

# **ABB BALDOR RELIANCE III**

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## **Customer information packet** XEFRPM36754

75HP, 1800, 460V, HL365T, TEFC, F1

**Specifications**

<b>Enclosure</b>	TEFC
<b>Frame</b>	HL365T
<b>Frame Material</b>	Exposed Laminations
<b>Frequency</b>	60.00 Hz
<b>Output @ Frequency</b>	75.000 HP @ 60 HZ
<b>Phase</b>	3
<b>Synchronous Speed @ Frequency</b>	1800 RPM @ 60 HZ
<b>Voltage @ Frequency</b>	460.0 V @ 60 HZ
<b>Agency Approvals</b>	CCSA US NEMA PREMIUM
<b>Auxiliary Box</b>	NO AUXILLARY BOX
<b>Base Indicator</b>	Rigid
<b>Bearing Grease Type</b>	Polyrex EM (-20F +300F)
<b>Constant Torque Speed Range</b>	1-60
<b>Current @ Voltage</b>	74.000 A @ 460.0 V
<b>Duty Rating</b>	CONT
<b>Feedback Device</b>	NO FEEDBACK
<b>Frame Prefix</b>	HL
<b>Heater Indicator</b>	No Heater
<b>High Voltage Full Load Amps</b>	74.0 a
<b>Insulation Class</b>	H
<b>KVA Code</b>	G
<b>Motor Standards</b>	NEMA
<b>Mounting Arrangement</b>	F1
<b>Product Family</b>	Fan - Centrifugal
<b>Pulley End Bearing Type</b>	Ball
<b>Pulley Face Code</b>	Standard
<b>Service Factor</b>	1.15
<b>Shaft Diameter</b>	2.374 IN
<b>Shaft Ground Indicator</b>	No Shaft Grounding
<b>Shaft Rotation</b>	Reversible
<b>Speed</b>	1800 rpm

**Part Detail**

<b>Revision</b>	G
<b>Type</b>	AC
<b>Mech. spec.</b>	
<b>Base</b>	
<b>Status</b>	PRD/A
<b>Elec. spec.</b>	LS7023A
<b>Layout</b>	619706-001
<b>Eff. date</b>	04-23-2019
<b>CD Diagram</b>	422927-001
<b>Poles</b>	04
<b>Leads</b>	
<b>Proprietary</b>	False
<b>Created date</b>	06-03-2016

**Thermal Device - Bearing**

**None**

**Thermal Device - Winding**

**Normally Closed Thermostat**

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**Nameplate**

**000613007QF**

	<b>DUTY</b>	<b>HP</b>	<b>RPM</b>	<b>AMPS</b>	<b>VOLTS</b>	<b>HZ</b>						
	CONT	75	1800	74	460	60						
<b>CAT.NO.</b>	XEFRPM36754		<b>SPEC. NO.</b>		H36-A000-0002							
<b>SER.NO.</b>			<b>FRAME SIZE</b>		HL365T	<b>TYPE PSM</b>						
<b>AMB.</b>	40	<b>S.F.</b>	1.15	<b>ENCL.</b>	TEFC	<b>PH</b>	3	<b>DESIGN</b>	B	<b>CODE</b>	G	
<b>NEMA NOM. EFF</b>	97.3		<b>GUARANTEED EFFICIENCY</b>		96.7		<b>POWER FACTOR</b>		99.2		<b>INSUL. CLASS</b>	H
<b>D.E. BRG.</b>	75BC02J30X		<b>O.D.E. BRG.</b>		55BC02J30X							
<b>VPWM INVERTER DUTY @1.0SF</b>	<b>CHP HZ</b>	60-90		<b>CT HZ</b>	1-60		<b>VT HZ</b>	0-60				
	XT											

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000692000VY

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**MEAS OPEN CIRCUIT VOLTAGE**

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IS  VOLTS AT  RPM.

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S.O.	FRAME	HP	TYPE	PHASE	HERTZ	RPM
--	HL365T	75	PSM	3	60	1800
VOLTS	AMPS	DUTY	AMB <sup>o</sup> C	INSUL	S.F.	NEMA DESIGN
460	72.7	CONT	40	H	1.15	B
CODE LETTER	ENCL	ROTOR INERTIA (lb-ft <sup>2</sup> )	STATOR RES. @ 25 <sup>o</sup> C OHMS (BETWEEN LINES)		TYPICAL DATA	
G	TEFC	9.37	.08626		TYPICAL DATA	

**PERFORMANCE**

LOAD	HP	AMPERES	RPM	% POWER FACTOR	% EFFICIENCY
NO LOAD	0	26.3	1800	3.70	N/A
1/4	18.7	22.3	1800	83.1	94.7
2/4	37.5	37.0	1800	98.2	96.5
3/4	56.2	54.5	1800	99.4	97.1
4/4	74.9	72.7	1800	99.2	97.3
5/4	93.6	91.4	1800	98.7	97.2

**SPEED TORQUE**

	RPM	TORQUE (% FULL LOAD)	TORQUE (lb-ft)	AMPERES
LOCKED ROTOR	0	168	366.6	544.0
PULL OUT	1800	239	523.1	224.7
FULL LOAD	1800	100	218.6	72.7

THIS IS A PERMANENT MAGNET MOTOR  
GENERATED OPEN CIRCUIT LINE-LINE VOLTAGE at 25<sup>o</sup>C = 21.8 VOLTS PER 100 RPM

REMARKS:



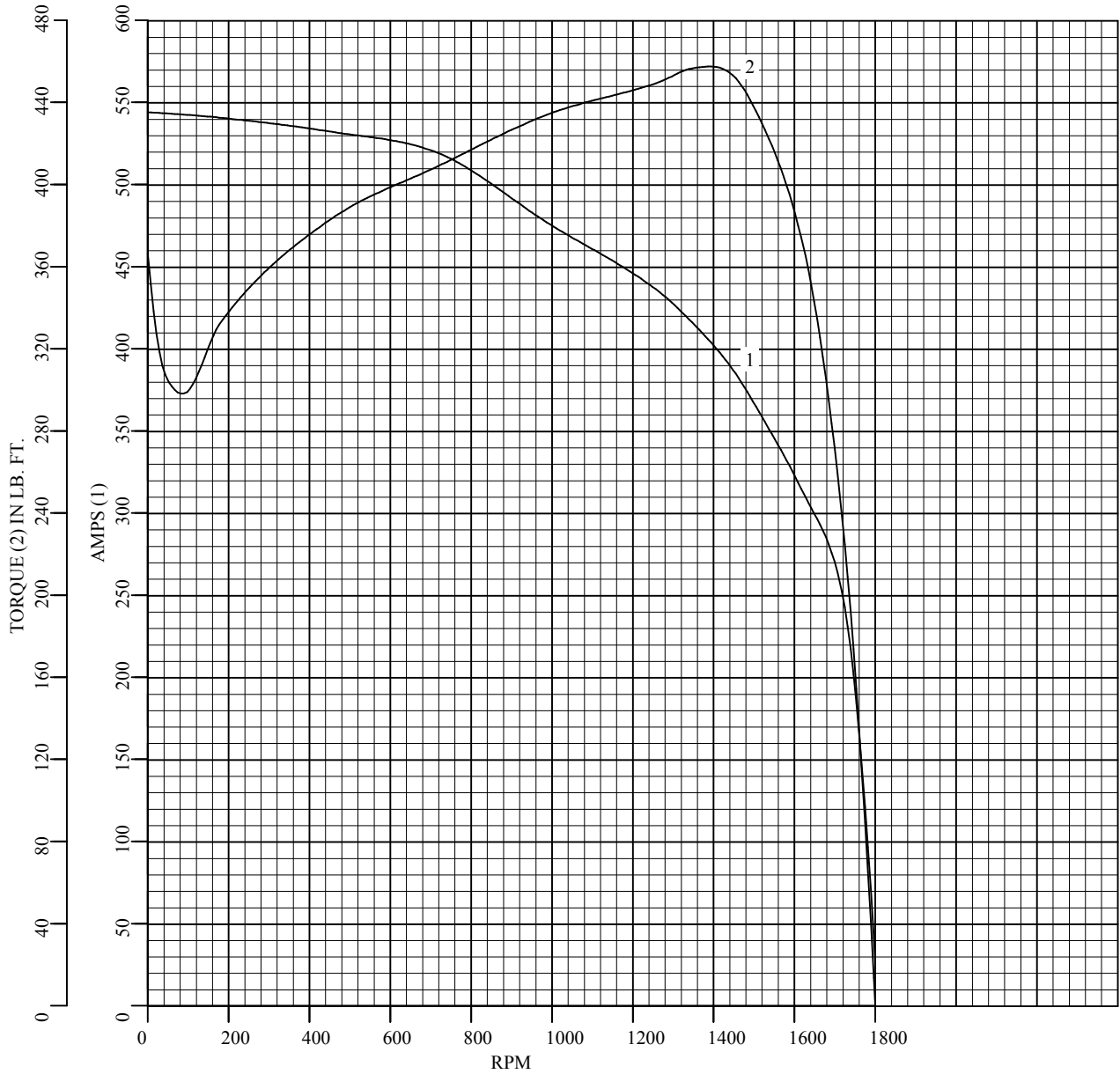
DR. BY CAD  
CK. BY RFM  
APP. BY RFM  
DATE 05/25/2016

**LSPM MOTOR  
PERFORMANCE LS7023A  
DATA**

ISSUE DATE 05/25/2016

S.O.	--	HERTZ	60	AMB <sup>o</sup> C	40	CODE LETTER	G
FRAME	HL365T	RPM	1800	INSUL	H	WK <sup>2</sup> (lb-ft <sup>2</sup> )	9.37
HP	75	VOLTS	460	S.F.	1.15	NEMA DESIGN	B
TYPE	PSM	AMPS	72.7	ENCL	TEFC	STATOR RES. @ 25 <sup>o</sup> C	.08626
PHASE	3	DUTY	CONT			OHMS (BETWEEN LINES)	

Amps & Torque vs. RPM  
During Acceleration



TYPICAL DATA



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

**LSPM MOTOR  
 PERFORMANCE  
 CURVES**

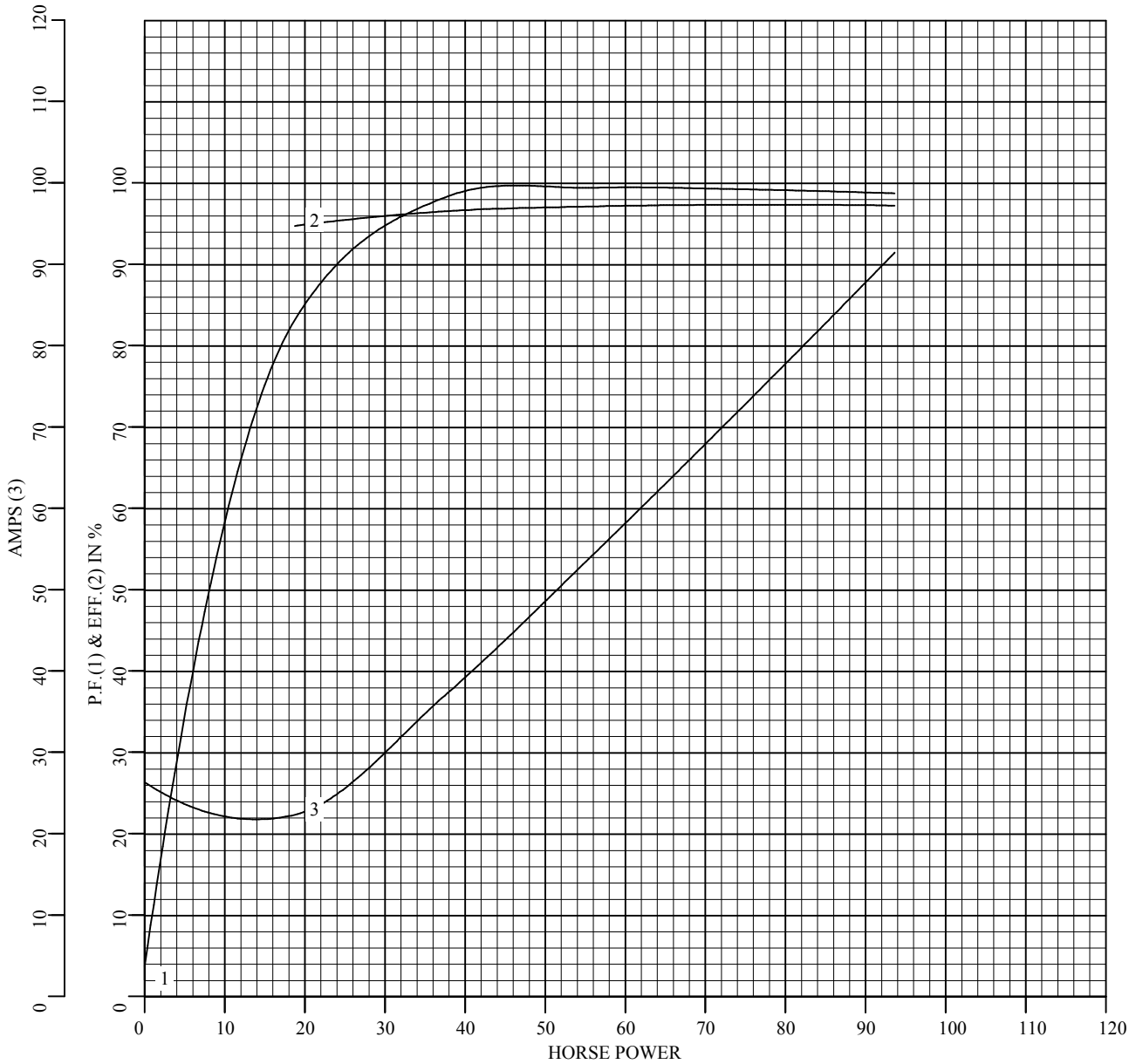
LS7023A

ISSUE DATE

05/25/2016

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FRAME	HL365T	RPM	1800	INSUL	H	WK <sup>2</sup> (lb-ft <sup>2</sup> )	9.37
HP	75	VOLTS	460	S.F.	1.15	NEMA DESIGN	B
TYPE	PSM	AMPS	72.7	ENCL	TEFC	STATOR RES. @ 25 <sup>o</sup> C	.08626
PHASE	3	DUTY	CONT			OHMS (BETWEEN LINES)	

Performance Data vs. HP  
At Synchronous Speed



TYPICAL DATA

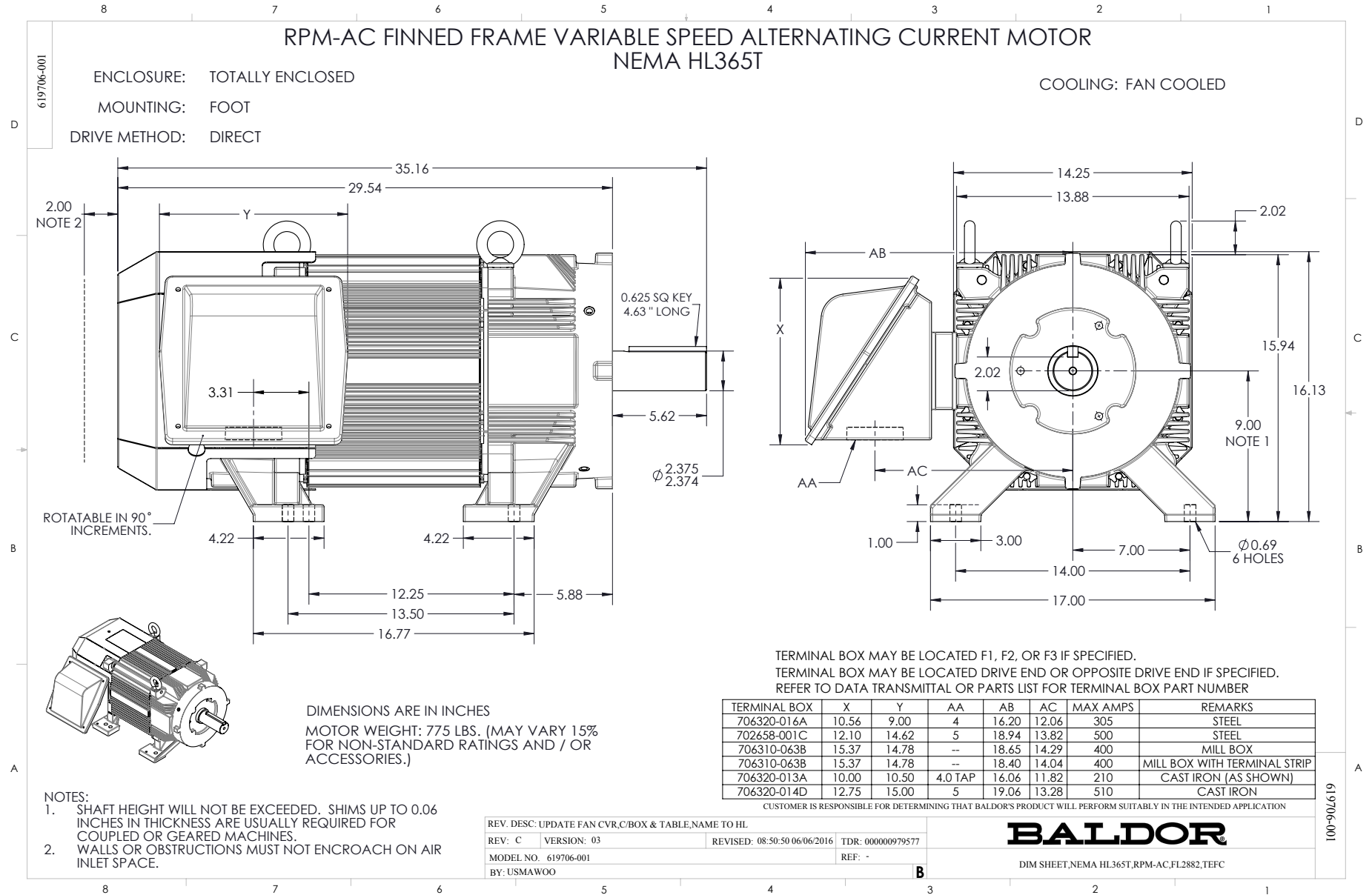


DR. BY CAD  
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**LSPM MOTOR  
 PERFORMANCE  
 CURVES**

LS7023A

ISSUE DATE 05/25/2016 Page 8 of 10



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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: 00000788708
FILE: \RGG\00000\203	REVISED: 08:09:29 03/04/2013	
MTL: -	BY: RGGWT	

**BALDOR**

EXTERNAL CONNECTION LABEL

SH 1 of 1