

# Data sheet for three-phase Squirrel-Cage-Motors SIMOTICS

**Motor type:** FS: 254T - 6p - 7.5 hp -

|                  |                 |           |
|------------------|-----------------|-----------|
| Client order no. | Item-No.        | Offer no. |
| Order no.        | Consignment no. | Project   |

Remarks

**Electrical data** Class I, Div 1 Gr. C&D; Class II, Div1, Gr. F&G

| U [V] | $\Delta/Y$ | f [Hz] | P [HP] | P [kW] | n [rpm] | I Load [Amps] |      |      |      |      | LRC  | Nom. Eff Load [%] |      |      | Pwr. Factor Load [%] |      |      | Torque [lb-ft] | T <sub>A</sub> /T <sub>N</sub> LRT [%] | T <sub>k</sub> /T <sub>N</sub> BDT [%] |
|-------|------------|--------|--------|--------|---------|---------------|------|------|------|------|------|-------------------|------|------|----------------------|------|------|----------------|--|--|
|       |            |        |        |        |         | 4/4           | 3/4  | 1/2  | 0    | 4/4  |      | 3/4               | 2/4  | 4/4  | 3/4                  | 2/4  |      |                |  |  |
| 575   |            | 60     | 7.50   | -/-    | 1,175   | 8.00          | 6.60 | 5.30 | 4.00 | 50.4 | 91.0 | 91.5              | 91.1 | 77.2 | 70.2                 | 58.4 | 33.0 | 167            | 261                                    |  |

|                  |  |                             |   |              |            |
|------------------|--|-----------------------------|---|--------------|------------|
| Frame Type: 254T | Type of constr.: (A) Foot mounted - End shield | Ins. Cl.:Insulation class F | Motor Prot.:(G) Thermostats, Klixon type, normally closed | NEMA Des.: B | S.F.: 1.15 |
| Mtr. WT:272      |  | Temp. Rise Cl.: B           | Amb. Temp.: + to -20 °C @1000 m                           | kVA: H       | IP IP65    |

**Mechanical data**

|                                      |                                |                         |                  |
|--------------------------------------|--------------------------------|-------------------------|------------------|
| Sound level (SPL / SWL) at 60 Hz     | 55.0 dB(A) / 67.0 dB(A)        | Thickener               | Polyurea         |
| Octave Band Center Frequencies Hertz | 250 500 1000 2000 4000 8000 Hz | Safe Stall Time Hot     | 26 s             |
| SPL@3                                |                                | Safe Stall Time Cold    | 45 s             |
| Moment of inertia                    | 1.5 Lb-ft <sup>2</sup>         | Frame material          | cast iron        |
| Ext Load Inertia Capability:         | 104.0 Lb ft <sup>2</sup>       | Color, paint shade      |                  |
| <b>Bearings</b>                      |                                | Coating (paint finish)  |                  |
| Bearing DE   NDE                     | 6309 Z C3 S0   6309 Z C3 S0    | <b>Ventilation Type</b> |                  |
| Bearing_Type                         | Ball Bearing   Ball Bearing    | Method of cooling       | TEFC             |
| AFBMA:                               | 45BC03JP30   45BC03JP30        | Direction of rotation   | Bidirectional    |
| <b>Grease</b>                        |                                | Fan Material            | Polypropylen ESD |
| Capacity                             | 0.5 oz   0.5 oz                | VFD                     | CT: 4:1 VT: 20:1 |
| Grease Type:                         | Exxon Mobile EM                | Space heaters           | without          |
|                                      |                                | Brake:                  | -/-              |

**Terminal box**

|                      |                             |                          |                    |
|----------------------|-----------------------------|--------------------------|--------------------|
| Lead Wire Connection | 3 LEAD - WYE                | Terminal box position    | (3) Mounting - F-1 |
| Voltage              | L1 L1 L1 Connected together | Material of terminal box |                    |
| ----                 | ----                        | Cable entry              | -/-                |
| ----                 | T1 T2 T3                    |                          |                    |

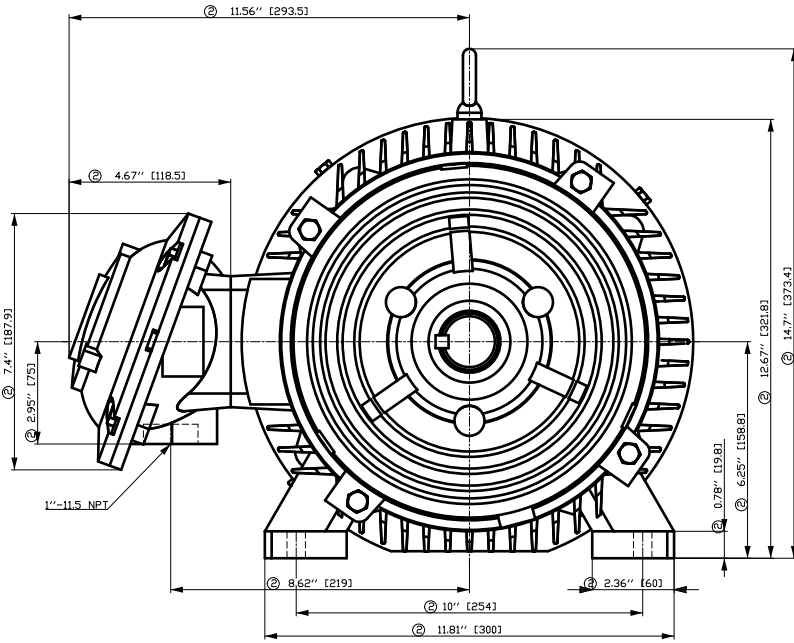
**Notes:**

I<sub>L</sub>/I<sub>N</sub> = locked rotor current / current nominal  
M<sub>L</sub>/M<sub>N</sub> = locked rotor torque / torque nominal  
M<sub>k</sub>/M<sub>N</sub> = break down torque / nominal torque

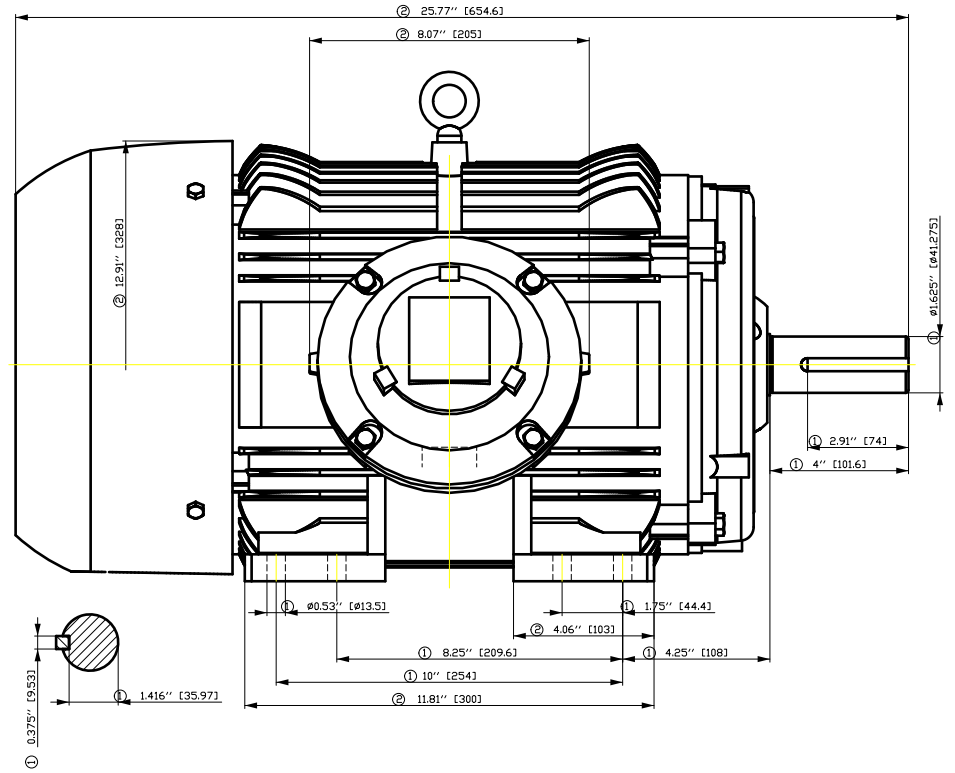
3) Value is valid only for DOL operation with motor design IC411  
2) at rated power / at full load

|                  |                     |                 |             |   |
|------------------|---------------------|-----------------|-------------|---|
| responsible dep. | technical reference | created by      | approved by | <i>Technical data are subject to change! There may be discrepancies between software and customer interface</i> |
| DI MC LVM        |                     | DT Configurator |             |   |

|                   |                    |                 |                  |               |
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| © Siemens AG 2022 |                    | rev.            | creation date    | language Page |
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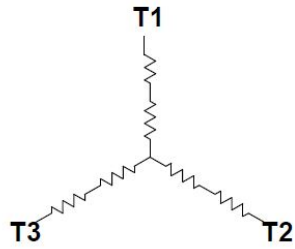


- ① Tolerances according to NEMA std.
- ② All these dimensions corresponding to assemblies and castings shall have a tolerance as per DIN standard 1686-GTB 19.
- ③ Not according to NEMA std.



| Tolerance        | Surface      | Material         | Weight   | Scale        |               |
|------------------|--------------|------------------|----------|--------------|---------------|
| FT ÖGFCÉÓÖFF#ÖÖH | Author       | Öä ^)•ä }ä/ä ä * | E        |              |               |
| E                | Creator      |                  |          |              | ÖVS           |
|                  | Approval     |                  |          |              | T ä : ^ä@ } * |
|                  | Department   |                  |          |              |               |
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| © Siemens AG     | Project No   | E                | Ref No   | E            |               |
| 2018             |              |                  |          | Sheet        |               |
|                  |              |                  |          | F of F       |               |

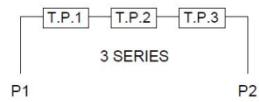
Main terminal diagram



| 3 LEAD WYE |    |    |       |
|------------|----|----|-------|
| LINES      |    |    | CONN. |
| L1         | L2 | L3 |       |
| T1         | T2 | T3 | Y     |

Motor protection

THERMOSTATS



responsible dep.  
DI MC LVM

technical reference

created by

approved by

Project

**SIEMENS**

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Wiring Diagram

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document status  
free

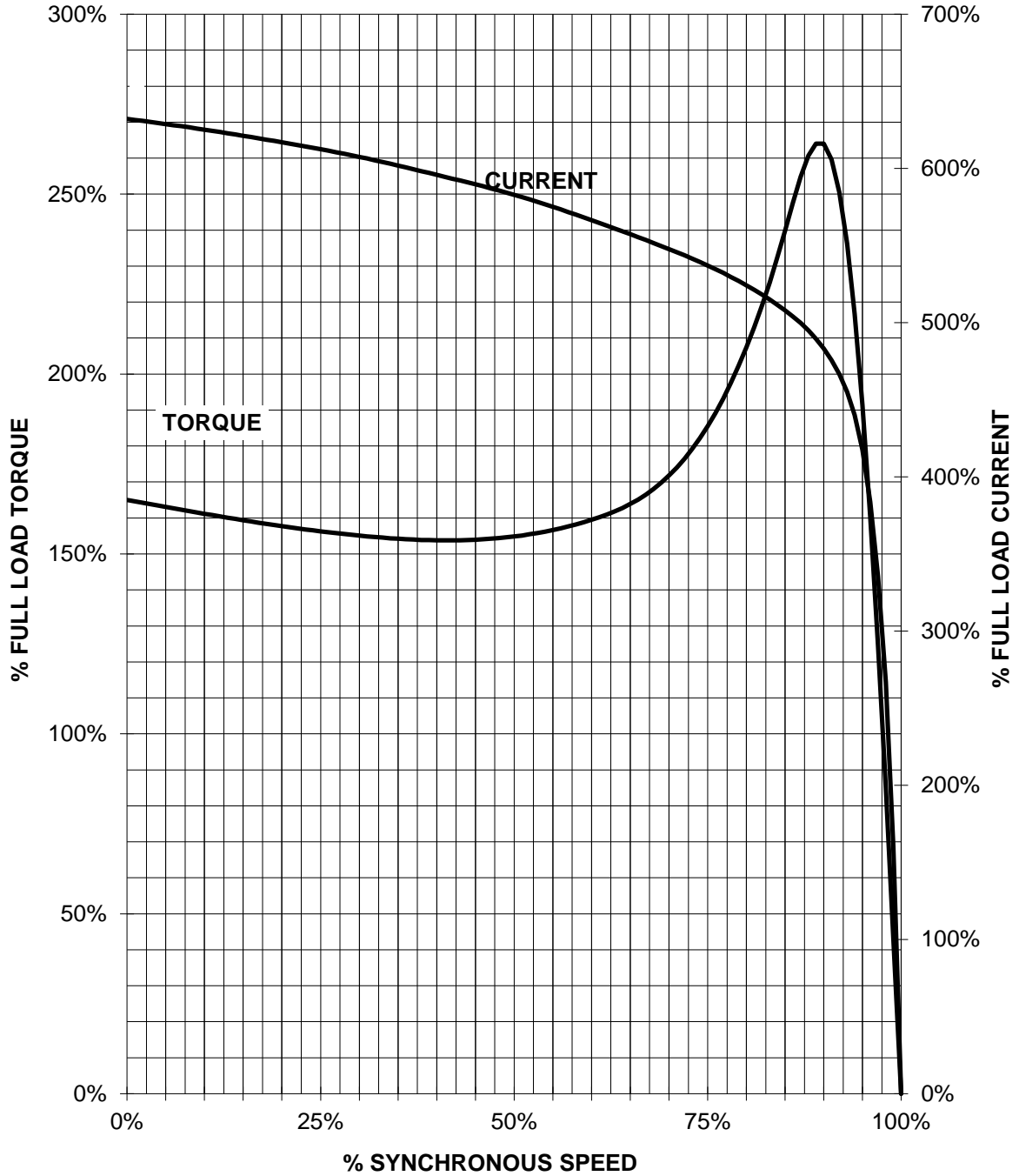
document number

customer

# SIEMENS INDUSTRY, INC.

HP 7,5 VOLTS <600 RPM 1200 TYPE XP100  
HZ 60 PHASE 3 FRAME 254T NEMA B

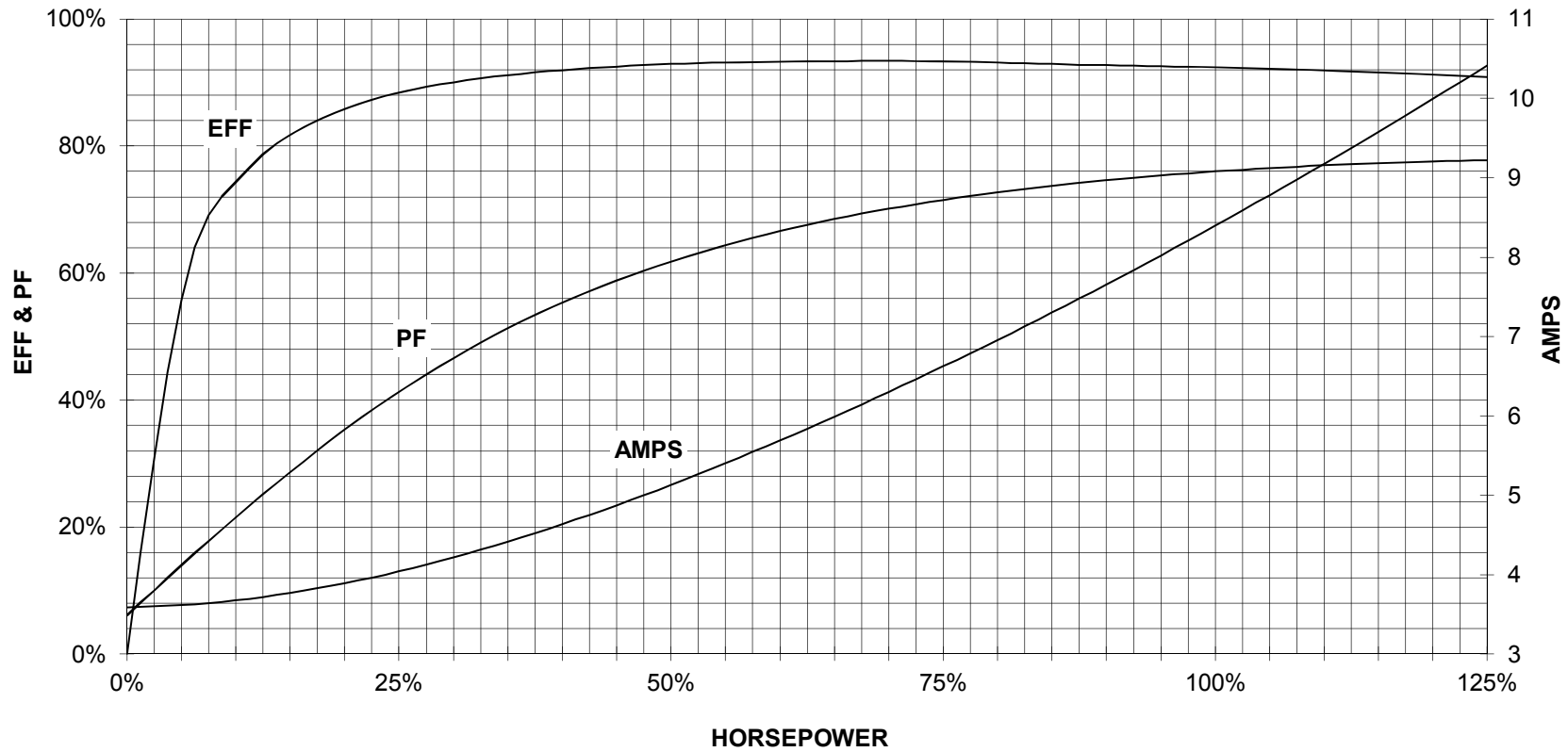
## TORQUE & CURRENT VS. SPEED



CUSTOMER: \_\_\_\_\_ ORDER#: \_\_\_\_\_

7.5 HP 1200 RPM 254T FRAME 575 VOLTS 3 PHASE NEMA DESIGN B

**SIEMENS INDUSTRY, INC.  
PERFORMANCE CURVE  
XP100**



CUSTOMER \_\_\_\_\_ ORDER # \_\_\_\_\_ PO # \_\_\_\_\_

PERFORMANCE BASED ON DESIGN CALCULATIONS. SUBJECT TO CHANGE WITHOUT NOTICE.

REV. 1