

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

Motor type: FS: 256T - 2p - 20 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 | 20.00 | -/- | 3,515 | 22.50 | 16.80 | 11.80 | 5.20 | 145.0 | 91.0 | 91.6 | 92.1 | 91.5 | 91.3 | 86.2 | 30.0 | 183 | 230 | |
| 230 | | 60 | 20.00 | -/- | 3,515 | 45.00 | | | | | 91.0 | 91.6 | 92.1 | 91.5 | 91.3 | 86.2 | 30.0 | 183 | 230 | |

| | | | | | |
|------------------|--|-----------------------------|---|--------------|------------|
| Frame Type: 256T | 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:308 | | Temp. Rise Cl.: B | Amb. Temp.: + to -20 °C @1000 m | kVA: G | IP IP65 |


Mechanical data

| | | | |
|--------------------------------------|--------------------------------|-------------------------|------------------|
| Sound level (SPL / SWL) at 60 Hz | 67.0 dB(A) / 79.0 dB(A) | Thickener | Polyurea |
| Octave Band Center Frequencies Hertz | 250 500 1000 2000 4000 8000 Hz | Safe Stall Time Hot | 20 s |
| SPL@3 | dB(A) | Safe Stall Time Cold | 45 s |
| Moment of inertia | 1.4 Lb-ft ² | Frame material | cast iron |
| Ext Load Inertia Capability: | 21.0 Lb ft ² | Color, paint shade | |
| Bearings | | Coating (paint finish) | |
| Bearing DE NDE | 6309 Z C3 S0 6309 Z C3 S0 | Ventilation Type | |
| Bearing_Type | Ball Bearing Ball Bearing | Method of cooling | TEFC |
| AFBMA: | 45BC03JP30 45BC03JP30 | Direction of rotation | Bidirectional |
| Grease | | Fan Material | Polypropylen ESD |
| Capacity | 0.5 oz 0.5 oz | VFD | CT: 4:1 VT: 20:1 |
| Grease Type: | Exxon Mobile EM | Space heaters | without |
| | | Brake: | -/- |

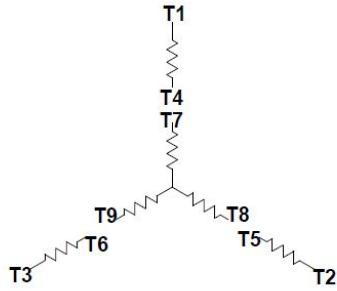
Terminal box

| | | | |
|----------------------|-----------------------------|--------------------------|--------------------|
| 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_L/I_N = locked rotor current / current nominal
 M_L/M_N = locked rotor torque / torque nominal
 M_d/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> | |
|  | document type datasheet | document status released | customer | | |
| | title 1MB2121-2BA21-4AG3 | document number | | | |
| © Siemens AG 2022 | rev. 01 | creation date 2022-04-08 20:15 | language en | Page 1/1 | |

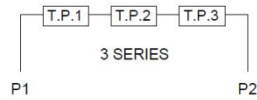
Main terminal diagram



| 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 | |

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

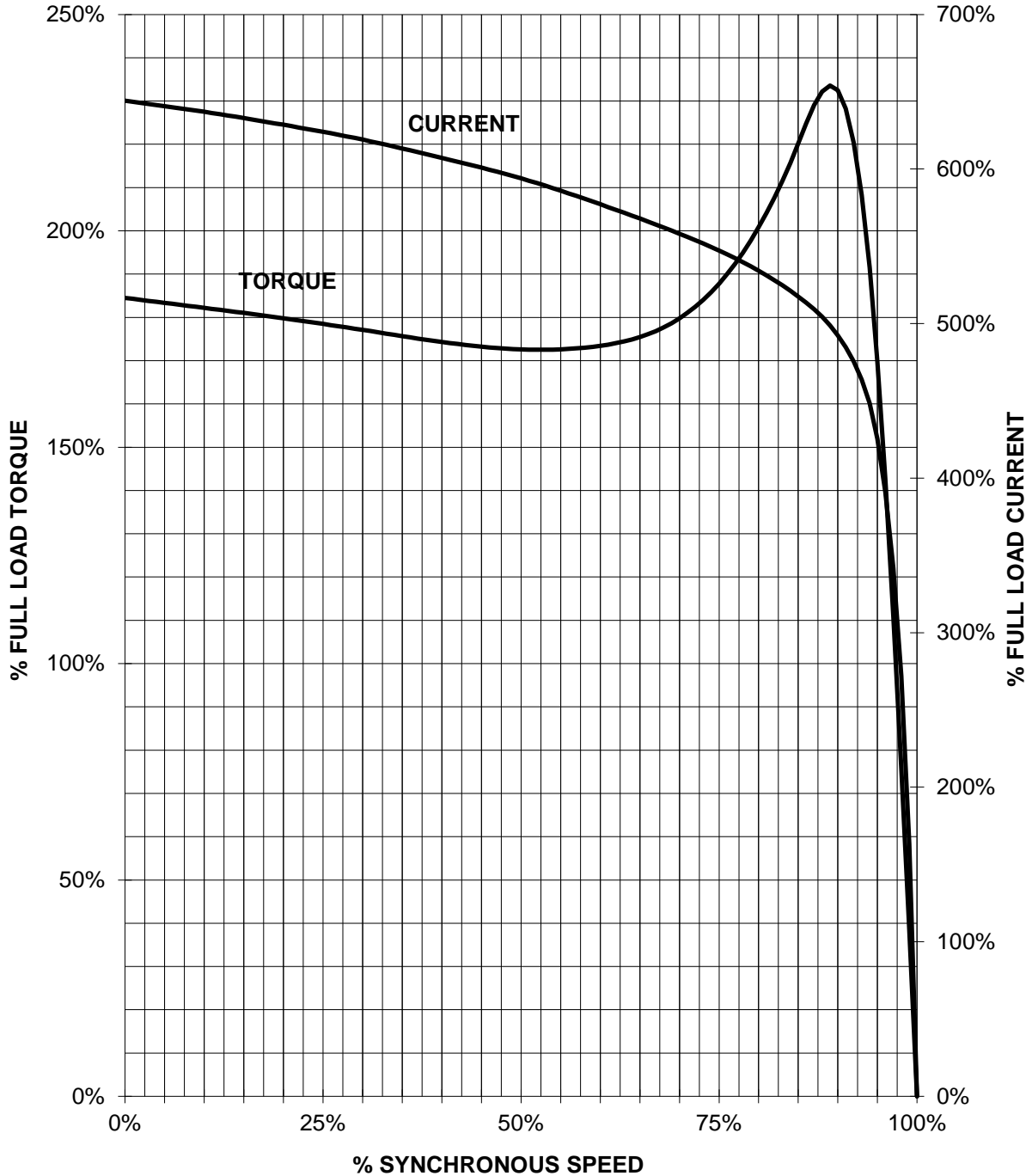
document number

customer

SIEMENS INDUSTRY, INC.

HP 20 VOLTS <600 RPM 3600 TYPE XP100
HZ 60 PHASE 3 FRAME 256T NEMA B

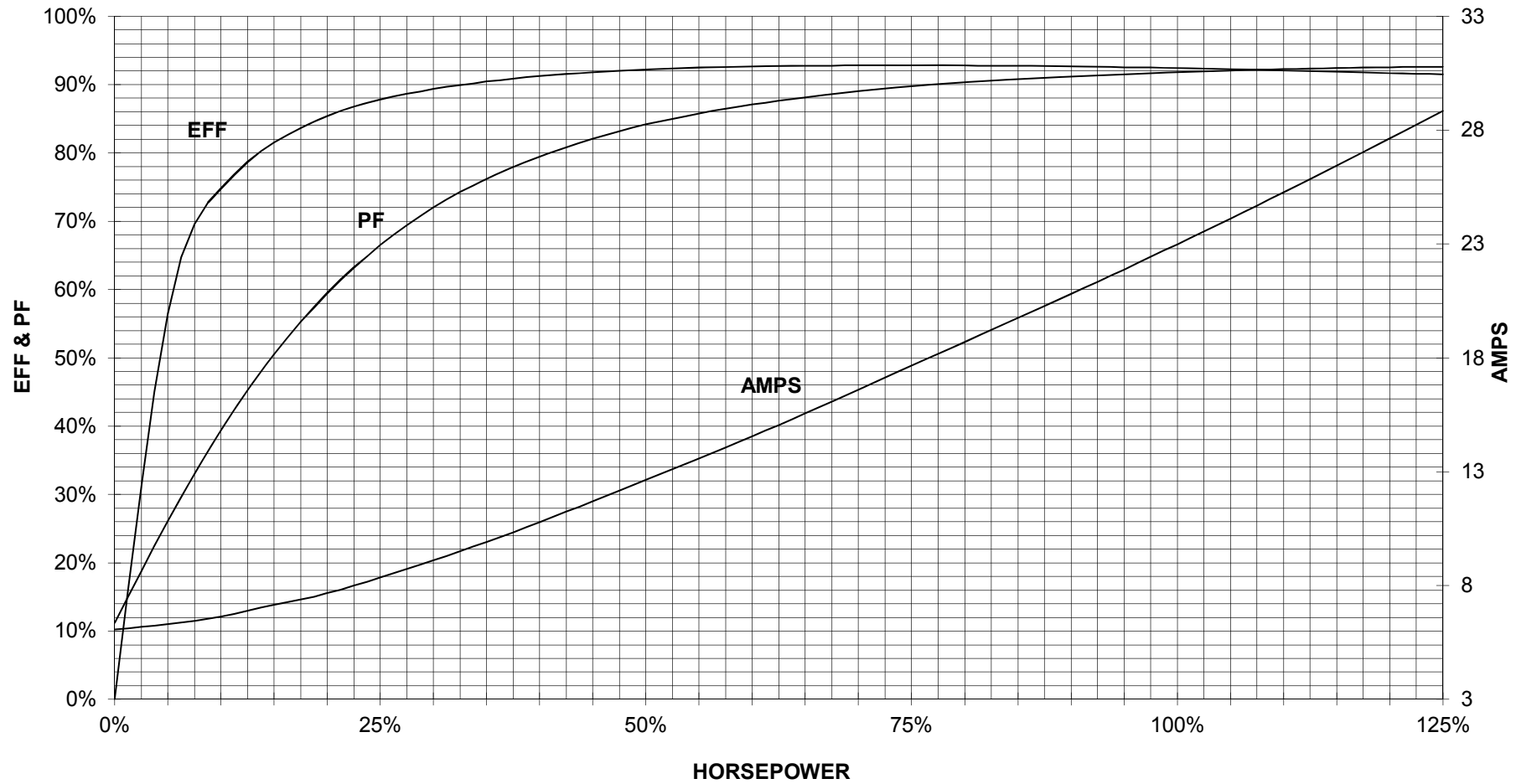
TORQUE & CURRENT VS. SPEED



CUSTOMER: _____ ORDER#: _____

20 HP 3600 RPM 256T FRAME 460 VOLTS 3 PHASE NEMA DESIGN B

SIEMENS INDUSTRY, INC.
PERFORMANCE CURVE
XP100



CUSTOMER _____ ORDER # _____ PO # _____

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

REV. 1