

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

Motor type: FS: 145T - 6p - 1 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] | | | | | 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 | | | | |
| 575 | | 60 | 1.00 | -/- | 1,165 | 1.30 | 1.10 | 0.90 | 0.80 | 8.8 | 82.5 | 82.5 | 80.2 | 70.9 | 63.3 | 50.2 | 4.5 | 256 | 344 | |

| | | | | | |
|------------------|--|-----------------------------|---|--------------|------------|
| Frame Type: 145T | 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:88 | | Temp. Rise Cl.: B | Amb. Temp.: + to -20 °C @1000 m | kVA: K | IP IP65 |


Mechanical data

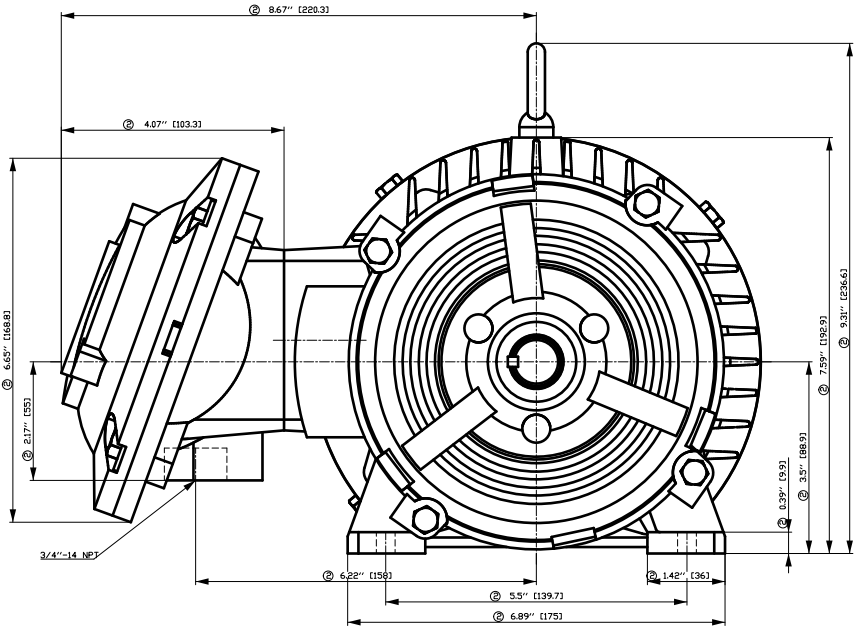
| | | | |
|--------------------------------------|--------------------------------|-------------------------|------------------|
| Sound level (SPL / SWL) at 60 Hz | 50.0 dB(A) / 58.0 dB(A) | Thickener | Polyurea |
| Octave Band Center Frequencies Hertz | 250 500 1000 2000 4000 8000 Hz | Safe Stall Time Hot | 18 s |
| SPL@3 | dB(A) | Safe Stall Time Cold | 31 s |
| Moment of inertia | 0.2 Lb-ft ² | Frame material | cast iron |
| Ext Load Inertia Capability: | 15.0 Lb ft ² | Color, paint shade | |
| Bearings | | Coating (paint finish) | |
| Bearing DE NDE | 6205 Z C3 S0 6205 Z C3 S0 | Ventilation Type | |
| Bearing_Type | Ball Bearing Ball Bearing | Method of cooling | TEFC |
| AFBMA: | 25BC02JP30 25BC02JP30 | Direction of rotation | Bidirectional |
| Grease | | Fan Material | Polypropylen ESD |
| Capacity | 0.1 oz 0.1 oz | VFD | CT: 4:1 VT: 20:1 |
| Grease Type: | Exxon Mobile EM | Space heaters | without |
| | | Brake: | -/- |

Terminal box

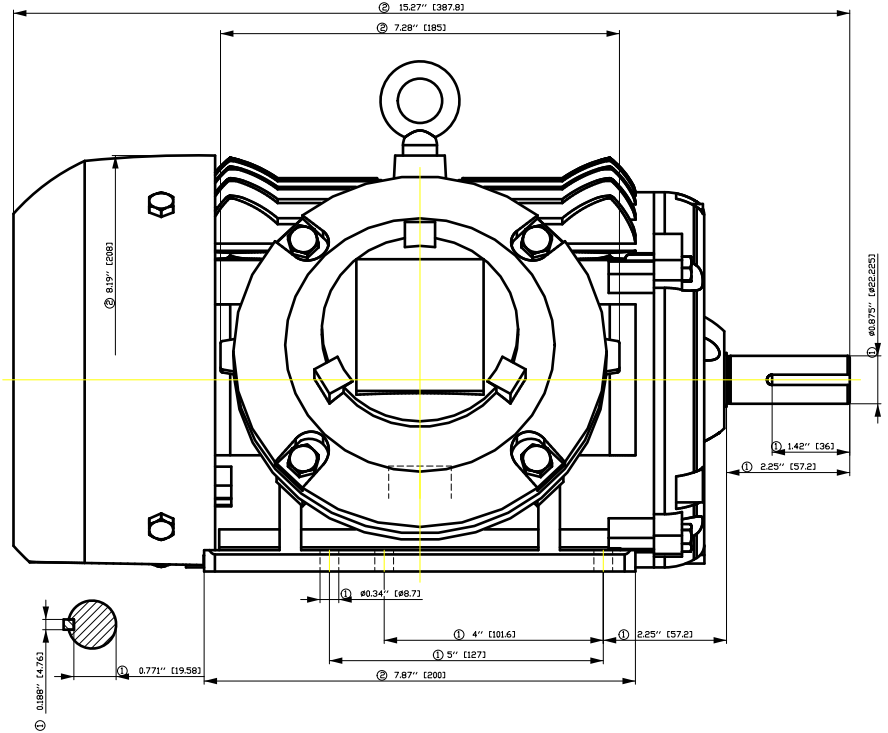
| | | | |
|----------------------|-----------------------------|--------------------------|--------------------|
| Lead Wire Connection | 3 LEAD - WYE | Terminal box position | (3) Mounting - F-1 |
| Voltage | L1 L1 L1 Connected together | Material of terminal box | |
| ---- | ---- | Cable entry | -/-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

Notes:
 I_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> | | | |
|  | document type datasheet | document status released | customer | | document number | | |
| | title 1MB2121-1AC31-3AG3 | rev. 01 | creation date 2022-04-08 16:21 | language en | Page 1/1 | | |
| © Siemens AG 2022 | | | | | | | |

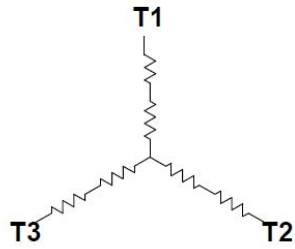


- ① Tolerances according to NEMA std.
- ② All these dimensions corresponding to assemblies and castings shall have a tolerance as per DIN standard 1686-GTB 19.
- ③ Not according to NEMA std.



| Tolerance | Surface | Material | Weight | Scale |
|-------------------|--------------|-----------------|--------|-------|
| FT ÖGFCEÖHF#ÖÖH | Author | ÖV | 1 | 1:1 |
| É | Creator | ÖVS | 1 | 1:1 |
| | Approval | T a : ^ & @ } * | | |
| | Department | | | |
| | Change Order | MFB | | |
| | Doc. State | I ð BGG | | |
| SIEMENS | Revision | Index RS | | |
| © Siemens AG 2018 | Project No | É | | |
| | Item No | | | |
| | Doc No | | | |
| | Ref No | É | | |
| | Doc Type | | | |
| | Paper Size | CH | | |
| | 1st Language | ^ | | |
| | 2nd Language | â^ | | |
| | Sheet | F of F | | |

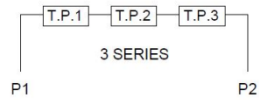
Main terminal diagram



| 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

document type
Wiring Diagram

title
1MB2121-1AC31-3AG3

document status
free

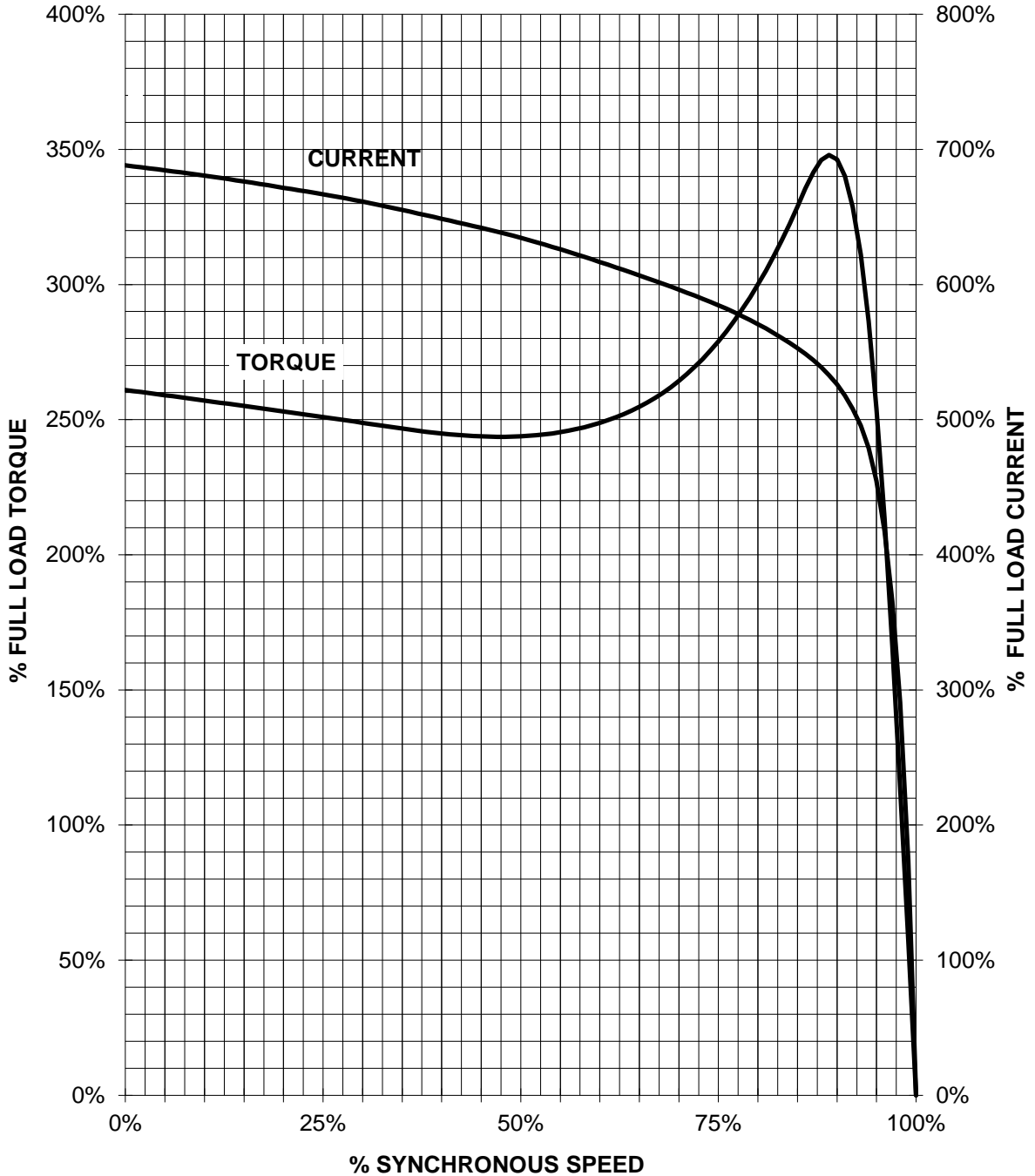
document number

customer

SIEMENS INDUSTRY, INC.

HP 1 VOLTS <600 RPM 1200 TYPE XP100
HZ 60 PHASE 3 FRAME 145T NEMA B

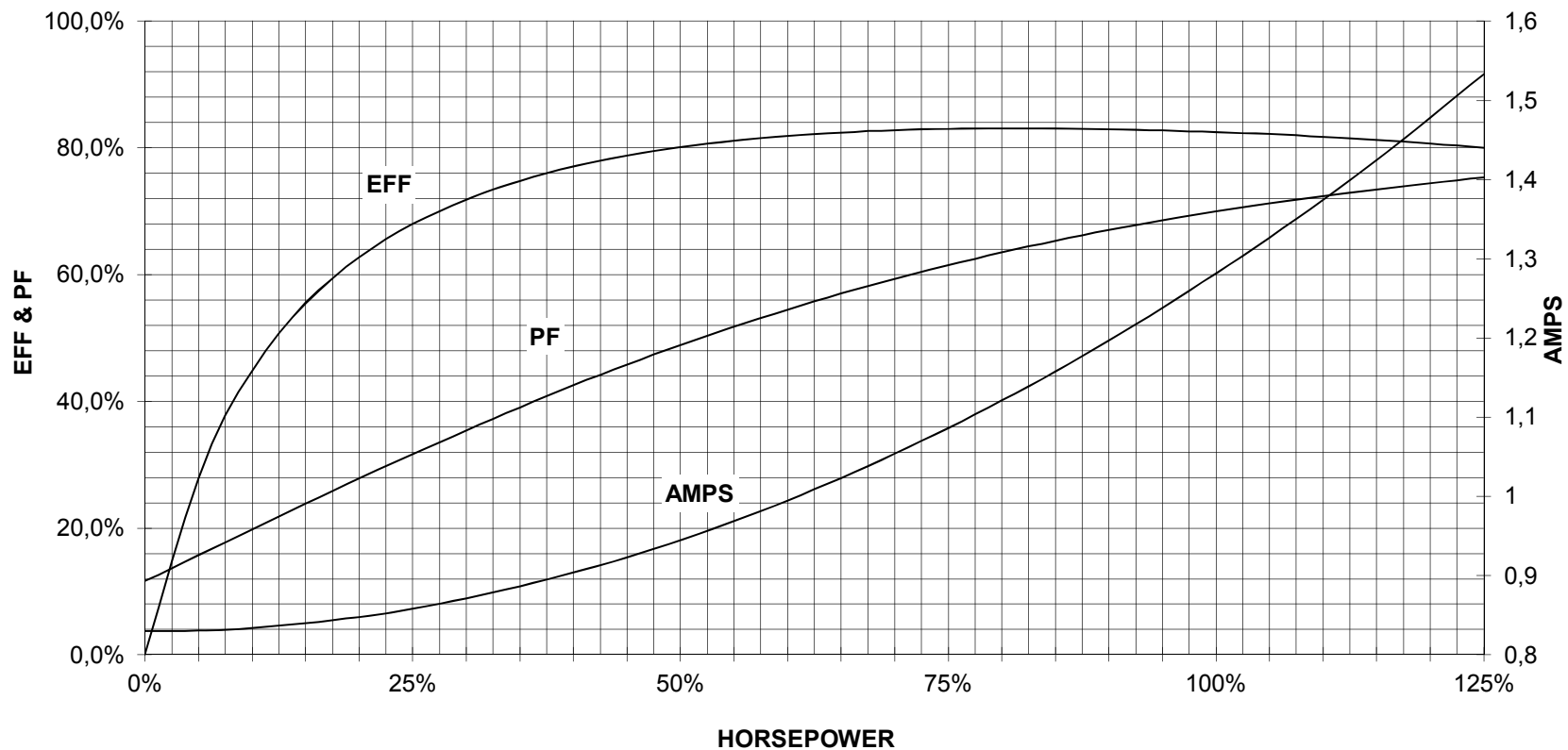
TORQUE & CURRENT VS. SPEED



CUSTOMER: _____ ORDER#: _____

1 HP 1200 RPM 145T 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