

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

Motor type: FS: 182TCV - 8p - 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 | | | |
| 460 | | 60 | 1.00 | -/- | 870 | 2.10 | 1.90 | 1.70 | 1.50 | 9.0 | 81.5 | 80.0 | 77.0 | 56.0 | 47.0 | 36.0 | 8.0 | 138 | 250 | |
| 230 | | 60 | 1.00 | -/- | 870 | 4.20 | | | | | 81.5 | 80.0 | 77.0 | 56.0 | 47.0 | 36.0 | 8.0 | 138 | 250 | |

| | | | | | |
|--------------------|---|-----------------------------|---|--------------|------------|
| Frame Type: 182TCV | Type of constr.: (L) Round body - C-Face w/drip cover + hooks | Ins. Cl.:Insulation class F | Motor Prot.:(G) Thermostats, Klixon type, normally closed | NEMA Des.: B | S.F.: 1.15 |
| Mtr. WT:105 | | Temp. Rise Cl.: B | Amb. Temp.: + to -20 °C @1000 m | kVA: J | IP IP65 |

Mechanical data

| | | | |
|--------------------------------------|--------------------------------|-------------------------|------------------|
| Sound level (SPL / SWL) at 60 Hz | 54.0 dB(A) / 63.0 dB(A) | Thickener | Polyurea |
| Octave Band Center Frequencies Hertz | 250 500 1000 2000 4000 8000 Hz | Safe Stall Time Hot | 50 s |
| SPL@3 | | Safe Stall Time Cold | 68 s |
| Moment of inertia | 0.2 Lb-ft ² | Frame material | cast iron |
| Ext Load Inertia Capability: | 31.0 Lb ft ² | Color, paint shade | |
| Bearings | | Coating (paint finish) | |
| Bearing DE NDE | 6206 Z C3 S0 6206 Z C3 S0 | Ventilation Type | |
| Bearing_Type | Ball Bearing Ball Bearing | Method of cooling | TEFC |
| AFBMA: | 30BC02JP30 30BC02JP30 | Direction of rotation | Bidirectional |
| Grease | | Fan Material | Polypropylen ESD |
| Capacity | 0.2 oz 0.2 oz | VFD | CT: 4:1 VT: 20:1 |
| Grease Type: | Exxon Mobile EM | Space heaters | without |
| | | Brake: | -/- |

Terminal box


| | | | |
|----------------------|-----------------------------|--------------------------|--------------------|
| Lead Wire Connection | 9 LEAD - WYE | Terminal box position | (3) Mounting - F-1 |
| Voltage | L1 L1 L1 Connected together | Material of terminal box | |
| LOW | T1 T7 T2 T8 T3 T9 T4 T5 T6 | Cable entry | -/- |
| HIGH | T1 T2 T3 T4 T7-T5 T8-T6 T9 | | |

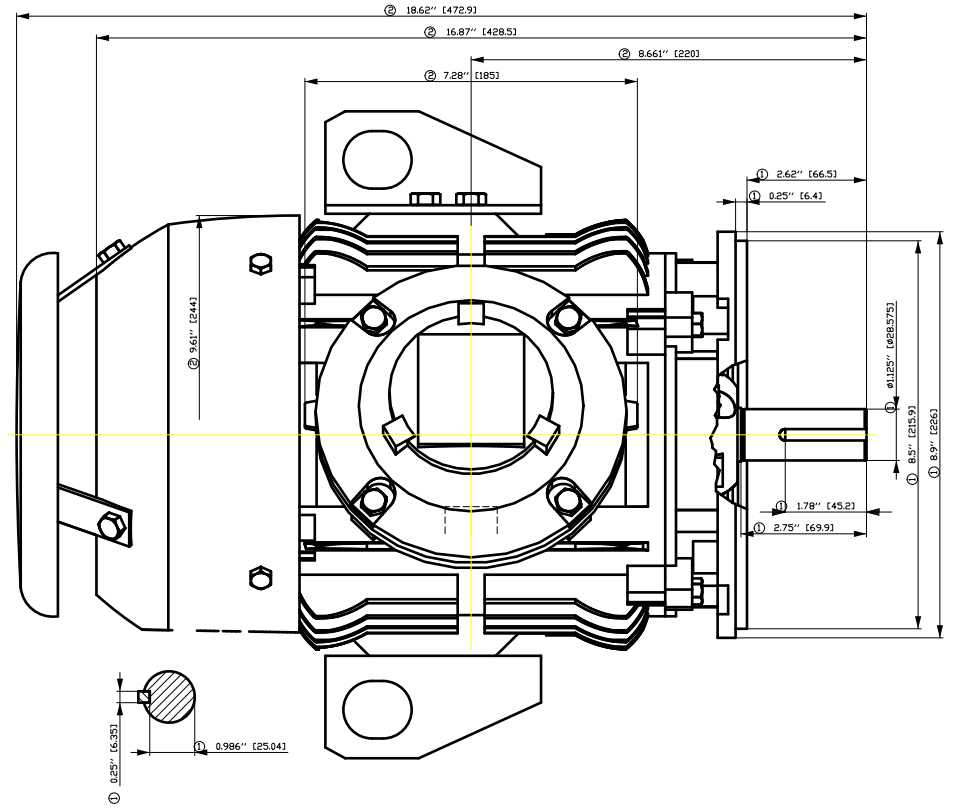
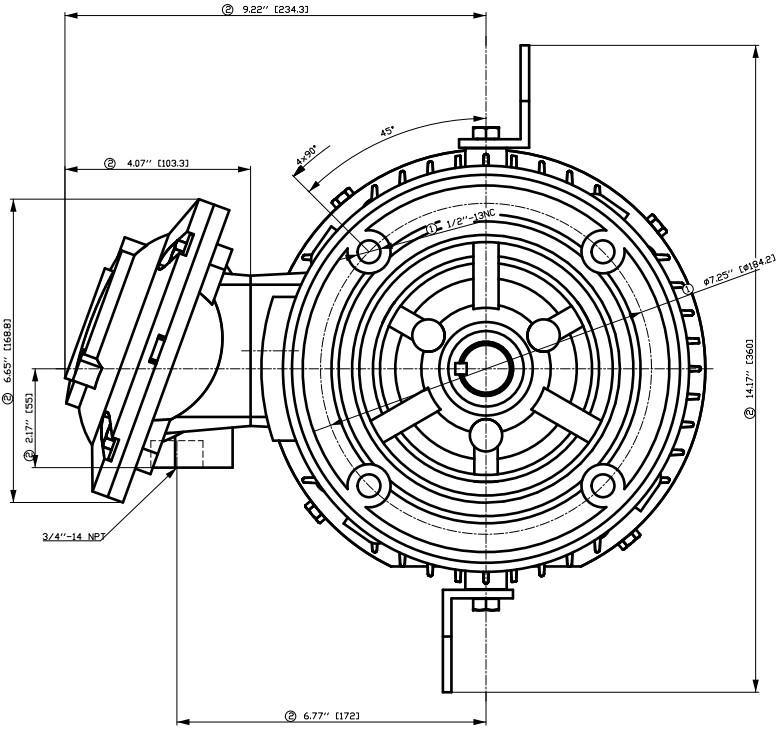
Notes:

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> |
|-------------------------------|---------------------|-------------------------------|-------------|---|

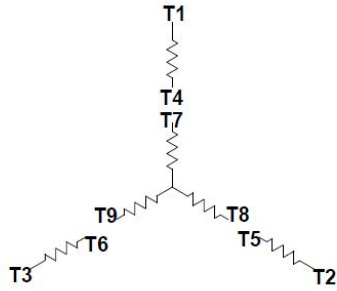
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|--|-----------------------------|-----------------------------------|----------------|-------------|
|  | document type datasheet | document status released | customer | |
| | title 1MB2121-1CD11-6LG3 | document number | | |
| © Siemens AG 2022 | rev. 01 | creation date 2022-04-08 17:49 | 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 |
|--------------------|--------------|-----------------|--------------|--------|
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| É | Creator | ÖVŠ | | |
| | Approval | T aš : ^Š@` } * | | |
| | Department | | | |
| | Change Order | MFB | | |
| | Doc. State | I ð BGG | | |
| | Revision | Index RS | | |
| © Siemens AG 2018 | Project No | É | Ref No | É |
| | | | Doc Type | |
| | | | Paper Size | A4 |
| | | | 1st Language | ^ } |
| | | | 2nd Language | â ^ |
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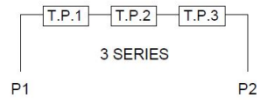
Main terminal diagram



| 9 LEAD WYE | | | | | | |
|------------|----------|----------|----------|--------------------|-------|--|
| Volts | LINES | | | CONNECTED TOGETHER | CONN. | |
| | L1 | L2 | L3 | | | |
| LOW | T1 T7 | T2 T6 | T3 T9 | T4 T5 T6 | YY | |
| HIGH | T1 | T2 | T3 | T4 T7-T5 T8-T6 T9 | Y | |

Motor protection

THERMOSTATS



responsible dep.
DI MC LVM

technical reference

created by

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Project

SIEMENS

document type
Wiring Diagram

title
1MB2121-1CD11-6LG3

document status
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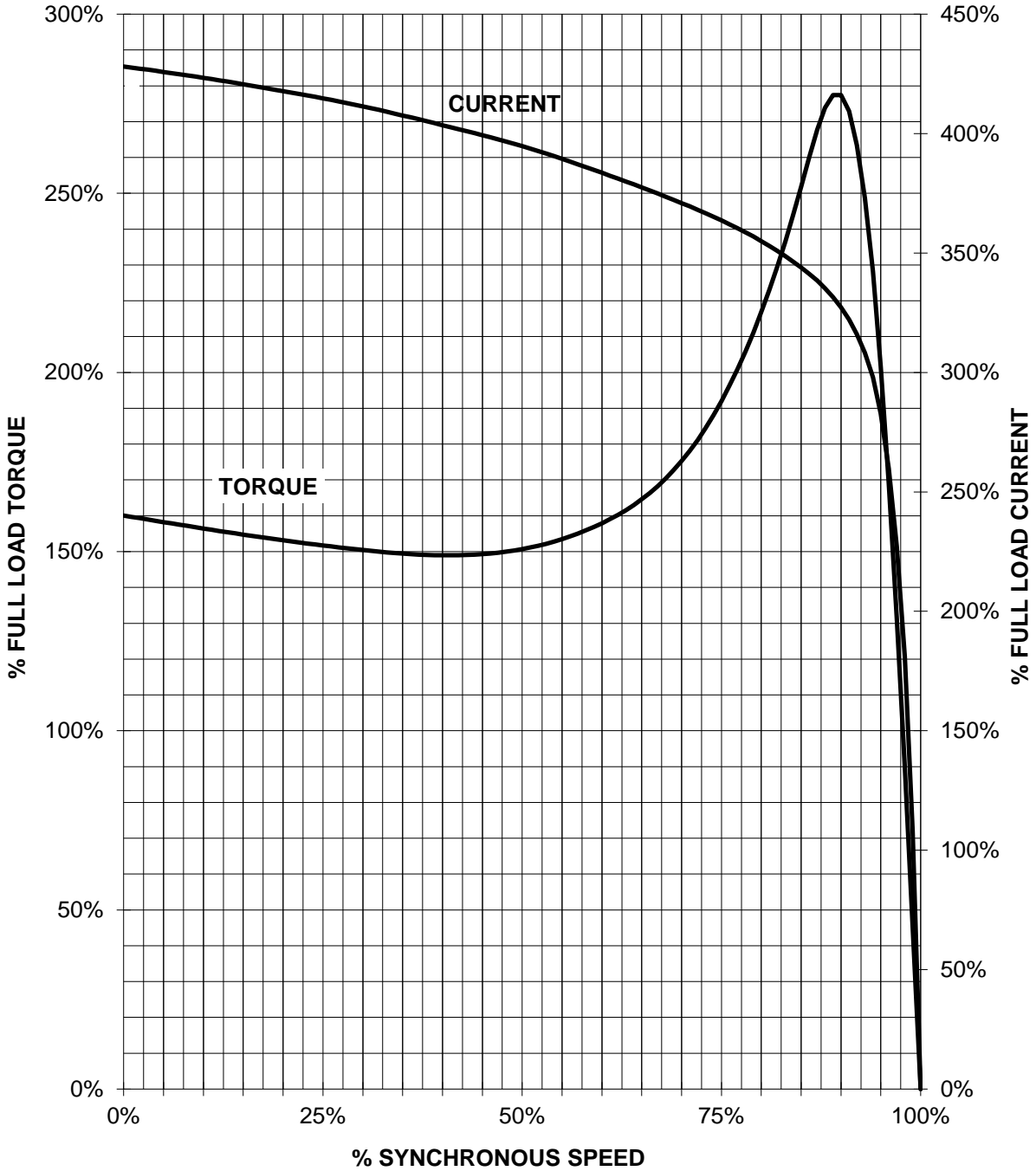
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SIEMENS INDUSTRY, INC.

HP 1 VOLTS <600 RPM 900 TYPE XP100
HZ 60 PHASE 3 FRAME 182T NEMA B

TORQUE & CURRENT VS. SPEED



CUSTOMER: _____ ORDER#: _____