

ABB BALDOR RELIANCE III

Customer information packet

IDDRPM405004

500HP, 1775RPM, 3PH, NAHZ, L4034, DPG-FV, FOOT

Specifications

Enclosure	DP
Frame	L4034
Frame Material	Exposed Laminations
Frequency	60.00 Hz
Output @ Frequency	500.000 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	557.000 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	557.0 a
Insulation Class	H
Motor Standards	NEMA
Mounting Arrangement	F1
Overall Length	56.88 IN
Product Family	General Industrial
Pulley End Bearing Type	Ball
Pulley Face Code	Standard
Service Factor	1.00
Shaft Diameter	3.624 IN
Shaft Ground Indicator	Shaft Grounding
Shaft Rotation	Reversible
Speed	1775 rpm

Part Detail

Revision	A
Type	AC
Mech. spec.	
Base	
Status	INA/A
Elec. spec.	L0485A
Layout	609998-001
Eff. date	08-03-2018
CD Diagram	422927-001
Poles	04
Leads	
Proprietary	False
Created date	04-09-2015

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

Nameplate

000613006MY									
	DUTY	HP	RPM	AMPS	VOLTS	HZ			
	CONT	500	1775		557	460	60		
	CONT	500	2400		557	460	81.1		
				SPEC. NO.	P40L1315				
	SER.NO			FR	L 4034	INSUL	H		
PH.	3	MAX SAFE SPEED			3750	AMB.	40	MIN. AMB.	-25
DESIGN NO.	L0485A	TYPE			ENCL.	DP			
S.F.	1.00		D.E. BRG.		6219/C3VL0241				
ENCL MOD	FORCE VENT		O.D.E. BRG.		6316/C3VL0241				

REL S.O.	-	VOLTS	460	ENCLOSURE	DPFV	WYE CONN EQ CKT OHMS PER PHASE			
FRAME	RL4034	AMPS	557	MAX SAFE RPM	3750	(AT BASE RATING, 25 °C)			
HP	500	DUTY	CONT	IM (AMPS)	134.83	R1	.00560	X1	.0562
BASE SPEED	1775	S.F.	1.0	P.F.@NL/FL	.042/.902	R2	.00419	X2	.0567
PHASE/HERTZ	3/60	AMB °C/INSUL	40/H	WK ² (Lb-Ft ²)	77.0			XM	2.00

RATED FULL LOAD DATA

	RPM	HP	TORQUE LB-FT	FUND VOLTS	FREQ-HZ	AMPS
BASE SPEED	1778	500	1477	460	60	554
MAX SPEED	2402	500	1092	460	81.1	554
MIN SPEED	0	0	1477	9.47	.724	554

LOAD PERFORMANCE AT BASE SPEED

	RPM	HP	TORQUE LB-FT	FUND VOLTS	FREQ-HZ	AMPS
NO LOAD	1800	0	0	460	60	132
1/4	1795	127	371	460	60	191
1/2	1790	253	744	460	60	300
3/4	1784	380	1117	460	60	425
FULL LOAD	1778	500	1477	460	60	554
O/L	1765	745	2216	460	60	842

REMARKS: TYPICAL DATA
CORRELATED DATA

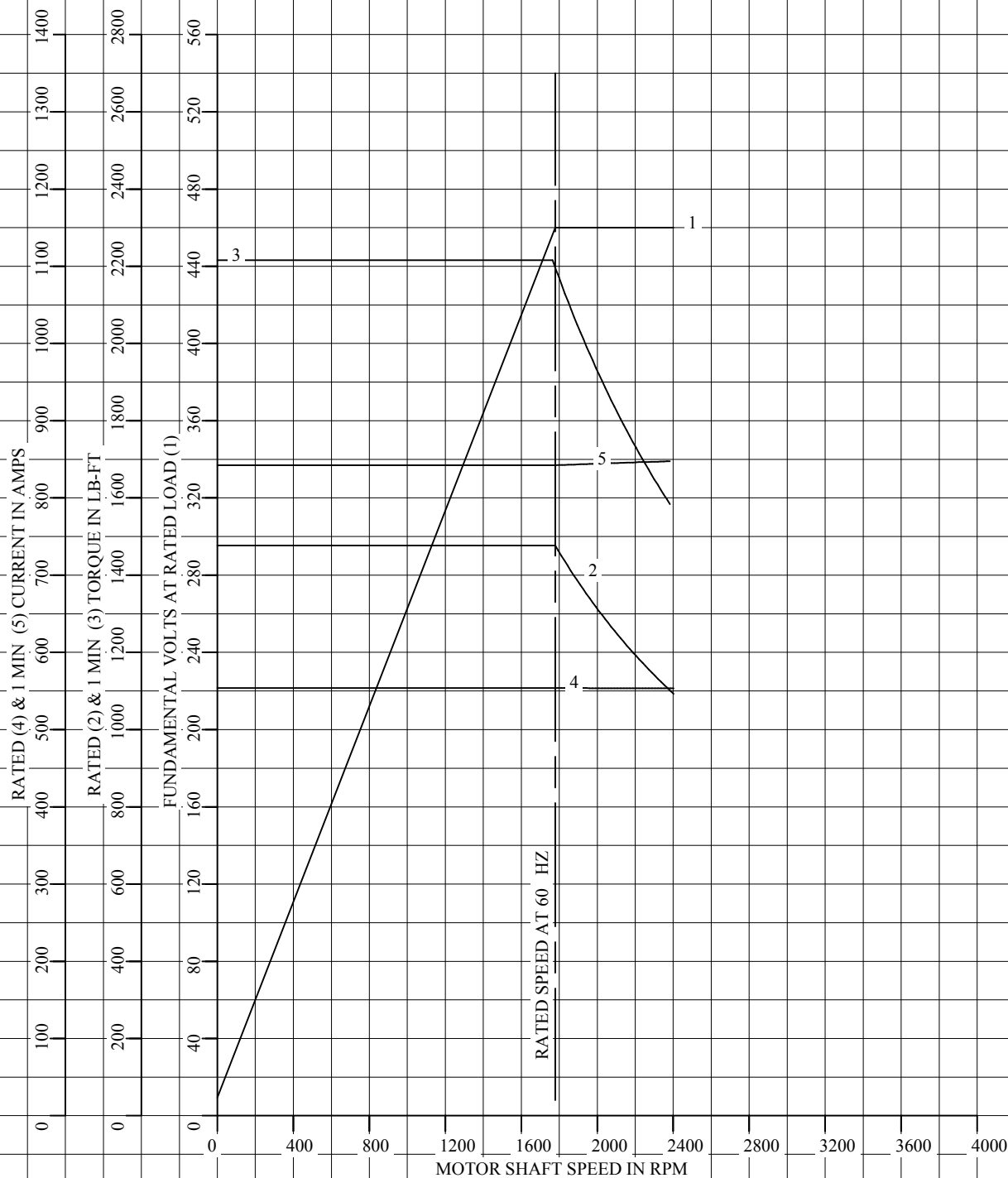


DR. BY J. MARTIN
CK. BY J. MARTIN
APP. BY T. EVON
DATE 10/3/95

**A-C MOTOR
PERFORMANCE DATA** L0485A
ISSUE DATE 02/26/16

REL S.O.	-	VOLTS	460	ENCLOSURE	DPFV	WYE CONN EQ CKT OHMS PER PHASE	
FRAME	RL4034	AMPS	557	MAX SAFE RPM	3750	(AT BASE RATING, 25 °C)	
HP	500	DUTY	CONT	IM (AMPS)	134.83	R1 .00560	X1 .0562
BASE SPEED	1775	S.F.	1.0	P.F. @NL/FL	.042/.902	R2 .00419	X2 .0567
PHASE/HERTZ	3/60	AMB °C/INSUL	40/H	WK ² (Lb-Ft ²)	77.0	XM 2.00	

CORRELATED DATA
VARIABLE SPEED AC MOTOR CURVES



REMARKS: TYPICAL DATA
DATA VALID FOR NAMEPLATE SPEED RANGE ONLY

BALDOR
A MEMBER OF THE ABB GROUP

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DATE 10/3/95

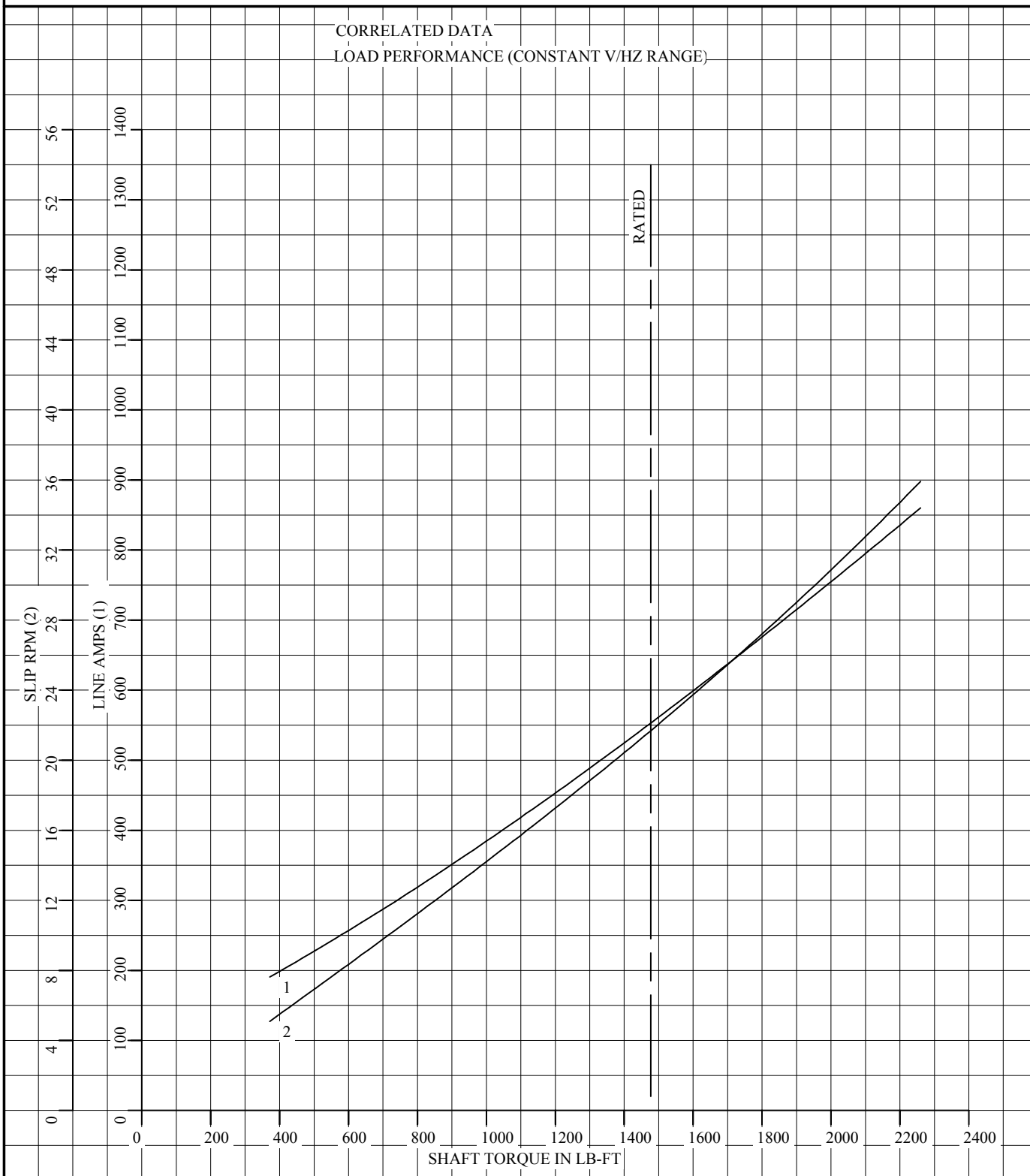
**A-C MOTOR
PERFORMANCE
CURVES**

L0485A
SH 1 OF 2
ISSUE DATE 02/26/16
Page 6 of 10

REL S.O.	-	VOLTS	460	ENCLOSURE	DPFV	WYE CONN EQ CKT OHMS PER PHASE	
FRAME	RL4034	AMPS	557	MAX SAFE RPM	3750	(AT BASE RATING, 25 °C)	
HP	500	DUTY	CONT	IM (AMPS)	134.83	R1 .00560	X1 .0562
BASE SPEED	1775	S.F.	1.0	P.F. @NL/FL	.042/.902	R2 .00419	X2 .0567
PHASE/HERTZ	3/60	AMB °C/INSUL	40/H	WK ² (Lb-Ft ²)	77.0	XM 2.00	

CORRELATED DATA

LOAD PERFORMANCE (CONSTANT V/HZ RANGE)



REMARKS: TYPICAL DATA
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APP. BY T. EVON
DATE 10/3/95

**A-C MOTOR
PERFORMANCE
CURVES**

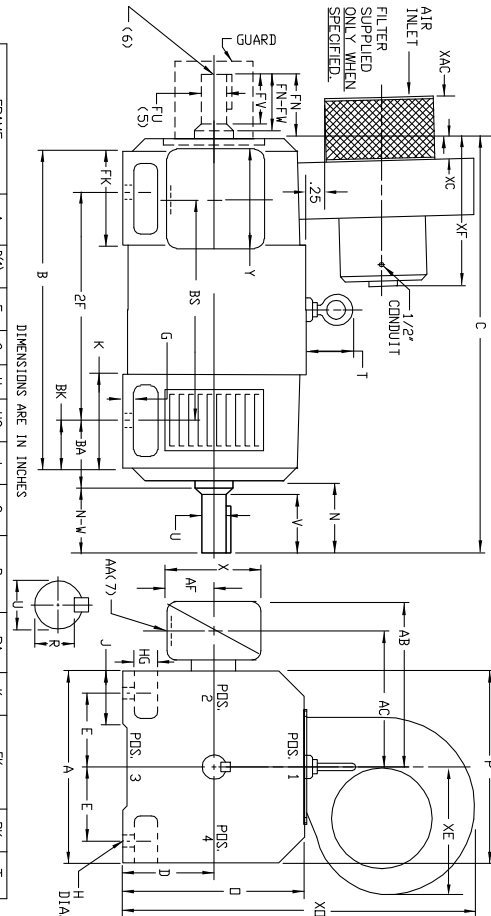
L0485A
SH 2 OF 2
ISSUE DATE 02/26/16 Page 7 of 10

VARIABLE SPEED ALTERNATING CURRENT MOTORS
RPM AC

ENCLOSURE: DRIP-PROOF FULLY-GUARDED
MOUNTING:FOOT

COOLING: FORCE VENTILATED WITH INTEGRAL BLOWER AND MOTOR

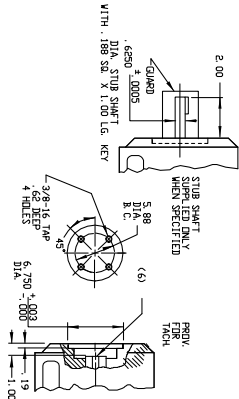
FRAMES L3292Z THRU UL4046Z

PROVISION FOR
TACHOMETER MOUNTING
ONLY WHEN SPECIFIED

DIMENSIONS ARE IN INCHES														
														
FRAME	A	D(1)	E	G	H	HG	O	P	BA	K	FK	BK	T	
L3292Z - L2032Z	15.50	8.00	6.25	.75	.69	2.92	3.00	15.81	15.62	5.25	6.75	7.94	4.00	2.38
AL8982Z - AL3614Z	17.50	9.00	7.00	.88	.81	2.62	3.50	17.81	17.62	5.88	7.25	8.56	4.62	2.38
AL4022Z - UL4046Z	19.38	10.00	8.00	1.06	1.06	2.82	3.50	19.81	19.56	6.82	8.75	12.12	5.25	2.38

[illegible]

FRAME	XAC	XC	XE	XF	XO
L3292Z-L3203Z	6.75	3.25	8.50	19.25	28.00
AL3598Z-UJ.3614Z	6.50	3.75	11.00	20.38	32.00
AL4034Z-UJ.4046Z	4.88	6.88	10.50	23.50	34.00



- (1) "P" DIMENSION WILL NOT BE EXCEEDED. SHIMS UP TO .06 INCHES
 - (2) "H" THICKNESS ARE USUALLY REQUIRED FOR COUPLED MACHINES.
 - (3) "R" & "P" WAYS—0.000 — .015
 - (4) METHOD OF DRIVE—COUPLED OR BELTED
 - (5) DEPRESSIVE DRIVE—END SHAFTS SUPPLIED ONLY WHEN SPECIFIED.
 - (6) TERMINAL BOX VARIES FOR DIMENSIONS "AA", "AB", "AC", "A'E", "X", "Y", AND "Y'".
 - (7) TERMINAL BOX VARIES FOR DIMENSIONS "AA", "X/P 6099379 — 1.0, WILL 6099379 — 10.0.
- REFER TO BOX D/S (SEE 6099379 — 1.0).
- TERMINAL BOX CAN BE ROTATED FOR LEAD OUTLET AT TOP, SIDES OR BOTTOM.
- TERMINAL BOX LOCATED ON DEPRESSIVE SIDE WHEN "F-2, W-1, W-4, W-5, W-7, OR C-1" MOUNTING IS SPECIFIED. BOX LOCATED AT POSITIONS 1, 2, 3, OR 4, EXCEPT BLOWER ASSEMBLY, CAN BE LOCATED AT POSITIONS 1, 2, 3, OR 4.
- BLOWER ASSEMBLY, AND TERMINAL BOX CAN NOT BE LOCATED AT THE SAME POSITION
- ENTER WEIGHT MAY VARY 15% FOR NON-STANDARD RATINGS AND/OR ACCESSORIES.
- * MOUNTING CLEARANCE DETAILS ARE OBTAINED BY CONSULTING FACTORY.

FRAME_____	TYPE_____	TERMINAL_____	BLOWER MOTOR_____	CERTIFIED FOR_____
ORDER_____	ITEM_____	HP_____	TACH_____	BOX_____
SALES ORDER_____	APPROVED BY_____	RPM_____	PH_____	HZ_____
				VOLTS_____
				DATE_____

609998-001

609998-001

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

REV. DESC: ADD FRAMES AL4022Z, L4022Z & UL4022Z		
REV. LTR: A	VERSION: 01	TDR: 000000931162
FILE: \RGG\00003\663	REVISED: 11:41:50 06/22/2015	BY: RGGWT
MTL: --		

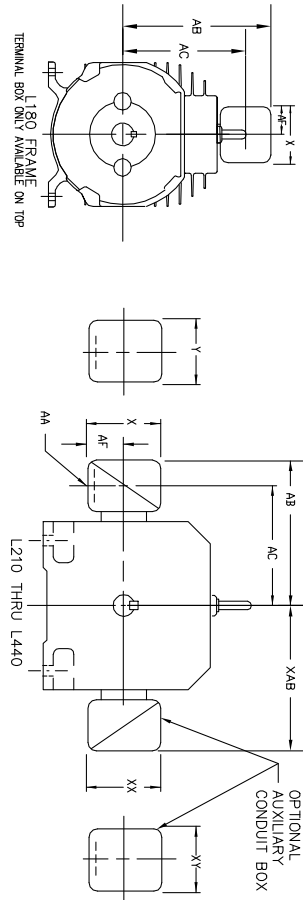
BALDOR

DIM SHT L3292Z THRU UL4046Z RPM AC DPFV INT BLWR & MTR

SH 1 of 1

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

616779-001

L180 FRAME
TERMINAL BOX ONLY AVAILABLE ON TOP

DIMENSIONS ARE IN INCHES (mm)

STEEL TERMINAL BOX DIMENSIONS (MAXIMUM)										CAST IRON TERMINAL BOX DIMENSIONS (MAXIMUM)									
FRAME MAX SIZE (AMPS (A)(1))					STANDARD SIZE					FRAME MAX SIZE (AMPS (A)(2))					STANDARD SIZE				
AB	AC	AF	X	Y	AB	AC	AF	X	Y	AB	AC	AF	X	Y	AB	AC	AF	X	Y
PART NUMBER										PART NUMBER									
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
L360/DL225	800	---	13.58 (345)	11.57 (294)	4.41 (112)	8.82 (224)	8.82 (224)	706310-63-B	706310-63-B
L360/DL200	800	---	20.78 (528)	18.25 (464)	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 1/2"
(3) CUSTOMER TO PROVIDE
(4) 2" DN -5A or 1" IAW DN -4C
CONDUIT BOX CAN BE ROTATED
ROTATED 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

REV. LTR: A

VERSION: 01

TDR: 000000804459

FILE: \RGG\00003\688

REVISED: 10:23:58 06/18/2013

BY: RGGWT

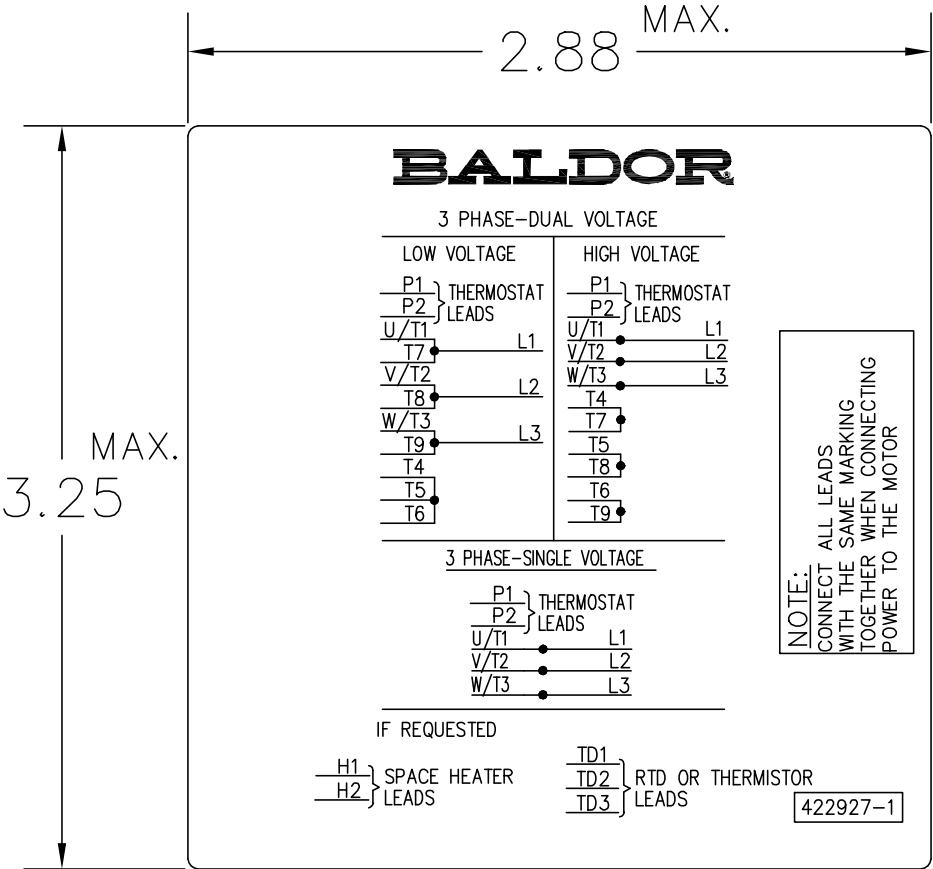
MTL: -

BALDOR

DIM SHT NEMA L180 THRU L440 & IEC DL112 THRU DL280

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