

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

Totally Enclosed Fan Cooled (TEFC)



MLFB-Ordering data: **1MB2221-1AB31-4AA3**

Client order no.:  
Order no.:  
Offer no.:  
Remarks:

Item no.:  
Consignment no.:  
Project:

U [V]	$\Delta / Y$	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	1/2	4/4	3/4	1/2			
460	Y	60	1.50	-/-	1,740	2.10	1.70	1.40	1.10	19.0	86.5	87.0	85.8	77.3	71.8	58.5	4.5	333	422
230	YY	60	1.50	-/-	1,740	4.20	3.37	2.80	2.20	38.0	86.5	87.0	85.8	77.3	71.8	58.5	4.5	333	422

Frame Type	Type of constr.: ( A ) Foot mounted - End shield	Ins. Cl.: Insulation class F	Motor Prot.: (A) No winding protection	NEMA Des.: B	S.F.: 1.15
Mtr WT: 88 lbs	Mounting: (3) Mounting - F-1	Temp. Rise Cl.: B	Amb. Temp.: +55 °C @1000 m	kVA: M	IP65

### Mechanical data

#### WK2

Rotor Moment of Inertia: 0 Lb-ft<sup>2</sup>

Ext Load Inertia Capability: 9.0 Lb-ft<sup>2</sup>

#### Safe Stall Time

Hot: 15.0 s

Cold: 21.0 s

#### Typical Noise Data

A-weighted Sound

Sound Pressure: 62.0 dB(A)

Sound Power: 50.0 dB(A)

Octave Band Center Frequencies Hertz

	250	500	1000	2000	4000	8000	Hz
SPL@3 feet	37.0	40.0	49.0	45.0	37.0	31.0	dB(A)

#### Bearings

	DE	NDE
Bearing size:	6205 Z C3 S0	6205 Z C3 S0
Bearing Type:	Ball Bearing	Ball Bearing
AFBMA:	25BC02JP30	25BC02JP30

#### Grease

Capacity:	0.10 oz	0.10 oz
Type:	Exxon Mobile EM	
Thickener:	Polyurea	

#### Frame

Frame material:	cast iron
Coating (paint finish):	standard
Color, paint shade:	RAL 7030

#### Terminal box

Terminal box position: (3) Mounting - F-1

#### Lead Wire Connection

Description:	9 LEAD - WYE				
Voltage	L1	L2	L3	Connected together	
LOW	T1 T7	T2 T8	T3 T9	T4 T5 T6	Y Y
HIGH	T1	T2	T3	T4 T7-T5 T8-T6 T9	Y

#### Ventilation Type

Type of Cooling:	TEFC
Fan Material:	Polypropylen ESD
Fan Rotation:	Bidirectional

#### Additional information

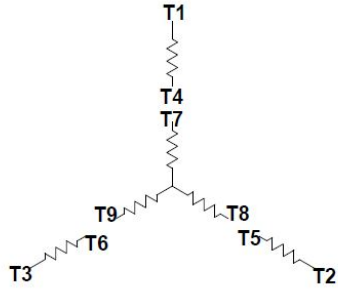
VFD Operation:	CT: 4:1	VT: 20:1
Area: classification:	Class I Division 1 Groups D	
Brake:		

#### Notes

$I_A/I_N$  = locked rotor current / current nominal  $T_A/T_N$  = break down torque / nominal torque  
 $T_k/T_N$  = locked rotor torque / torque nominal <sup>1)</sup> Value is valid only for DOL operation with motor design IC411



Main terminal diagram



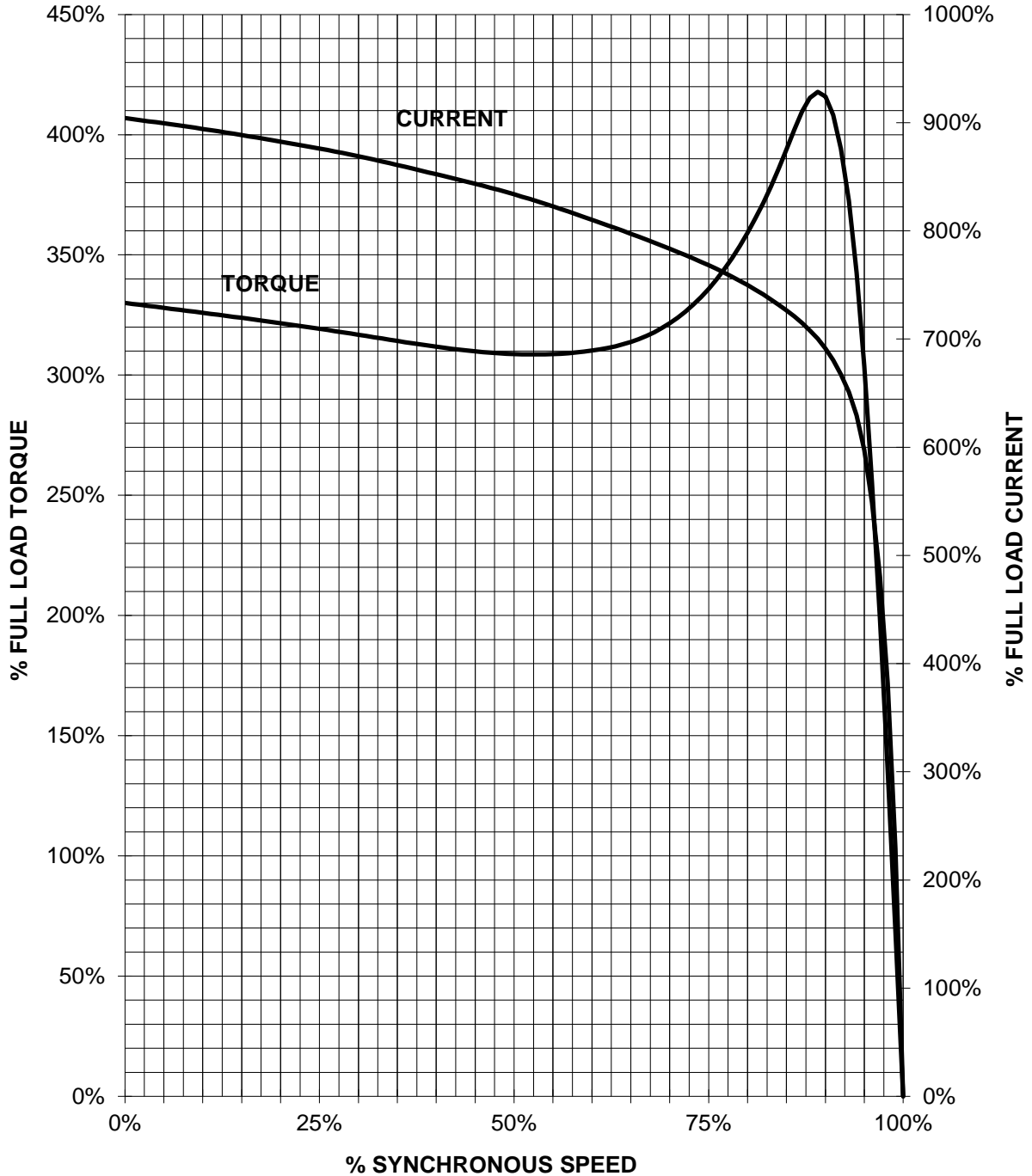
9 LEAD WYE						
Volts	LINES			CONNECTED TOGETHER	CONN.	
	L1	L2	L3			
LOW	T1 T7	T2 T6	T3 T9	T4 T5 T6	YY	
HIGH	T1	T2	T3	T4 T7-T5 T8-T6 T9	Y	

responsible dep. DI MC LVM	technical reference	created by	approved by	project
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# SIEMENS INDUSTRY, INC.

HP 1,5 VOLTS <600 RPM 1800 TYPE XP100 1D1  
HZ 60 PHASE 3 FRAME 145T NEMA B

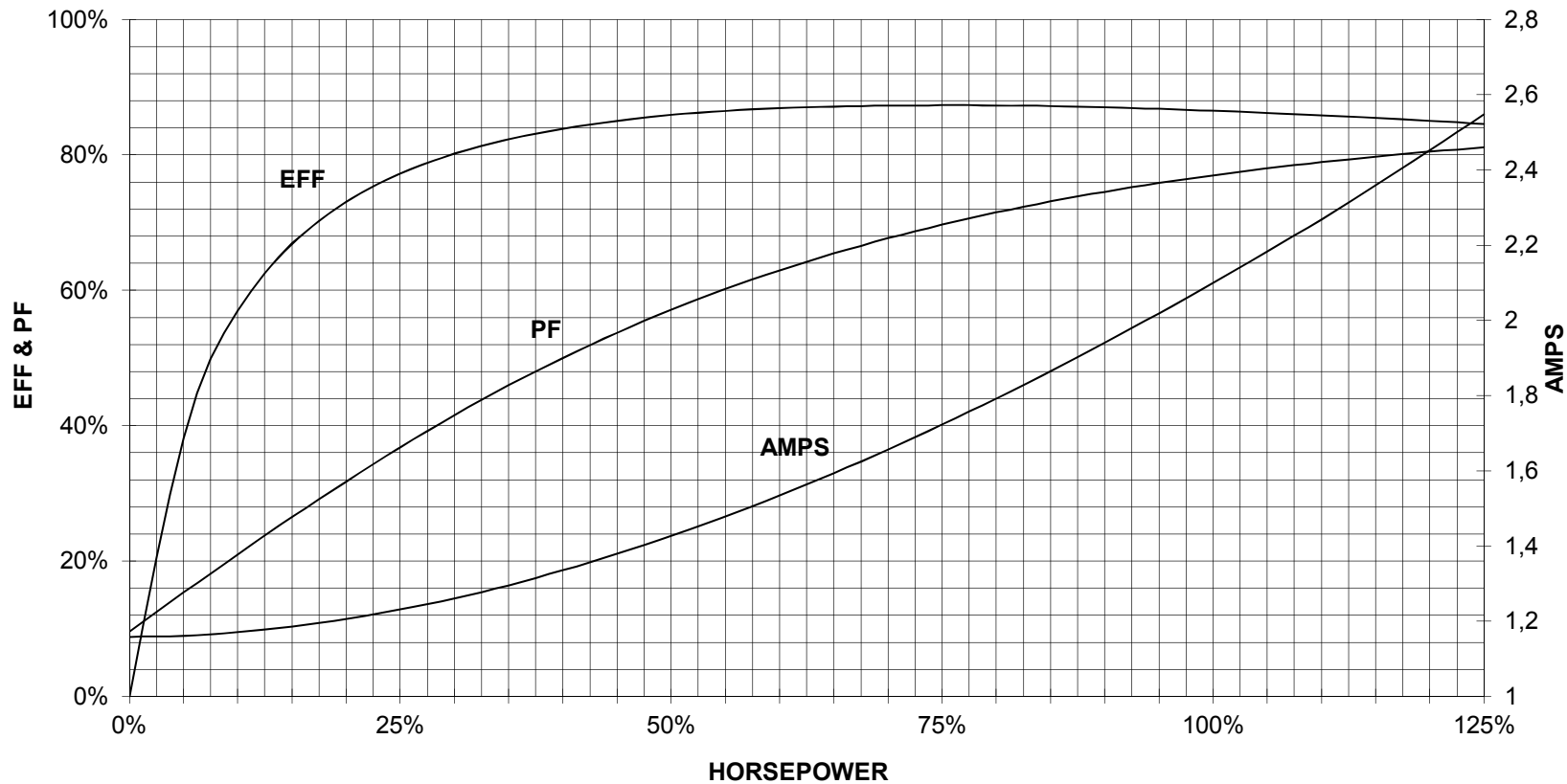
## TORQUE & CURRENT VS. SPEED



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

1.5 HP 1800 RPM 145T FRAME 460 VOLTS 3 PHASE NEMA DESIGN B

**SIEMENS INDUSTRY, INC.**  
PERFORMANCE CURVE  
XP100 1D1



CUSTOMER \_\_\_\_\_ ORDER # \_\_\_\_\_ PO # \_\_\_\_\_

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

REV. 1