

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

Motor type: FS: 449TS - 2p - 250 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 | 250.00 | -/- | 3,575 | 265.00 | 201.00 | 137.40 | 45.00 | 1825.0 | 95.8 | 96.0 | 95.7 | 91.0 | 91.0 | 89.0 | 368.0 | 120 | 200 |

| | | | | | |
|-------------------|------------------------------------------------|-----------------------------|-----------------------------------------------------------|--------------|------------|
| Frame Type: 449TS | 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:2,300 | | Temp. Rise Cl.: B | Amb. Temp.: + to -20 °C @1000 m | kVA: G | IP IP65 |


Mechanical data

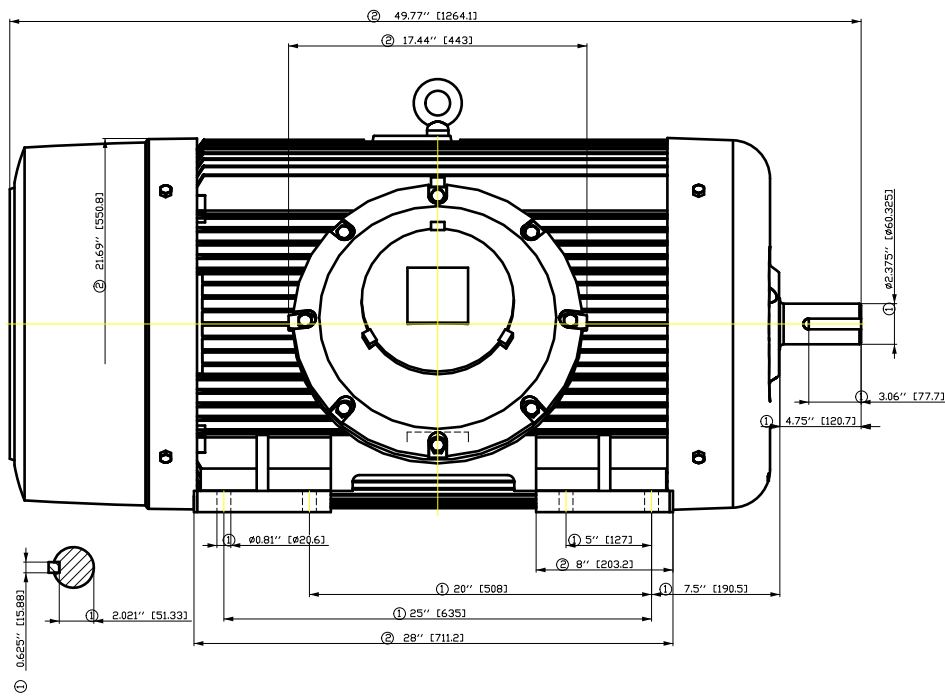
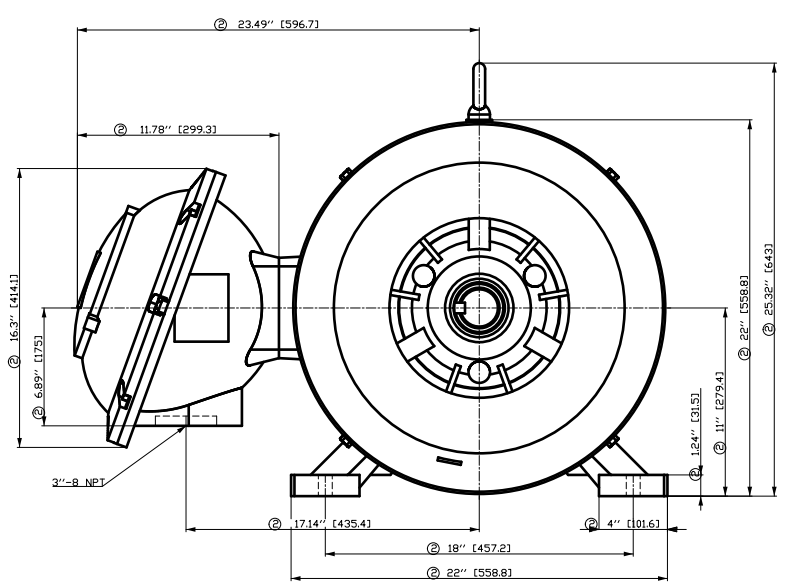
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|--------------------------------------|--------------------------------|-------------------------|------------------|
| Sound level (SPL / SWL) at 60 Hz | 82.0 dB(A) / 94.0 dB(A) | Thickener | Polyurea |
| Octave Band Center Frequencies Hertz | 250 500 1000 2000 4000 8000 Hz | Safe Stall Time Hot | 12 s |
| SPL@3 | dB(A) | Safe Stall Time Cold | 18 s |
| Moment of inertia | 39.3 Lb-ft ² | Frame material | cast iron |
| Ext Load Inertia Capability: | 210.0 Lb ft ² | Color, paint shade | |
| Bearings | | Coating (paint finish) | |
| Bearing DE NDE | 6316 Z C3 S0 6316 Z C3 S0 | Ventilation Type | |
| Bearing_Type | Ball Bearing Ball Bearing | Method of cooling | TEFC |
| AFBMA: | 80BC03JP30 80BC03JP30 | Direction of rotation | Bidirectional |
| Grease | | Fan Material | Polypropylen ESD |
| Capacity | 7.5 oz 7.5 oz | VFD | CT: n/a 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

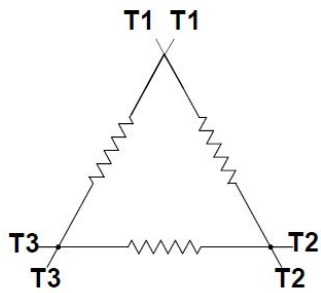
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|------------------------------------------------------------------------------------|-----------------------------|-----------------------------------|----------------|----------------------------------------------------------------------------------------------------------------|--|--|--|
| 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 1MB2121-4DA51-2AG3 | document number | | | | | |
| © Siemens AG 2022 | rev. 01 | creation date 2022-04-09 02:08 | 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 E | Scale 1:1 |
| FT ÖGF CF E ÖÖ F E ÖÖ ÖH E | Author Creator Approval Department Change Order | ÖS T a e : ^ & @ } * | | |
| SIEMENS | Doc. State Revision | I E E G Index RS | MFB Item No Doc No | Doc Type Paper Size 1st Language 2nd Language |
| | © Siemens AG 2018 | Project No E | Ref No E | Sheet F of F |

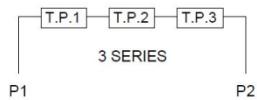
Main terminal diagram



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

Motor protection

THERMOSTATS



responsible dep.
DI MC LVM

technical reference

created by

approved by

Project

SIEMENS

document type
Wiring Diagram

title
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document status
free

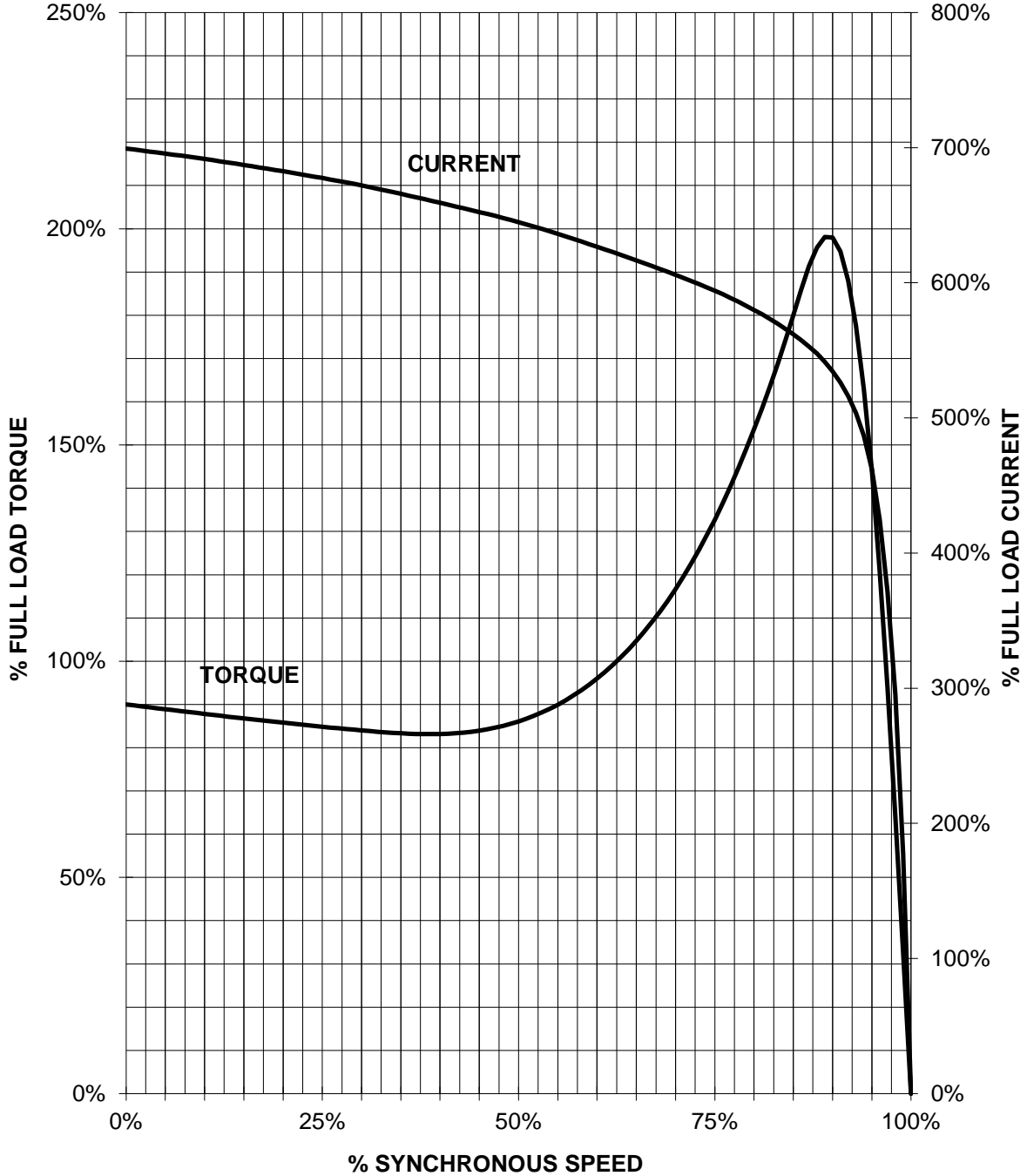
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SIEMENS INDUSTRY, INC.

HP 250 VOLTS <600 RPM 3600 TYPE XP100
HZ 60 PHASE 3 FRAME 449TS NEMA B

TORQUE & CURRENT VS. SPEED



CUSTOMER: _____ ORDER#: _____