

ABB BALDOR RELIANCE III

Customer information packet

XEFRPM25204

20HP, 1800, 460V, HL256T, TEFC, F1

Specifications

Enclosure	TEFC
Frame	HL256T
Frame Material	Exposed Laminations
Frequency	60.00 Hz
Output @ Frequency	20.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	460.0 V @ 60 HZ
Agency Approvals	CCSA US NEMA PREMIUM
Auxiliary Box	NO AUXILLARY BOX
Base Indicator	Rigid
Bearing Grease Type	Polyrex EM (-20F +300F)
Constant Torque Speed Range	1-60
Current @ Voltage	20.000 A @ 460.0 V
Duty Rating	CONT
Feedback Device	NO FEEDBACK
Frame Prefix	HL
Heater Indicator	No Heater
High Voltage Full Load Amps	20.0 a
Insulation Class	H
KVA Code	G
Motor Standards	NEMA
Mounting Arrangement	F1
Overall Length	24.89 IN
Product Family	Fan - Centrifugal
Pulley End Bearing Type	Ball
Pulley Face Code	Standard
Service Factor	1.15
Shaft Diameter	1.625 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible

Part Detail

Revision	J
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	LS7017A
Layout	619703-001
Eff. date	08-05-2026
CD Diagram	422927-001
Poles	04
Leads	
Proprietary	False
Created date	06-03-2016

Speed	1800 rpm
Thermal Device - Bearing	None
Thermal Device - Winding	Normally Closed Thermostat

Nameplate
000613007QF

	DUTY	HP	RPM	AMPS	VOLTS	HZ					
	CONT	20	1800	20.0	460	60					
CAT.NO.	XEFRPM25204		SPEC. NO.		H25-A000-0002						
SER.NO			FRAME SIZE		HL256T		TYPE PSM				
AMB.	40	S.F.	1.15	ENCL.	TEFC	PH	3	DESIGN	B	CODE	G
NEMA NOM. EFF	94.9	GUARANTEED EFFICIENCY			94	POWER FACTOR		92.8	INSUL. CLASS		H
D.E. BRG.	45BC02J30X		O.D.E. BRG.		35BC02J30X						
VPWM INVERTER DUTY @1.0SF	CHP HZ	60-90		CT HZ	1-60		VT HZ	0-60			
	X/T										

000692000VY

MEAS OPEN CIRCUIT VOLTAGE

IS VOLTS AT RPM.

Parts List

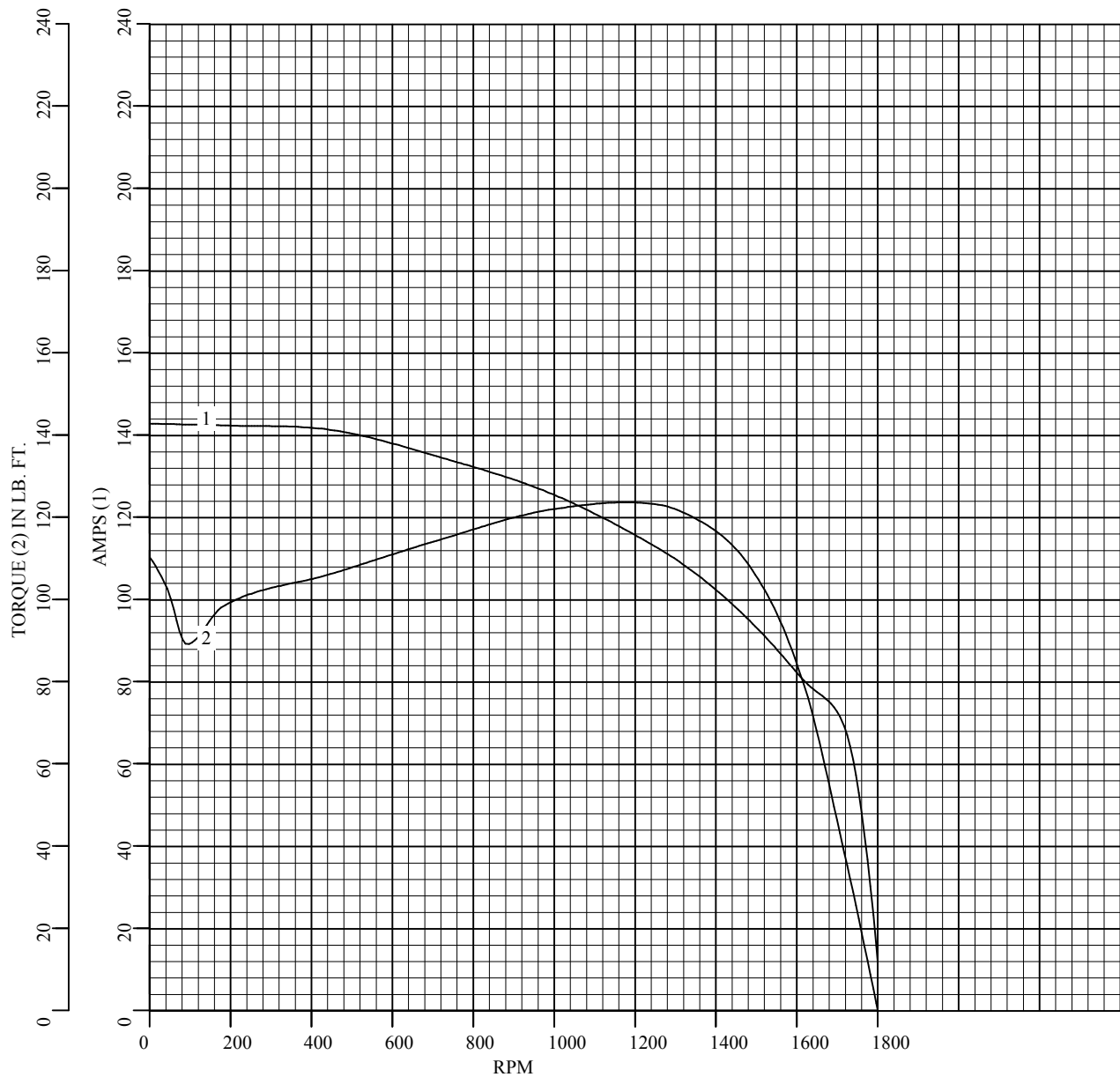
Part number	Description	Quantity
WS313100	WS H25-A000-0002	1.000 ea
RA309329	RA H25-A000-0002	1.000 ea
411716004A	219P039 - 219P039 - LA	1.000 ea
033775004EA	DRSCR #6-1/4 304 S.S.	8.000 ea
000613007QF	NP,RPM AC - XE WITH CERTIFIED LOGO	1.000 ea
000613006ABP	RPM-XE,EXTREME EFFICIENCY,UL LISTED	1.000 ea
000692000VY	PERMANENT MAGNET MOTOR NAMEPLATE	1.000 ea
422927001	C/D LABEL	1.000 ea
004824007AB	PAINT,XT	0.100 ea
418057243A	GROOVE PIN	1.000 ea
807504052E	FL1848 FRAME	1.000 ea
810101004AAC	BRKT,ODE,LSPM180 (FL250)	1.000 ea
810101003AAA	BRKT,DE,LSPM180 (FL250)	1.000 ea
HA4054	SHORT T-DRAIN FITTING, .125" N.P.T.	1.000 ea
HA4054	SHORT T-DRAIN FITTING, .125" N.P.T.	1.000 ea
004824015A	GREASE POLYREX EM	0.100 lb
036000050JB	M8-1,25 X 50 MHHCS	2.000 ea
032018014AK	HHCS 1/4-20X1-3/4 PLTD.	3.000 ea
415045002J	SLGR	1.000 ea
415045002H	SLGR	1.000 ea
400638001D	WAVEN (Customer number 43699)	1.000 ea
034017012AB	LCKW 1/4 STD. PLATED 034017012AF	4.000 ea
418150003A	GREASE FITTING CAP	2.000 ea
035000001A	ALFTG 1/8" 1610-BL	1.000 ea
035000001A	ALFTG 1/8" 1610-BL	1.000 ea
036140001B	METRIC EYEBOLT	2.000 ea
033102012AG	HXNUT LEAD CONN 1/4-20 GR5 ZP	4.000 ea
033070216HH	STUD 1/4 X 13.5	4.000 ea
033102012AG	HXNUT LEAD CONN 1/4-20 GR5 ZP	4.000 ea
415000103G	TLUG	1.000 ea
415072001A	CLAMP	1.000 ea

417733001A	GSK C/ BOX BASE	2.000 ea
034180010DA	KEY 1/4X1/4X1-1/4L	1.000 ea
078546001G	FAN 180	1.000 ea
807505505A	COVER,FAN,HL210	1.000 ea
036000012HB	HHCS M6X12MM LONG PLATED	4.000 ea
036000045JB	M8-1.25 X 45MM HXHCS	4.000 ea
418010006A	CAST,MPLATE,180-280,EX1,7BY	1.000 ea
418018074A	GROUND LABEL G100 METRIC 160 D.C.	1.000 ea
406673002AE	2" CAP PLUG	1.000 ea
036620009AB	M8 EXTERNAL LK WASHER	1.000 ea
036601008AB	M6 FLAT WASHER	4.000 ea
706320004C	CBOX REPL 705028-2C MTRC	1.000 ea
075459000A	C/BOX CVR W75459	1.000 ea
065564000D	GASK 210-250	1.000 ea
036000012HB	HHCS M6X12MM LONG PLATED	2.000 ea
034180024FA	KEY 3/8X3/8X3 L	1.000 ea
004824007K	SPECIAL PAINT	0.100 ea

S.O.	FRAME	HP	TYPE	PHASE	HERTZ	RPM
--	HL256T	20	PSM	3	60	1800
VOLTS	AMPS	DUTY	AMB [°] C	INSUL	S.F.	NEMA DESIGN
460	21.3	CONT	40	H	1.15	B
CODE LETTER	ENCL	ROTOR INERTIA (lb-ft ²)	STATOR RES. @ 25 [°] C OHMS (BETWEEN LINES)			
G	TEFC	.83	.5367	TYPICAL DATA		
PERFORMANCE						
LOAD	HP	AMPERES	RPM	% POWER FACTOR	% EFFICIENCY	
NO LOAD	0	11.7	1800	4.10	N/A	
1/4	5.00	10.3	1800	50.1	90.9	
2/4	10.0	12.5	1800	79.5	94.3	
3/4	15.0	16.5	1800	89.6	95.0	
4/4	20.0	21.3	1800	92.8	94.9	
5/4	25.0	26.5	1800	93.6	94.5	
SPEED TORQUE						
	RPM	TORQUE (% FULL LOAD)	TORQUE (lb-ft)	AMPERES		
LOCKED ROTOR	0	189	110.3	142.7		
PULL OUT	1800	244	142.6	65.7		
FULL LOAD	1800	100	58.4	21.3		
THIS IS A PERMANENT MAGNET MOTOR GENERATED OPEN CIRCUIT LINE-LINE VOLTAGE at 25 [°] C = 18.2 VOLTS PER 100 RPM REMARKS:						
		DR. BY <u>CAD</u> CK. BY <u>RFM</u> APP. BY <u>RFM</u> DATE <u>05/25/2016</u>		LSPM MOTOR PERFORMANCE DATA LS7017A ISSUE DATE 05/25/2016		

S.O.	--	HERTZ	60	AMB°C	40	CODE LETTER	G
FRAME	HL256T	RPM	1800	INSUL	H	WK ² (lb-ft ²)	.83
HP	20	VOLTS	460	S.F.	1.15	NEMA DESIGN	B
TYPE	PSM	AMPS	21.3	ENCL	TEFC	STATOR RES. @ 25°C	.5367
PHASE	3	DUTY	CONT			OHMS (BETWEEN LINES)	

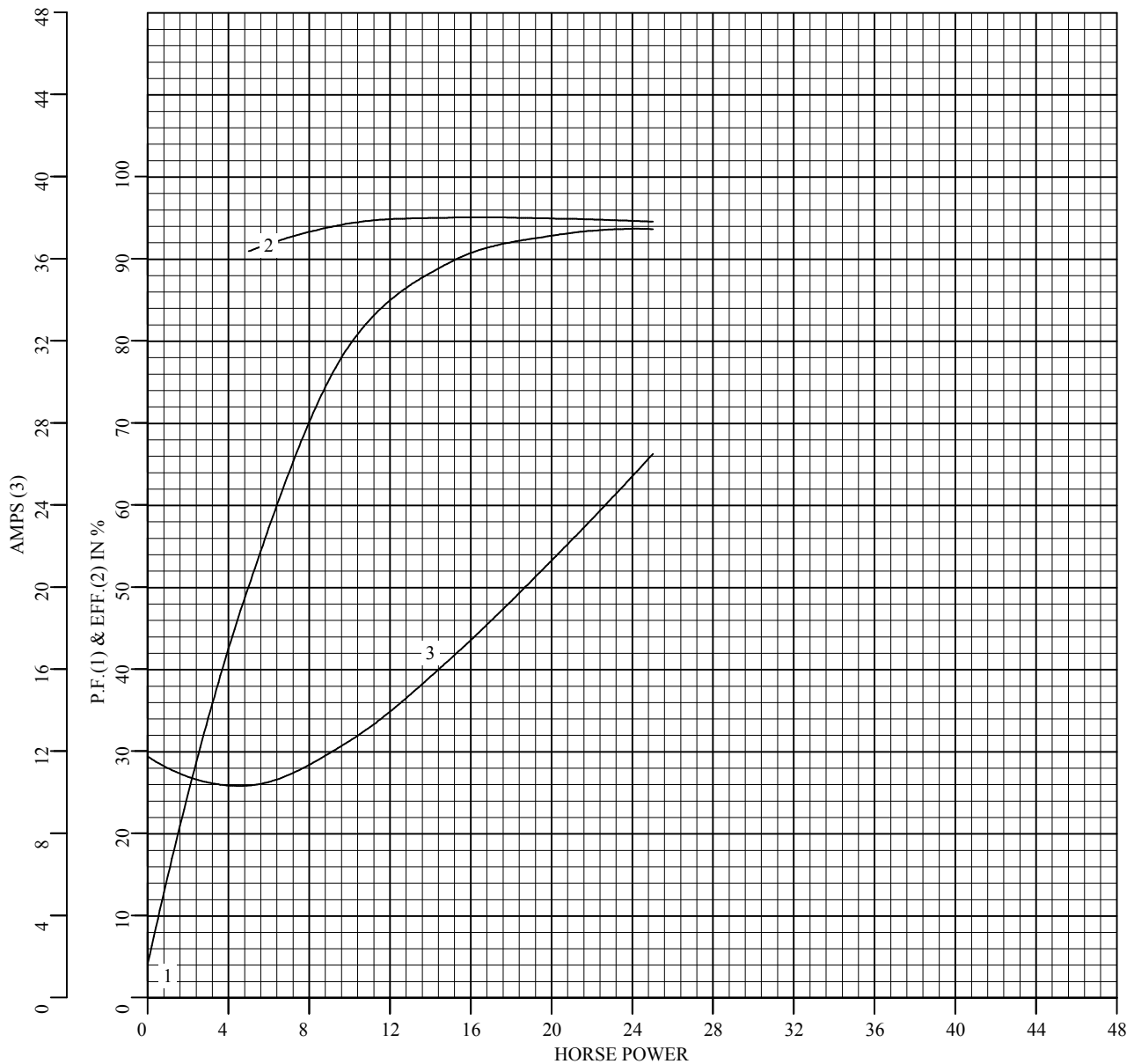
Amps & Torque vs. RPM During Acceleration



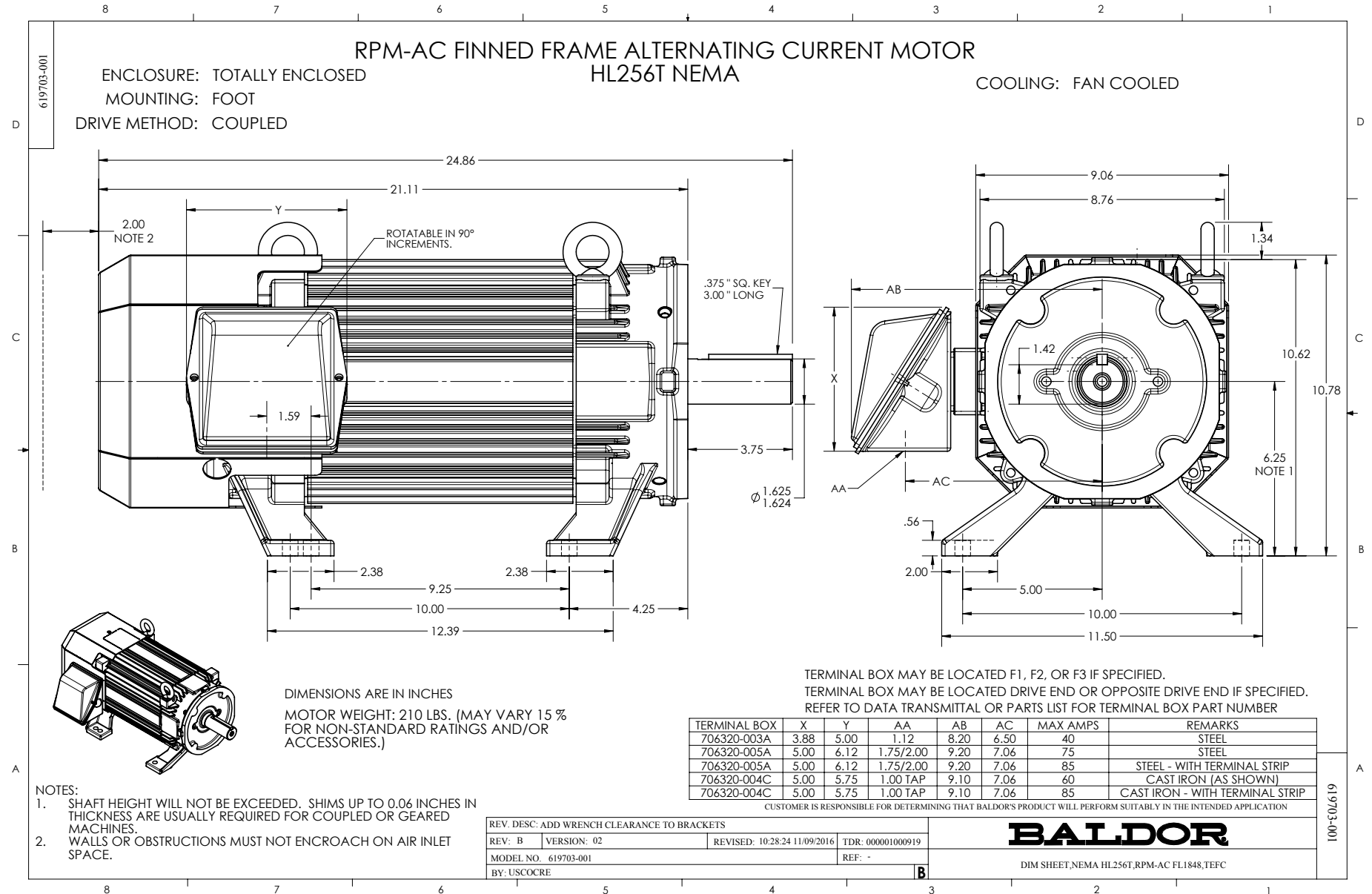
TYPICAL DATA

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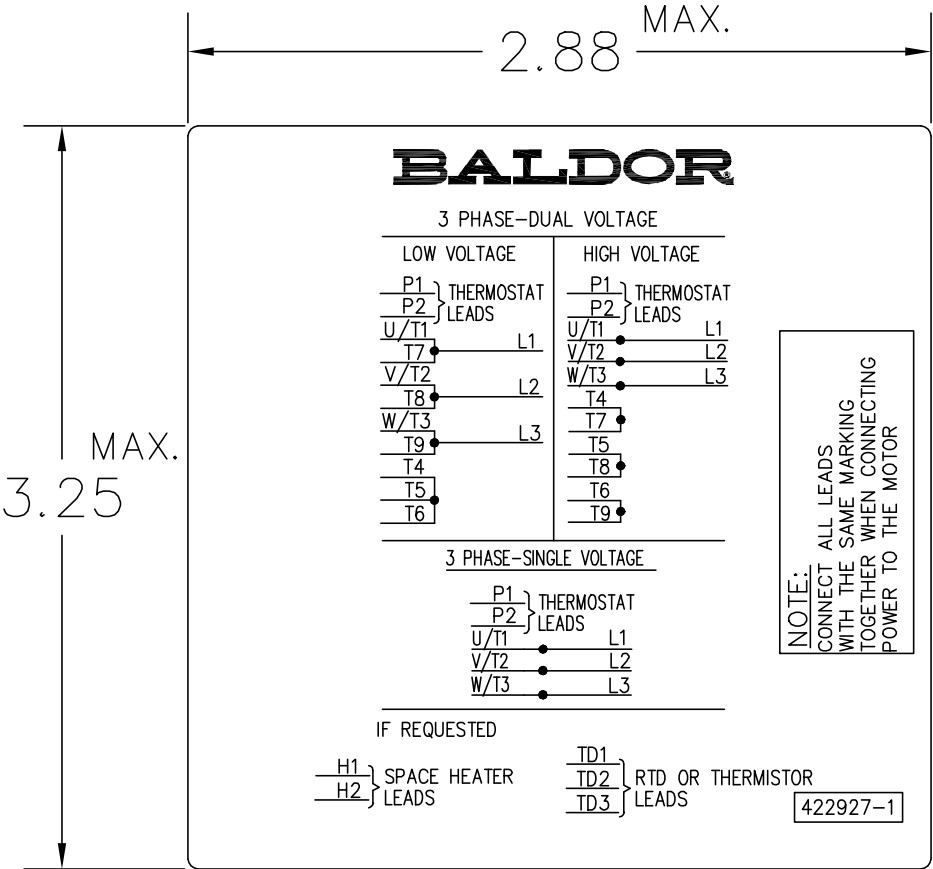
Performance Data vs. HP At Synchronous Speed



TYPICAL DATA



422927-001



NOTE:
DATA TO BE SIZED
SO THAT IT FITS INTO
MATERIAL DECAL
DIMENSIONS. MAKE
LETTERS & NUMBERS
AS LARGE AS POSSIBLE.

MATERIAL: CERAMATIC DGF-P4
PERMA GRIP ADHESIVE

ALL LETTERS, NUMBERS
AND LINES TO BE BLACK
ON WHITE BACKGROUND.

422927-001

REV. DESC: CHANGE BACKGROUND COLOR FROM GOLD TO WHITE		
REV. LTR: B	VERSION: 02	TDR: 000000788708
FILE: \RGG\00000\203	REVISED: 08:09:29 03/04/2013	
MTL: -	BY: RGGWT	

BALDOR
EXTERNAL CONNECTION LABEL
SH 1 of 1