

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

Motor type: **GP100** FS: 145T - 6p - 1 hp -

| | | |
|------------------|-----------------|-----------|
| Client order no. | Item-No. | Offer no. |
| Order no. | Consignment no. | Project |

Remarks

Electrical data

without

| 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 | Y | 60 | 1.00 | 0.75 | 1,200 | 1.60 | 1.30 | 1.20 | 1.00 | 11.0 | 82.5 | 82.5 | 80.2 | 70.9 | 63.3 | 50.2 | 4.5 | 256 | 344 | |
| 230 | YY | 60 | 1.00 | 0.75 | 1,200 | 3.20 | 2.69 | 2.33 | 2.00 | 22.0 | 82.5 | 82.5 | 80.2 | 70.9 | 63.3 | 50.2 | 4.5 | 256 | 344 | |
| 400 | Y | 50 | 0.75 | | 973 | 1.49 | 1.32 | 1.17 | 1.12 | 10.3 | 77.0 | 76.4 | 73.6 | 65.0 | 55.8 | 43.4 | 4.1 | 316 | 442 | |
| 200 | YY | 50 | 0.75 | | 973 | 2.98 | 2.64 | 2.34 | 2.24 | 20.6 | 77.0 | 76.4 | 73.6 | 65.0 | 55.8 | 43.4 | 4.1 | 316 | 442 | |

| | | | | | |
|------------------|--|---------------------------------------|-------------------------------------|--------------|------------|
| Frame Type: 145T | Type of constr.: (E) Foot mounted - C-Face | Ins. Cl.: Standard Class F Insulation | Motor Prot.: (A) Without Protection | NEMA Des.: B | S.F.: 1.15 |
| Mtr. WT.: 70 | | Temp. Rise Cl.: B | Amb. Temp.: + 40 to -20 °C @1000 m | kVA: K | IP 55 |

Mechanical data

| | | | | | | | | | |
|--------------------------------------|-------------------------|------|------|---------------|------|------|-------|-------------------------|------------------------------|
| Sound level (SPL / SWL) at 60 Hz | 50.0 dB(A) / 58.0 dB(A) | | | | | | | Thickener | Polyurea |
| Octave Band Center Frequencies Hertz | | | | | | | | Safe Stall Time Hot | 18 s |
| | 250 | 500 | 1000 | 2000 | 4000 | 8000 | Hz | Safe Stall Time Cold | 31 s |
| SPL@3 | 31.0 | 43.0 | 47.0 | 40.0 | 36.0 | 31.0 | dB(A) | Frame material | cast iron |
| Moment of inertia | 0.2 Lb-ft ² | | | | | | | Color, paint shade | Standard Paint - RAL7030 |
| Ext Load Inertia Capability: | 15.0 Lb ft ² | | | | | | | Coating (paint finish) | Standard Alkyed + Epoxy (C2) |
| Bearings | | | | | | | | Ventilation Type | |
| Bearing DE NDE | 6205 ZZ C3 S0 | | | 6205 ZZ C3 S0 | | | | Method of cooling | TEFC |
| Bearing_Type | Ball Bearing | | | Ball Bearing | | | | Direction of rotation | Bidirectional |
| AFBMA: | 25BC02JPP30 | | | 25BC02JPP30 | | | | Fan Material | Polypropylen |
| Grease | | | | | | | | VFD | CT: 4:1 VT: 20:1 |
| Capacity | 0.1 oz | | | 0.1 oz | | | | Space heaters | without |
| Grease Type: | Exxon Mobile EM | | | | | | | Brake: | without |

Terminal box


| | | | | | | |
|----------------------|--------------|-------|-------|--------------------|--------------------------|---|
| Lead Wire Connection | 9 LEAD - WYE | | | | Terminal box position | (3) F-1, Standard Floor Mount, T. Box LHS |
| Voltage | L1 | L1 | L1 | Connected together | Material of terminal box | Aluminium |
| LOW | T1 T7 | T2 T8 | T3 T9 | T4 T5 T6 | Cable entry | .75" NPT |
| HIGH | T1 | T2 | T3 | T4 T7-T5 T8-T6 T9 | | |

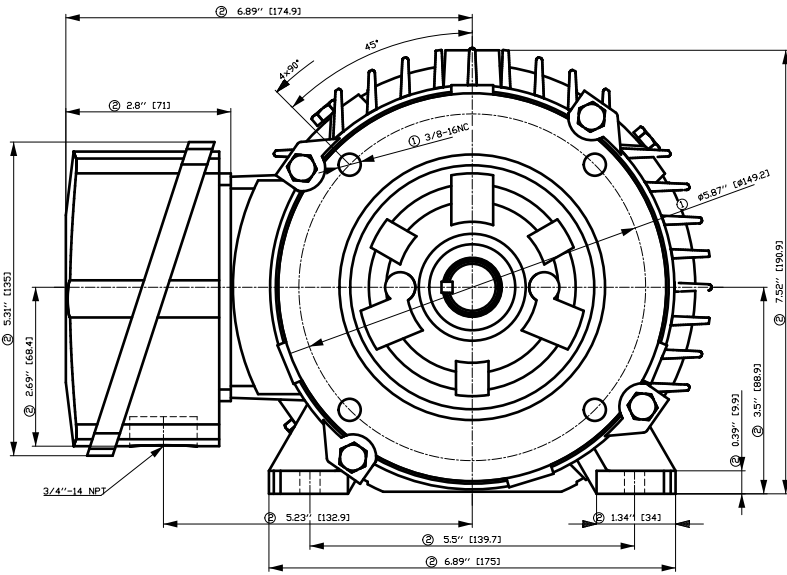
Notes:

I_L/I_N = locked rotor current / current nominal
M_L/M_N = locked rotor torque / torque nominal
M_b/M_N = break down torque / nominal torque

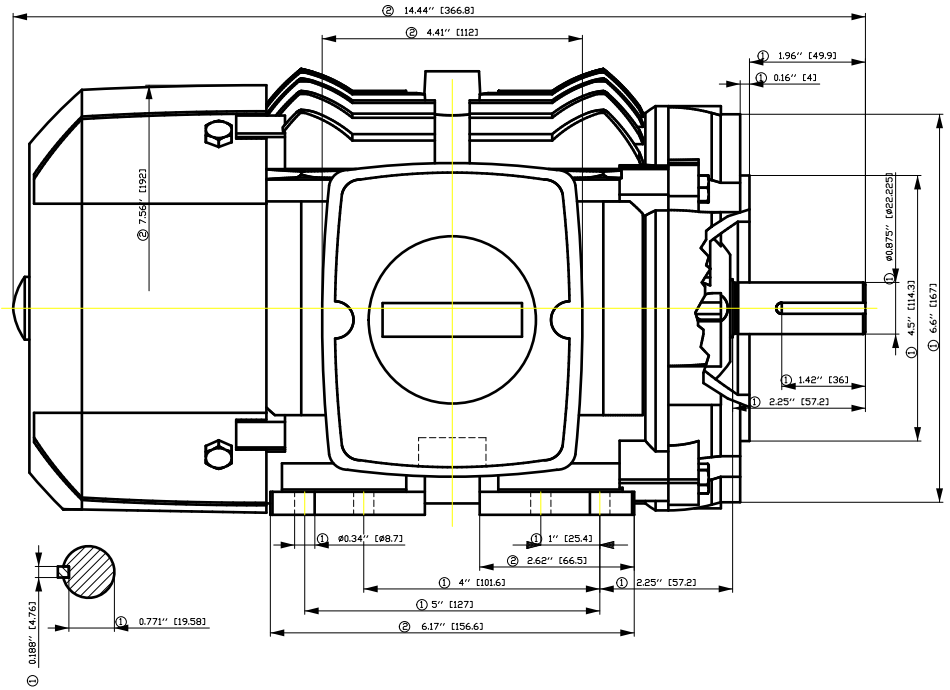
3) Value is valid only for DOL operation with motor design IC411
2) at rated power / at full load

| | | | | |
|-------------------------------|---------------------|-------------------------------|-------------|--|
| 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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- 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.

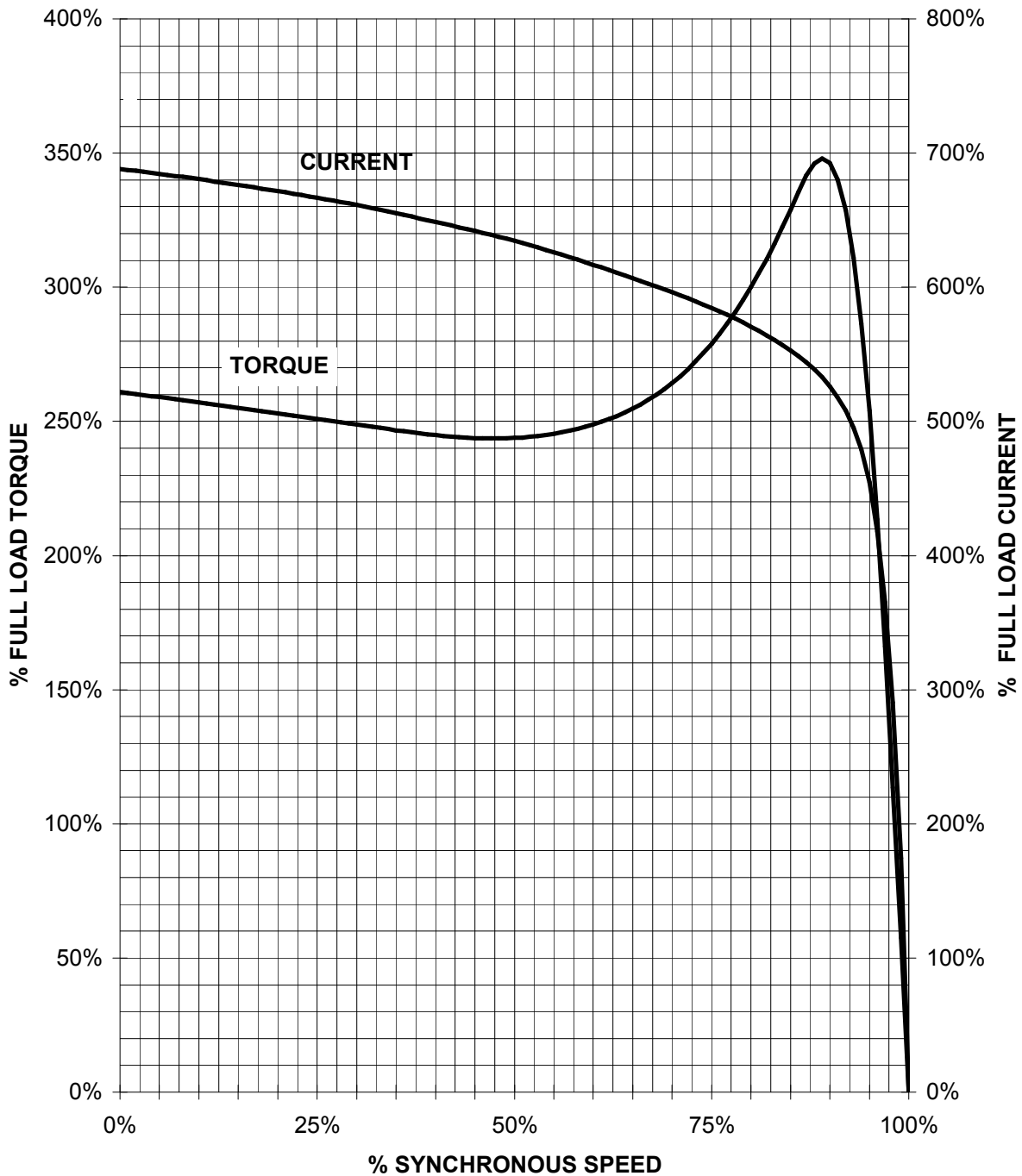


| Tolerance | Surface | Material | Weight | Scale |
|--------------------|--------------|------------------|----------|-----------------|
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| Ö | Creator | ÖVS | | |
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| | Project No | Ö | Ref No | 2nd Language ä^ |
| | | | | Sheet F of F |

SIEMENS INDUSTRY, INC.

HP 1 VOLTS < 600V RPM 1200 TYPE GP100
HZ 60 PHASE 3 FRAME 145T NEMA B

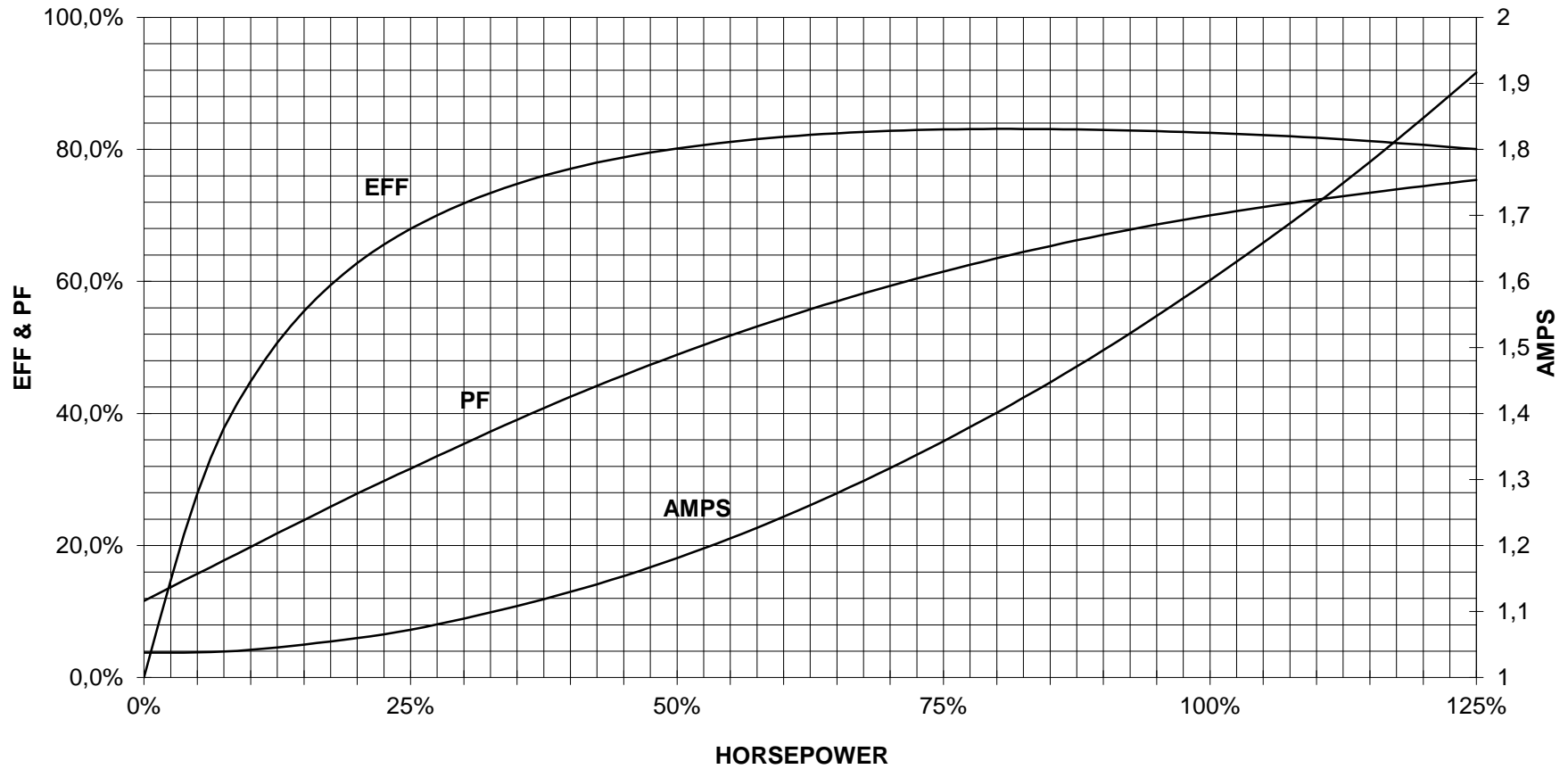
TORQUE & CURRENT VS. SPEED



CUSTOMER: _____ ORDER#: _____

1 HP 1200 RPM 145T FRAME 460 VOLTS 3 PHASE NEMA DESIGN B

SIEMENS INDUSTRY, INC.
PERFORMANCE CURVE
GP100



CUSTOMER _____ ORDER # _____ PO # _____

PERFORMANCE BASED ON DESIGN CALCULATIONS. SUBJECT TO CHANGE WITHOUT NOTICE.

REV. 1

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 | |

| | | | | |
|-------------------------------|---------------------------------|-----------------------------|----------------|-------------|
| responsible dep. DI MC LVM | technical reference | created by | approved by | Project |
| SIEMENS | document type Wiring Diagram | document status free | | customer |
| | title 1LE2221-1AC31-4EA3 | document number | | |
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