

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

Motor type: FS: 284T - 4p - 25 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] | Δ/Y | f [Hz] | P [HP] | P [kW] | n [rpm] | I Load [Amps] | | | | | 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 | LRC | 4/4 | 3/4 | 2/4 | 4/4 | 3/4 | 2/4 | | | |
| 460 | | 60 | 25.00 | -/- | 1,775 | 30.00 | 23.30 | 17.60 | 11.00 | 183.0 | 93.6 | 94.0 | 93.5 | 84.0 | 80.0 | 71.0 | 74.0 | 180 | 250 |
| 230 | | 60 | 25.00 | -/- | 1,775 | 60.00 | | | | | 93.6 | 94.0 | 93.5 | 84.0 | 80.0 | 71.0 | 74.0 | 180 | 250 |

| | | | | | |
|------------------|--|-----------------------------|---|--------------|------------|
| 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:460 | | Temp. Rise Cl.: B | Amb. Temp.: + to -20 °C @1000 m | kVA: G | IP IP65 |

Mechanical data

| | | | |
|--------------------------------------|--------------------------------|-------------------------|------------------|
| Sound level (SPL / SWL) at 60 Hz | 65.0 dB(A) / 76.0 dB(A) | Thickener | Polyurea |
| Octave Band Center Frequencies Hertz | 250 500 1000 2000 4000 8000 Hz | Safe Stall Time Hot | 24 s |
| SPL@3 | dB(A) | Safe Stall Time Cold | 44 s |
| Moment of inertia | 4.4 Lb-ft ² | Frame material | cast iron |
| Ext Load Inertia Capability: | 122.0 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

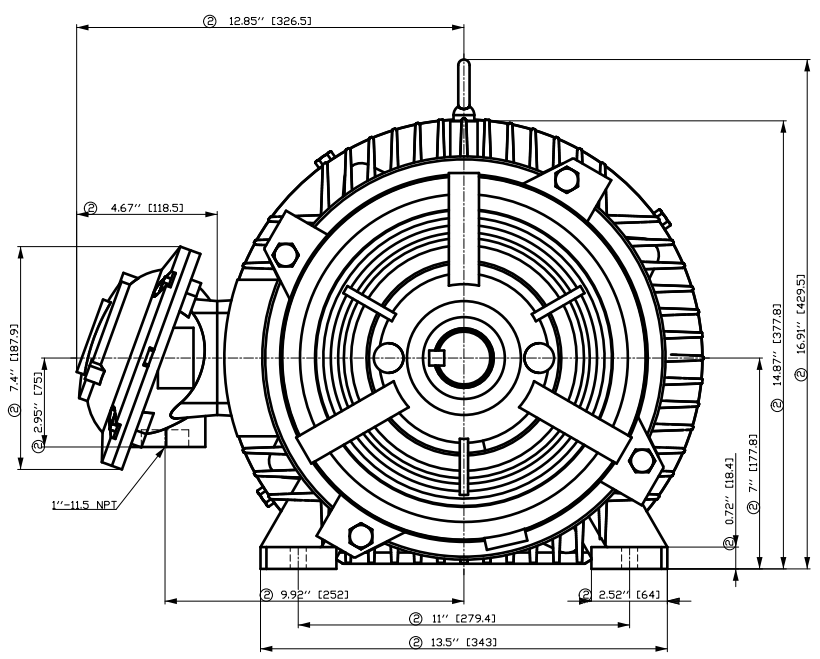
| | | | |
|----------------------|--------------------------------|--------------------------|--------------------|
| Lead Wire Connection | 9 LEAD - DELTA | Terminal box position | (3) Mounting - F-1 |
| Voltage | L1 L1 L1 Connected together | Material of terminal box | |
| LOW | T1 T7 T6 T2 T8 T4 T3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

Notes:

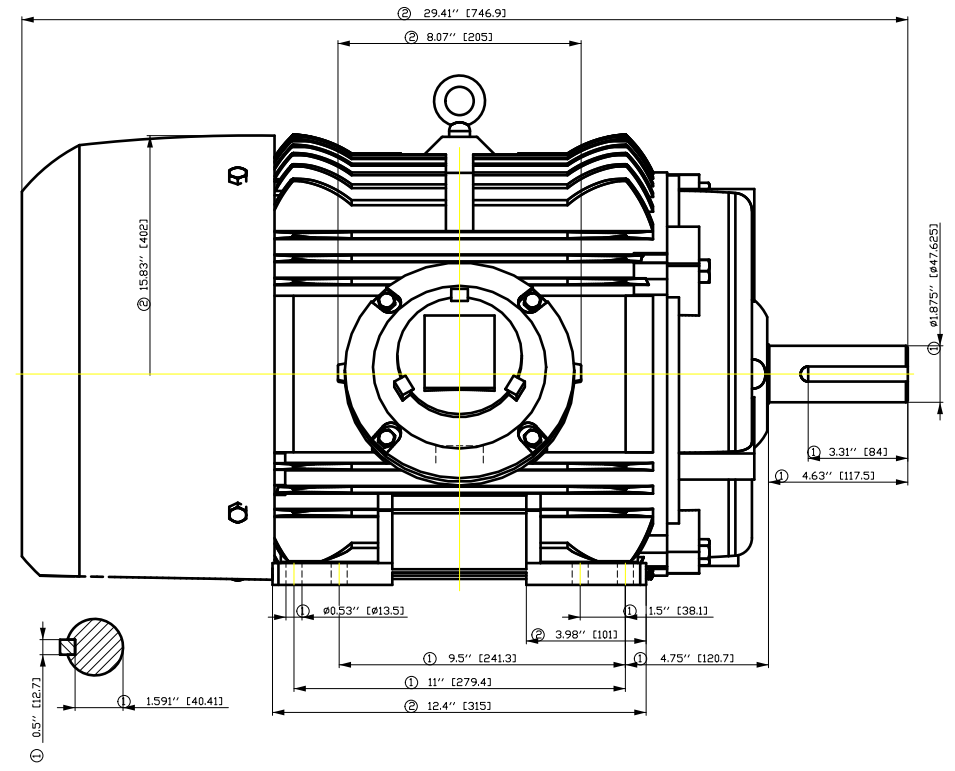
1) I_{L/N} = locked rotor current / current nominal
 2) M_{L/M_N} = locked rotor torque / torque nominal
 3) Value is valid only for DOL operation with motor design IC411
 4) M_{L/M_N} = break down torque / nominal torque
 5) 2) at rated power / at full load

| | | | | |
|------------------|---------------------|-----------------|-------------|---|
| 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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| | | | 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 ÖGF-FCÖÖFFB ÖÖH | Author | ÖÖ ^ } • 4 } 2ÖÖÖ 3 * | É | { { |
| É | Creator | ÖVS | | |
| | Approval | T 2 : ^ 2 @ } * | | |
| | Department | | | |
| | Change Order | MFB | | Doc Type |
| SIEMENS | Doc. State | I ÖÖ ÖÖ | Item No | Paper Size |
| © Siemens AG 2018 | Revision | Index RS | Doc No | 1st Language ^ } 2nd Language 2 ^ |
| | 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 T6 | T7 T4 | T8 T5 | T3 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

title
1MB2121-2CB11-6AG3

document status
free

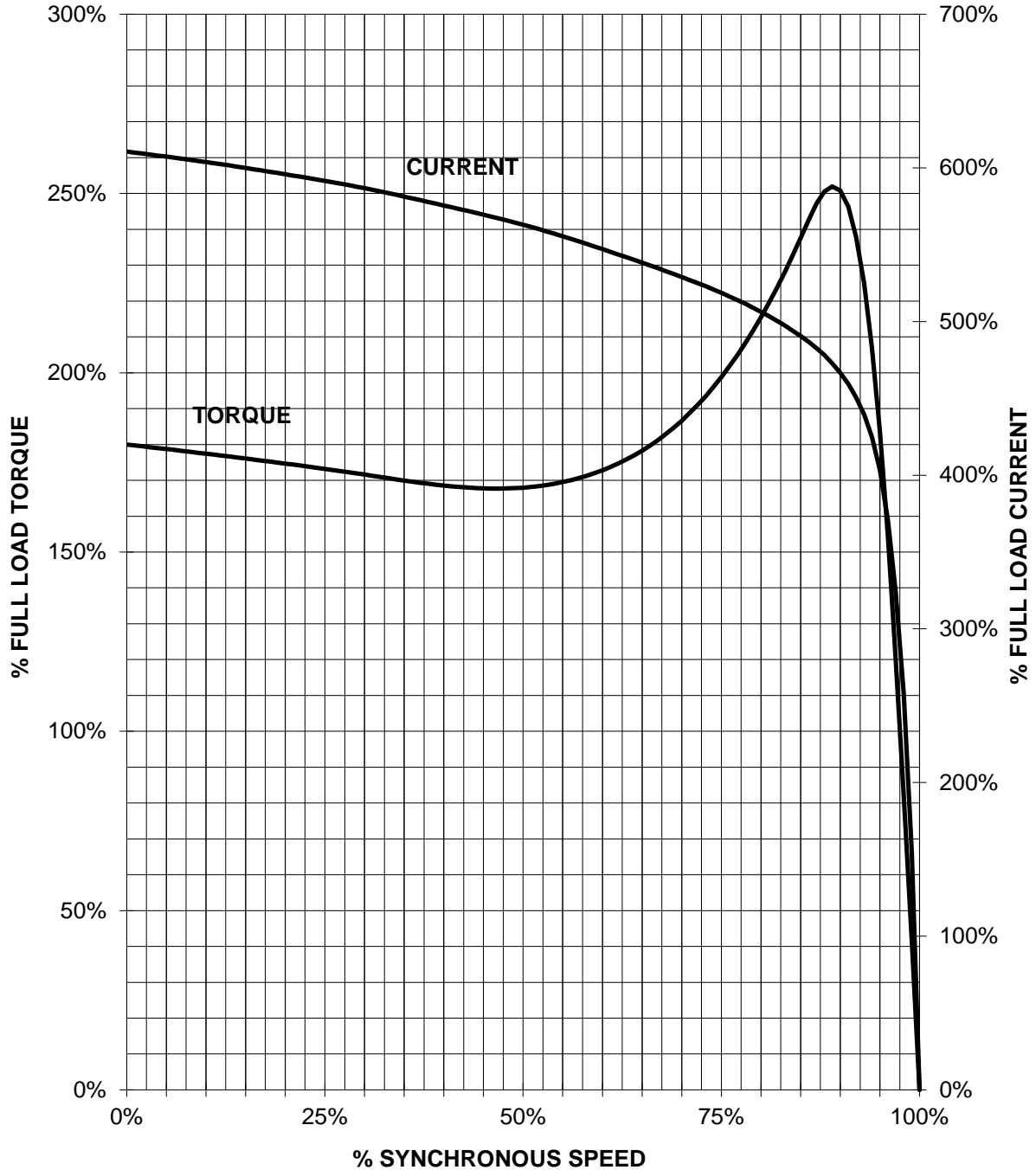
document number

customer

SIEMENS INDUSTRY, INC.

HP 25 VOLTS <600 RPM 1800 TYPE XP100
HZ 60 PHASE 3 FRAME 284T NEMA B

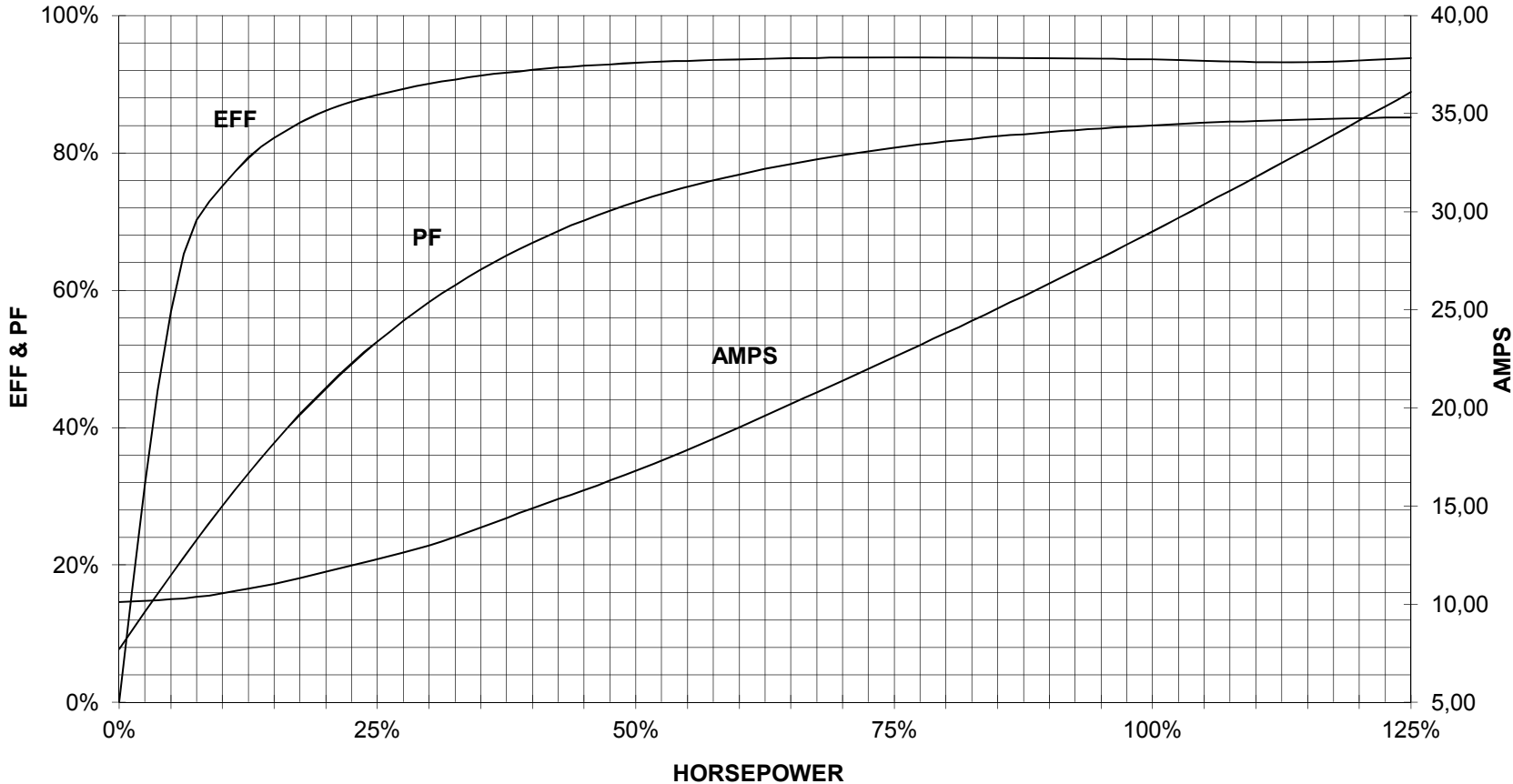
TORQUE & CURRENT VS. SPEED



CUSTOMER: _____ ORDER#: _____

25 HP 1800 RPM 284T FRAME 460 VOLTS 3 PHASE NEMA DESIGN B

SIEMENS INDUSTRY, INC.
PERFORMANCE CURVE
XP100



CUSTOMER: _____ ORDER #: _____

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

REV. 1