

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

Motor type: FS: 286T - 6p - 20 hp -

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

Remarks

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

| U [V] | Δ/Y | f [Hz] | P [HP] | P [kW] | n [rpm] | I Load [Amps] | | | | | LRC | Nom. Eff Load [%] | | | Pwr. Factor Load [%] | | | Torque [lb-ft] | T _A /T _N LRT [%] | T _k /T _N BDT [%] |
|-------|------------|--------|--------|--------|---------|---------------|-------|-------|-------|-------|------|-------------------|------|------|----------------------|------|------|----------------|--|--|
| | | | | | | 4/4 | 3/4 | 1/2 | 0 | 4/4 | | 3/4 | 2/4 | 4/4 | 3/4 | 2/4 | | | | |
| 460 | | 60 | 20.00 | -/- | 1,180 | 27.00 | 22.10 | 18.00 | 13.00 | 145.0 | 91.7 | 92.0 | 91.2 | 76.0 | 69.0 | 57.0 | 89.0 | 149 | 240 | |
| 230 | | 60 | 20.00 | -/- | 1,180 | 54.00 | | | | | 91.7 | 92.0 | 91.2 | 76.0 | 69.0 | 57.0 | 89.0 | 149 | 240 | |

| | | | | | |
|------------------|--|-----------------------------|---------------------------------------|--------------|------------|
| Frame Type: 286T | 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:506 | | Temp. Rise Cl.: B | Amb. Temp.: + to -20 °C @1000 m | kVA: G | IP IP65 |

Mechanical data


| | | | |
|--------------------------------------|--------------------------------|-------------------------|------------------|
| Sound level (SPL / SWL) at 60 Hz | 61.0 dB(A) / 72.0 dB(A) | Thickener | Polyurea |
| Octave Band Center Frequencies Hertz | 250 500 1000 2000 4000 8000 Hz | Safe Stall Time Hot | 20 s |
| SPL@3 | | Safe Stall Time Cold | 45 s |
| Moment of inertia | 4.5 Lb-ft ² | Frame material | cast iron |
| Ext Load Inertia Capability: | 262.0 Lb ft ² | Color, paint shade | |
| Bearings | | Coating (paint finish) | |
| Bearing DE NDE | 6310 Z C3 S0 6310 Z C3 S0 | Ventilation Type | |
| Bearing_Type | Ball Bearing Ball Bearing | Method of cooling | TEFC |
| AFBMA: | 50BC03JP30 50BC03JP30 | Direction of rotation | Bidirectional |
| Grease | | 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: | -/- |

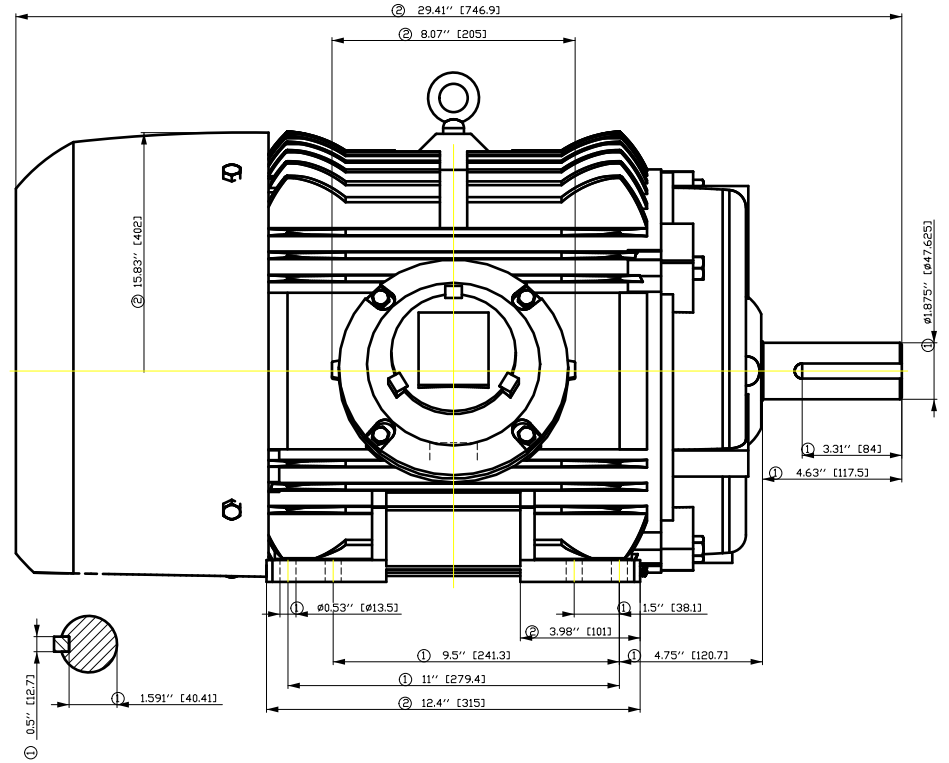
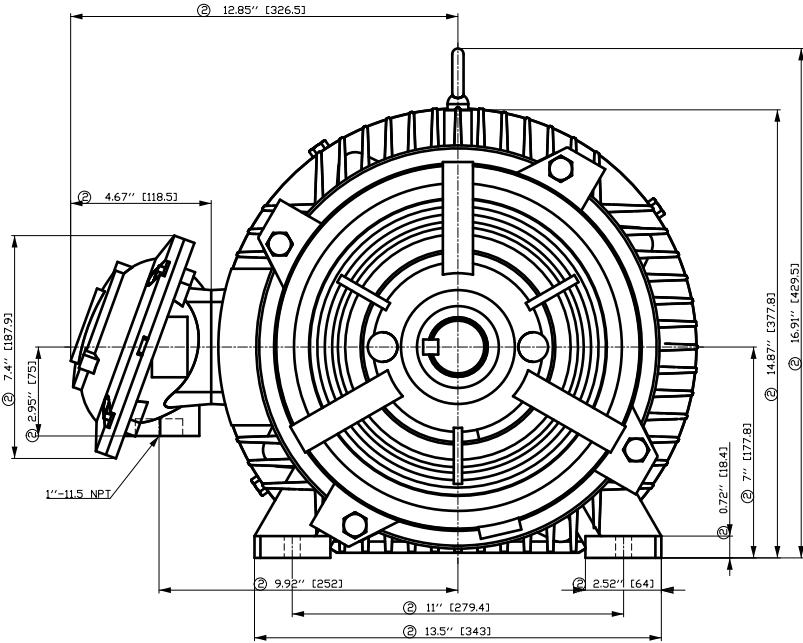
Terminal box

| | | | |
|----------------------|--------------------------------|--------------------------|--------------------|
| 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_r/I_N = locked rotor current / current nominal
 M_r/M_N = locked rotor torque / torque nominal
 M_b/M_N = 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. DI MC LVM | technical reference | created by 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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|  | document type datasheet | document status released | customer | |
| | title 1MB2221-2CC21-6AA3 | document number | rev. 01 | creation date 2022-04-08 21:06 |
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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 ÖGGR-ESÖG-FE ÖEH | Author | ÖS Tae: ^@~}* | É | { { |
| É | Creator | | | |
| | Approval | | | |
| | Department | | | |
| | Change Order | MFB | | Doc Type |
| SIEMENS | Doc. State | I ð ÖG | Item No | Paper Size |
| | Revision | Index RS | Doc No | 1st Language |
| | | | | 2nd Language |
| © Siemens AG 2018 | Project No | É | Ref No | É |
| | | | | Sheet F of F |

刀线管
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Main terminal diagram



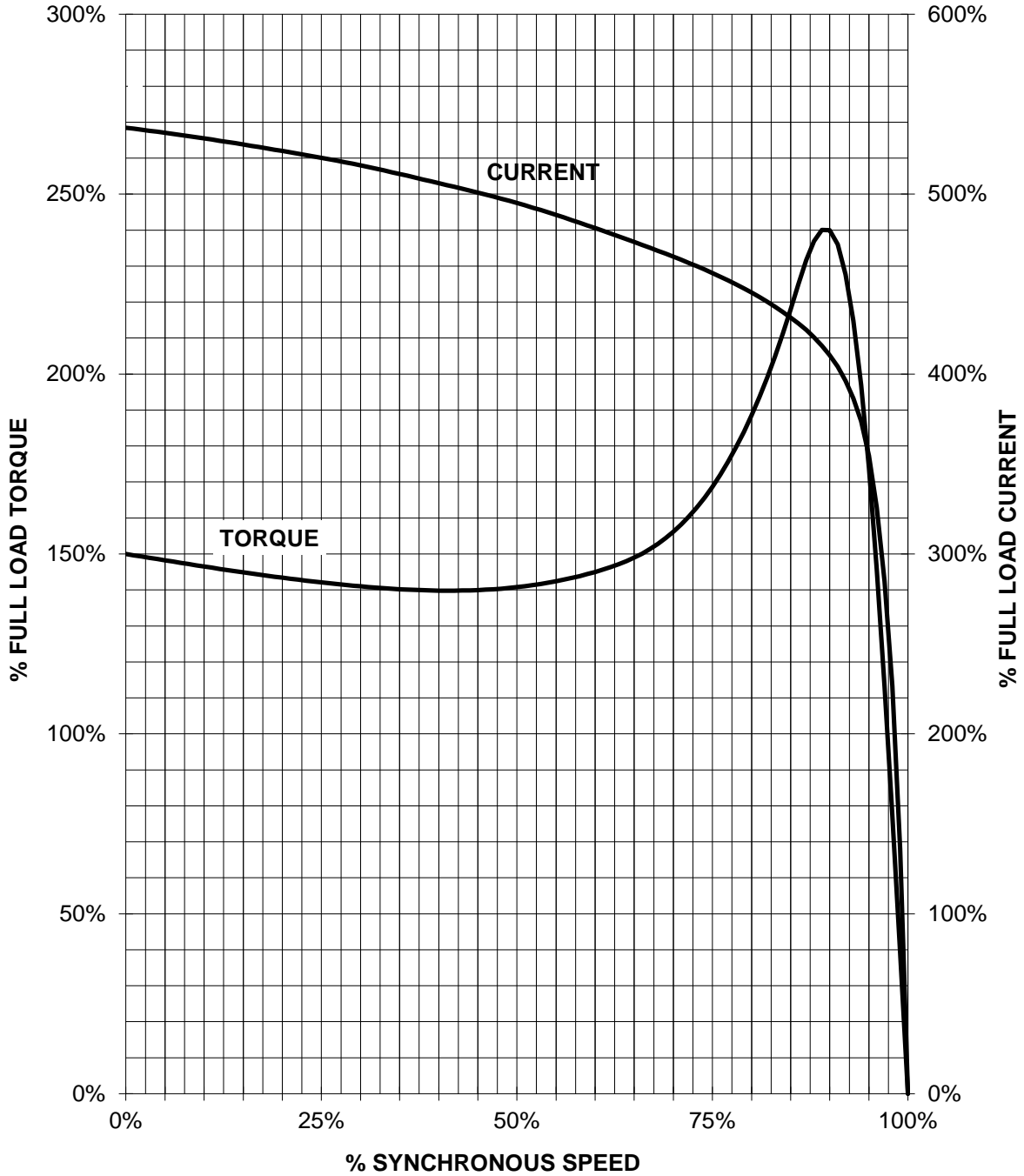
| 9 LEAD DELTA | | | | | | |
|--------------|----------|----------|----------|--------------------|-------|-----|
| Volts | LINES | | | CONNECTED TOGETHER | CONN. | |
| | L1 | L2 | L3 | | | |
| LOW | T1 T6 | T7 T4 | T8 T5 | T3 T9 | | Δ Δ |
| HIGH | T1 | T2 | T3 | T4 T7-T5 T8-T6 T9 | | Δ |

| | | | | |
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| responsible dep. DI MC LVM | technical reference | created by | approved by | Project |
| SIEMENS | document type Wiring Diagram | document status free | | customer |
| | title 1MB2221-2CC21-6AA3 | document number | | |
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SIEMENS INDUSTRY, INC.

HP 20 VOLTS <600 RPM 1200 TYPE XP100 1D1
HZ 60 PHASE 3 FRAME 286T NEMA B

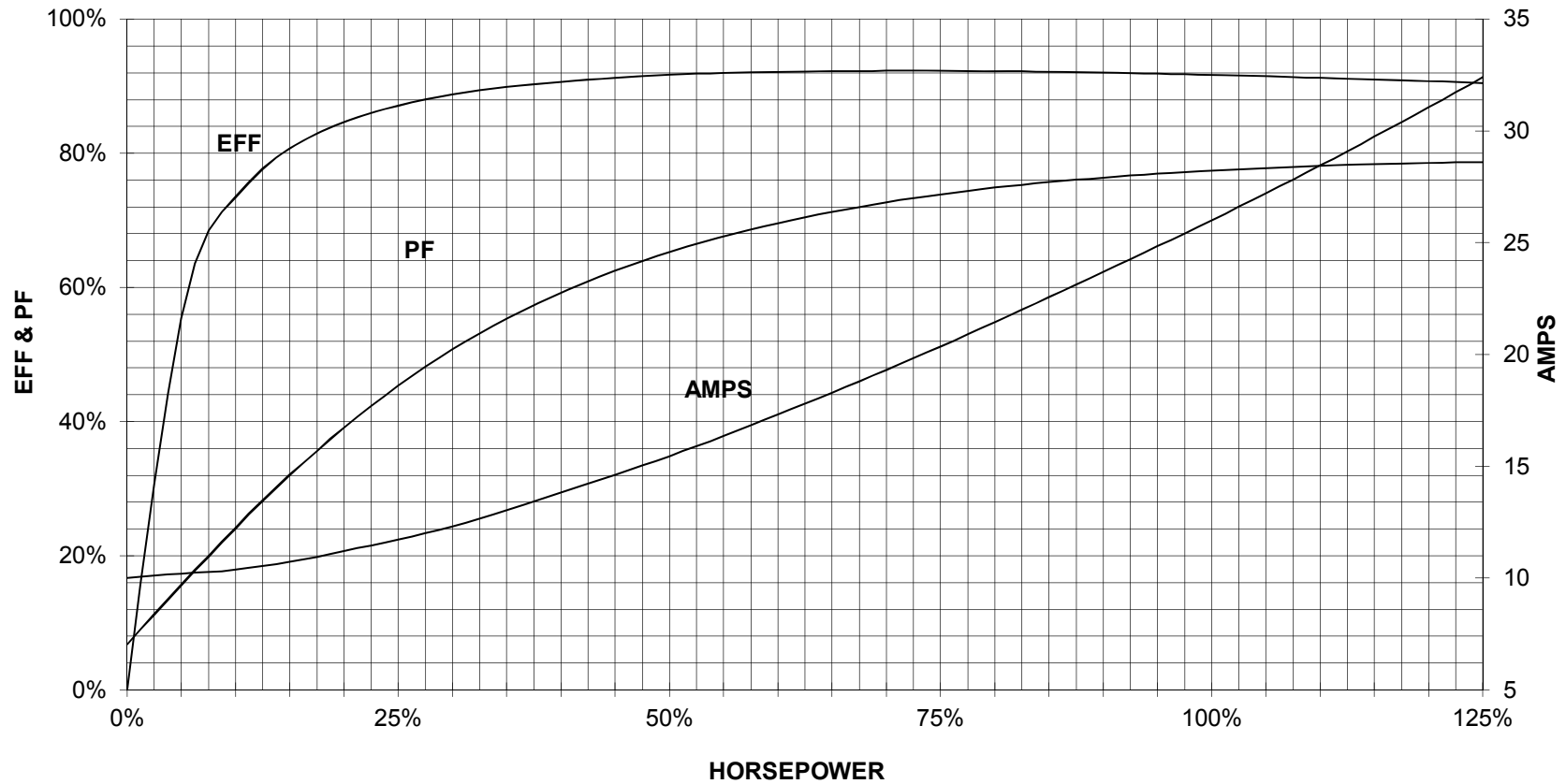
TORQUE & CURRENT VS. SPEED



CUSTOMER: _____ ORDER#: _____

20 HP 1200 RPM 286T FRAME 460 VOLTS 3 PHASE NEMA DESIGN B

SIEMENS INDUSTRY, INC.
PERFORMANCE CURVE
XP100 1D1



CUSTOMER: _____ ORDER #: _____

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

REV. 1