

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

Motor type: FS: B445T - 6p - 125 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 | 125.00 | -/- | 1,185 | 144.00 | 112.20 | 83.20 | 48.00 | 908.0 | 95.0 | 95.4 | 95.1 | 85.0 | 82.0 | 74.0 | 554.0 | 160 | 200 | |

| | | | | | |
|-------------------|--|-----------------------------|---------------------------------------|--------------|------------|
| Frame Type: B445T | 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:1,733 | | Temp. Rise Cl.: B | Amb. Temp.: + to -20 °C @1000 m | kVA: G | IP IP65 |


Mechanical data

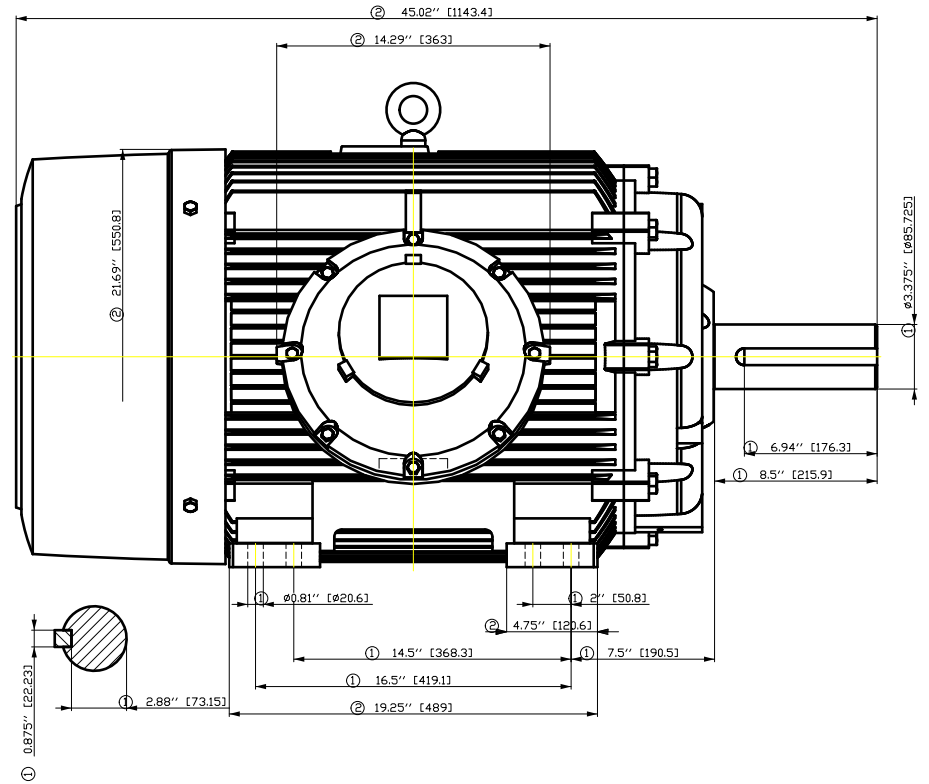
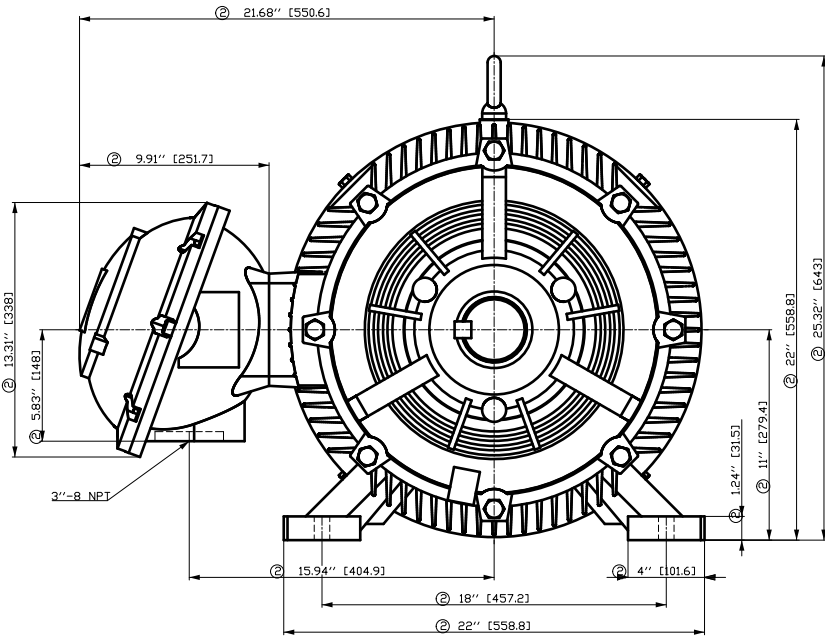
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|--------------------------------------|--------------------------------|-------------------------|------------------|
| Sound level (SPL / SWL) at 60 Hz | 75.0 dB(A) / 86.0 dB(A) | Thickener | Polyurea |
| Octave Band Center Frequencies Hertz | 250 500 1000 2000 4000 8000 Hz | Safe Stall Time Hot | 25 s |
| SPL@3 | dB(A) | Safe Stall Time Cold | 35 s |
| Moment of inertia | 58.5 Lb-ft ² | Frame material | cast iron |
| Ext Load Inertia Capability: | 1450.0 Lb ft ² | Color, paint shade | |
| Bearings | | Coating (paint finish) | |
| Bearing DE NDE | 6318 Z C3 S0 6316 Z C3 S0 | Ventilation Type | |
| Bearing_Type | Ball Bearing Ball Bearing | Method of cooling | TEFC |
| AFBMA: | 90BC03JP30 80BC03JP30 | Direction of rotation | Bidirectional |
| Grease | | Fan Material | Polypropylen ESD |
| Capacity | 14.5 oz 7.5 oz | VFD | CT: 4:1 VT: 20:1 |
| Grease Type: | Exxon Mobile EM | Space heaters | without |
| | | Brake: | -/- |

Terminal box

| | | | |
|----------------------|-----------------------------|--------------------------|--------------------|
| Lead Wire Connection | 6 LEAD - DELTA | 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 |

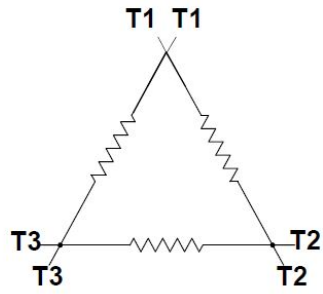
| | | | | | |
|--|-----------------------------|-------------------------------|-------------|--|----------------|
| responsible dep. DI MC LVM | technical reference | created by DT Configurator | approved by | <i>Technical data are subject to change! There may be discrepancies between software and hardware versions</i> | |
|  | document type datasheet | document status released | customer | | |
| | title 1MB2221-4EC21-2AA3 | document number | rev. 01 | creation date 2022-04-09 02:27 | language en |
| © Siemens AG 2022 | | | | Page 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 | |
|-----------------------|--------------|---------------------|----------|--------------|-----------------|
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| | Change Order | MFB | Doc Type | / | |
| | Doc. State | I È ÖÖG | Item No | Paper Size | |
| | Revision | Index RS | Doc No | 1st Language | |
| | | | | 2nd Language | |
| © Siemens AG 2018 | Project No | È | Ref No | È | |
| | | | | Sheet F of F | |

Main terminal diagram



| 6 LEAD DELTA | | | |
|--------------|----|----|-------|
| LINES | | | CONN. |
| L1 | L2 | L3 | |
| T1 | T2 | T3 | Δ |

responsible dep.
DI MC LVM

technical reference

created by

approved by

Project

SIEMENS

document type
Wiring Diagram

title
1MB2221-4EC21-2AA3

document status
free

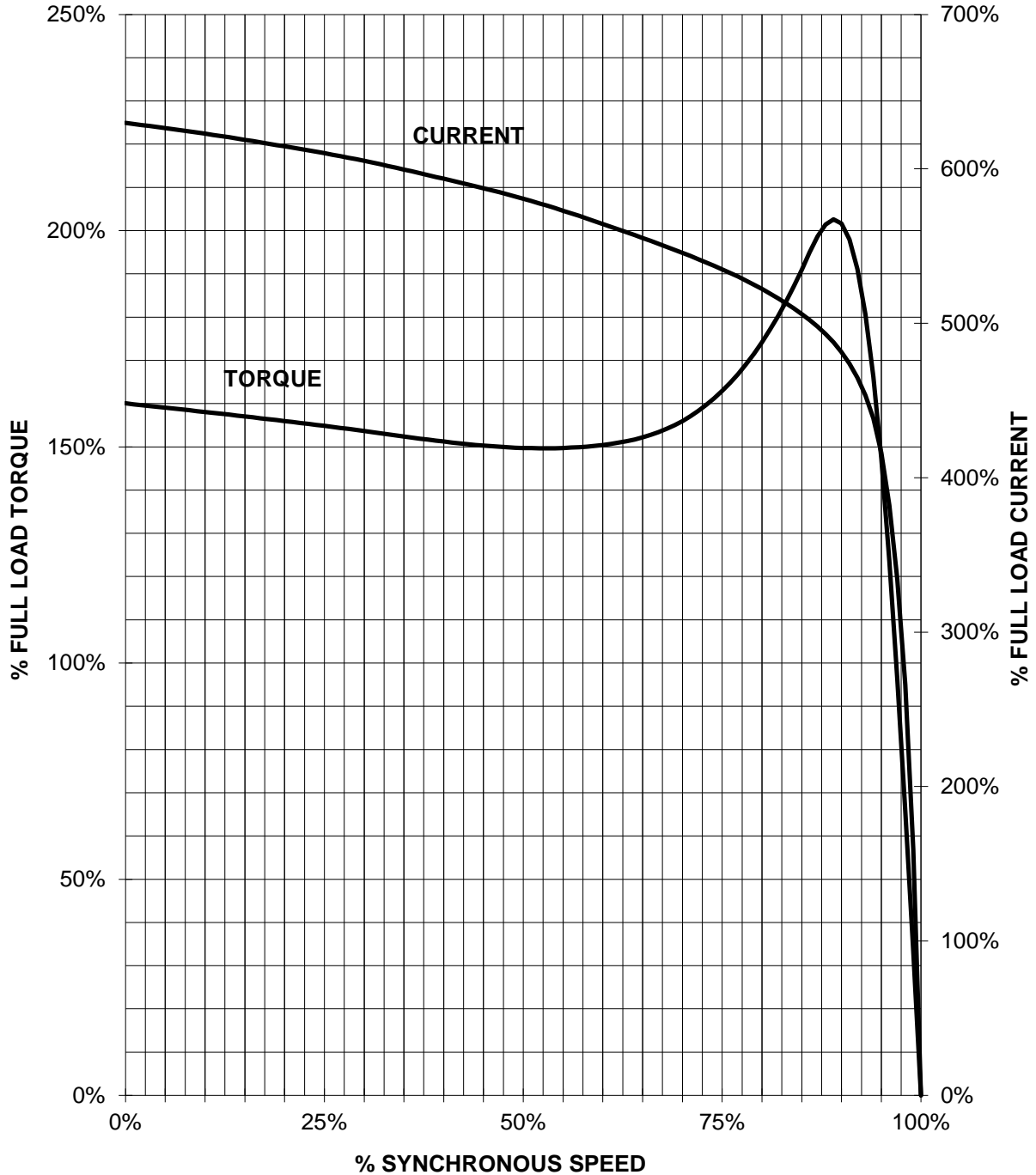
document number

customer

SIEMENS INDUSTRY, INC.

HP 125 VOLTS <600 RPM 1200 TYPE XP100 1D1
HZ 60 PHASE 3 FRAME B445T NEMA B

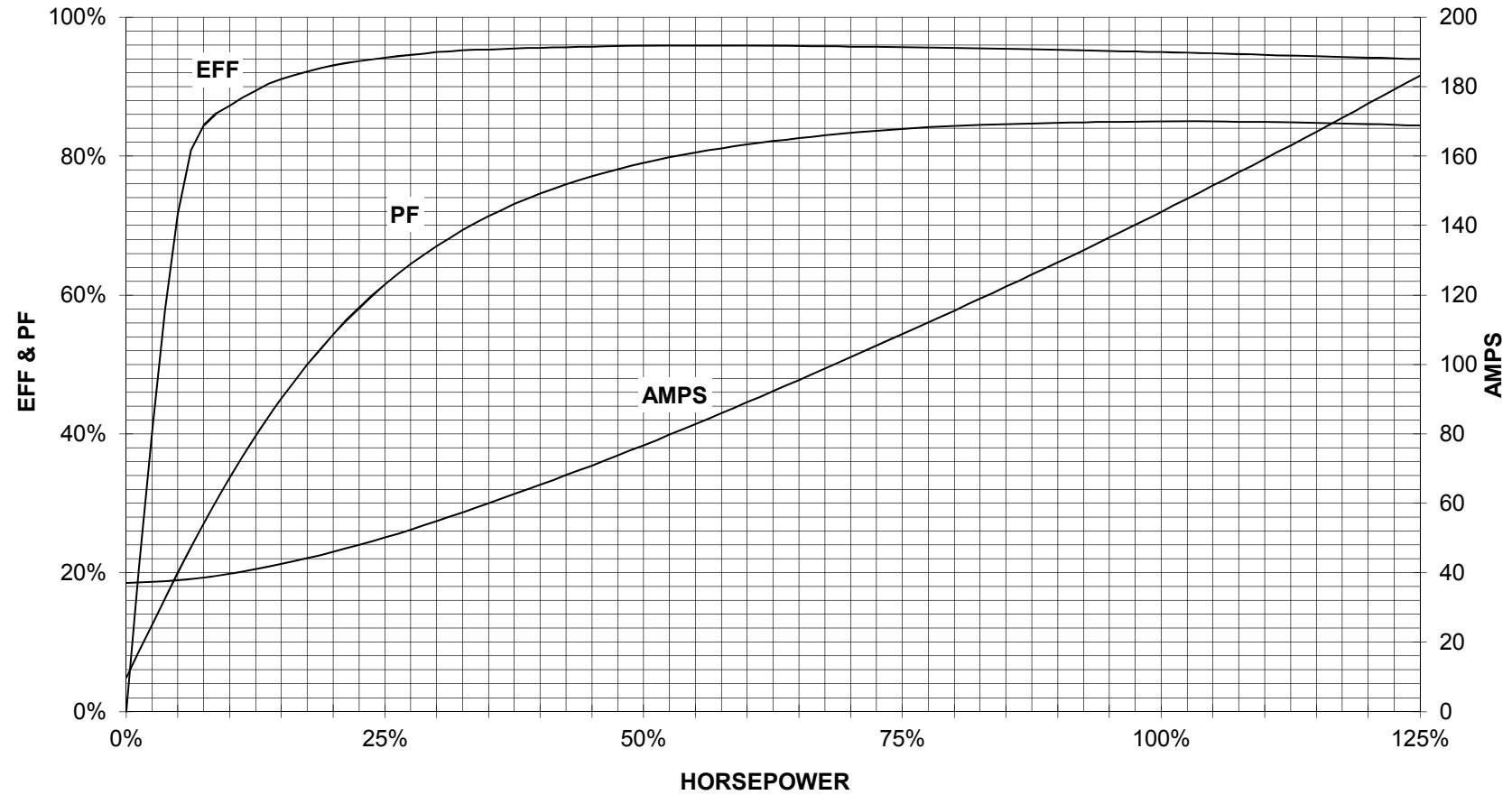
TORQUE & CURRENT VS. SPEED



CUSTOMER: _____ ORDER#: _____

125 HP 1200 RPM B445T 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.

REV. 1