

BALDOR® • RELIANCE 

Product Information Packet

IDDRPM21504

50HP,1760RPM,3PH,N/AHZ,2168,DPG-FV,

Part Detail							
Revision:	-	Status:	PRD/A	Change #:		Proprietary:	No
Type:	AC	Elec. Spec:	L1757A	CD Diagram:	422927-001	Mfg Plant:	
Mech. Spec:		Layout:	617206-001	Poles:	04	Created Date:	04-10-2015
Base:		Eff. Date:	04-13-2015	Leads:			

Specs			
Catalog Number:	IDDRPM21504		
Enclosure:	DPFV		
Frame:	RL2168		
Frame Material:	Exposed Laminations		
Output @ Frequency:	50.000 HP @ 60 HZ		
Synchronous Speed @ Frequency:	1800 RPM @ 60 HZ		
Voltage @ Frequency:	460.0 V @ 60 HZ		
Agency Approvals:	CCSA US		
	UR		
Auxillary Box:	No Auxillary Box		
Base Indicator:	Rigid		
Bearing Grease Type:	No Grease		
Current @ Voltage:	62.000 A @ 460.0 V		
Duty Rating:	CONT		
Enclosure Modification:	FORCE VENT		
Feedback Device:	NO FEEDBACK		
Frame Prefix:	RL		
Heater Indicator:	No Heater		

Insulation Class:	H		
Mounting Arrangement:	F1		
Product Family:	General Industrial		
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 000613006NN										
	DUTY	HP	RPM	AMPS	VOLTS	HZ				
	CONT	50	1760	62	460	60				
	CONT	50	2010	61	460	68.6				
	CONT	50	2400	60	460	82.4				
CAT.NO.	IDDRPM21504		SPEC. NO.	P21R0254						
SER.NO.			FR	RL 2168	INSUL	H				
PH.	3	MAX SAFE SPEED	5000		AMB.	40				
DESIGN NO.	L1757A		TYPE			ENCL.	DP			
S.F.	1.00		D.E. BRG.	50BC03JPP30A						
ENCL MOD	FORCE VENT		O.D.E. BRG.	45BC02JPP30A						
									MIN. AMB.	0

Parts List		
Part Number	Description	Quantity
WS286770	WS P21R0254	1.000 EA
RA282978	RA P21R0254	1.000 EA
000613006NN	RPM AC WITH CERTIFIED LOGOS	1.000 EA
000692000FP	NP, WARNING LIFT INSTRUCTIONS	1.000 EA
000692000VD	LABEL WARNING	1.000 EA
036170004EA	ROUND HEAD DRIVE SCREW	4.000 EA
422927001	C/D LABEL	1.000 EA
036100080KA	M10-1.50X 80MM HXSOCHDCS	3.000 EA
036140001B	METRIC EYEBOLT	2.000 EA
036500010AB	METRIC NUT M10-1.5PLTD400	4.000 EA
036500010AB	METRIC NUT M10-1.5PLTD400	4.000 EA
400638001AB	WASHER SPRING - 210	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
609830005ACH	STUD FRAME .375X13 LG	4.000 EA
807527202DAE	BRKT,DE,RL210,DPFV	1.000 EA
807527203CCB	BRKT,ODE,RL210,DPFV	1.000 EA
000613006NT	NAME PLATE IEC	1.000 EA
032018004AK	HHCS 1/4-20X1/2 PLATED	2.000 EA
032018004DK	HHCS,DRIP COVER	4.000 EA
032018006CK	HHCS 3/8-16X3/4L PLATED	4.000 EA
034017014AB	LCKW 3/8 STD. PLATED	4.000 EA
036000012JB	M8-1.25 X 12MM HXHDC	3.000 EA
036000012JB	M8-1.25 X 12MM HXHDC	4.000 EA

Parts List (continued)		
Part Number	Description	Quantity
036000045HB	MHHCS M6X45MM PLATED	4.000 EA
036000020HB	HHCS M6-1.0X20MM PLATED	8.000 EA
036321020HB	HEXSOCKET FLAT SCREW M	4.000 EA
036600009AB	METRIC FLWASH M8 PLATED	3.000 EA
036620008AB	M6 METRIC EXT LOCKWASHER	1.000 EA
065591000B	GASK 250-280	1.000 EA
075454001AJ	C/BOX, PAINTED 250-280	1.000 EA
075455000A	CBOXC, PAINTED 250-280	1.000 EA
410978010C	FLANGE, INLET BLOWER HSG.	1.000 EA
410978019A	SCREEN, INLET FLANGE	1.000 EA
415000103A	T/LUG #14AWG-#4AWG W/HOLE FOR .250 BOLT	1.000 EA
417733004AC	GASK C/BOX	2.000 EA
418018074A	GROUND LABEL G100 METRIC 160 D.C.	1.000 EA
422919190	HHCVR KIT,DC180,DE, LOUVERED	1.000 EA
422919190	HHCVR KIT,DC180,DE, LOUVERED	1.000 EA
609843001K	GASKET HANDHOLE COVER FE	1.000 EA
610409128A	ADAPTER, BLOWER	1.000 EA
610490001A	.5HP,3450//2850RPM,3PH,60//50HZ,56C,3420	1.000 EA
611917002AN	GASKT RL210 DPFV	1.000 EA
611965001A	WHEEL, BLOWER	1.000 EA
706305301A	GUARD, SHAFT	1.000 EA
708528004G	HOUSING, BLOWER	1.000 EA
000640000P	TAG WINDING THERMOST	1.000 EA
004824007K	SPECIAL PAINT	0.100 EA

034180020GA	KEY 1/2X1/2X2-1/2 L	1.000 EA
418018116	WARNING PLATE	1.000 EA
418010012J	CONDUIT BOX SPACER	1.000 EA

REL S.O.	-	VOLTS	460	ENCLOSURE	DPFV	WYE	CONN EQ	CKT OHMS	PER PHASE
FRAME	RL2168	AMPS	62	MAX SAFE RPM	5000	(AT BASE RATING, 25 °C)	R1	.106	X1
HP	50	DUTY	CONT	IM (AMPS)	23	R2	.0797	X2	.514
BASE SPEED	1760	S.F.	1.0	P.F. @NL/FL	.083/.857	XM			11.8
PHASE/HERTZ	3/60	AMB °C/INSUL	40/H	WK ² (lb-ft ²)	2.32				


RATED FULL LOAD DATA

	RPM	HP	TORQUE LB-FT	FUND VOLTS	FREQ-HZ	AMPS
BASE SPEED	1756	50.0	150	460	60	61.8
MAX SPEED	2408	50.0	109	460	82.4	60.0
MIN SPEED	0	0	0	20.0	1.49	62.0

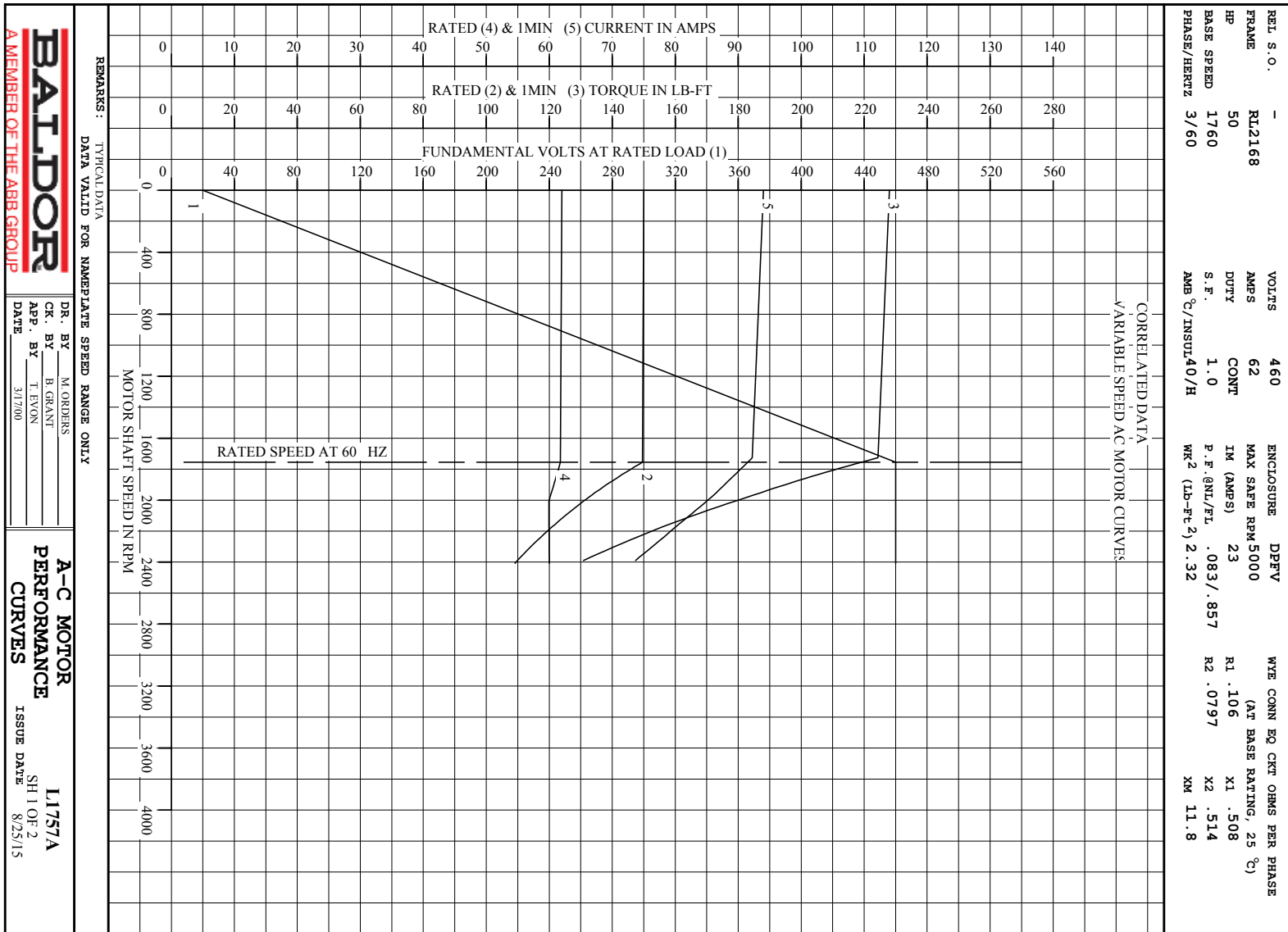
LOAD PERFORMANCE AT BASE SPEED

	RPM	HP	TORQUE LB-FT	FUND VOLTS	FREQ-HZ	AMPS
NO LOAD	1800	0	0	460	60	22.6
1/4	1790	12.5	37	460	60	27.2
1/2	1779	25.0	74	460	60	36.4
3/4	1768	37.5	111	460	60	48.2
FULL LOAD	1756	50.0	150	460	60	61.8
O/L	1727	73.8	224	460	60	92.2

REMARKS: TYPICAL DATA
CORRELATED DATA

 <p>A MEMBER OF THE ABB GROUP</p>	DR. BY	M. ORDERS	<p>A-C MOTOR</p> <p>PERFORMANCE</p> <p>DATA</p>
	CR. BY	B. GRANT	
	APP. BY	T. EVON	
	DATE	3/17/00	

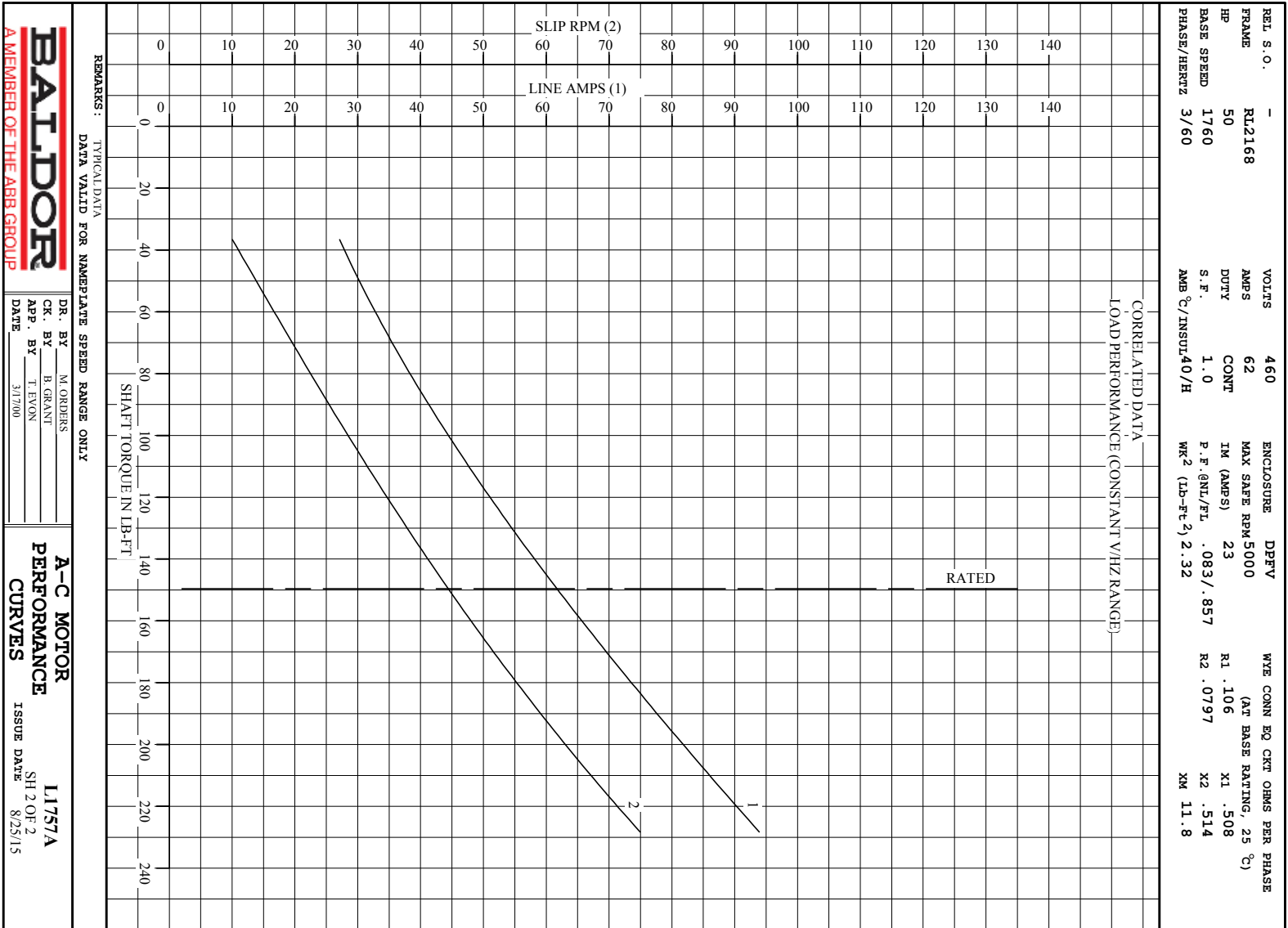
L1757A
ISSUE DATE 8/25/15



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CR. BY B. GRANT
APP. BY T. EVON
DATE 3/17/00

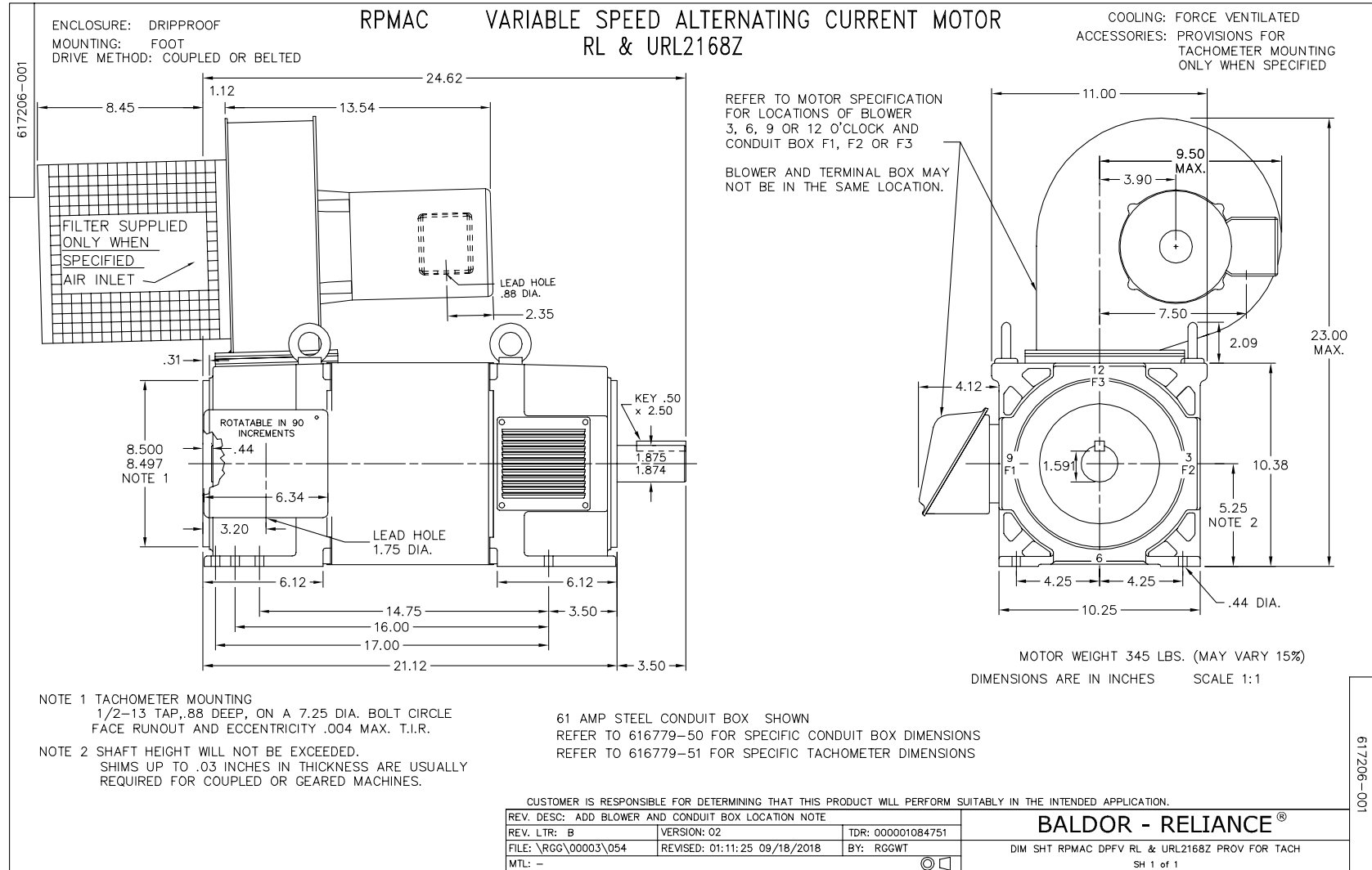
A-C MOTOR PERFORMANCE CURVES
L1757A
SH 1 OF 2
ISSUE DATE 8/25/15



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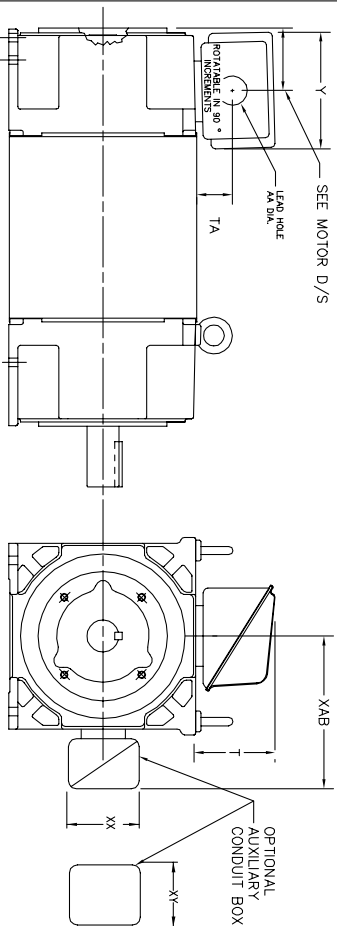
A-C MOTOR
PERFORMANCE
CURVES
L1757A
SH 2 OF 2
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INDUSTRIAL ALTERNATING CURRENT MOTORS

RPM AC

STEEL, CAST IRON, MILL AND TERMINAL BOARD CONDUIT BOX DIMENSIONS
 NEMA FRAMES RL210 thru RL280 and IEC FRAMES RDL132 thru RDL180
 NEMA FRAMES FL180 thru FL280 and IEC FRAMES FDL112 thru FDL180



FRAME	TYPE	TERMINAL STRIP	AMPS	C/BOX	Y	TA	T	AA
FL180	STEEL	N	40	706320003A	5.00	1.62	3.00	1.12
FL180	STEEL	Y/N	7/5	706320005A	6.12	2.38	4.38	1.75/2.00
FL180	STEEL	N	208	706320007A	7.62	2.00	7.00	2.50/3.00
FL180	CAST IRON	Y/N	60	706320004C	5.75	2.38	4.38	1.0 TAP
FL180 & FDL11	MILL	Y	100	706310056A	7.75	2.30	4.40	PG29/PG16

FL210 & RL210	STEEL	N	61	075452000B	6.34	2.00	4.12	1.75
FL210 & RL210	STEEL	N	121	075454001AJ	7.69	2.38	5.25	1.94
FL210 & RL210	STEEL	N	305	706320016A	9.00	4.12	8.44	4.59
FL210 & RL210	CAST IRON	N	110	075460062B	7.25	2.50	5.25	1.5 TAP
FL210 & RL210	MILL	Y	100	706310225R	7.75	2.30	4.40	PG29/PG16
FL210 & RL210	MILL	Y	160	706310226R	9.00	3.06	5.40	PG36/PG16
FL210 & RL210	MILL	Y	160	706310056B	9.00	3.06	5.40	PG36/PG16
FL210 & RL210	MILL	Y	400	706310063B	14.39	7.43	12.15	BLANK

FL250 & RL250	STEEL	N	61	075452000B	6.34	2.00	4.12	1.75
FL250 & RL250	STEEL	N	121	075454001AJ	7.69	2.38	5.25	1.94
FL250 & RL250	STEEL	N	305	706320016A	9.00	4.12	8.44	4.59
FL250 & RL250	CAST IRON	N	110	075460062B	7.25	2.50	5.25	1.5 TAP
FL250 & RL250	CAST IRON	N	210	706320013A	10.50	4.88	9.00	4.0 TAP
FL250 & RL250	MILL	Y	100	706310056A	7.75	2.30	4.40	PG29/PG16
FL250 & RL250	MILL	Y	160	706310225R	7.75	2.30	4.40	PG29/PG16
FL250 & RL250	MILL	Y	160	706310056B	9.00	3.06	5.40	PG36/PG16
FL250 & RL250	MILL	Y	400	706310063B	14.39	7.43	12.15	BLANK

FL280 & RL280	STEEL	N	160	706320009A	7.25	3.50	7.06	2.50
FL280 & RL280	STEEL	N	305	706320016A	9.00	4.12	8.44	4.59
FL280 & RL280	STEEL	N	500	702658001C	14.62	7.56	12.70	5.00
FL280 & RL280	CAST IRON	N	140	706320012B	9.25	4.81	8.56	3.0 TAP
FL280 & RL280	CAST IRON	N	210	706320013A	10.50	4.88	9.00	4.0 TAP
FL280 & RL280	CAST IRON	N	510	706320014D	15.00	7.56	12.81	5.0 TAP
FL280 & RL280	MILL	Y	100	706310056A	7.75	2.30	4.40	PG29/PG16
FL280 & RL280	MILL	Y	160	706310056B	9.00	3.06	5.40	PG36/PG16
FL280 & RL280	MILL	Y	160	706310056B	9.00	3.06	5.40	PG36/PG16
FL280 & RL280	MILL	Y	400	706310063B	14.39	7.43	12.15	BLANK

FRAME SIZE	XAB	OPTIMAL AUXILIARY CONDUIT BOX DIMENSIONS (MAXIMUM)			
		XX	XY	PART NUMBER	FRAME SIZE
FL180/TL180/RL210/VL132	7.38	4.25	4.25	603C007-26-A	FL180/TL180/RL210/VL132
FL180/TL180/RL210/VL160	8.44	4.25	4.25	603C007-26-A	FL180/TL180/RL210/VL160
FL280/TL180/RL280/VL180	9.12	4.25	4.25	603C007-26-A	FL280/TL180/RL280/VL180
		XAB	XX	XY	PART NUMBER
		10.88	8.00	8.00	706310-3-B
		11.88	8.00	8.00	706310-3-B
		12.62	8.00	8.00	706310-3-B

- (1) TAP CONDUIT
- (2) TAP PIPE TAP
- (3) CUSTOMER TO PROVIDE HOLE FOR CONDUIT.
- (4) 2" DN -5A or 1" TAP DN -4C

TERMINAL BOX CAN BE REPIATED FOR LEAD OUTLET AT TOP SIDES OR BOTTOM TERMINAL BOX CAN BE REPIATED FOR LEAD OUTLET AT TOP SIDES OR BOTTOM SIDE. LEAD OUTLET IS SPECIFIED IN BOX LOCATED ON TOP WHEN SPECIFIED.

050-667919

CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT BALDOR'S PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION.

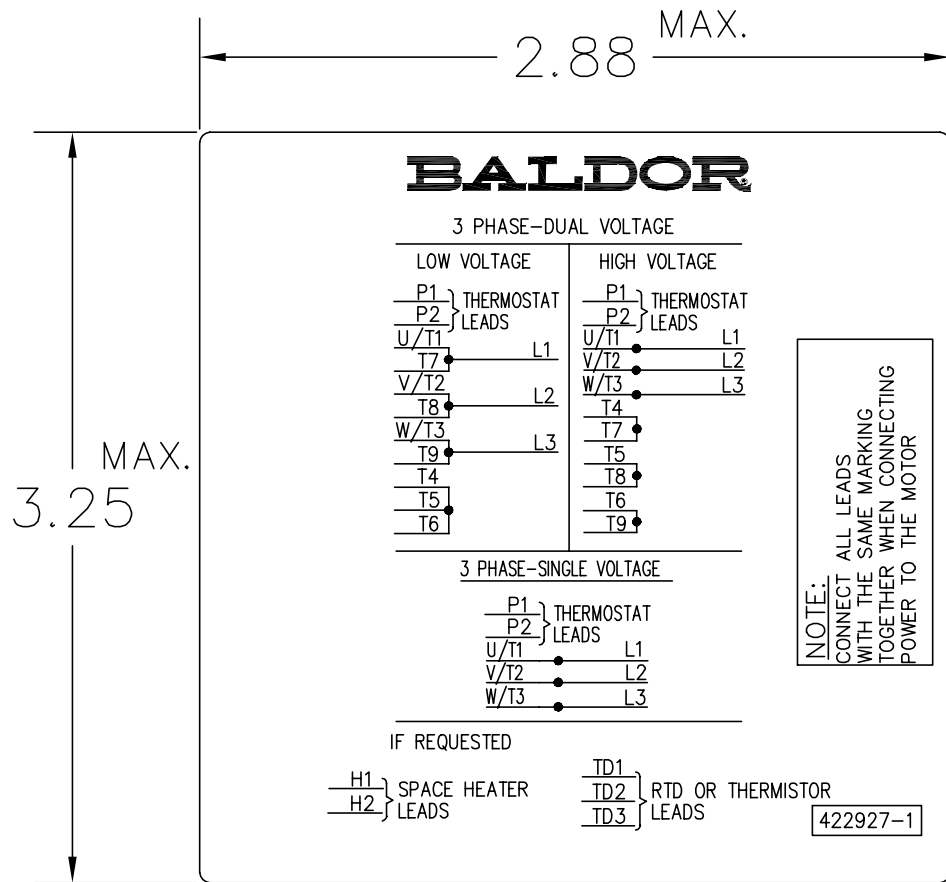
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REV. LTR: E	REVISED: 07: 27: 52 12/18/2018	BY: RGGWT
FILE: \RGG\00003\692		
MTL: -		

BALDOR - RELIANCE®

DIM SHT NEMA RL210-RL280 FL180-FL280 IEC RDL132-RDL180

SH 1 of 1

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

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