

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

**Motor type:** FS: 284T - 8p - 10 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] |       |       |       |      | 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     | LRC  | 4/4               | 3/4  | 2/4  | 4/4                  | 3/4  | 2/4  |                |  |  |
| 460   |            | 60     | 10.00  | -/-    | 885     | 17.00         | 14.80 | 12.60 | 11.00 | 81.0 | 90.2              | 89.8 | 88.2 | 61.0                 | 53.0 | 42.0 | 59.0           | 161                                    | 224                                    |
| 230   |            | 60     | 10.00  | -/-    | 885     | 34.00         |       |       |       |      | 90.2              | 89.8 | 88.2 | 61.0                 | 53.0 | 42.0 | 59.0           | 161                                    | 224                                    |

|                  |  |                             |   |              |            |
|------------------|--|-----------------------------|---|--------------|------------|
| Frame Type: 284T | 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:486      |  | Temp. Rise Cl.: B           | Amb. Temp.: + to -20 °C @1000 m                           | kVA: H       | IP IP65    |

## Mechanical data

|                                      |                                |                         |                  |
|--------------------------------------|--------------------------------|-------------------------|------------------|
| Sound level (SPL / SWL) at 60 Hz     | 59.0 dB(A) / 70.0 dB(A)        | Thickener               | Polyurea         |
| Octave Band Center Frequencies Hertz | 250 500 1000 2000 4000 8000 Hz | Safe Stall Time Hot     | 15 s             |
| SPL@3                                | dB(A)                          | Safe Stall Time Cold    | 30 s             |
| Moment of inertia                    | 4.1 Lb-ft <sup>2</sup>         | Frame material          | cast iron        |
| Ext Load Inertia Capability:         | 273.0 Lb ft <sup>2</sup>       | Color, paint shade      |                  |
| <b>Bearings</b>                      |                                | Coating (paint finish)  |                  |
| Bearing DE   NDE                     | 6310 Z C3 S0   6310 Z C3 S0    | <b>Ventilation Type</b> |                  |
| Bearing_Type                         | Ball Bearing   Ball Bearing    | Method of cooling       | TEFC             |
| AFBMA:                               | 50BC03JP30   50BC03JP30        | Direction of rotation   | Bidirectional    |
| <b>Grease</b>                        |                                | Fan Material            | Polypropylen ESD |
| Capacity                             | 2.6 oz   2.6 oz                | VFD                     | CT: 4:1 VT: 20:1 |
| Grease Type:                         | Exxon Mobile EM                | Space heaters           | without          |
|                                      |                                | Brake:                  | -/-              |


## Terminal box

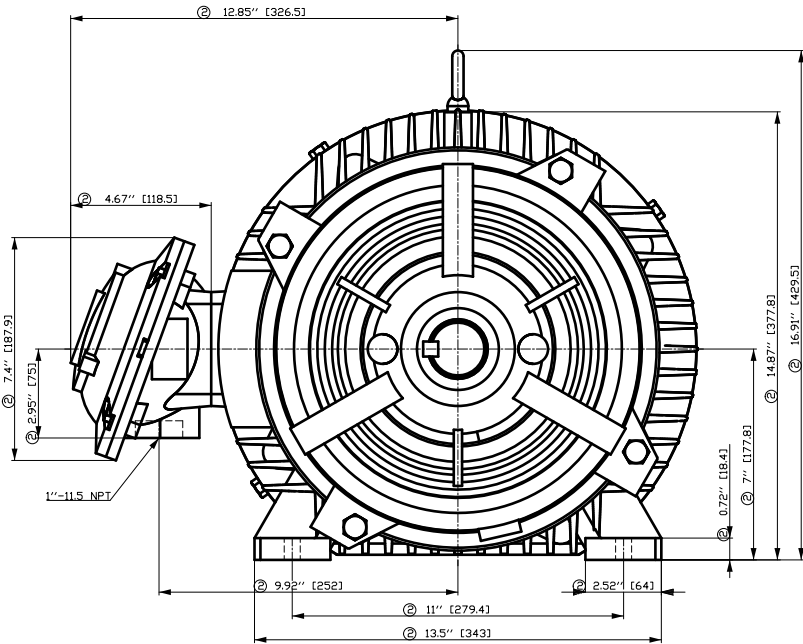
|                      |                                |                          |                    |
|----------------------|--------------------------------|--------------------------|--------------------|
| Lead Wire Connection | 9 LEAD - DELTA                 | Terminal box position    | (3) Mounting - F-1 |
| Voltage              | L1 L1 L1 Connected together    | Material of terminal box |                    |
| LOW                  | T1 T7 T6 T2 T8 T4 T3 T9 T5 --- | Cable entry              | -/-                |
| HIGH                 | T1 T2 T3 T4 T7-T5 T8-T6 T9     |                          |                    |

### Notes:

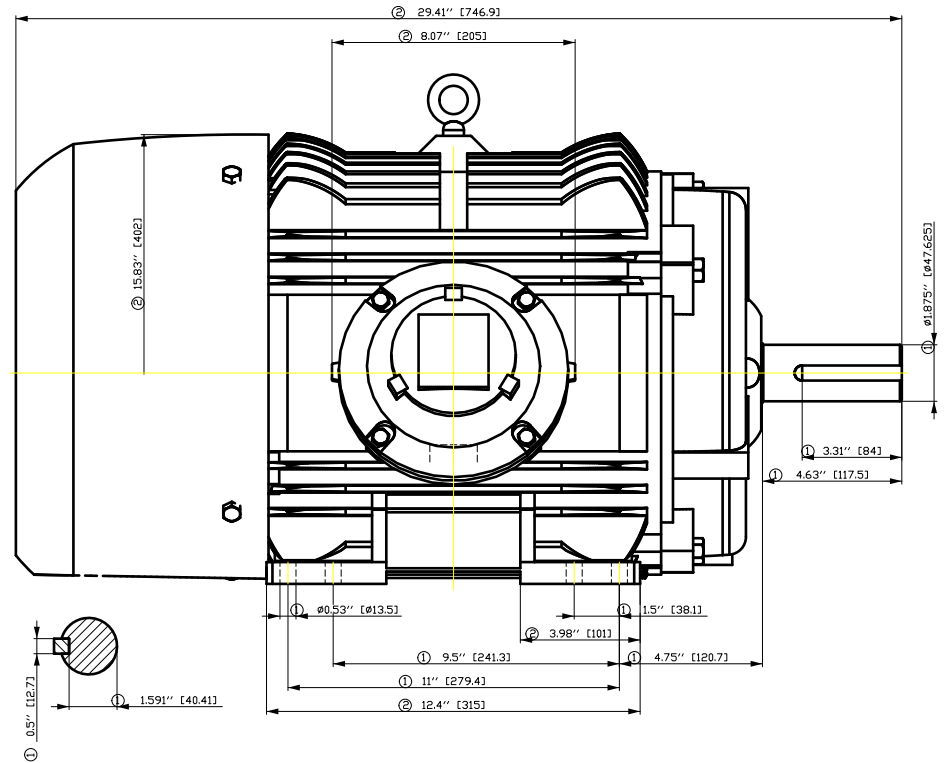
I<sub>L</sub>/I<sub>N</sub> = locked rotor current / current nominal  
 M<sub>L</sub>/M<sub>N</sub> = locked rotor torque / torque nominal  
 M<sub>d</sub>/M<sub>N</sub> = break down torque / nominal torque  
 3) Value is valid only for DOL operation with motor design IC411  
 2) at rated power / at full load

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

|  |                             |                             |            |                                   |
|--|-----------------------------|-----------------------------|------------|-----------------------------------|
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| © Siemens AG 2022  |                             |                             |            | Page<br>1/1                       |

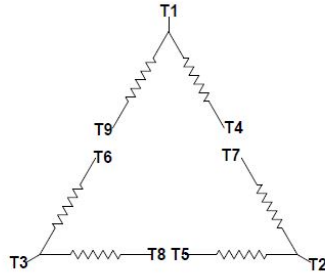


- ① Tolerances according to NEMA std.
- ② All these dimensions corresponding to assemblies and castings shall have a tolerance as per DIN standard 1686-GTB 19.
- ③ Not according to NEMA std.



| Tolerance               | Surface   | Material                          | Weight                             | Scale   |
|-------------------------|---|-----------------------------------|------------------------------------|---------|
| FT ÖGFC EÖÖFFB ÖÖH<br>É | Author<br>Creator ÖVS<br>Approval<br>Department<br>Change Order | Öä ^}•} *<br>Tæ : ^æ@ `}*<br>MLFB | É                                  | { {<br> |
| SIEMENS                 | Doc. State I ÖG   | Item No                           | Paper Size ÖH                      |         |
|                         | Revision Index RS   | Doc No                            | 1st Language ^}<br>2nd Language ä^ |         |
| © Siemens AG 2018       | Project No É  | Ref No É                          | Sheet F of F                       |         |

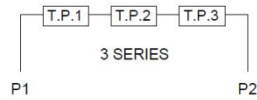
Main terminal diagram



| 9 LEAD DELTA |          |          |          |                    |       |     |
|--------------|----------|----------|----------|--------------------|-------|-----|
| Volts        | LINES    |          |          | CONNECTED TOGETHER | CONN. |     |
|              | L1       | L2       | L3       |                    |       |     |
| LOW          | T1<br>T6 | T7<br>T4 | T8<br>T5 | T3<br>T9           |       | Δ Δ |
| HIGH         | T1       | T2       | T3       | T4 T7-T5 T8-T6 T9  |       | Δ   |

Motor protection

THERMOSTATS



responsible dep.  
DI MC LVM

technical reference

created by

approved by

Project

**SIEMENS**

document type  
Wiring Diagram

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document status  
free

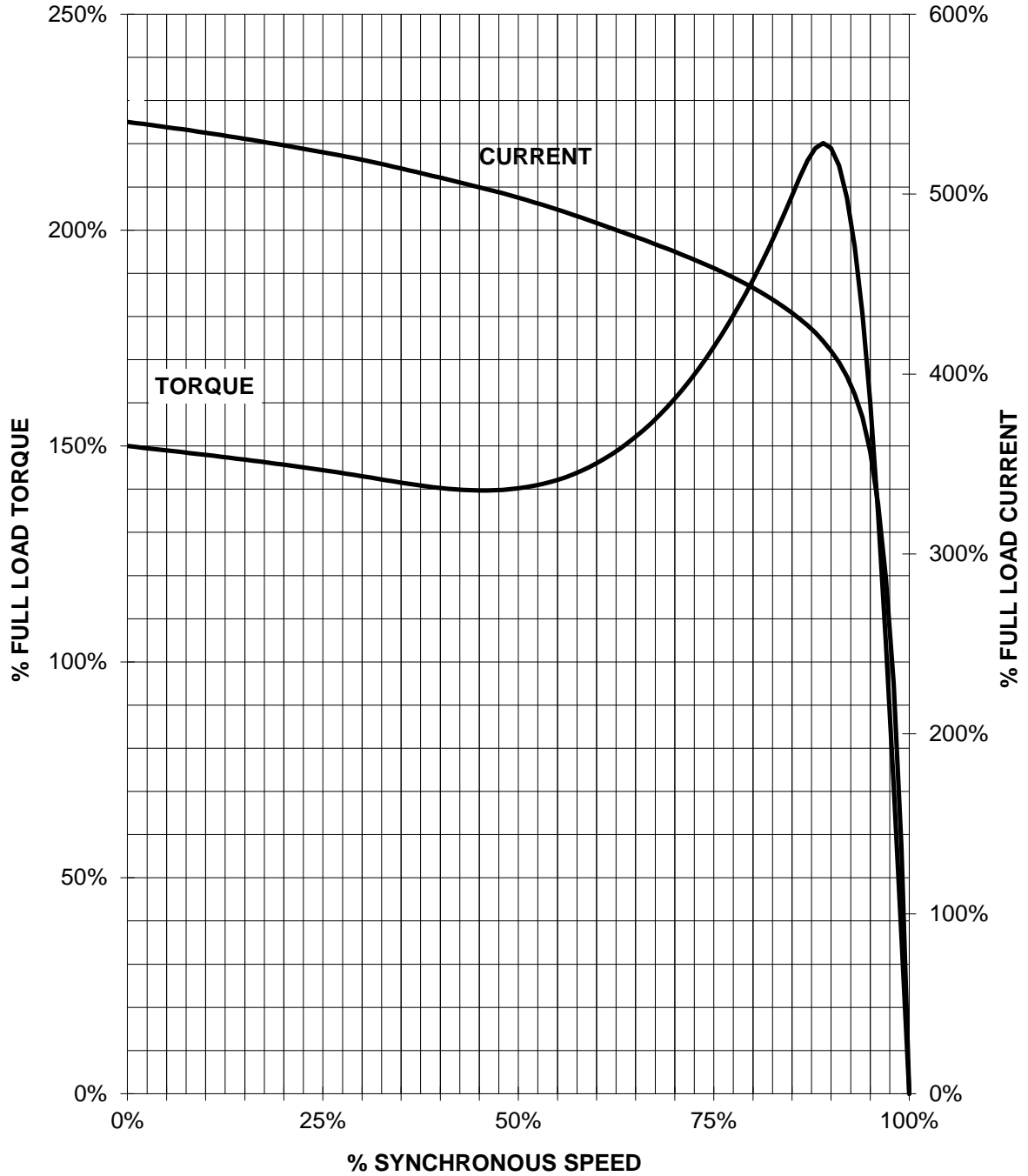
document number

customer

# SIEMENS INDUSTRY, INC.

HP 10 VOLTS <600 RPM 900 TYPE XP100  
HZ 60 PHASE 3 FRAME 284T NEMA B

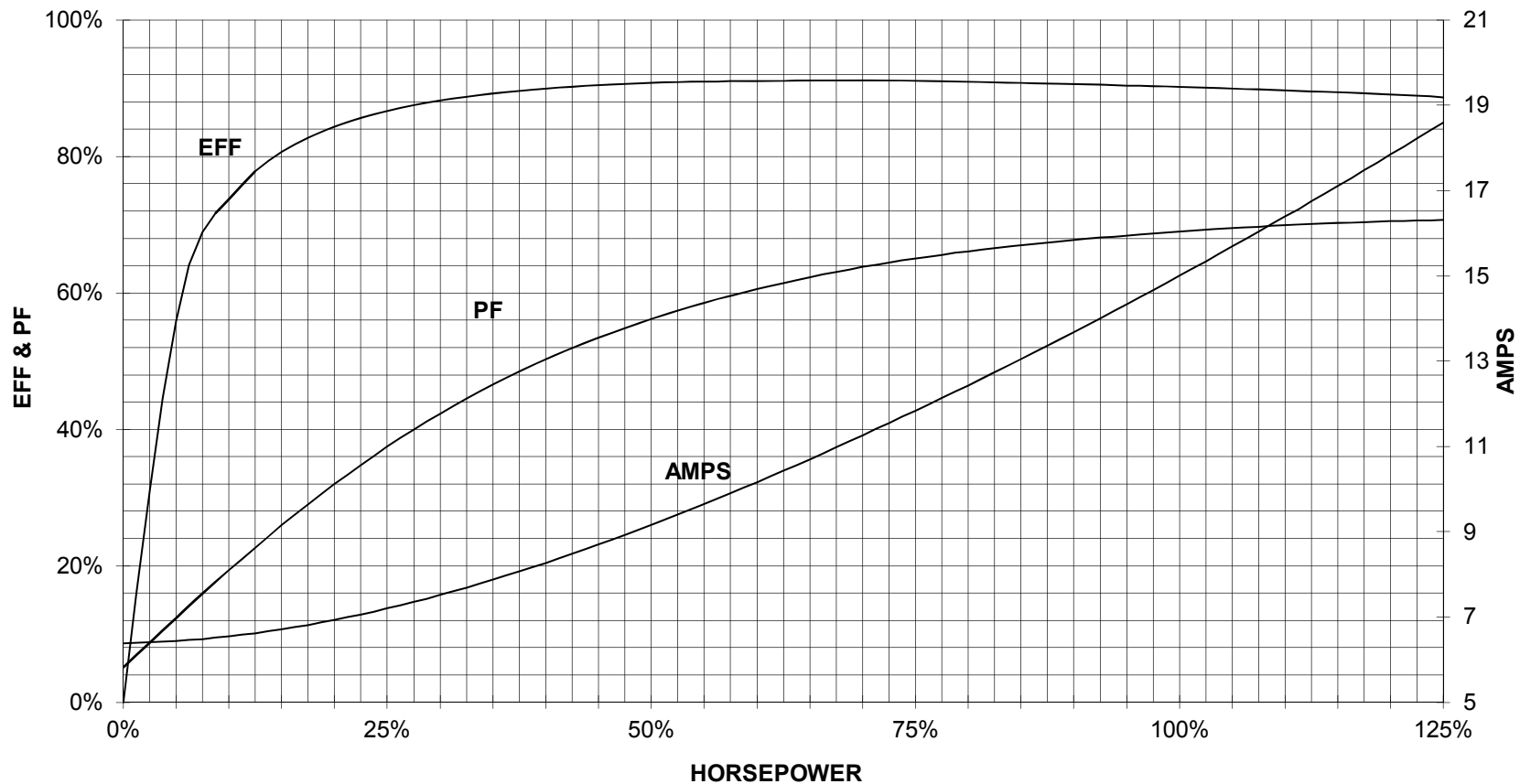
## TORQUE & CURRENT VS. SPEED



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

10 HP 900 RPM 284T FRAME 460 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