

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

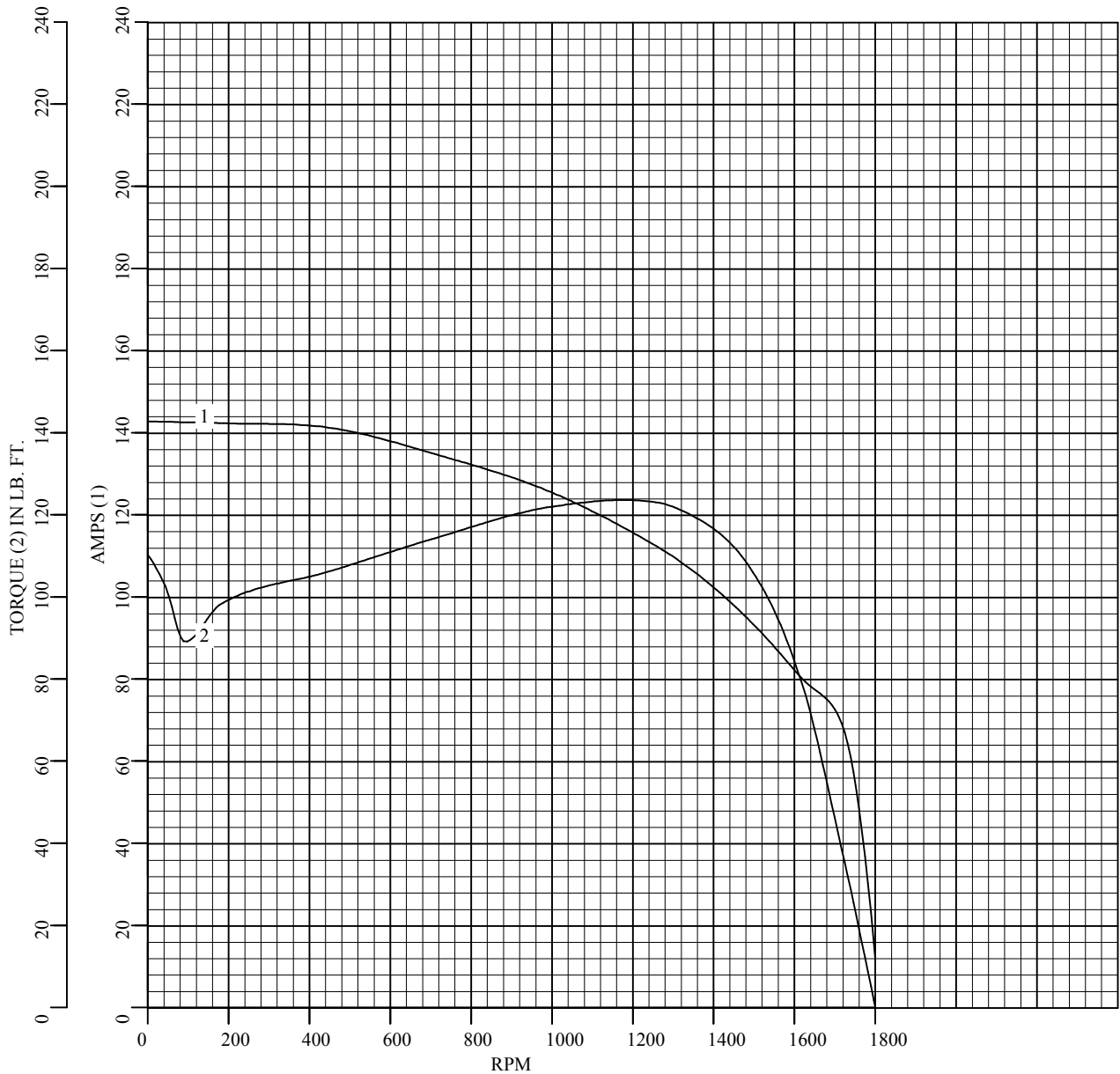
MEAS OPEN CIRCUIT VOLTAGE

IS VOLTS AT RPM.

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 ^o 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 ^o C	.5367
PHASE	3	DUTY	CONT			OHMS (BETWEEN LINES)	

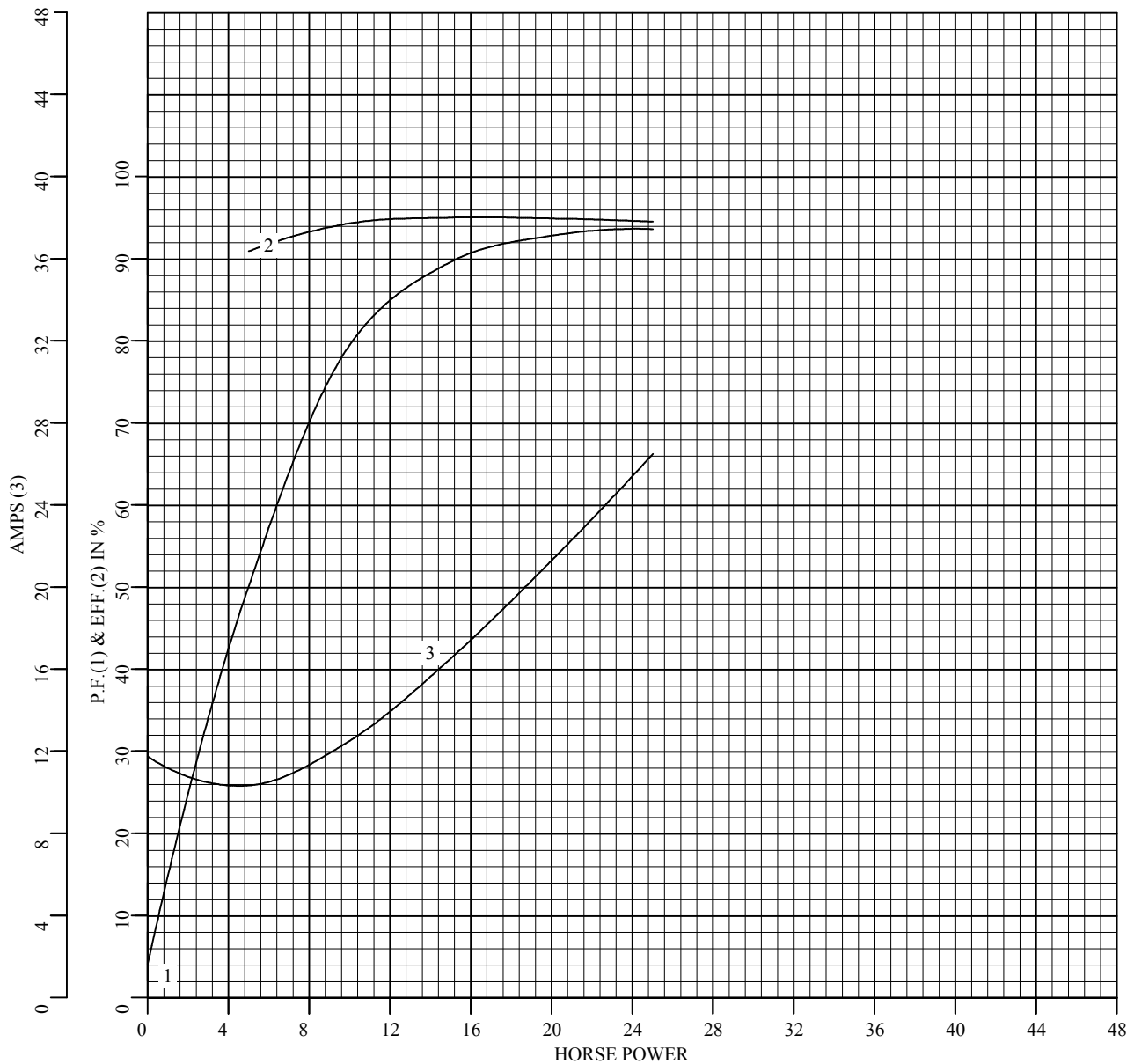
Amps & Torque vs. RPM During Acceleration



TYPICAL DATA

S.O.	--	HERTZ	60	AMB ^o 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 ^o C	.5367
PHASE	3	DUTY	CONT			OHMS (BETWEEN LINES)	

Performance Data vs. HP At Synchronous Speed



TYPICAL DATA

BALDOR
A MEMBER OF THE ABB GROUP

DR. BY CAD
CK. BY RFM
APP. BY RFM
DATE 05/25/2016

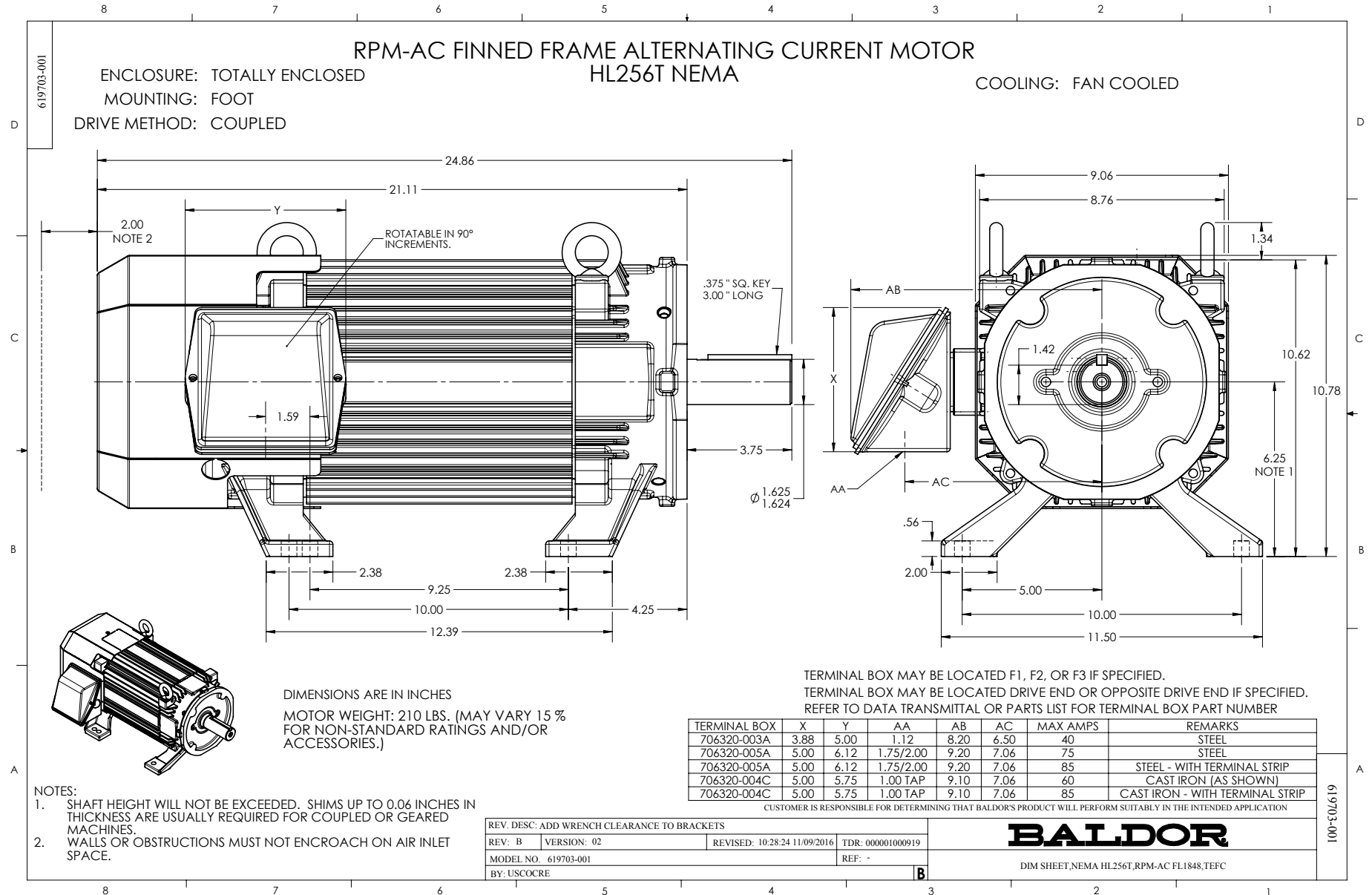
**LSPM MOTOR
PERFORMANCE
CURVES**

ISSUE DATE

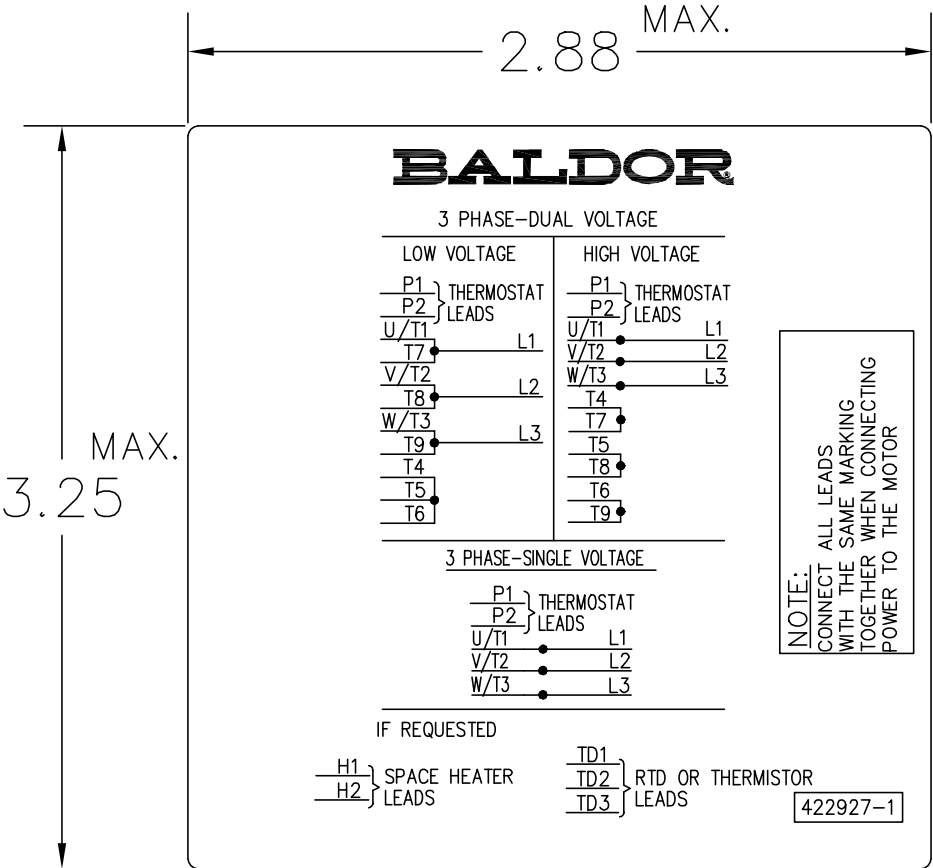
LS7017A

05/25/2016

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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