

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

Motor type: FS: 449TS - 2p - 300 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 | | | |
| 460 | | 60 | 300.00 | -/- | 3,570 | 325.00 | 244.30 | 171.50 | 68.00 | 2200.0 | 95.8 | 95.8 | 95.2 | 91.0 | 90.0 | 86.0 | 441.0 | 100 | 200 |
| Frame Type: 449TS | | 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:2,300 | | | | | | Temp. Rise Cl.: B | | Amb. Temp.: + to -20 °C @1000 m | | | kVA: G | | IP IP65 | | | | | | |


Mechanical data

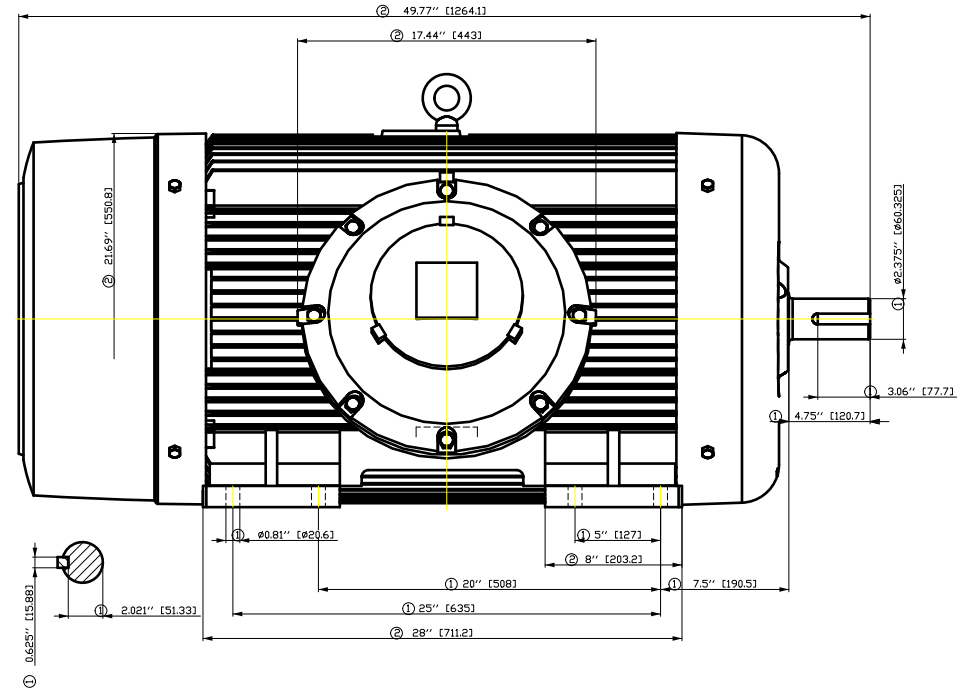
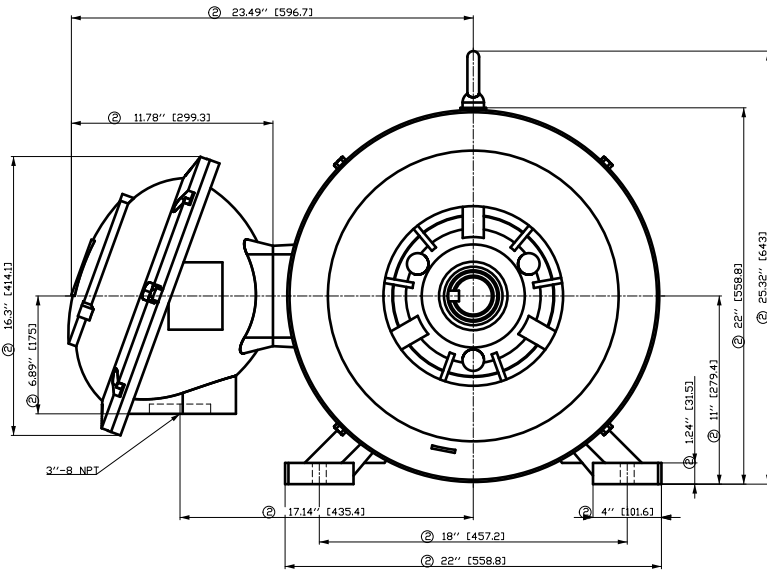
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|--------------------------------------|--------------------------|-------------------------|-----------------------|
| Sound level (SPL / SWL) at 60 Hz | 91.0 dB(A) / 103.0 dB(A) | Thickener | Polyurea |
| Octave Band Center Frequencies Hertz | | Safe Stall Time Hot | 12 s |
| 250 | 500 | 1000 | 2000 |
| 4000 | 8000 | Hz | |
| SPL@3 | dB(A) | | Safe Stall Time Cold |
| | | Frame material | cast iron |
| Moment of inertia | 39.1 Lb-ft ² | Color, paint shade | |
| Ext Load Inertia Capability: | 246.0 Lb ft ² | Coating (paint finish) | |
| Bearings | | Ventilation Type | |
| Bearing DE NDE | 6316 Z C3 S0 | 6316 Z C3 S0 | Method of cooling |
| Bearing_Type | Ball Bearing | Ball Bearing | TEFC |
| AFBMA: | 80BC03JP30 | 80BC03JP30 | Direction of rotation |
| Grease | | Polypropylen ESD | |
| Capacity | 7.5 oz | 7.5 oz | VFD |
| Grease Type: | Exxon Mobile EM | | 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 | -/- |
| ---- | 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 | |

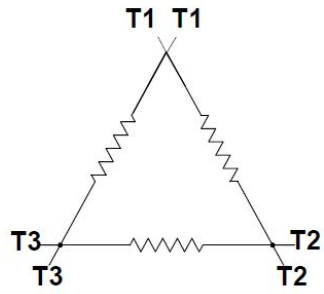
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|--|---------------------|------------------|-------------|--|--|--|
| responsible dep. | technical reference | created by | approved by | <i>Technical data are subject to change! There may be discrepancies between software and hardware versions</i> | | |
| DI MC LVM | | DT Configurator | | | | |
|  | document type | document status | | customer | | |
| | datasheet | released | | | | |
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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 |
|---------------------------|---|----------------------|--------------|--------------|
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| | Revision | Index | Doc No | Paper Size |
| © Siemens AG 2018 | Project No | Ref No | 1st Language | 2nd Language |
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| | | | 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

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document type
Wiring Diagram

title
1MB2221-4DA61-2AA3

document status
free

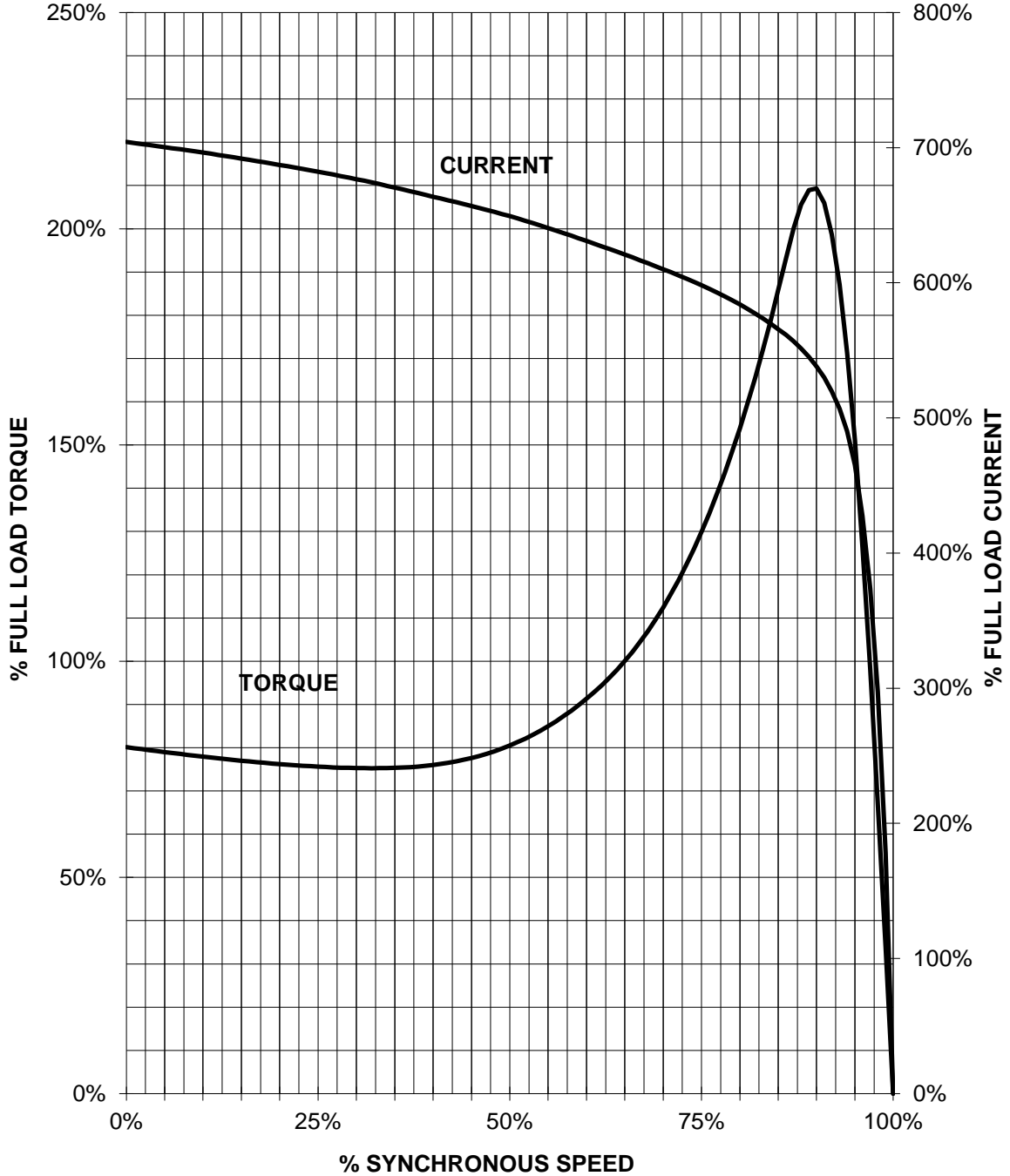
document number

customer

SIEMENS INDUSTRY, INC.

HP 300 VOLTS <600 RPM 3600 TYPE XP100 1D1
HZ 60 PHASE 3 FRAME 449TS NEMA B

TORQUE & CURRENT VS. SPEED



CUSTOMER: _____ ORDER#: _____