

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

**Motor type:** FS: 213TCV - 4p - 7.5 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]	$\Delta/Y$	f [Hz]	P [HP]	P [kW]	n [rpm]	I Load [Amps]					LRC	Nom. Eff Load [%]			Pwr. Factor Load [%]			Torque [lb-ft]	T <sub>A</sub> /T <sub>N</sub> LRT [%]	T <sub>k</sub> /T <sub>N</sub> BDT [%]
						4/4	3/4	1/2	0	4/4		3/4	2/4	4/4	3/4	2/4				
460		60	7.50	-/-	1,765	9.70	7.90	6.40	5.00	63.0	91.7	91.7	90.7	78.9	72.3	60.5	22.0	273	455	
230		60	7.50	-/-	1,765	19.40					91.7	91.7	90.7	78.9	72.3	60.5	22.0	273	455	

Frame Type: 213TCV	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:192		Temp. Rise Cl.: B	Amb. Temp.: + to -20 °C @1000 m	kVA: H	IP IP65


**Mechanical data**

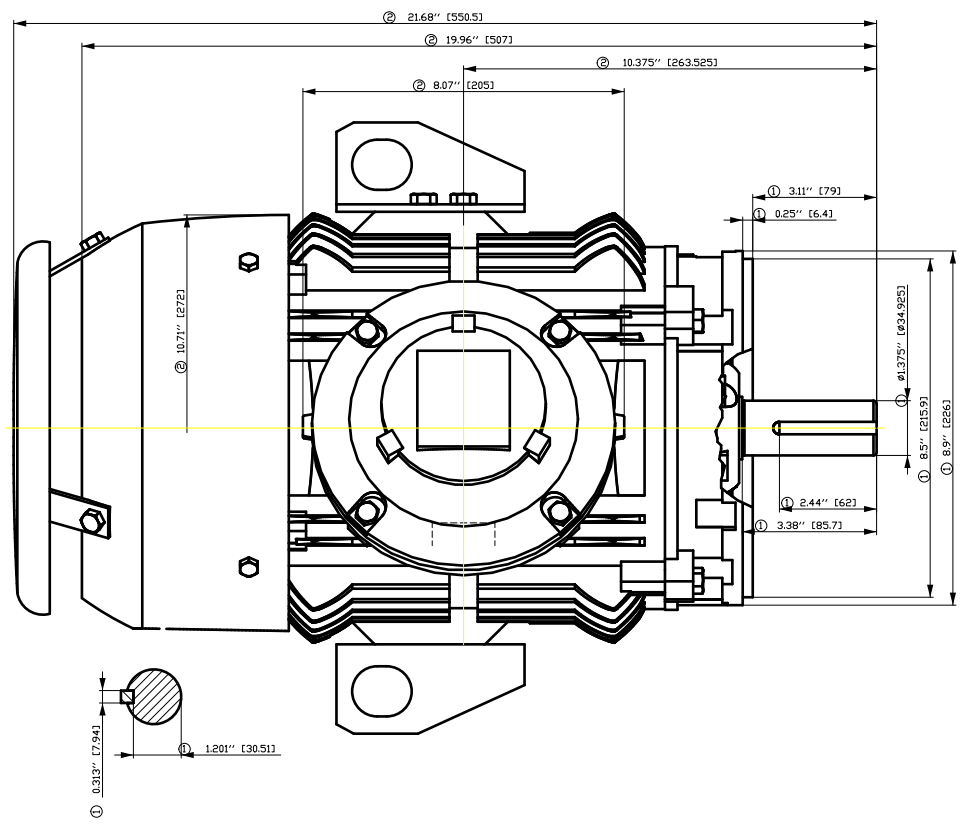
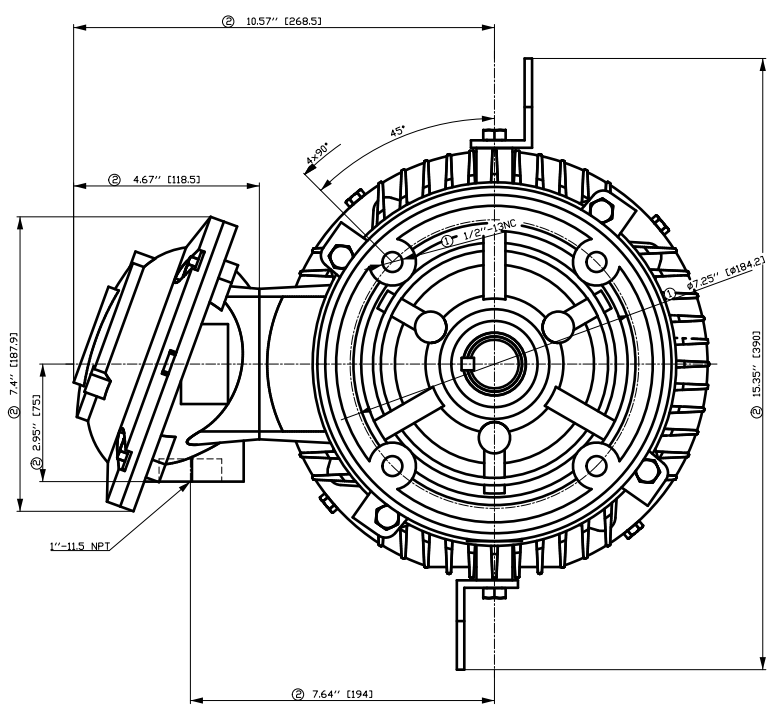
Sound level (SPL / SWL) at 60 Hz	57.0 dB(A) / 69.0 dB(A)	Thickener	Polyurea
Octave Band Center Frequencies Hertz	250 500 1000 2000 4000 8000 Hz	Safe Stall Time Hot	25 s
SPL@3	dB(A)	Safe Stall Time Cold	42 s
Moment of inertia	0.8 Lb-ft <sup>2</sup>	Frame material	cast iron
Ext Load Inertia Capability:	39.0 Lb ft <sup>2</sup>	Color, paint shade	
<b>Bearings</b>		Coating (paint finish)	
Bearing DE   NDE	6208 Z C3 S0   6208 Z C3 S0	<b>Ventilation Type</b>	
Bearing_Type	Ball Bearing   Ball Bearing	Method of cooling	TEFC
AFBMA:	40BC02JP30   40BC02JP30	Direction of rotation	Bidirectional
<b>Grease</b>		Fan Material	Polypropylen ESD
Capacity	0.3 oz   0.3 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<sub>r</sub>/I<sub>N</sub> = locked rotor current / current nominal  
 M<sub>r</sub>/M<sub>N</sub> = locked rotor torque / torque nominal  
 M<sub>d</sub>/M<sub>N</sub> = break down torque / nominal torque  
 3) Value is valid only for DOL operation with motor design IC411  
 2) at rated power / at full load

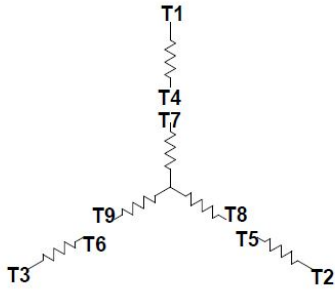
responsible dep. DI MC LVM	technical reference	created by DT Configurator	approved by	<i>Technical data are subject to change! There may be discrepancies between software and hardware versions</i>	
	document type datasheet	document status released	customer		
	title 1MB2121-2AB11-6LG3	document number	rev. 01	creation date 2022-04-08 18:52	language en
© Siemens AG 2022					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
FT ÖGFC EÖÖFFÉ ŠÖH	Author	ÖGFC EÖÖFFÉ ŠÖH	É	{ {
É	Creator	ÖVS		
	Approval	T æ : ^ æ @ } *		
	Department			
	Change Order	MFB		Doc Type
	Doc. State	I ð EÖG		Paper Size
<b>SIEMENS</b>	Revision	Index RS		1st Language ^
© Siemens AG 2018				2nd Language á
	Project No	É		Sheet F of F

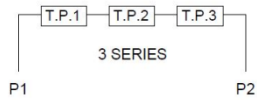
Main terminal diagram



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  
1MB2121-2AB11-6LG3

document status  
free

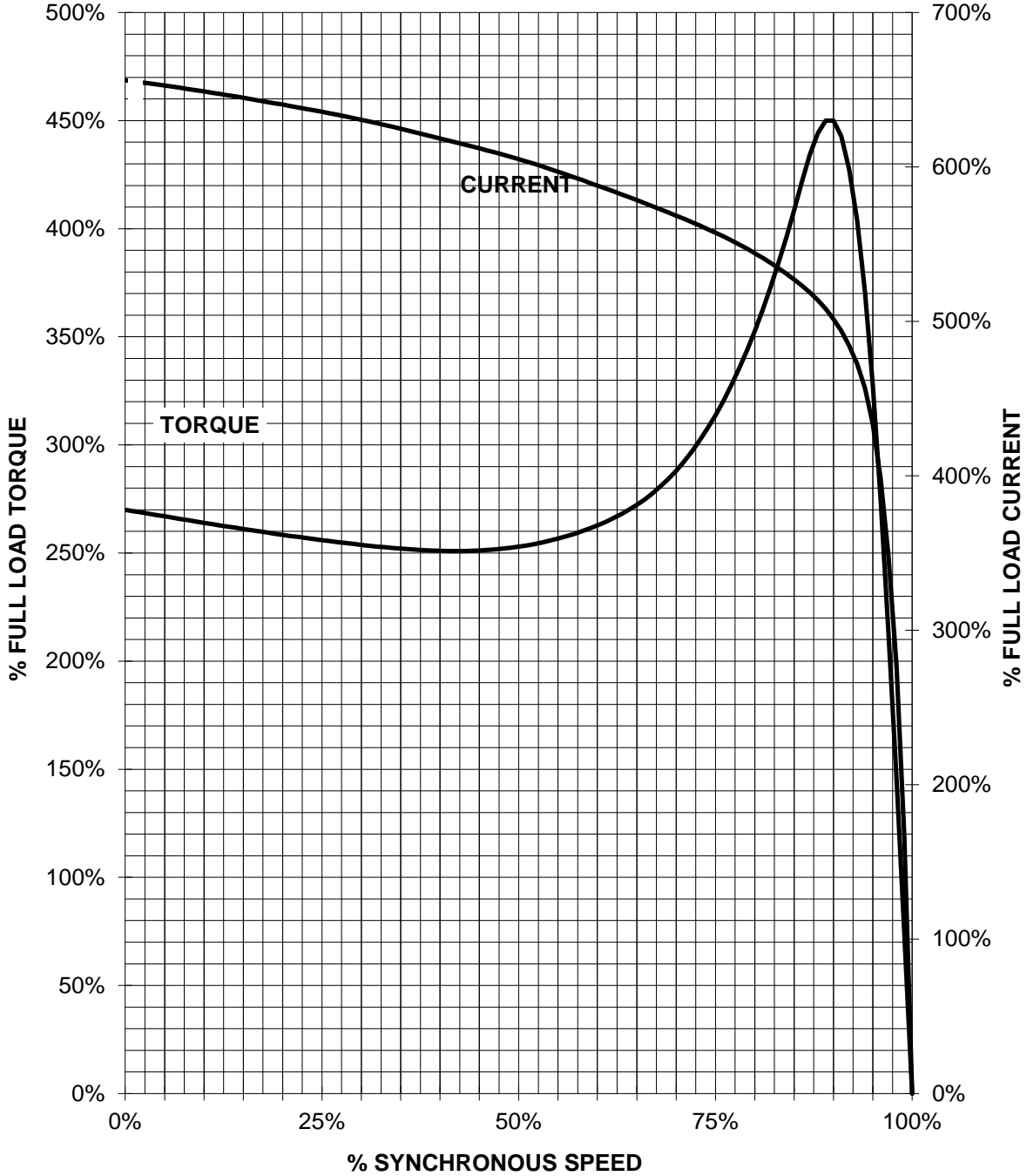
document number

customer

# SIEMENS INDUSTRY, INC.

HP 7.5 VOLTS <600 RPM 1800 TYPE XP100  
HZ 60 PHASE 3 FRAME 213T NEMA B

## TORQUE & CURRENT VS. SPEED



CUSTOMER: \_\_\_\_\_ ORDER#: \_\_\_\_\_