

ABB BALDOR RELIANCE III

Customer information packet

IDBRPM321504

150HP, 1780RPM, 3PH, N/AHZ, L3213, TEBC, FOOT,

Specifications

Enclosure	TEBC
Frame	L3213
Frame Material	Exposed Laminations
Frequency	60.00 Hz
Output @ Frequency	150.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	460.0 V @ 60 HZ
Agency Approvals	CCSA US
Auxiliary Box	NO AUXILLARY BOX
Base Indicator	Rigid
Bearing Grease Type	Polyrex EM (-20F +300F)
Current @ Voltage	177.000 A @ 460.0 V
Duty Rating	CONT
Feedback Device	NO FEEDBACK
Frame Prefix	L
Heater Indicator	No Heater
High Voltage Full Load Amps	177.0 a
Insulation Class	H
Motor Standards	NEMA
Mounting Arrangement	F3
Overall Length	48.44 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	1780 rpm
Thermal Device - Bearing	None
Thermal Device - Winding	Normally Closed Thermostat

Part Detail

Revision	A
Type	AC
Mech. spec.	
Base	
Status	INA/A
Elec. spec.	L1659A
Layout	616763-001
Eff. date	08-03-2018
CD Diagram	422927-001
Poles	04
Leads	
Proprietary	False
Created date	04-10-2015

Nameplate

000613006NS									
	DUTY	HP	RPM	AMPS	VOLTS	HZ			
	CONT	150	1780		177	460		60	
	CONT	150	3560		168	460		120	
CAT.NO.			SPEC. NO.	P32L0228					
SER.NO			FR	L 3213		INSUL	H		
PH.	3	MAX SAFE SPEED		4000		AMB.	40	MIN. AMB.	-25
DESIGN NO.	L1659A		TYPE			ENCL.	TEAO-BC		
S.F.	1.0		D.E. BRG.	85BC02J30X					
ENCL MOD			O.D.E. BRG.	65BC02J30X					

REL S.O.	-	VOLTS	460	ENCLOSURE	TEBC	WYE CONN	EQ	CKT	OHMS	PER PHASE
FRAME	L3213	AMPS	177	MAX SAFE RPM	4000	(AT BASE RATING, 25 °C)				
HP	150	DUTY	CONT	IM (AMPS)	76	R1	.0141	X1	.103	
BASE SPEED	1780	S.F.	1.0	P.F.@NL/FL	.04/.84	R2	.0118	X2	.141	
PHASE/HERTZ	3/60	AMB °C/INSUL	40/H	WK ² (Lb-Ft ²)	24			XM	3.47	

RATED FULL LOAD DATA

	RPM	HP	TORQUE LB-FT	FUND VOLTS	FREQ-HZ	AMPS
BASE SPEED	1782	150	442	460	60	178
MAX SPEED	3562	150	221	460	120	168
MIN SPEED	0	0	442	7.28	.590	178

LOAD PERFORMANCE AT BASE SPEED

	RPM	HP	TORQUE LB-FT	FUND VOLTS	FREQ-HZ	AMPS
NO LOAD	1800	0	0	460	60	74.9
1/4	1796	37.5	110	460	60	86.7
1/2	1791	75.1	220	460	60	111
3/4	1787	112	331	460	60	142
FULL LOAD	1782	150	442	460	60	178
O/L	1758	326	972	460	60	367

BLOWER
DATA

VOLTS	PH/HZ	FL AMPS	LR AMPS	FRAME	CFM

REMARKS: TYPICAL DATA

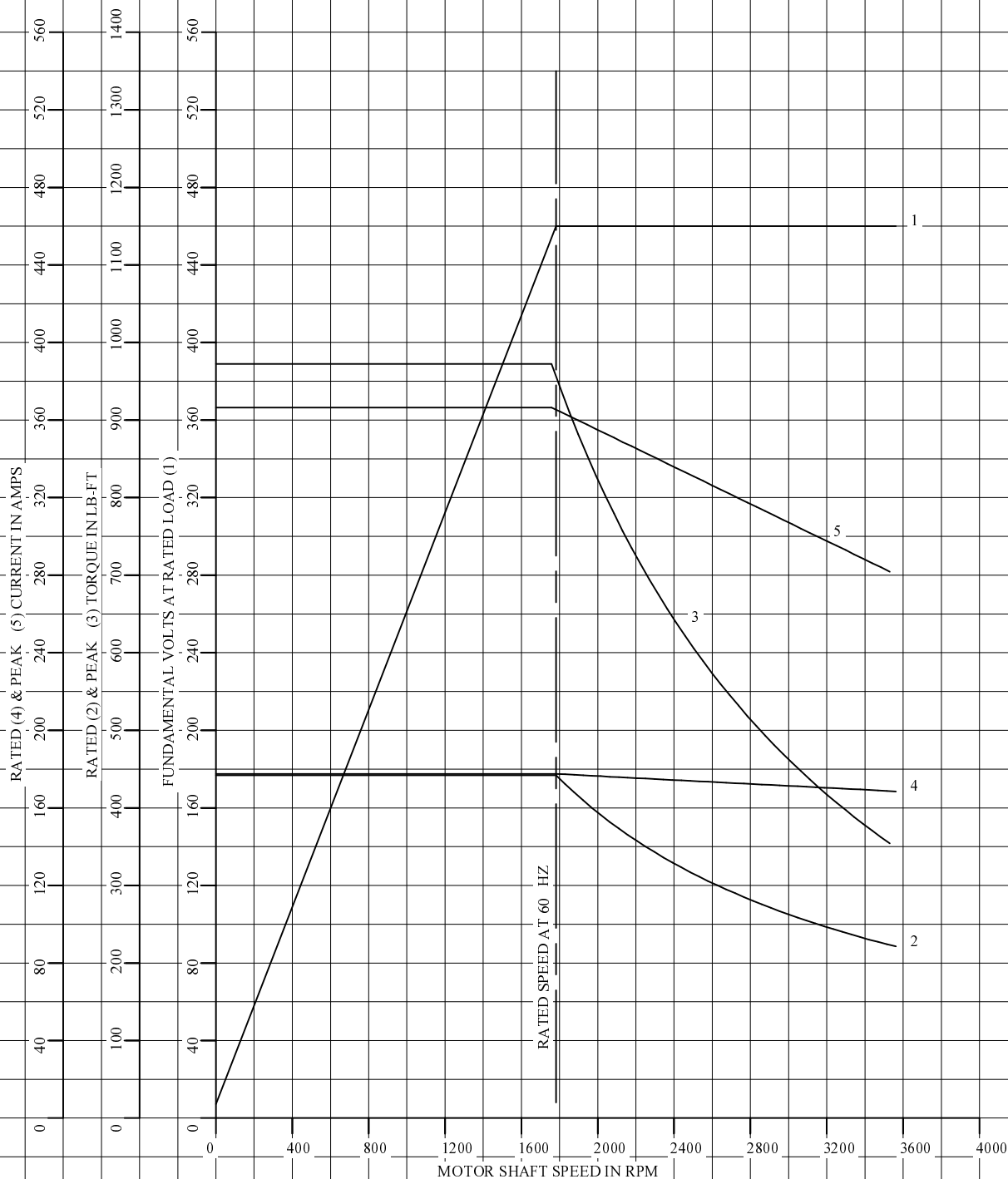


DR. BY	M. ORDERS
CK. BY	B. GRANT
APP. BY	T. EVON
DATE	12/21/99

A-C MOTOR
PERFORMANCE DATA L1659A
ISSUE DATE 12/21/99

REL S.O.	-	VOLTS	460	ENCLOSURE	TEBC	WYE CONN	EQ CKT	OHMS PER PHASE
FRAME	L3213	AMPS	177	MAX SAFE RPM	4000	(AT BASE RATING, 25 °C)		
HP	150	DUTY	CONT	IM (AMPS)	76	R1	.0141	X1 .103
BASE SPEED	1780	S.F.	1.0	P.F. @NL/FL	.04/.84	R2	.0118	X2 .141
PHASE/HERTZ	3/60	AMB °C/INSUL	40/H	WK ² (Lb-Ft ²)	24			XM 3.47

VARIABLE SPEED AC MOTOR CURVES



REMARKS: TYPICAL DATA
DATA VALID FOR NAMEPLATE SPEED RANGE ONLY



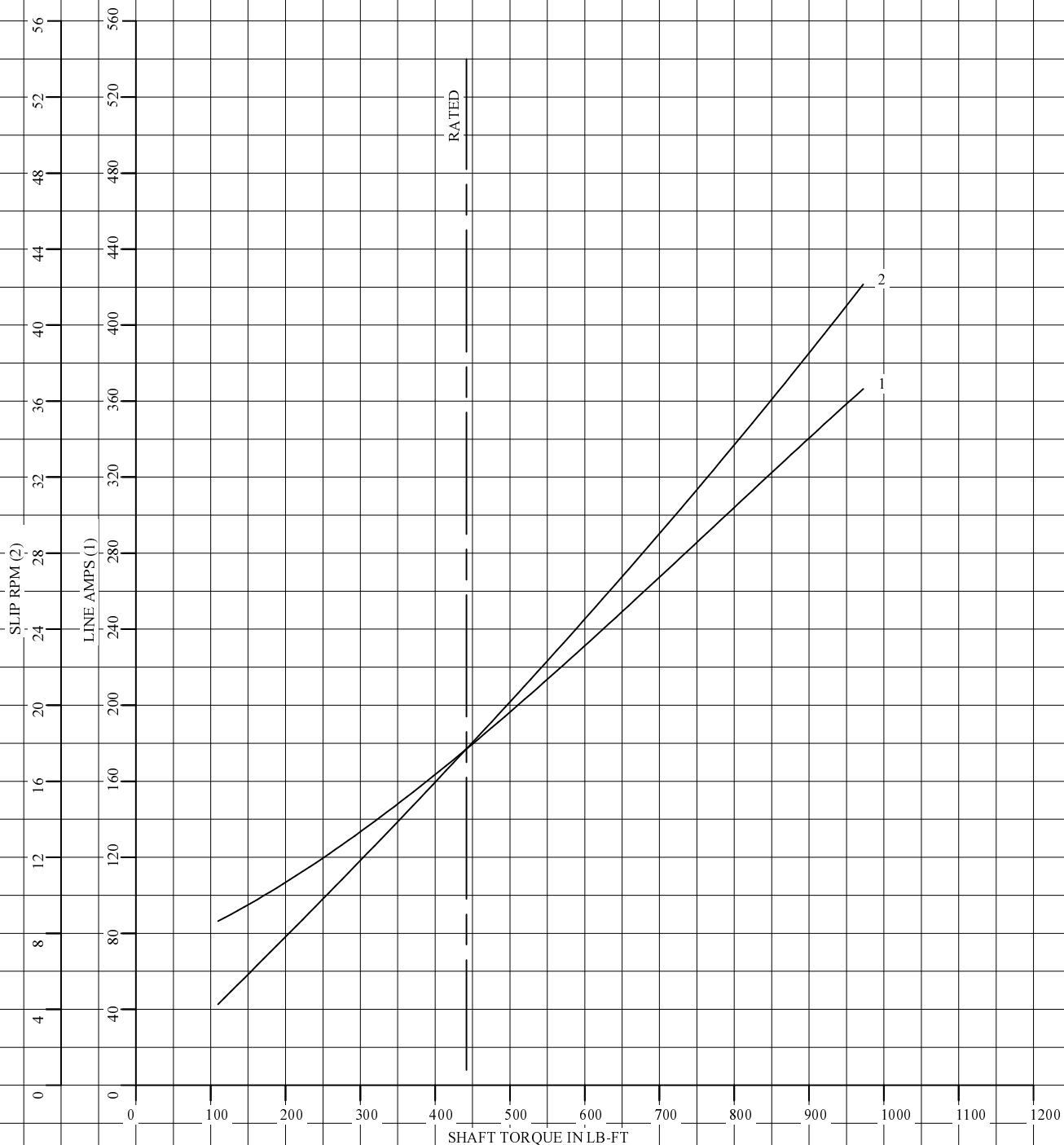
DR. BY M. ORDERS
CK. BY B. GRANT
APP. BY T. EVON
DATE 12/21/99

**A-C MOTOR
PERFORMANCE
CURVES**

L1659A
SH 1 OF 2
ISSUE DATE 12/21/99

REL S.O.	-	VOLTS	460	ENCLOSURE	TEBC	WYE CONN	EQ	CKT OHMS PER PHASE	
FRAME	L3213	AMPS	177	MAX SAFE RPM	4000	(AT BASE RATING, 25 °C)			
HP	150	DUTY	CONT	IM (AMPS)	76	R1	.0141	X1	.103
BASE SPEED	1780	S.F.	1.0	P.F. @NL/FL	.04/.84	R2	.0118	X2	.141
PHASE/HERTZ	3/60	AMB °C/INSUL	40/H	WK ² (Lb-Ft ²)	24	XM 3.47			

LOAD PERFORMANCE (CONSTANT V/HZ RANGE)



REMARKS: TYPICAL DATA
DATA VALID FOR NAMEPLATE SPEED RANGE ONLY



DR. BY	M. ORDERS
CK. BY	B. GRANT
APP. BY	T. EVON
DATE	12/21/99

**A-C MOTOR
PERFORMANCE
CURVES**

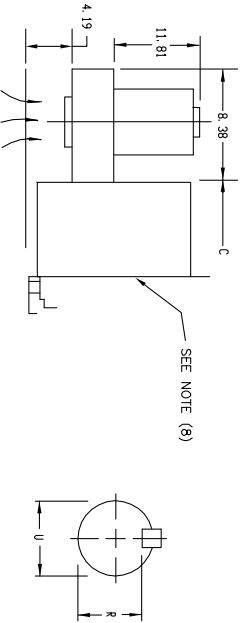
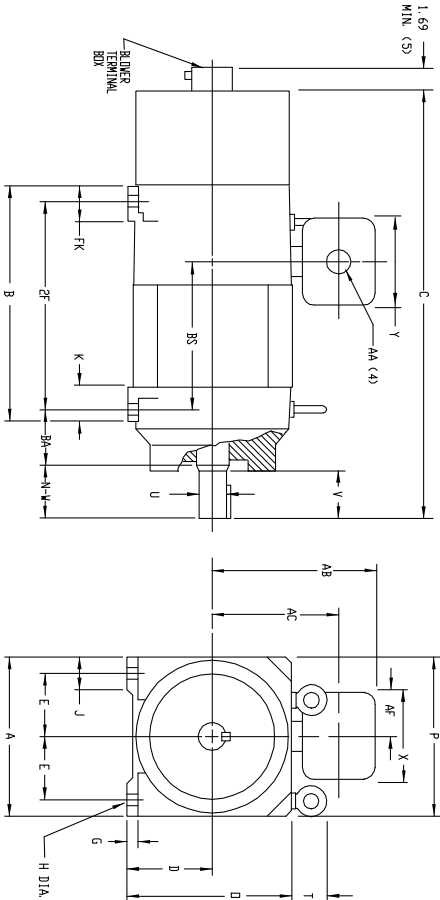
L1659A
SH 2 OF 2
ISSUE DATE 12/21/99

VARIABLE SPEED ALTERNATING CURRENT MOTORS
RPM AC

ENCLOSURE: TOTALLY ENCLOSED
MOUNTING: FOOT
DRIVE METHOD: COUPLED OR BELTED

COOLING: BLOWER COOLED
AIR-OVER INLINE
ACCESSORIES: PROVISIONS FOR
TACHOMETER MOUNTING
ONLY WHEN SPECIFIED

FRAMES L3203Z THRU UL3213Z



DIMENSIONS ARE IN INCHES

FRAME	A	DX(1)	E	G	H	J	D	P	T	BA	K	FK
L3203Z THRU UL3213Z	15.50	8.00	6.25	.88	.69	3.00	15.81	15.62	3.06	5.25	3.25	8.00

FRAME	C (6)	B	BS	2F	N-W	UK(2)	V	RK(3)	SQ	LGTH	WT. LBS.
UL&L3203Z	44.25	27.75	20.94	25.75	5.75	2.875	5.50	2.450	.750	4.25	1170
UL&L3213Z	46.75	30.25	23.44	28.25	5.75	2.875	5.50	2.450	.750	4.25	1310

- (1) "P" DIMENSION WILL NOT BE EXCEEDED. SHIMS UP TO .03 INCHES IN THICKNESS ARE USUALLY REQUIRED FOR COUPLED OR GEARED MACHINES.
- (2) "U" VARIES -- +.000 --.001
- (3) "R" VARIES -- +.000 --.015
- (4) FOR TERMINAL BOX DIMENSIONS "AA", "AB", "AC", "AF", "Y" AND "V" REFER TO BOX D/S 616779-1
- (5) WALLS OR OBSTRUCTIONS MUST NOT ENROACH ON AIR INLET SPACE.
- (6) DIMENSIONS IN D/S 616779-10 FOR TACHOMETER MOUNTING ONLY WHEN SPECIFIED.
- (7) REFER TO D/S 616779-10 (TEAD-BD) FOR TACH CONNECTION DIMENSIONS.
- (8) DIMENSIONS FOR "X" FEATURES OR CENTRIFUGAL BLOWER ONLY.
- TERMINAL BOX CAN BE ROTATED IN 90 DEG. INCREMENTS.
- TERMINAL BOX MOUNTED ON TOP AS STANDARD.
- TERMINAL BOX CAN BE LOCATED ON SIDE IN F1 OR F2 POSITION WHEN SPECIFIED.
- MOTOR WEIGHT MAY VARY 15% FOR NON-STANDARD RATINGS AND/OR ACCESSORIES.
- IF MOUNTING CLEARANCE DETAILS ARE REQUIRED, CONSULT FACTORY.
- FRAME PREFIX UL = ROLLER BEARING
- FRAME PREFIX L = BALL BEARINGS

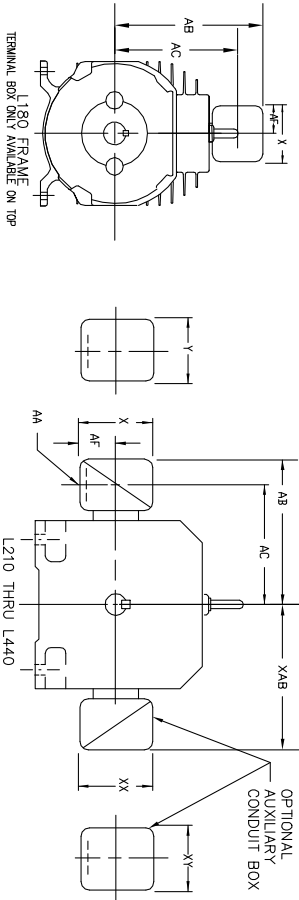
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT BALDOR'S PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION.

REV. DESC: ADD NOTE: CENTRIFUGAL STYLE BLOWERS	TDR: 000000740277
REV. LTR: A	VERSION: 01
FILE: \RGG\00003\683	REVISED: 04:09:59 03/29/2012
MTL: -	BY: RGGTB1

BALDOR

DIM SHT L3203Z THRU UL3213Z RPM AC TEBC AO INLINE FT MTG
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



STEEL TERMINAL BOX DIMENSIONS (MAXIMUM)										CAST IRON TERMINAL BOX DIMENSIONS (MAXIMUM)									
FRAME SIZE		STANDARD SIZE					PART NUMBER			FRAME MAX SIZE		STANDARD SIZE					PART NUMBER		
AMP	FA(1)	AB	AC	AF	X	Y				AMP	FA(2)	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-B	
L250	160	2	13.75	10.25	4.25	8.44	7.25	706320-9-A & D		L250	140	3	15.38	11.50	3.62	8.00	9.25	706320-12-B	
L250	305	4	15.75	11.56	5.38	10.56	9.00	706320-16-A & D		L250	210	4	16.62	12.44	4.12	9.50	10.50	706320-13-A	
L250	500	5	19.50	14.31	6.50	12.10	14.62	706320-16-A & D		L250	510	5	19.62	14.31	7.00	12.75	15.00	706320-14-B	
L280	160	2	14.00	10.44	4.25	8.44	7.25	706320-9-A & D		L280	140	3	15.50	11.75	3.62	8.00	9.25	706320-12-B	
L280	305	4	15.88	11.75	5.38	10.56	9.00	706320-16-A & D		L280	210	4	16.88	12.62	4.12	9.50	10.50	706320-13-A	
L280	500	5	19.62	14.50	6.50	12.10	14.62	706320-16-A & D		L280	510	5	19.75	14.50	7.00	12.75	15.00	706320-14-B	
L320	160	2	15.38	11.81	4.25	8.44	7.25	706320-9-A & D		L320	140	3	15.75	12.00	3.62	8.00	9.25	706320-12-B	
L320	305	4	17.25	13.12	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	500	5	21.00	15.88	6.50	12.10	14.62	706320-16-A & D		L320	510	5	21.12	15.88	7.00	12.75	15.00	706320-14-B	
L360	160	2	16.38	12.81	4.25	8.44	7.25	706320-9-A & D		L360	140	3	16.75	13.00	3.62	8.00	9.25	706320-12-B	
L360	305	4	18.25	14.12	5.38	10.56	9.00	706320-16-A & D		L360	210	4	18.12	13.88	4.12	9.50	10.50	706320-13-A	
L360	500	5	22.00	16.88	6.50	12.10	14.62	706320-16-A & D		L360	510	5	22.12	16.88	7.00	12.75	15.00	706320-14-B	

MILL CONDUIT BOX DIMENSIONS (MAXIMUM)									
FRAME SIZE		AMP		AB		AC		AF	
L210	160	(3)	(3)	10.78	8.41	3.50	8.00	8.00	8.00
L250	160	(3)	(3)	11.84	9.47	3.50	8.00	8.00	8.00
L280	590	(3)	(3)	12.75	10.75	4.50	16.00	16.00	16.00
L320	590	(3)	(3)	14.75	11.34	4.50	16.00	16.00	16.00
L360	590	(3)	(3)	15.47	12.06	4.50	16.00	16.00	16.00
L400	590	(3)	(3)	16.47	13.06	4.50	16.00	16.00	16.00
L440	1260	(3)	(3)	27.38	19.88	6.06	18.50	18.50	18.50

IEC CONDUIT BOX DIMENSIONS WITH TERMINAL BOARDS (MAXIMUM)									
FRAME NEMA/IEC		AMP		AB (mm)		AC (mm)		AF (mm)	
L180/DL112	85	(4)	(4)	9.38 (239)	7.50 (191)	2.74 (70)	5.62 (143)	6.12 (156)	706320-5-A or 4-C
L210/DL132	100	---	---	10.77 (274)	9.04 (230)	3.74 (95)	7.48 (190)	7.48 (190)	706310-5-A or 4-C
L250/DL160	160	---	---	11.63 (296)	9.62 (245)	4.41 (112)	8.82 (224)	8.82 (224)	706310-5-B
L250/DL160	100	---	---	12.09 (307)	10.36 (264)	3.74 (95)	7.48 (190)	7.48 (190)	706310-5-B
L280/DL180	160	---	---	12.95 (329)	10.94 (278)	4.41 (112)	8.82 (224)	8.82 (224)	706310-5-B
L280/DL180	100	---	---	13.58 (345)	11.57 (294)	4.41 (112)	8.82 (224)	8.82 (224)	706310-5-B
L360/DL225	800	---	---	20.78 (528)	18.25 (464)	6.20 (158)	14.39 (366)	14.39 (366)	706310-63-B
L360/DL225	800	---	---	20.78 (528)	18.25 (464)	6.20 (158)	14.39 (366)	14.39 (366)	706310-63-B
L400/DL250	800	---	---	21.75 (553)	19.25 (489)	6.20 (158)	14.39 (366)	14.39 (366)	706310-63-B
L400/DL250	1260	---	---	25.94 (659)	18.44 (469)	6.06 (154)	18.50 (470)	18.50 (470)	706310-63-E
L440/DL280	1360	---	---	27.38 (696)	19.88 (505)	6.06 (154)	18.50 (470)	18.50 (470)	706310-63-E
L440/DL280	1300	---	---	30.38 (772)	21.38 (545)	12.44 (316)	24.00 (610)	24.00 (610)	706310-86-A

OPTIONAL AUXILIARY CONDUIT BOX DIMENSIONS (MAXIMUM)									
FRAME SIZE		AMP		AB		AC		AF	
L210/DL132	7.38	4.25	4.25	6.0207-26-A	L210/DL132	10.88	8.00	8.00	706310-3-B
L250/DL160	8.44	4.25	4.25	6.0207-26-A	L250/DL160	11.88	8.00	8.00	706310-3-B
L280/DL180	9.12	4.25	4.25	6.0207-26-A	L280/DL180	12.62	8.00	8.00	706310-3-B
L320/DL200	10.00	4.25	4.25	6.0207-26-A	L320/DL200	13.50	8.00	8.00	706310-3-B
L360/DL225	11.00	4.25	4.25	6.0207-26-A	L360/DL225	14.50	8.00	8.00	706310-3-B
L400/DL250	12.00	4.25	4.25	6.0207-26-A	L400/DL250	15.50	8.00	8.00	706310-3-B
L440/DL280	13.12	4.25	4.25	6.0207-26-A	L440/DL280	16.62	8.00	8.00	706310-3-B

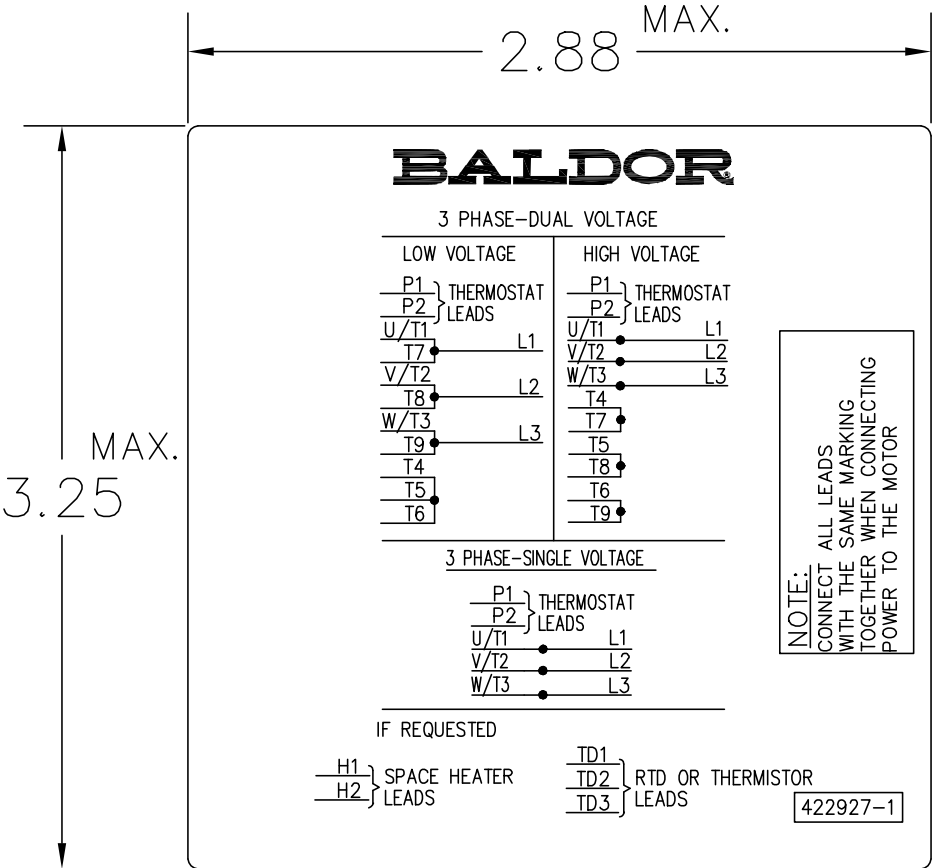
(1) ** CONDUIT
(2) ** PIPE 1/4"
(3) CUSTOMER TO PROVIDE
(4) 2" DN -5A or 1" IAW DN -4C
CONDUIT BOX CAN BE ROTATED
ROTAION OF CONDUIT BOX MAY BE
SPECIFIED

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		
REV. LTR: A	VERSION: 01	TDR: 000000804459
FILE: \RGG\00003\688	REVISED: 10:23:58 06/18/2013	BY: RCGWT
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