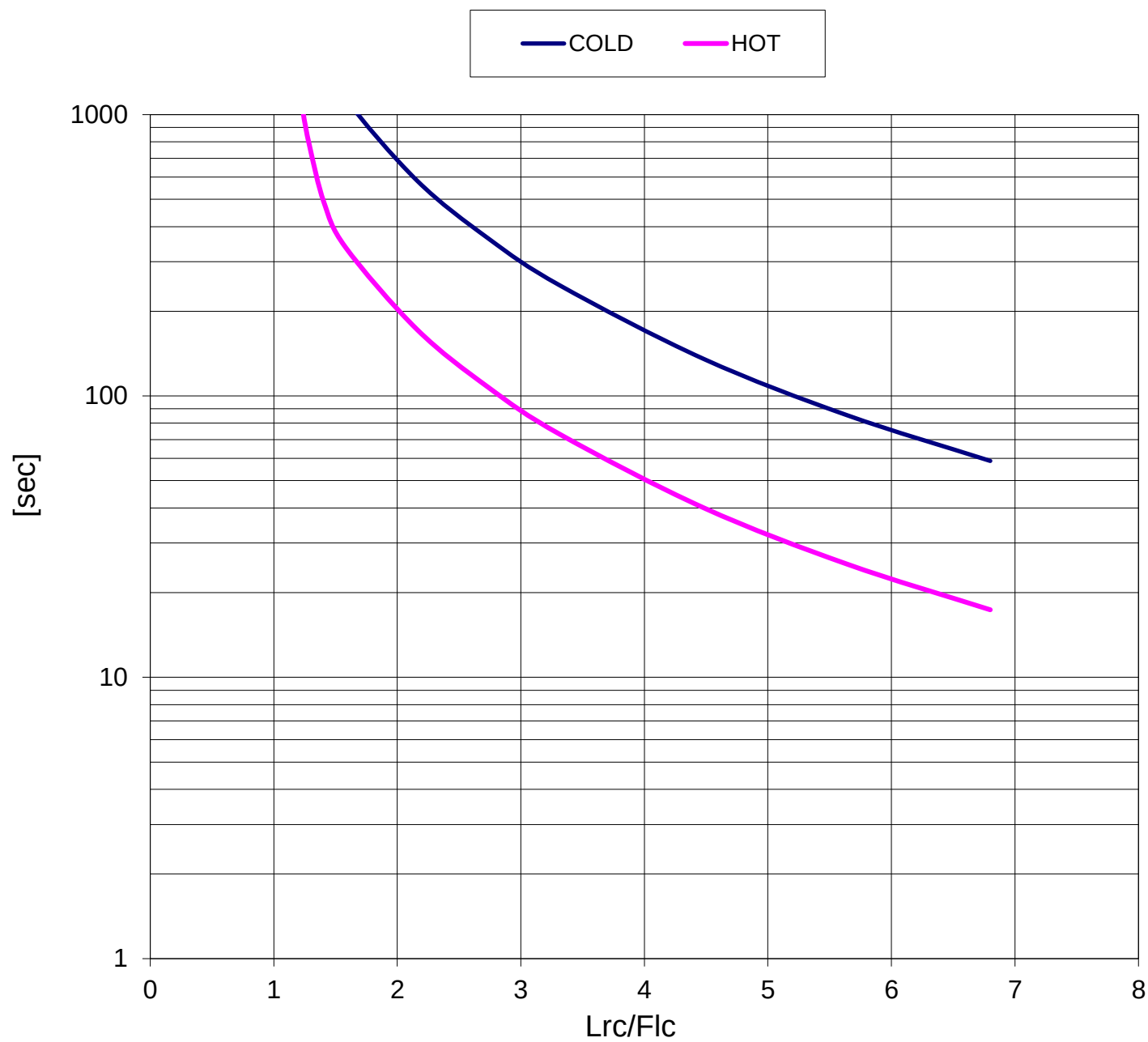
**MOD-700**

Data / Date 28 January 2022

# CURVA LIMITE CORRENTE TEMPO
## *THERMAL WITHSTAND CURVE*

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

| **Motore / Motor** | **AC30 355MB 6** | |
|---|---|---|
| Potenza nominale / Rated power | 200,00 | kW |
| Poli / Pole | 6 | |
| Tensione - Frequenza / Voltage - Frequency | 400 - 50 | V - Hz |
| Corrente / Rated current | 362,38 | A |
| Velocità / Speed | 992 | rpm |
| Coppia / Torque | 1925,33 | Nm |




Valori calcolati - Data obtained by calculation method

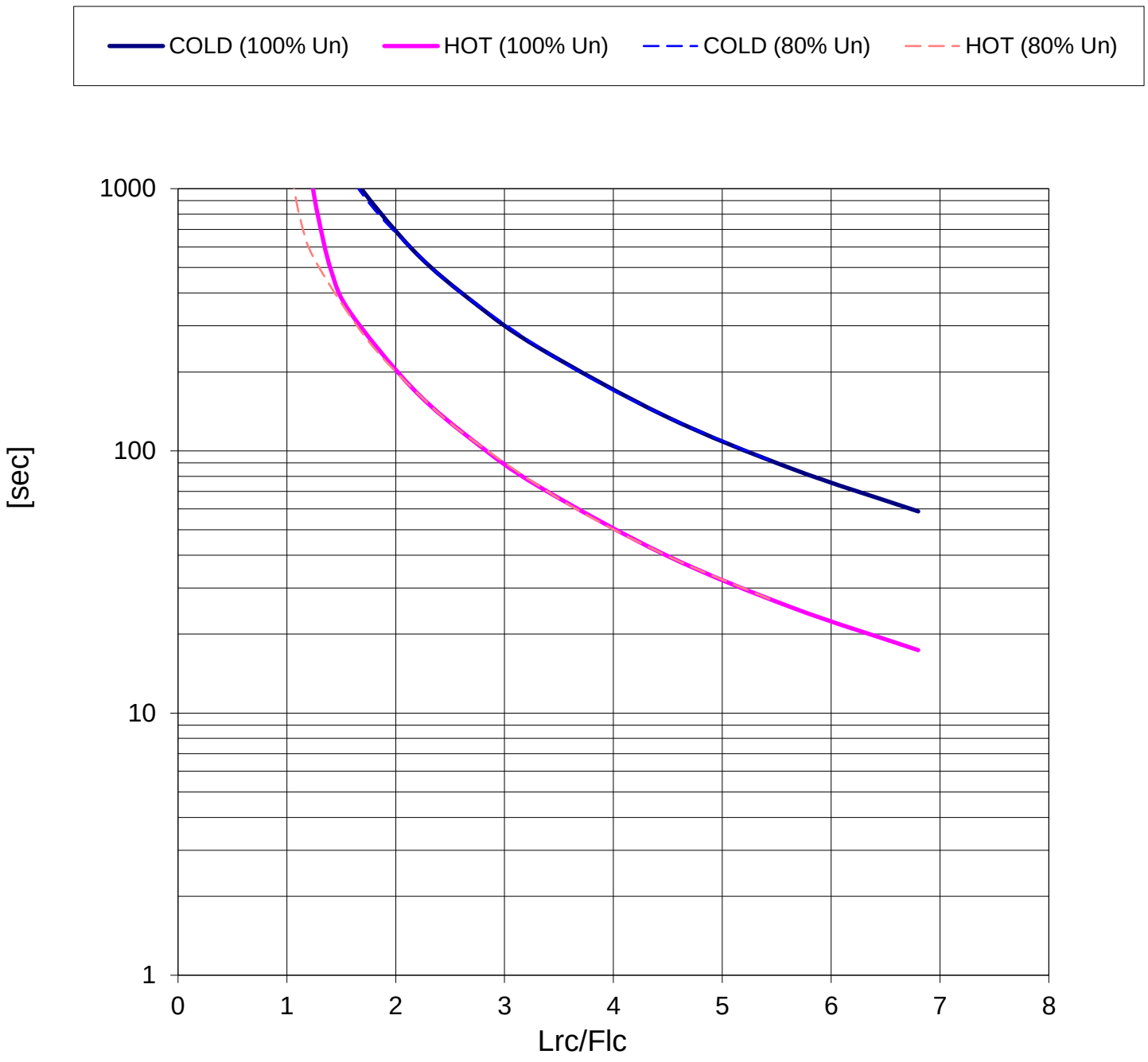
**MOD-900**

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** | **AC30 355MB 6** | |
|---|---|---|
| Potenza nominale / Rated power | 200,00 | kW |
| Poli / Pole | 6 | |
| Tensione - Frequenza / Voltage - Frequency | 400 - 50 | V - Hz |
| Corrente / Rated current | 362,38 | A |
| Velocità / Speed | 992 | rpm |
| Coppia / Torque | 1925,33 | Nm |




Valori calcolati - Data obtained by calculation method

**MOD-901**

Data / Date 28 January 2022