

ABB BALDOR RELIANCE III

Customer information packet

IDDRPM364004

400HP, 1775RPM, 3PH, 60HZ, L3614, DPG-FV, FOOT

Specifications

Enclosure	DPFV
Frame	L3614
Frame Material	Exposed Laminations
Frequency	60.00 Hz
Output @ Frequency	400.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	460.0 V @ 60 HZ
Agency Approvals	CCSA US
	UR
Auxiliary Box	NO AUXILLARY BOX
Base Indicator	Rigid
Bearing Grease Type	Polyrex EM (-20F +300F)
Current @ Voltage	459.000 A @ 460.0 V
Duty Rating	CONT
Enclosure Modification	FORCE VENT
Feedback Device	NO FEEDBACK
Frame Prefix	L
Heater Indicator	No Heater
High Voltage Full Load Amps	459.0 a
Insulation Class	H
Motor Standards	NEMA
Mounting Arrangement	F1
Overall Length	51.50 IN
Product Family	General Industrial
Pulley End Bearing Type	Ball
Pulley Face Code	Standard
Service Factor	1.00
Shaft Diameter	2.874 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Speed	1775 rpm

Part Detail

Revision	A
Type	AC
Mech. spec.	
Base	
Status	INA/A
Elec. spec.	L0809A
Layout	616779-001
Eff. date	10-04-2019
CD Diagram	422927-001
Poles	04
Leads	
Proprietary	False
Created date	04-10-2015

Thermal Device - Bearing	None
Thermal Device - Winding	Normally Closed Thermostat

Nameplate

000613006MY									
	DUTY	HP	RPM	AMPS	VOLTS	HZ			
	CONT	400	1775		459	460		60	
	CONT	400	2400		446	460		81.1	
	CONT	400	2700		450	460		91.3	
CAT.NO.				SPEC. NO.	P36L0212				
SER.NO			FR	L 3614	INSUL	H			
PH.	3	MAX SAFE SPEED			3750	AMB.	40	MIN. AMB.	-25
DESIGN NO.	L0809A	TYPE			ENCL.	DP			
S.F.	1.0	D.E. BRG.			95BC02J30X				
ENCL MOD	FORCE VENT	O.D.E. BRG.			80BC02J30X				

FRAME	RL3614	AMPS	459	MAX SAFE SPEED	3750	WYE CONN EQ CKT PER PHASE (AT BASE RATING, 25°C)	
HP	400	DUTY	CONT	IM (AMPS)	146.47	R1 .00662	X1 .0657
BASE SPEED	1775	S.F.	1.0	P.F. @NL / FL	.035/.874	R2 .00528	X2 .0660
PHASE/HZ	3/60	AMB.°C / INSUL	40/H	WK ² (Lb-Ft ²)	45	XM 1.84	

RATED FULL LOAD DATA

	RPM	HP	TORQUE LB-FT	FUND VOLTS	FREQ-HZ	AMPS
BASE SPEED	1776	400	1183	460	60	461
MAX SPEED	2700	400	778	460	91.3	450
MIN SPEED	0	0	1183	9.76	.804	461

LOAD PERFORMANCE AT BASE SPEED

	RPM	HP	TORQUE LB-FT	FUND VOLTS	FREQ-HZ	AMPS
NO LOAD	1800	0	0	460	60	144
1/4	1794	102	297	460	60	184
1/2	1788	203	595	460	60	263
3/4	1782	304	896	460	60	360
FULL LOAD	1776	400	1183	460	60	461
0/L	1743	785	2365	460	60	955

REMARKS:
TYPICAL DATA
CORRELATED DATA

BALDOR
A MEMBER OF THE ABB GROUP

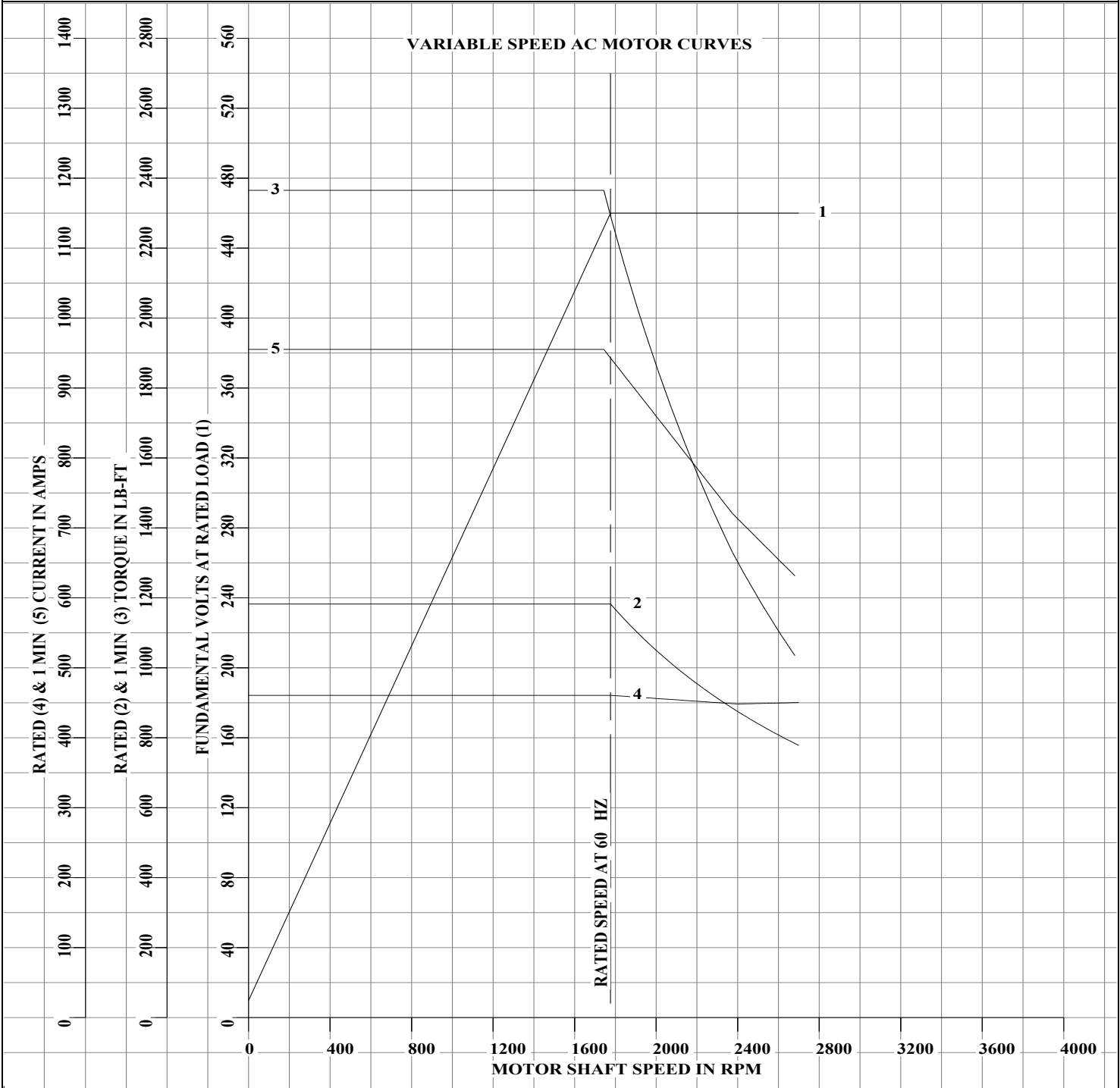
DRAWN BY: J. MARTIN
CHECKED BY: J. MARTIN
APPROVED BY: T. EVON
DATE: 01/18/97

**AC MOTOR
PERFORMANCE
DATA**

L0809A

ISSUE DAT 6-19-17

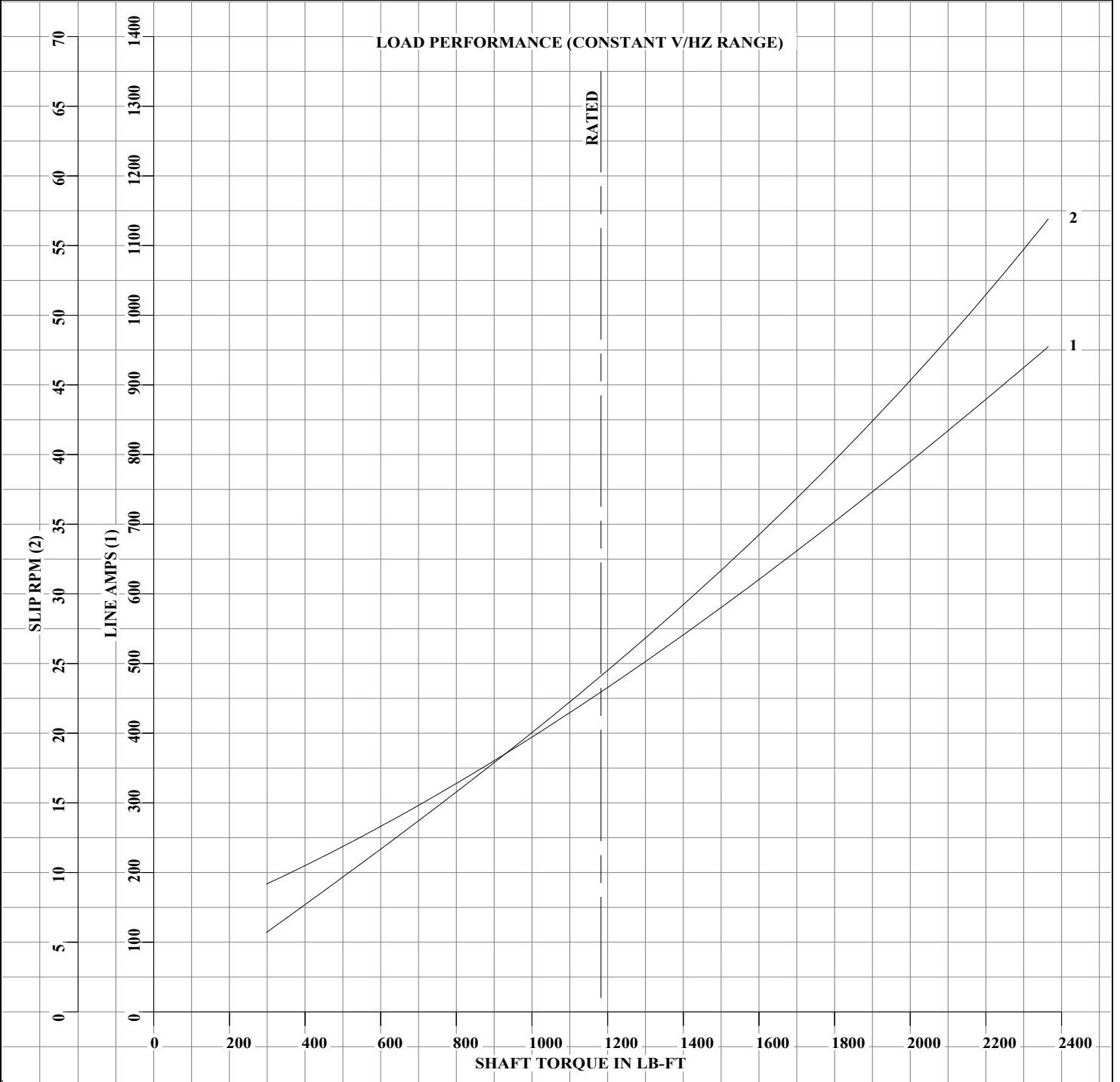
FRAME	RL3614	VOLTS	460	ENCLOSURE	DPFV	WYE CONN EQ CKT PER PHASE (AT BASE RATING, 25°C)		
HP	400	AMPS	459	MAX SAFE SPEED	3750	R1	.00662	X1 .0657
BASE SPEED	1775	DUTY	CONT	IM (AMPS)	146.47	R2	.00528	X2 .0660
PHASE/HZ	3/60	S.F.	1.0	P.F. @NL / FL	.035/.874			XM 1.84
		AMB.°C / INSUL	40/H	WK ² (Lb-Ft ²)	45			



TYPICAL DATA
CORRELATED DATA DATA VALID FOR NAMEPLATE SPEED RANGE ONLY

	DRAWN BY: <u>J. MARTIN</u> CHECKED BY: <u>J. MARTIN</u> APPROVED BY: <u>T. EVON</u> DATE: <u>01/18/97</u>	AC MOTOR PERFORMANCE DATA	L0809A
			ISSUE DATE 6-19-17

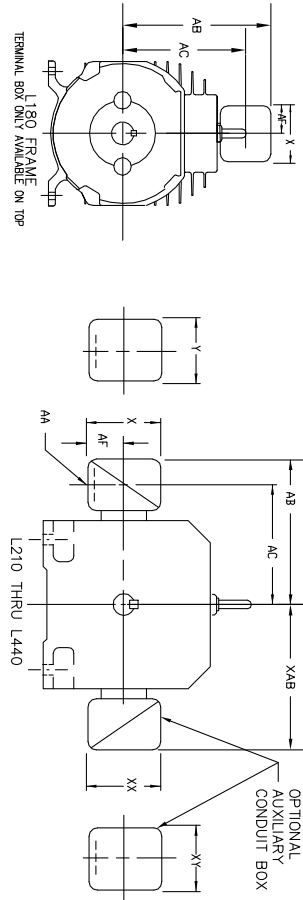
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TYPICAL DATA
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 A MEMBER OF THE ABB GROUP	DRAWN BY: J. MARTIN CHECKED BY: J. MARTIN APPROVED BY: T. EVON DATE: 01/18/97	AC MOTOR PERFORMANCE DATA	L0809A ISSUE DATE 6-19-17

RPM AC INDUSTRIAL ALTERNATING CURRENT MOTORS
STEEL, CAST IRON, MILL AND TERMINAL BOARD CONDUIT BOX DIMENSIONS
NEMA FRAMES L180 thru L440 and IEC FRAMES DL112 thru DL280



DIMENSIONS ARE IN INCHES (mm)

STEEL TERMINAL BOX DIMENSIONS (MAXIMUM)										CAST IRON TERMINAL BOX DIMENSIONS (MAXIMUM)									
FRAME MAX SIZE (AMPS IAC(1))					STANDARD SIZE					FRAME MAX SIZE (AMPS IAC(2))					STANDARD SIZE				
AB	AC	AF	X	Y	AB	AC	AF	X	Y	AB	AC	AF	X	Y	AB	AC	AF	X	Y
L180	40	1.38	8.62	6.94	2.25	4.50	5.00	706320-3-A		L180	60	1	9.38	7.50	2.50	5.00	5.75	706320-4-C	
L180	75	2	9.38	7.50	2.81	5.62	6.12	706320-5-A		L210	140	3	14.25	10.50	3.62	8.00	9.25	706320-12-B	
L210	160	2	12.75	9.19	4.25	8.44	7.25	706320-9-A & D		L210	210	4	15.62	11.38	4.12	9.50	10.50	706320-13-A	
L210	305	4	14.62	10.50	5.38	10.56	9.00	706320-16-A & D		L210	510	5	18.50	13.25	7.00	12.75	15.00	706320-14-D	
L250	500	5	18.38	13.25	6.50	12.10	14.62	706320-16-A & D		L250	140	3	15.38	11.50	3.62	8.00	9.25	706320-12-B	
L250	160	2	13.75	10.25	4.25	8.44	7.25	706320-9-A & D		L250	210	4	16.62	12.44	4.12	9.50	10.50	706320-13-A	
L250	305	4	13.75	11.56	5.38	10.56	9.00	706320-16-A & D		L250	510	5	19.62	14.31	7.00	12.75	15.00	706320-14-D	
L280	500	5	19.50	14.31	6.50	12.10	14.62	706320-16-A & D		L280	210	4	16.88	12.62	4.12	9.50	10.50	706320-13-A	
L280	160	2	14.00	10.44	4.25	8.44	7.25	706320-9-A & D		L280	510	5	19.75	14.50	7.00	12.75	15.00	706320-14-D	
L280	305	4	15.88	11.75	5.38	10.56	9.00	706320-16-A & D		L320	210	4	17.12	12.88	4.12	9.50	10.50	706320-13-A	
L320	160	2	15.38	11.81	4.25	8.44	7.25	706320-9-A & D		L320	510	5	21.12	15.88	7.00	12.75	15.00	706320-14-D	
L320	305	4	17.25	13.12	5.38	10.56	9.00	706320-16-A & D		L360	140	3	16.75	13.00	3.62	8.00	9.25	706320-12-B	
L360	160	2	16.38	12.81	4.25	8.44	7.25	706320-9-A & D		L360	210	4	18.12	13.88	4.12	9.50	10.50	706320-13-A	
L360	305	4	18.25	14.12	5.38	10.56	9.00	706320-16-A & D		L440	510	5	22.12	16.88	7.00	12.75	15.00	706320-14-D	
L440	500	5	22.00	16.88	6.50	12.10	14.62	706320-16-A & D											

MILL CONDUIT BOX DIMENSIONS (MAXIMUM)									
FRAME SIZE	AMPS	AA	AB	AC	AF	X	Y	PART NUMBER	
L210	160	(3)	10.78	8.41	3.50	8.00	8.00	706310-3-X or Y	
L250	160	(3)	11.84	9.47	3.50	8.00	8.00	706310-3-X or Y	
L280	590	(3)	12.75	10.75	4.50	16.00	16.00	706310-3-R	
L320	590	(3)	14.75	11.34	4.50	16.00	16.00	706310-3-R	
L360	590	(3)	15.47	12.06	4.50	16.00	16.00	706310-3-R	
L400	590	(3)	16.47	13.06	4.50	16.00	16.00	706310-3-R	
L440	1260	(3)	27.38	19.88	6.06	18.50	18.50	706310-63-E	

IEC CONDUIT BOX DIMENSIONS WITH TERMINAL BOARDS (MAXIMUM)									
FRAME NEMA/IEC	AMPS	AA	AB (mm)	AC (mm)	AF (mm)	X (mm)	Y (mm)	PART NUMBER	
L180/DL112	85	(4)	9.38 (239)	7.50 (191)	5.62 (143)	6.12 (156)	706320-5-A or 4-C	706320-5-A or 4-C	
L210/DL132	100	---	10.77 (274)	9.04 (230)	3.74 (95)	7.48 (190)	7.48 (190)	706310-56-A	706310-225-R
L250/DL160	160	---	11.63 (296)	9.62 (245)	4.41 (112)	8.82 (224)	8.82 (224)	706310-56-B	706310-226-R
L250/DL160	100	---	12.09 (307)	10.36 (264)	3.74 (95)	7.48 (190)	7.48 (190)	706310-56-A	706310-225-R
L280/DL180	160	---	12.95 (329)	10.94 (278)	4.41 (112)	8.82 (224)	8.82 (224)	706310-56-B	706310-226-R
L280/DL180	160	---	13.58 (345)	11.57 (294)	4.41 (112)	8.82 (224)	8.82 (224)	706310-56-B	706310-226-R
L360/DL225	800	---	20.78 (528)	18.25 (464)	6.20 (158)	14.39 (366)	14.39 (366)	706310-63-B	706310-63-B
L360/DL200	800	---	20.06 (510)	17.33 (446)	6.20 (158)	14.39 (366)	14.39 (366)	706310-63-B	706310-63-B
L400/DL250	800	---	21.75 (553)	19.25 (489)	6.20 (158)	14.39 (366)	14.39 (366)	706310-63-B	706310-63-B
L400/DL250	1260	---	25.94 (659)	18.44 (469)	6.06 (154)	18.50 (470)	18.50 (470)	706310-63-E	706310-63-E
L440/DL280	1360	---	27.38 (696)	19.88 (505)	6.06 (154)	18.50 (470)	18.50 (470)	706310-63-E	706310-63-E
L440/DL280	1300	---	30.38 (772)	21.38 (543)	12.44 (316)	24.00 (610)	24.00 (610)	706310-360-A	706310-360-A

OPTIONAL AUXILIARY CONDUIT BOX DIMENSIONS (MAXIMUM)									
FRAME SIZE	XAB	XX	XY	PART NUMBER	FRAME SIZE	XAB	XX	XY	PART NUMBER
L210/DL132	7.38	4.25	4.25	602007-26-A	L210/DL132	10.88	8.00	8.00	706310-3-B
L250/DL160	8.44	4.25	4.25	602007-26-A	L250/DL160	11.88	8.00	8.00	706310-3-B
L280/DL180	9.12	4.25	4.25	602007-26-A	L280/DL180	12.62	8.00	8.00	706310-3-B
L320/DL200	10.00	4.25	4.25	602007-26-A	L320/DL200	13.50	8.00	8.00	706310-3-B
L360/DL225	11.00	4.25	4.25	602007-26-A	L360/DL225	14.50	8.00	8.00	706310-3-B
L400/DL250	12.00	4.25	4.25	602007-26-A	L400/DL250	15.50	8.00	8.00	706310-3-B
L440/DL280	13.12	4.25	4.25	602007-26-A	L440/DL280	16.62	8.00	8.00	706310-3-B

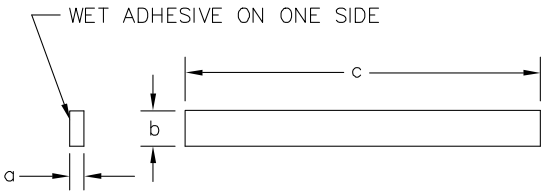
(1) ** CONDUIT
(2) ** PIPE 1/4"
(3) CUSTOMER TO PROVIDE
(4) 2" DN -5A or 1" IAW DN -4C
CONDUIT BOX CAN BE ROTATED
ROTAION OF CONDUIT BOX MAY BE
SPECIFIED

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

REV. DESC: ADD 1260 AMP L400, ADD 1300 AMP L440	VERSION: 01	TDR: 000000804459
REV. LTR: A	REVISED: 10:23:58 06/18/2013	BY: RCGWT
FILE: \RGG\00003\688		
MTL: -		

BALDOR
DIM SHT NEMA L180 THRU L440 & IEC DL112 THRU DL280
SH 1 of 1

065564-004



SYM	MAKE FROM	a	b	c	REMARKS
A	X	1/8	5/8	24*	TERMBX & CVR 180AT-250AT
B	X	1/8	5/8	37 1/2*	TERMBX & CVR 280AT-320AT
C	Y	1/4	5/8	44 1/2Δ	FILTER TO HOUSING GASKET
D	X	1/8	5/8	170"	TEAO HEAT EXCH.
E	Y	1/4	5/8	72"Δ	TERMBX & CVR

SYM	MAT'L SPEC	a	b	c
X	46024-XV	1/8	5/8	* 50' ROLL; WET ADHESIVE ON ONE SIDE
Y	46024-XV	1/4	5/8	* 50' ROLL; WET ADHESIVE ON ONE SIDE

Δ RELIANCE WILL CUT AND MOUNT ON FILTER HOUSING PER
ASSEMBLY DRAWING 603989-2.

* PROD. NOTE: WHEN ORDERING THRU PURCHASING
ORDER AS 50 FT. ROLLS, WET ADHESIVE ON ONE
SIDE. RELIANCE WILL CUT AND MOUNT ON COVER.
PER INSTRUCTIONS ON COVER DRAWINGS.

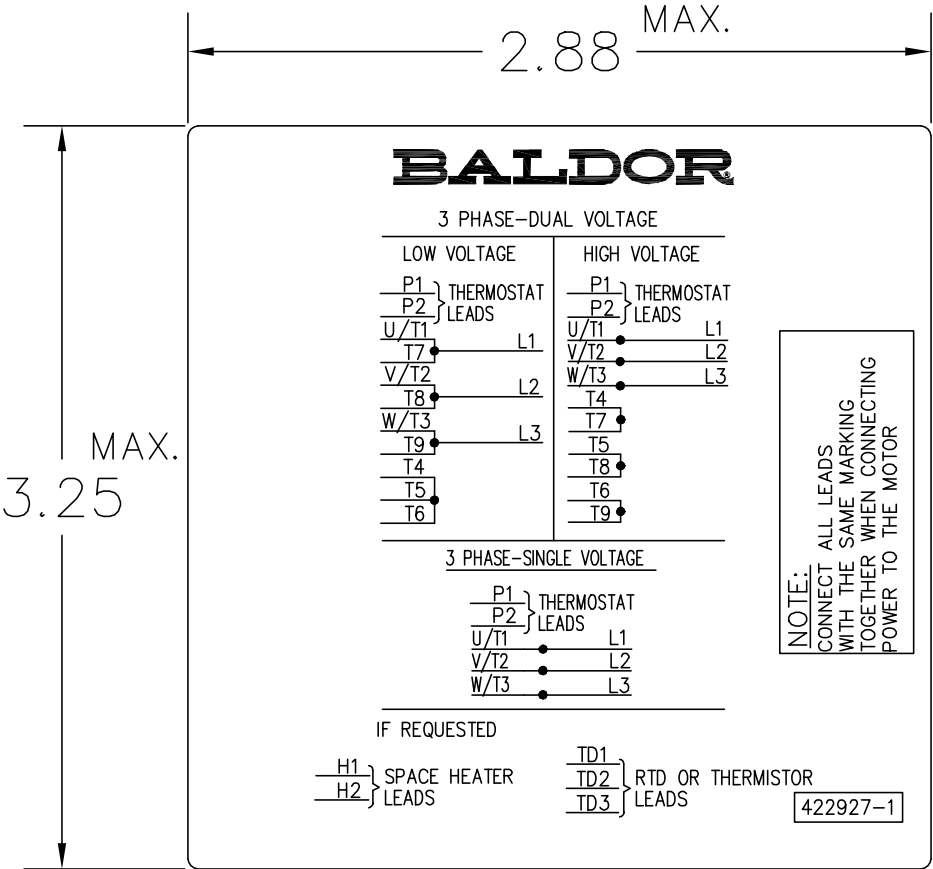
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT BALDOR'S PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION.

REV. DESC: CHANGE DESCRIPTION ON TITLE BLOCK		
REV. LTR: C	VERSION: 03	TDR: 000000571980
FILE: \RGG\00000\220	REVISED: 10:54:04 12/16/2010	BY: RGGWT
MTL: -		

BALDOR
GASKET,STRIP,CLOSED CELL NEOPRENE
SH 1 of 1

065564-004

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