

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

Motor type: FS: B445T - 4p - 150 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] | | | | | 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 | | | |
| 575 | | 60 | 150.00 | -/- | 1,785 | 136.00 | 104.50 | 75.30 | 41.60 | 868.0 | 95.8 | 96.0 | 95.7 | 86.0 | 84.0 | 78.0 | 441.0 | 150 | 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:1,896 | | | | | | Temp. Rise Cl.: B | | Amb. Temp.: + to -20 °C @1000 m | | | kVA: G | | IP IP65 | | | | | | |


Mechanical data

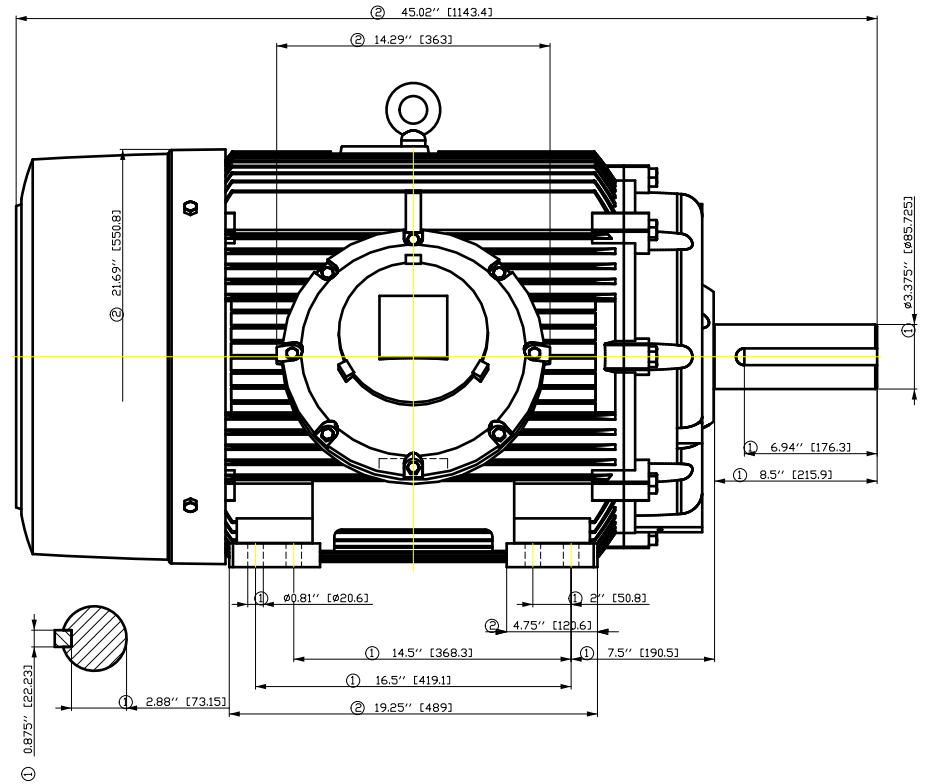
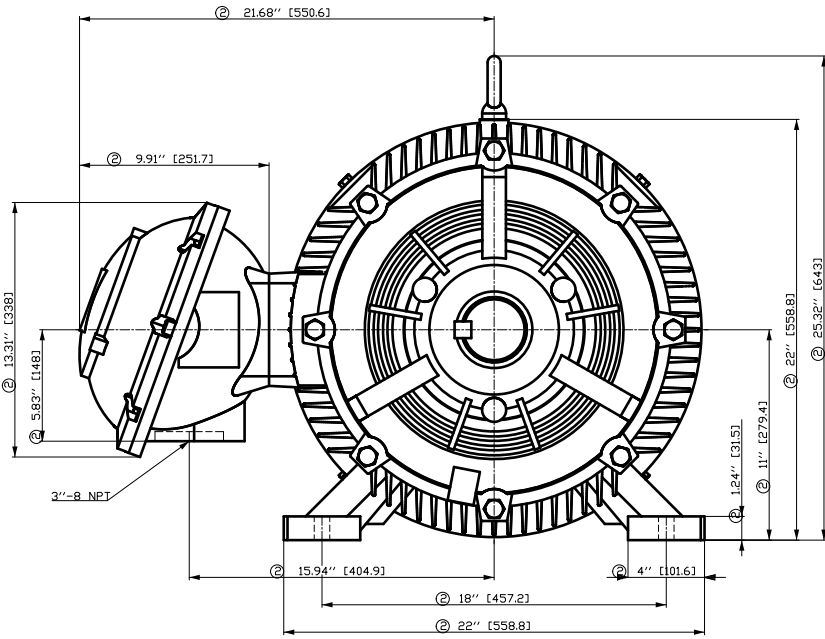
| | | | |
|--------------------------------------|--------------------------|-------------------------|------------------|
| Sound level (SPL / SWL) at 60 Hz | 73.0 dB(A) / 84.0 dB(A) | Thickener | Polyurea |
| Octave Band Center Frequencies Hertz | | Safe Stall Time Hot | 20 s |
| 250 | 500 | 1000 | 2000 |
| 4000 | 8000 | Hz | |
| SPL@3 | | dB(A) | |
| Moment of inertia | 45.0 Lb-ft ² | Safe Stall Time Cold | 30 s |
| Ext Load Inertia Capability: | 640.0 Lb ft ² | Frame material | cast iron |
| Bearings | | Color, paint shade | |
| Bearing DE NDE | 6318 Z C3 S0 | 6316 Z C3 S0 | |
| Bearing_Type | Ball Bearing | Ball Bearing | |
| AFBMA: | 90BC03JP30 | 80BC03JP30 | |
| Grease | | Coating (paint finish) | |
| Capacity | 14.5 oz | 7.5 oz | |
| Grease Type: | Exxon Mobile EM | | |
| | | Ventilation Type | |
| | | Method of cooling | TEFC |
| | | Direction of rotation | Bidirectional |
| | | Fan Material | Polypropylen ESD |
| | | VFD | CT: 4:1 VT: 20:1 |
| | | 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 | -/- |

| | | | |
|---|---|---|--|
| 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 |

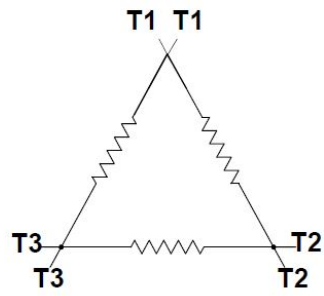
| | | | | | | | |
|--|-----------------------------|-----------------------------------|----------------|---|--|--|--|
| responsible dep. DI MC LVM | technical reference | created by DT Configurator | approved by | <i>Technical data are subject to change! There may be discrepancies between software and customer interface</i> | | | |
|  | document type datasheet | document status released | customer | | | | |
| | title 1MB2221-4EB21-3AA3 | document number | | | | | |
| © Siemens AG 2022 | rev. 01 | creation date 2022-04-09 02:25 | language en | 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 | |
|-------------------|--------------|----------------|----------|--------------|-----|
| FT ÖGGR-ÖÖG-ÖÖH | Author | ÖS T: ^@~}* | E | | |
| E | Creator | | | | ÖVS |
| | Approval | | | | |
| | Department | | | | |
| | Change Order | MFB | Doc Type | / | |
| | Doc. State | I ÖGGR | Item No | Paper Size | |
| | Revision | Index RS | Doc No | 1st Language | |
| | | | | 2nd Language | |
| © Siemens AG 2018 | Project No | E | Ref No | E | |
| | | | | Sheet F of F | |

Main terminal diagram



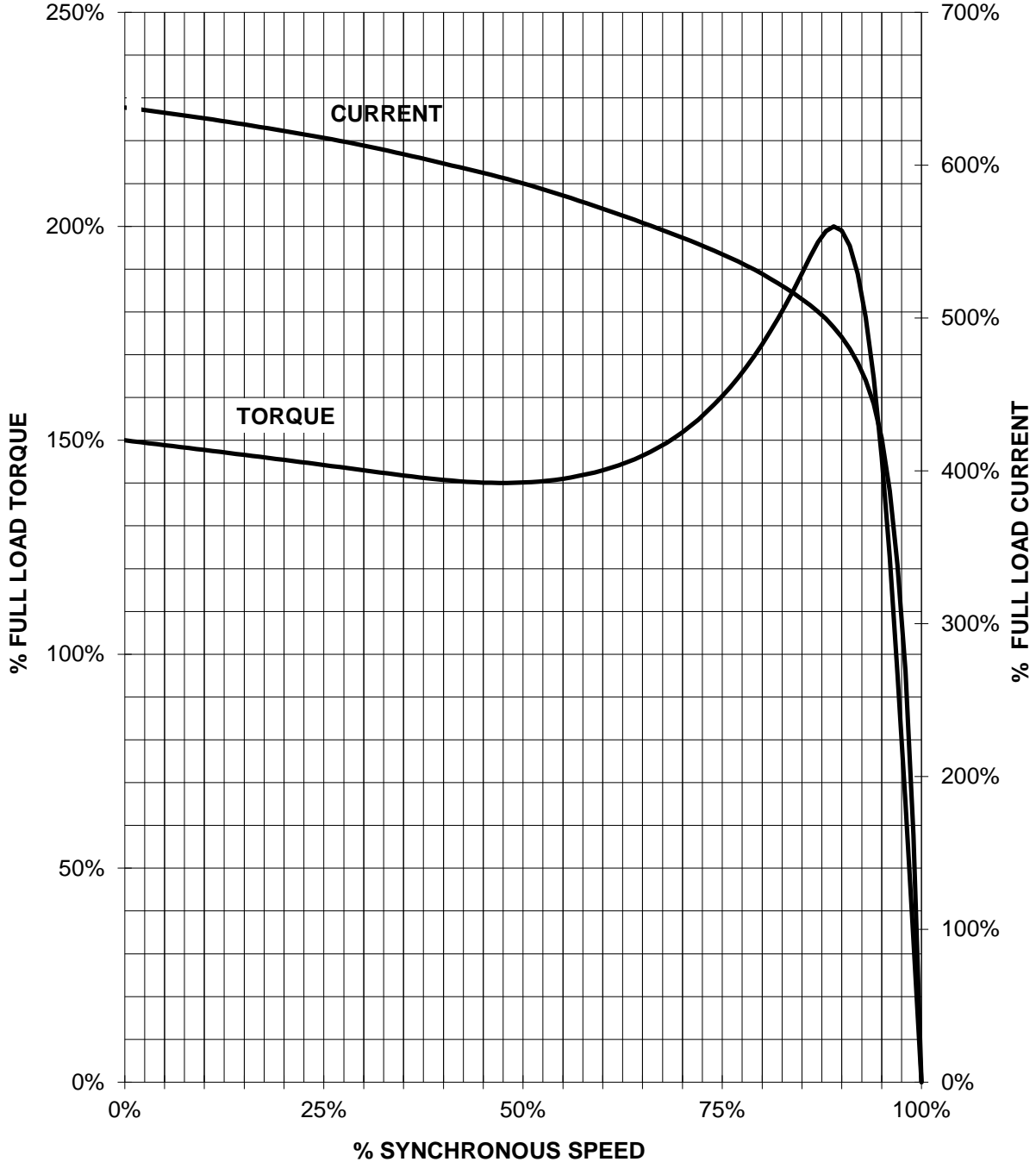
| 6 LEAD DELTA | | | |
|--------------|----|----|-------|
| LINES | | | CONN. |
| L1 | L2 | L3 | |
| T1 | T2 | T3 | Δ |

| | | | | |
|-------------------------------|---------------------------------|-------------------------|-----------------------------|-------------------------------|
| responsible dep. DI MC LVM | technical reference | created by | approved by | Project |
| SIEMENS | document type Wiring Diagram | document status free | | customer |
| | title 1MB2221-4EB21-3AA3 | document number | | |
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SIEMENS INDUSTRY, INC.

HP 150 VOLTS <600 RPM 1800 TYPE XP100 1D1
HZ 60 PHASE 3 FRAME B445T NEMA B

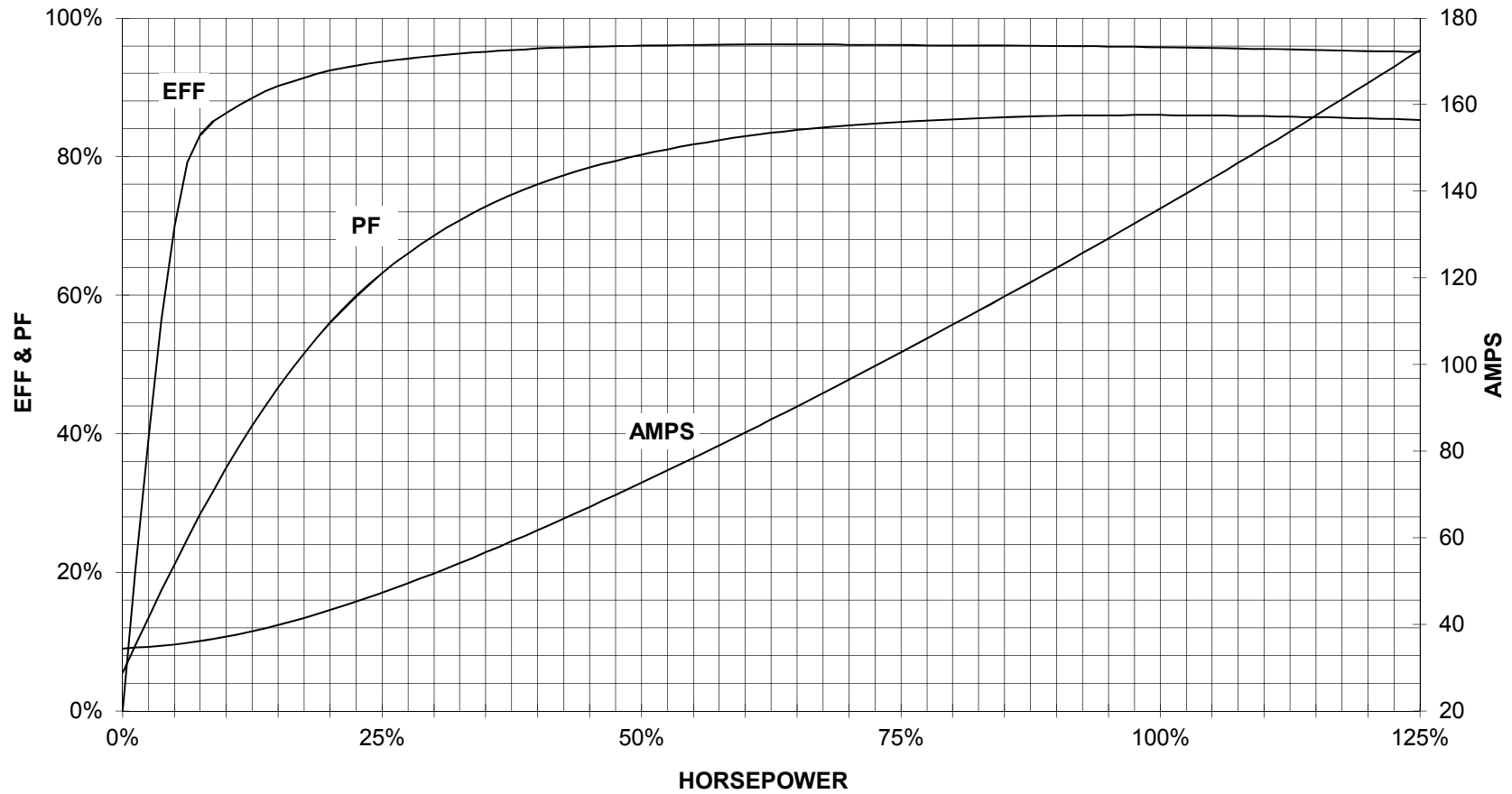
TORQUE & CURRENT VS. SPEED



CUSTOMER: _____ ORDER#: _____

150 HP 1800 RPM B445T FRAME 575 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