

BALDOR® • RELIANCE 

Product Information Packet

XEFRPM401004

100HP,1800,460V,HL405T,TEFC,F1

Part Detail							
Revision:	G	Status:	PRD/A	Change #:		Proprietary:	No
Type:	AC	Elec. Spec:	LS7024A	CD Diagram:	422927-001	Mfg Plant:	
Mech. Spec:		Layout:	619705-001	Poles:	04	Created Date:	06-03-2016
Base:		Eff. Date:	04-23-2019	Leads:			

Specs			
Catalog Number:	XEFRPM401004		
Enclosure:	TEFC		
Frame:	HL405T		
Frame Material:	Exposed Laminations		
Output @ Frequency:	100.000 HP @ 60 HZ		
Synchronous Speed @ Frequency:	1800 RPM @ 60 HZ		
Voltage @ Frequency:	460.0 V @ 60 HZ		
Agency Approvals:	CCSA US		
Auxillary Box:	No Auxillary Box		
Base Indicator:	Rigid		
Bearing Grease Type:	Polyrex EM (-20F +300F)		
Constant Torque Speed Range:	1-60		
Current @ Voltage:	98.000 A @ 460.0 V		
Duty Rating:	CONT		
Feedback Device:	NO FEEDBACK		
Frame Prefix:	HL		
Heater Indicator:	No Heater		
Insulation Class:	H		

IP Rating:	IP54		
KVA Code:	F		
Mounting Arrangement:	F1		
Product Family:	Fan - Centrifugal		
Pulley End Bearing Type:	Ball		
Pulley Face Code:	Standard		
Shaft Ground Indicator:	No Shaft Grounding		
Shaft Rotation:	Reversible		
Motor Standards:	NEMA		
Thermal Device - Bearing:	None		
Thermal Device - Winding:	Normally Closed Thermostat		

Nameplate 000613007QF												
	DUTY	HP	RPM	AMPS	VOLTS	HZ						
	CONT	100	1800	98	460	60						
CAT.NO.	XEFRPM401004		SPEC. NO.		H40-A000-0001							
SER.NO.			FRAME SIZE		HL405T		TYPE PSM					
AMB.	40	S.F.	1.15	ENCL.	TEFC	PH	3	DESIGN	B	CODE	F	
NEMA NOM. EFF	97.3		GUARANTEED EFFICIENCY		96.7		POWER FACTOR		99.1		INSUL. CLASS	H
D.E. BRG.	75BC02J30X		O.D.E. BRG.		55BC02J30X							
VPWM INVERTER DUTY @1.0SF	CHP HZ	60-90		CT HZ	1-60		VT HZ	0-60				
	X/T											

Nameplate 000692000VY		
IS	<input type="text"/>	MEAS OPEN CIRCUIT VOLTAGE
		VOLTS AT <input type="text"/>
		MTR PH CURRENT SHOULD NOT
EXCEED	L.R. <input type="text"/>	AMPS RMS PEAK TO
		RPM.
		AVOID DEMAGNETIZATION

Parts List		
Part Number	Description	Quantity
WS313105	WS H40-A000-0001	1.000 EA
RA309334	RA H40-A000-0001	1.000 EA
000692000FP	NP, WARNING LIFT INSTRUCTIONS	1.000 EA
000692000VD	LABEL WARNING	1.000 EA
418057747A	METAL FASTENER	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
810106004AAC	BRKT,ODE,LSPM280 (FL400)	1.000 EA
810106003AAA	BRKT,DE,LSPM280 (FL400)	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	0.300 LB
036600014AB	FLTW MOTOR MTG.	2.000 EA
415045002F	SLINGER	1.000 EA
415045002P	SLINGER	1.000 EA
400638001G	WAVEN (Customer number 43699)	1.000 EA
418150003A	GREASE FITTING CAP	2.000 EA
035000001A	ALFTG 1/8" 1610-BL	1.000 EA
035000001BA	ALFTG 1/8" 1688-B-use 1B (bs)	1.000 EA
036100070KA	METRIC HSHCS	3.000 EA
036100070JA	HSHCS M8 70MM UNPLATED	3.000 EA

Parts List (continued)		
Part Number	Description	Quantity
036140001D	EYEBOLT - 360	2.000 EA
034693001AB	PPLG - G508- use 034692001AB	1.000 EA
034693001AB	PPLG - G508- use 034692001AB	1.000 EA
036500011AB	METRIC NUT M12-1.75 PLT.	4.000 EA
036500011AB	METRIC NUT M12-1.75 PLT.	4.000 EA
609830005G	TBOLT VERSION 3	4.000 EA
415000103E	T/LUG #4AWG-1/0AWG W/HOLE FOR .375 BOLT	1.000 EA
415072001B	CLAMP	1.000 EA
417733004J	GASKT	3.000 EA
034180014FA	KEY 3/8X3/8X1-3/4L	1.000 EA
078548001T	FAN 250	1.000 EA
708535505A	FAN COVER HL360	1.000 EA
036000016KB	HHCSM10-1.5X16MM PLTD-280	4.000 EA
036000016KB	HHCSM10-1.5X16MM PLTD-280	2.000 EA
418018074A	GROUND LABEL G100 METRIC 160 D.C.	3.000 EA
033512008LB	HHTTS 1/4-20X1 PLATED	4.000 EA
406673002AE	2" CAP PLUG	1.000 EA
036620009AB	M8 EXTERNAL LK WASHER	1.000 EA
036620010AB	M10 EXT. TOOTH LK WASHER	2.000 EA
034630001AJ	1/8" PIPE COUPLING	1.000 EA
418014004A	609185004cDPT/BOX	2.000 EA
034530016AB	P/NIP 1/8X2 PLATED - 320	1.000 EA
076708000BB	CONDUIT BOX-360	1.000 EA
076709000A	C/B Cover - 360	1.000 EA

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067053000B	GASK 320-400	1.000 EA
036000080JB	HHCS BRHLDR MTG	4.000 EA
034180048JA	KEY 3/4X3/4X6L	1.000 EA
004824007K	SPECIAL PAINT	0.100 EA

S. O.	FRAME	HP	TYPE	PHASE	HERTZ	RPM
--	HL405T	100	PSM	3	60	1800
VOLTS	AMPS	DUTY	AMB°C	INSUL	S. F.	NEMA DESIGN
460	97.4	CONT	40	H	1.15	B
CODE LETTER	ENCL	ROTOR INERTIA (lb-ft ²)		STATOR RES. @ 25°C OHMS (BETWEEN LINES)		
F	TEFC	11.1		.06784		TYPICAL DATA

PERFORMANCE


LOAD	HP	AMPERES	RPM	POWER FACTOR %	EFFICIENCY %
NO LOAD	0	32.1	1800	3.50	N/A
1/4	25.0	28.4	1800	86.8	95.1
2/4	49.9	49.1	1800	98.7	96.6
3/4	74.9	72.9	1800	99.4	96.9
4/4	99.8	97.4	1800	99.1	96.8
5/4	125	123	1800	98.3	96.6

SPEED TORQUE

	RPM	TORQUE (% FULL LOAD)	TORQUE (lb-ft)	AMPERES
LOCKED ROTOR	0	169	494.0	688.0
PULL OUT	1800	220	642.0	275.6
FULL LOAD	1800	100	291.5	97.4

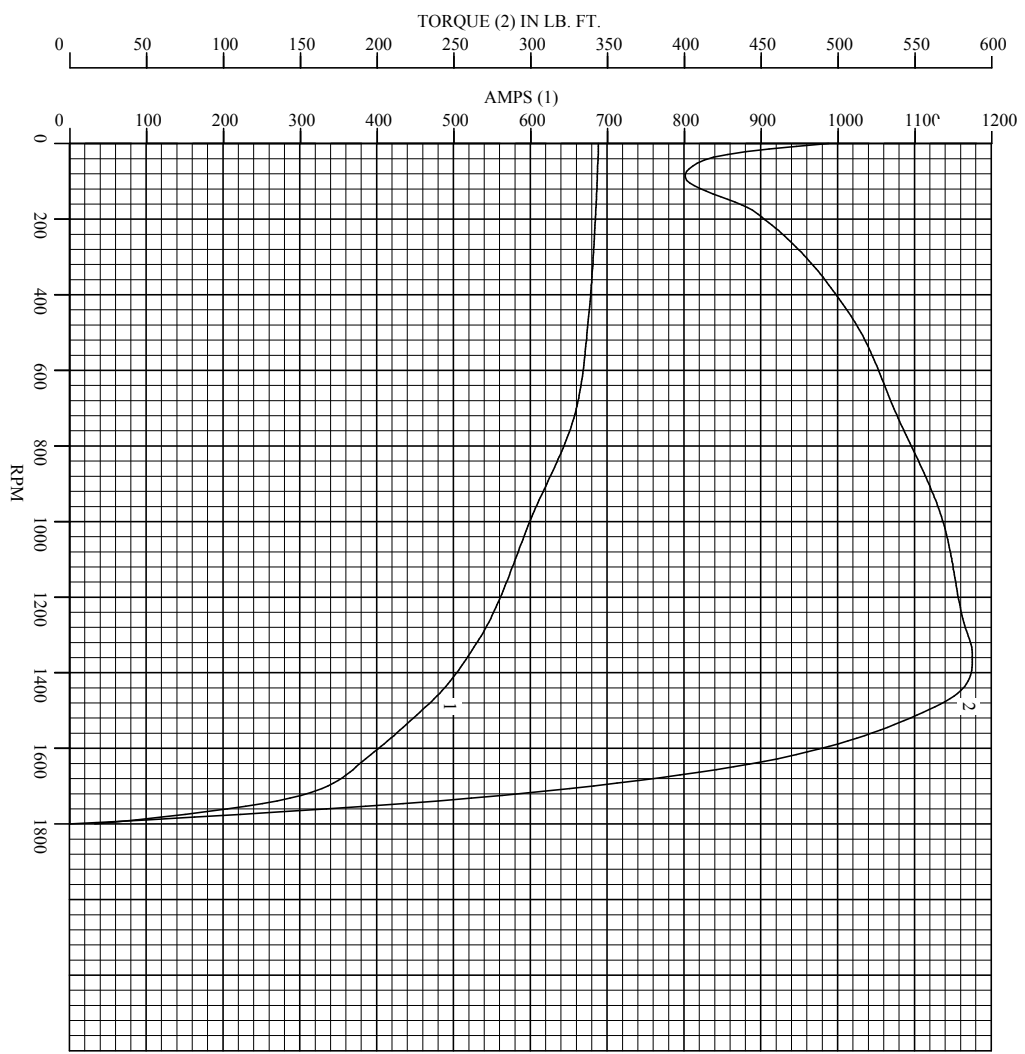
THIS IS A PERMANENT MAGNET MOTOR
 GENERATED OPEN CIRCUIT LINE-LINE VOLTAGE at 25°C = 22.1 VOLTS PER 100 RPM

REMARKS:

 A MEMBER OF THE ABB GROUP	DR. BY	CAD	LSPM MOTOR PERFORMANCE DATA ISSUE DATE 05/25/2016
	CR. BY	SEM	
	APP. BY	SEM	
	DATE	05/25/2016	

S. O.	--	HERTZ	60	AMB°C	40	CODE LETTER	F
FRAME	HL405T	RPM	1800	INSUL.	H	WR ² (lb-ft ²)	11.1
HP	100	VOLTS	460	S.F.	1.15	NEMA DESIGN	B
TYPE	PSM	AMPS	97.4	ENCL.	TEFC	STATOR RES. @ 25°C	.06784
PHASE	3	DUTY	CONT			OHMS (BETWEEN LINES)	

**Amps & Torque vs. RPM
During Acceleration**



TYPICAL DATA

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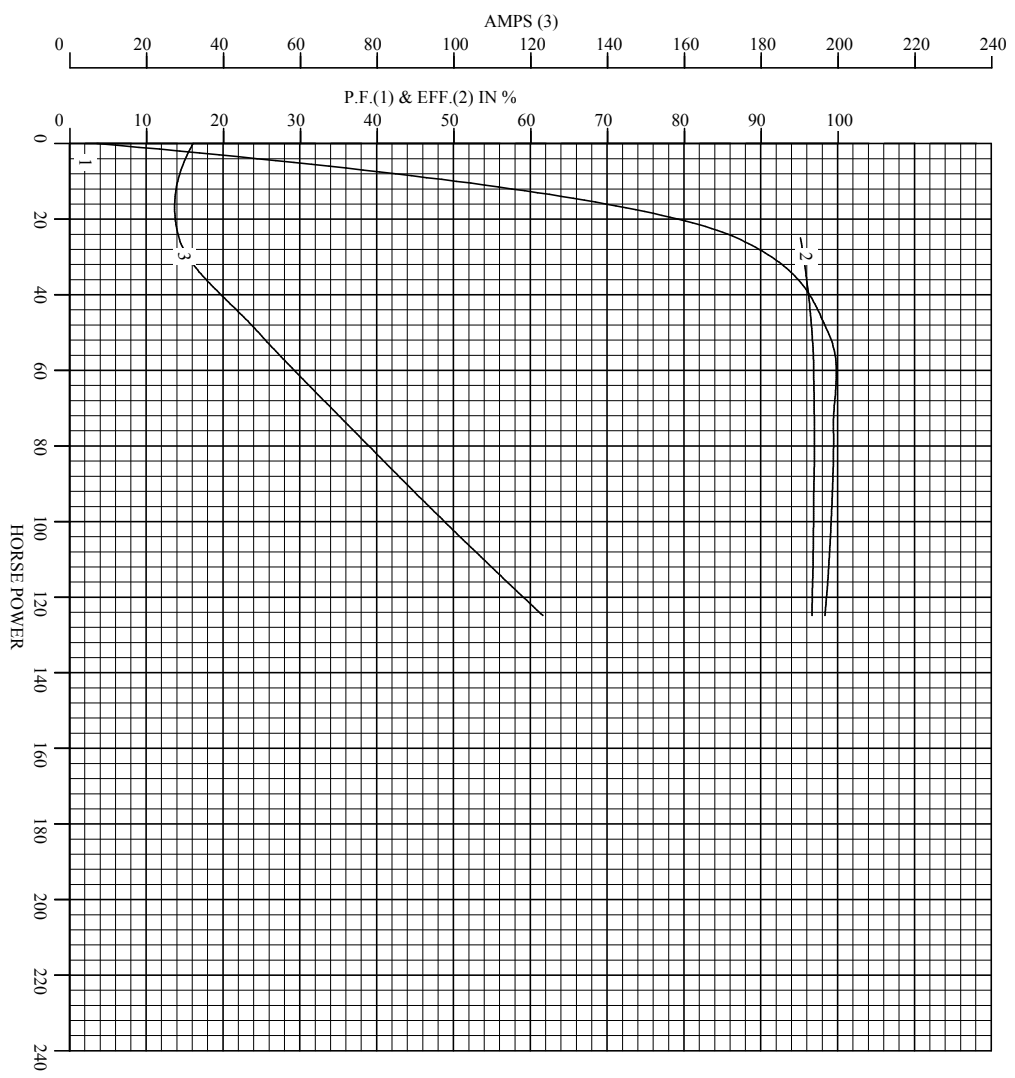
DR. BY	CAD	
CR. BY	RHM	
APP. BY	RHM	
DATE	05/25/2016	

**ISPM MOTOR
PERFORMANCE
CURVES**

ISSUE DATE
L57024A
05/25/2016

S. O.	--	HERTZ	60	AMB°C	40	CODE LETTER	F
FRAME	HL405T	RPM	1800	INSUL	H	WR ² (1b-ft ²)	11.1
HP	100	VOLTS	460	S.F.	1.15	NEMA DESIGN	B
TYPE	PSM	AMPS	97.4	ENCL	TEFC	STATOR RES. @ 25°C	.06784
PHASE	3	DUTY	CONT			OHMS (BETWEEN LINES)	

Performance Data vs. HP
At Synchronous Speed



TYPICAL DATA

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DATE	05/25/2016

ISPM MOTOR

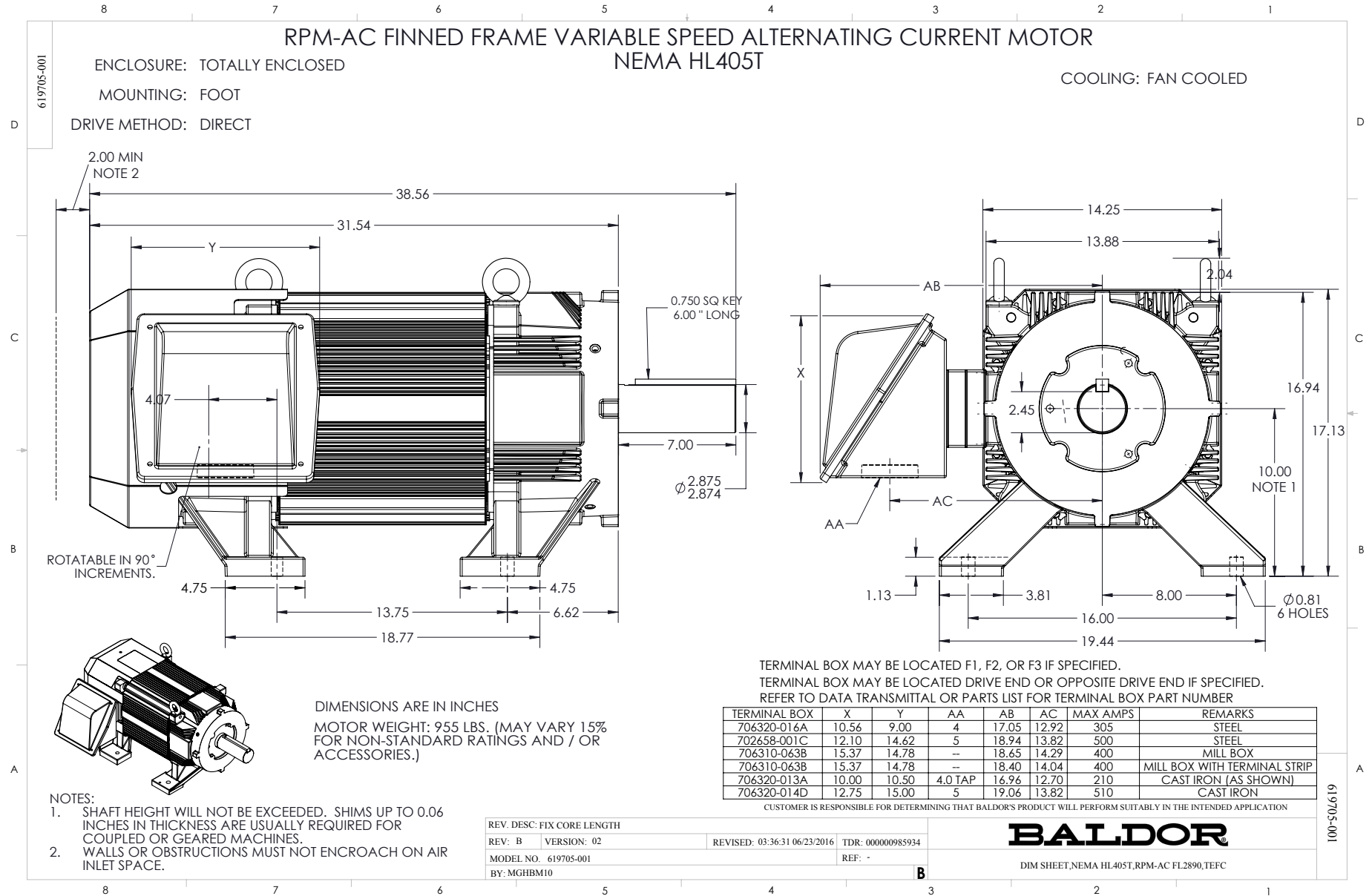
PERFORMANCE

CURVES

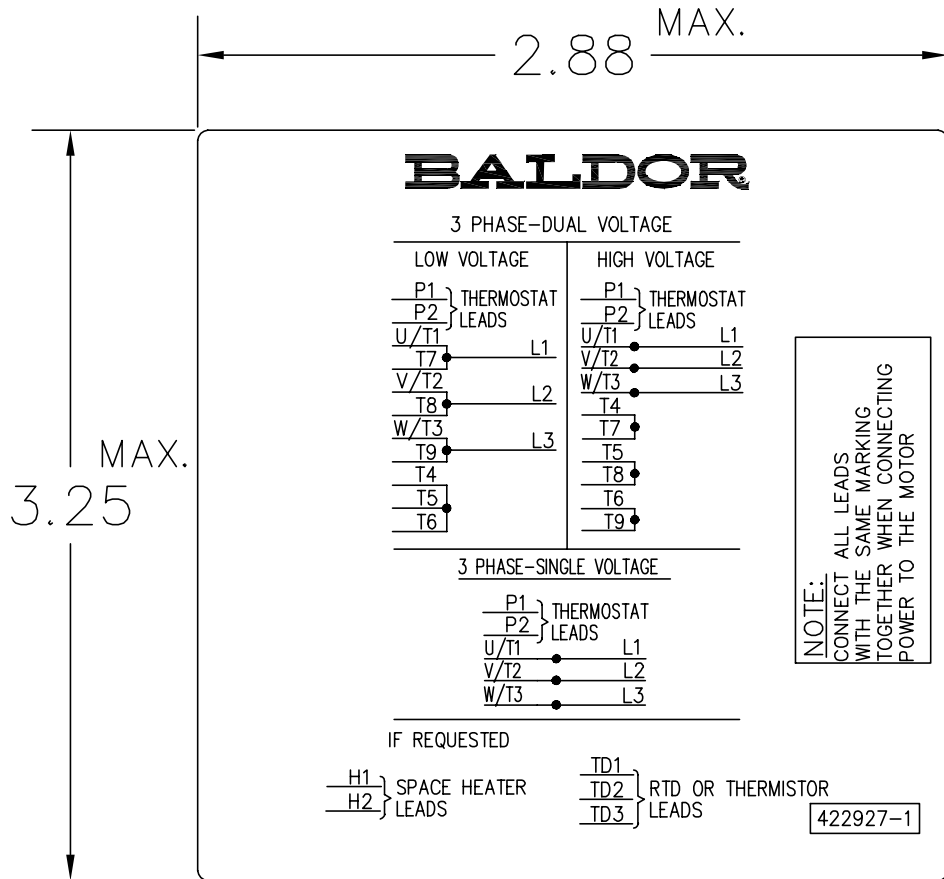
ISSUE DATE

L57024A

05/25/2016



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

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