

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

**Motor type:** FS: 326TS - 2p - 50 hp -

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

Remarks

**Electrical data** **Class I Division 1 Groups D**

| 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  |      |                |  |  |
| 460   |            | 60     | 50.00  | -/-    | 3,535   | 55.00         | 41.90 | 30.40 | 15.00 | 363.0 | 93.6 | 94.1              | 93.8 | 91.0 | 89.0                 | 82.0 | 74.0 | 150            | 250                                    |  |
| 230   |            | 60     | 50.00  | -/-    | 3,535   | 110.00        |       |       |       |       | 93.6 | 94.1              | 93.8 | 91.0 | 89.0                 | 82.0 | 74.0 | 150            | 250                                    |  |

|                   |  |                             |                                       |              |            |
|-------------------|--|-----------------------------|---------------------------------------|--------------|------------|
| Frame Type: 326TS | Type of constr.: (A) Foot mounted - End shield | Ins. Cl.:Insulation class F | Motor Prot.:(A) No winding protection | NEMA Des.: B | S.F.: 1.15 |
| Mtr. WT:600       |  | Temp. Rise Cl.: B           | Amb. Temp.: + to -20 °C @1000 m       | kVA: G       | IP IP65    |

**Mechanical data**

|                                      |                                |                         |                  |
|--------------------------------------|--------------------------------|-------------------------|------------------|
| Sound level (SPL / SWL) at 60 Hz     | 77.0 dB(A) / 87.0 dB(A)        | Thickener               | Polyurea         |
| Octave Band Center Frequencies Hertz | 250 500 1000 2000 4000 8000 Hz | Safe Stall Time Hot     | 18 s             |
| SPL@3                                | dB(A)                          | Safe Stall Time Cold    | 37 s             |
| Moment of inertia                    | 4.4 Lb-ft <sup>2</sup>         | Frame material          | cast iron        |
| Ext Load Inertia Capability:         | 49.0 Lb ft <sup>2</sup>        | Color, paint shade      |                  |
| <b>Bearings</b>                      |                                | Coating (paint finish)  |                  |
| Bearing DE   NDE                     | 6312 Z C3 S0   6312 Z C3 S0    | <b>Ventilation Type</b> |                  |
| Bearing_Type                         | Ball Bearing   Ball Bearing    | Method of cooling       | TEFC             |
| AFBMA:                               | 60BC03JP30   60BC03JP30        | Direction of rotation   | Bidirectional    |
| <b>Grease</b>                        |                                | Fan Material            | Polypropylen ESD |
| Capacity                             | 5.5 oz   5.5 oz                | VFD                     | CT: 4:1 VT: 20:1 |
| Grease Type:                         | Exxon Mobile EM                | Space heaters           | without          |
|                                      |                                | Brake:                  | -/-              |

**Terminal box**

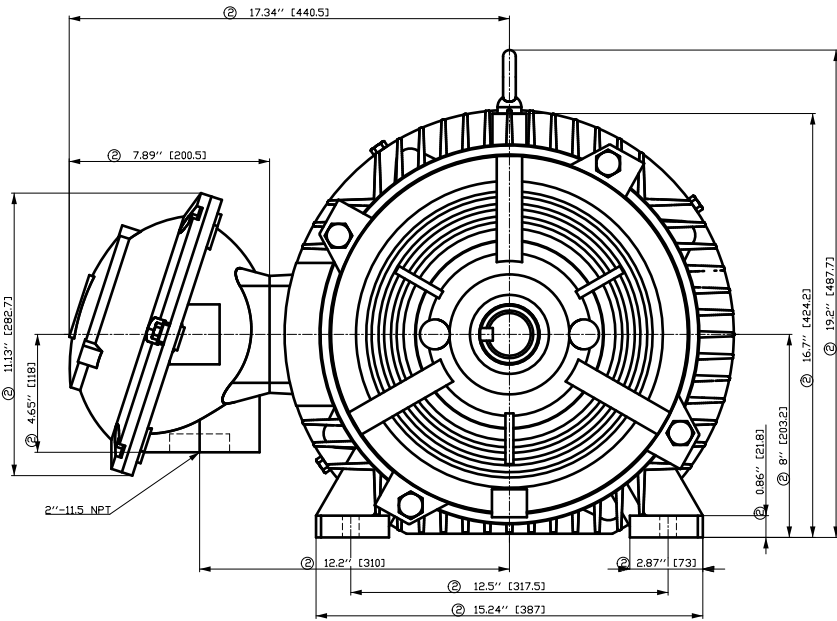
|                      |                                |                          |                    |
|----------------------|--------------------------------|--------------------------|--------------------|
| Lead Wire Connection | 9 LEAD - DELTA                 | Terminal box position    | (3) 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:

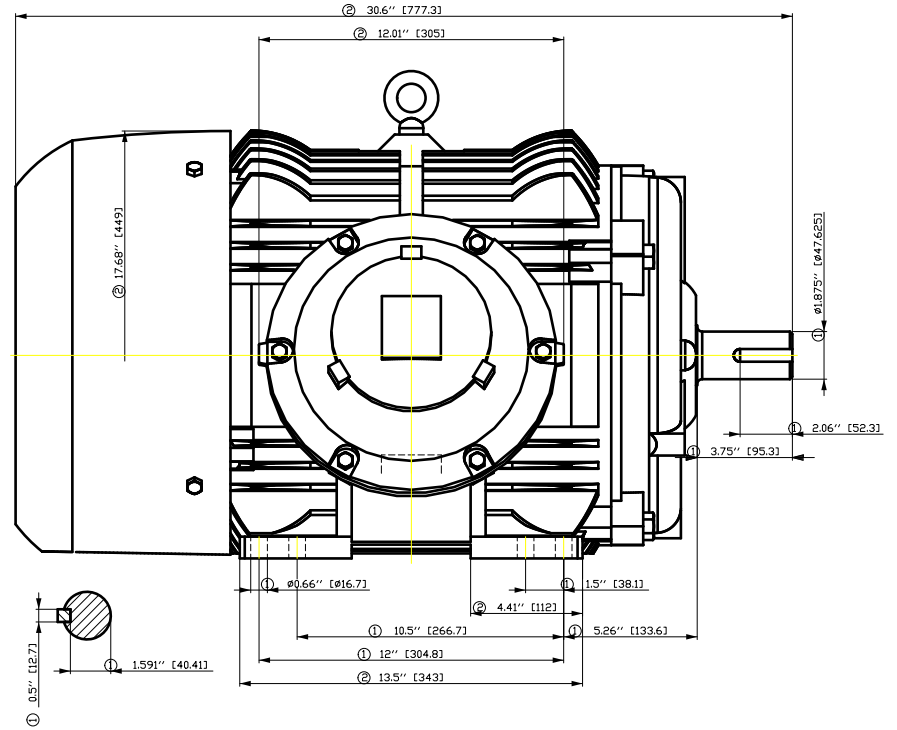
1) I<sub>r</sub>/I<sub>N</sub> = locked rotor current / current nominal  
 2) M<sub>r</sub>/M<sub>N</sub> = locked rotor torque / torque nominal  
 3) M<sub>b</sub>/M<sub>N</sub> = break down torque / nominal torque  
 3) Value is valid only for DOL operation with motor design IC411  
 2) at rated power / 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 |
|                   |                    | 01              | 2022-04-08 21:47 | en 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 ÖGGEF-ÖÖGF-ÖÖH | Author       | ÖS<br>Tæ: ^æ@` }* | E        | 1:1          |              |
| E                 | Creator      |                   |          |              |              |
|                   | Approval     |                   |          |              |              |
|                   | Department   | MFB               | Doc Type | /            |              |
| SIEMENS           | Change Order | I ÖGGE            | Item No  | Paper Size   | ÖH           |
|                   | Doc. State   |                   | Doc No   | 1st Language | ^            |
|                   | Revision     |                   | Index    | 2nd Language | â^           |
| © Siemens AG 2018 | Project No   | E                 | Ref No   | E            | Sheet F of F |

Main terminal diagram



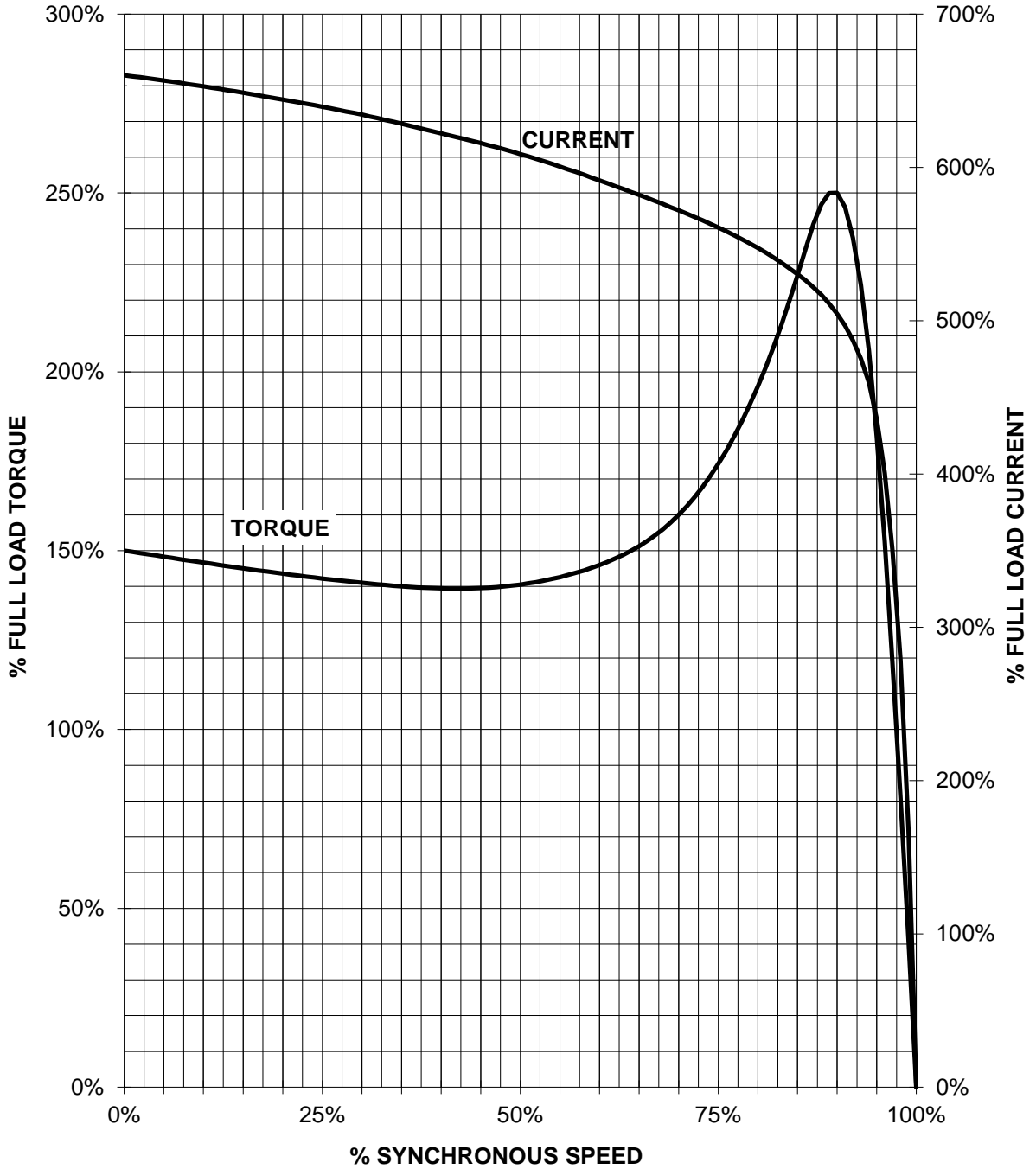
| 9 LEAD DELTA |          |          |          |                    |       |     |
|--------------|----------|----------|----------|--------------------|-------|-----|
| Volts        | LINES    |          |          | CONNECTED TOGETHER | CONN. |     |
|              | L1       | L2       | L3       |                    |       |     |
| 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   |

|                               |                                 |                             |                |             |
|-------------------------------|---------------------------------|-----------------------------|----------------|-------------|
| responsible dep.<br>DI MC LVM | technical reference             | created by                  | approved by    | Project     |
| <b>SIEMENS</b>                | document type<br>Wiring Diagram | document status<br>free     |                | customer    |
|                               | title<br>1MB2221-3BA21-6AA3     | document number             |                |             |
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# SIEMENS INDUSTRY, INC.

HP 50    VOLTS <600    RPM 3600    TYPE XP100 1D1  
HZ 60    PHASE 3    FRAME 326TS    NEMA B

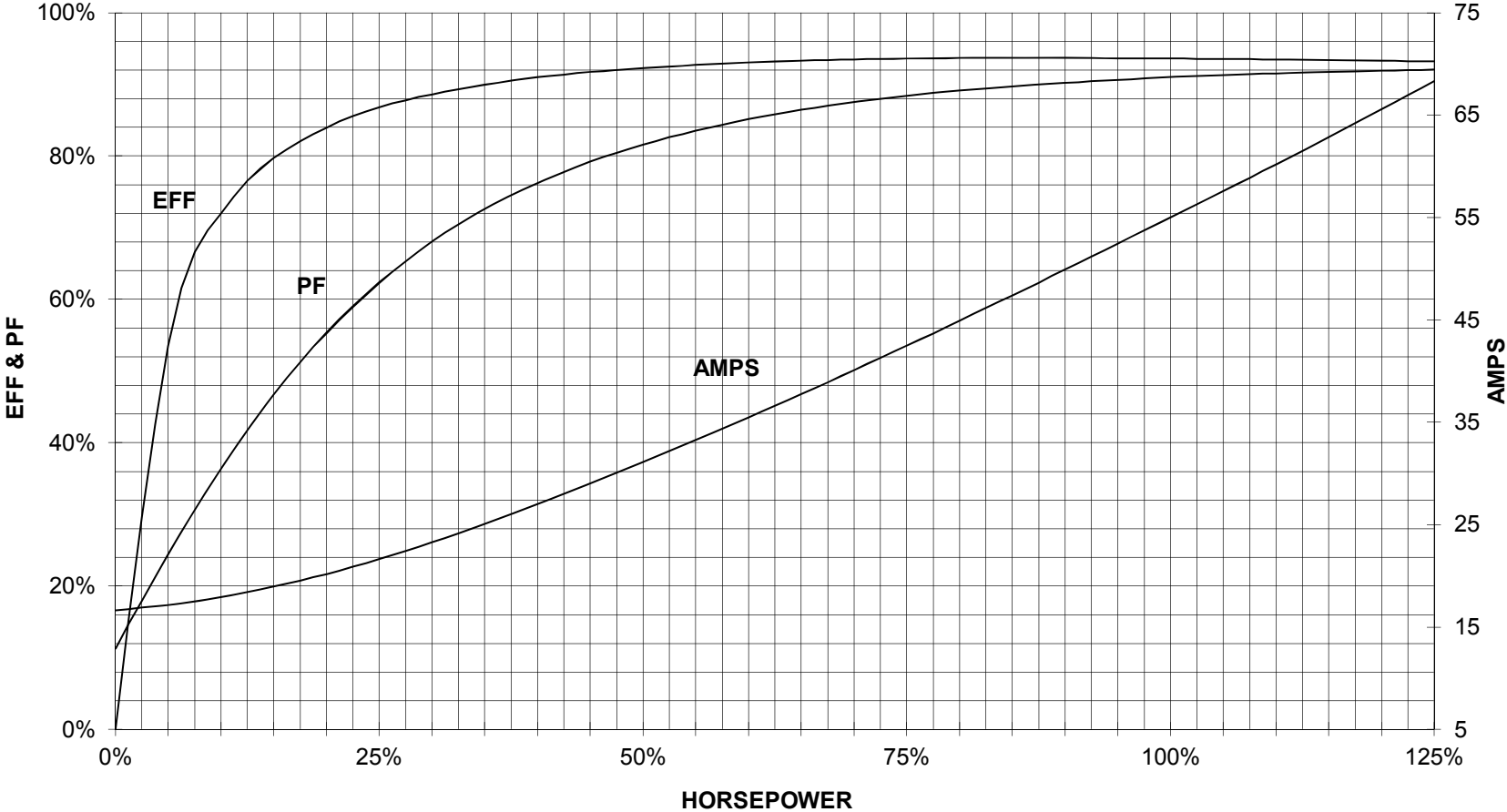
## TORQUE & CURRENT VS. SPEED



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

50 HP 3600 RPM 326TS FRAME 460 VOLTS 3 PHASE NEMA DESIGN B

**SIEMENS INDUSTRY, INC.**  
**PERFORMANCE CURVE**  
**XP100 1D1**



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

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