

BALDOR® • RELIANCE

Product Information Packet

ZDNRPM18054C

5HP,1750RPM,3PH,60HZ,1838C,TENV,FOOT,

Part Detail							
Revision:	-	Status:	PRD/A	Change #:		Proprietary:	No
Type:	AC	Elec. Spec:	L3221A	CD Diagram:	422927-001	Mfg Plant:	
Mech. Spec:		Layout:	617228-003	Poles:	04	Created Date:	04-10-2015
Base:		Eff. Date:	04-13-2015	Leads:			

Specs			
Catalog Number:	ZDNRPM18054C		
Enclosure:	TENV		
Frame:	FL1838C		
Frame Material:	Aluminum		
Output @ Frequency:	5.000 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:	Polyrex EM (-20F +300F)		
Current @ Voltage:	7.200 A @ 460.0 V		
Duty Rating:	CONT		
Feedback Device:	TACHOMETER		
Frame Prefix:	FL		
Heater Indicator:	No Heater		
Insulation Class:	H		

Mounting Arrangement:	TP		
Product Family:	General Industrial		
Pulley End Bearing Type:	Ball		
Pulley Face Code:	C-Face		
Shaft Ground Indicator:	No Shaft Grounding		
Shaft Rotation:	Reversible		
Motor Standards:	NEMA		
Thermal Device - Bearing:	None		
Thermal Device - Winding:	Normally Closed Thermostat		

REL. S.O.	-	VOLTS	460	ENCLOSURE	TENV	WYE CONN EQ CKT OHMS PER PHASE
FRAME	FL1838	AMPS	7.2	MAX SAFE RPM	7200	(AT BASE RATING, 25 °C)
HP	5	DUTY	CONT	IM (AMPS)	4.4	R1 .803 X1 2.62
BASE SPEED	1770	S.F.	1.0	P.F.@NL/FL	.069/.745	R2 .523 X2 3.46
PHASE/HERTZ	3/60	AMB °C/INSUL	60/H	WK ² (LB-FT ²)	.528	XM 59.7

RATED FULL LOAD DATA

	RPM	HP	TORQUE LB-FT	FUND VOLTS	FREQ-HZ	AMPS
BASE SPEED	1770	5.01	15	460	60	7.44
MAX SPEED	3534	5.00	7	460	120	6.76
MIN SPEED	0	0	15	16.7	.989	7.44

LOAD PERFORMANCE AT BASE SPEED

	RPM	HP	TORQUE LB-FT	FUND VOLTS	FREQ-HZ	AMPS
NO LOAD	1800	0	0	460	60	4.30
1/4	1792	1.25	4	460	60	4.71
1/2	1785	2.50	7	460	60	5.38
3/4	1778	3.75	11	460	60	6.30
FULL LOAD	1770	5.00	15	460	60	7.44
O/L	1718	12.1	37	460	60	15.8

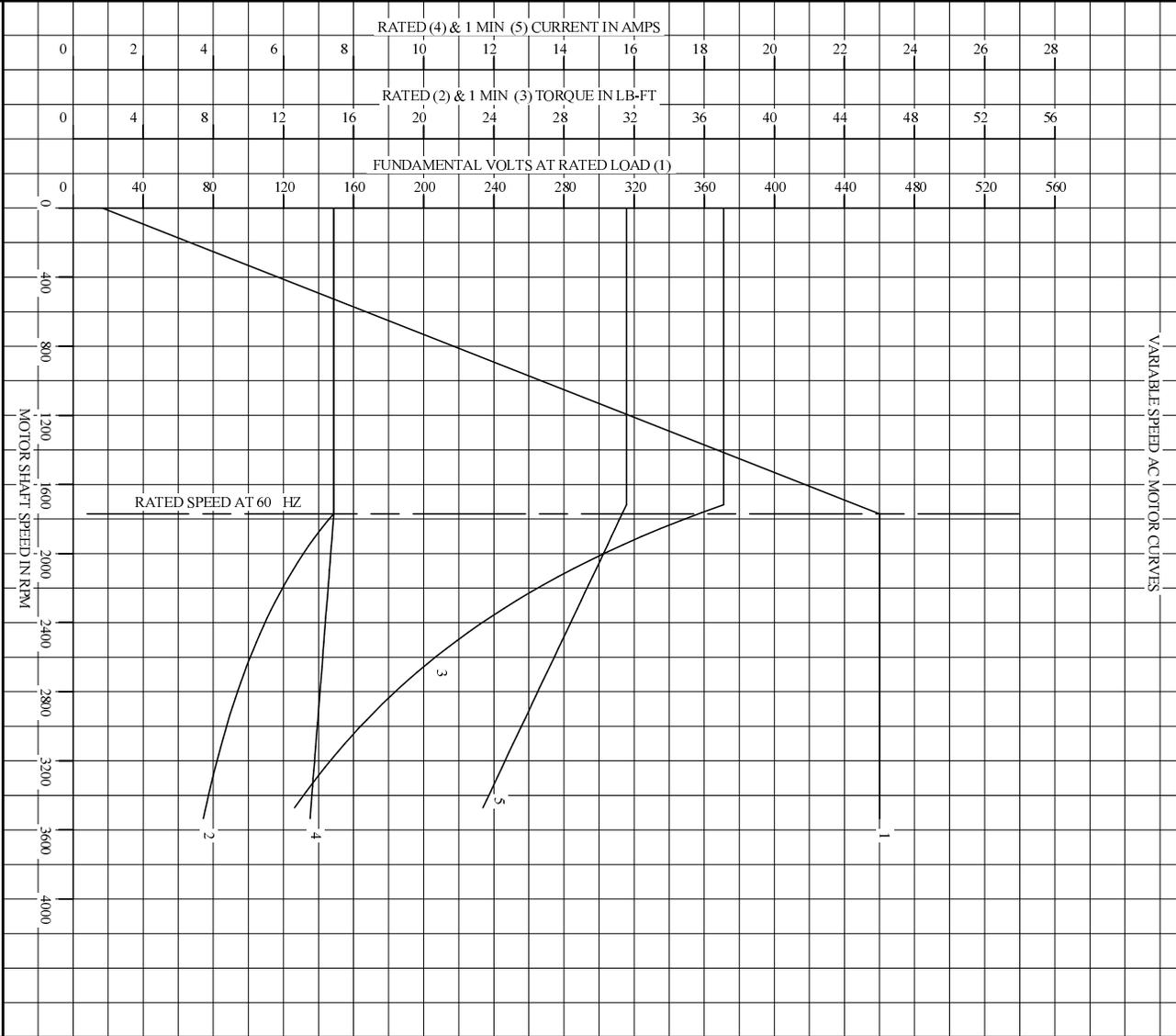
BLOWER DATA

VOLTS	PH/HZ	FL AMPS	LR AMPS	FRAME	CFM

REMARKS: TYPICAL DATA

	DR. BY	B. GRANT	A-C MOTOR PERFORMANCE DATA L3221A ISSUE DATE 3-7-06
	CK. BY	T. CUER	
	APP. BY	3-7-06	
	DATE		

REL S.O.	-	VOLTS	460	ENCLOSURE	TENV	WYE CONN EQ CRT OHMS PER PHASE
FRAME	FL1838	AMPS	7.2	MAX SAFE RPM	7200	(AT BASE RATING, 25 °C)
HP	5	DUTY	CONT	IM (AMPS)	4.4	R1 .803
BASE SPEED	1770	S.F.	1.0	P.F.@NL/FL	.069 / .745	R2 .523
PHASE/HERTZ	3/60	AMB C/INSUL	60/H	WK ² (LB-FC ²)	.528	X1 2.62
						X2 3.46
						XN 59.7



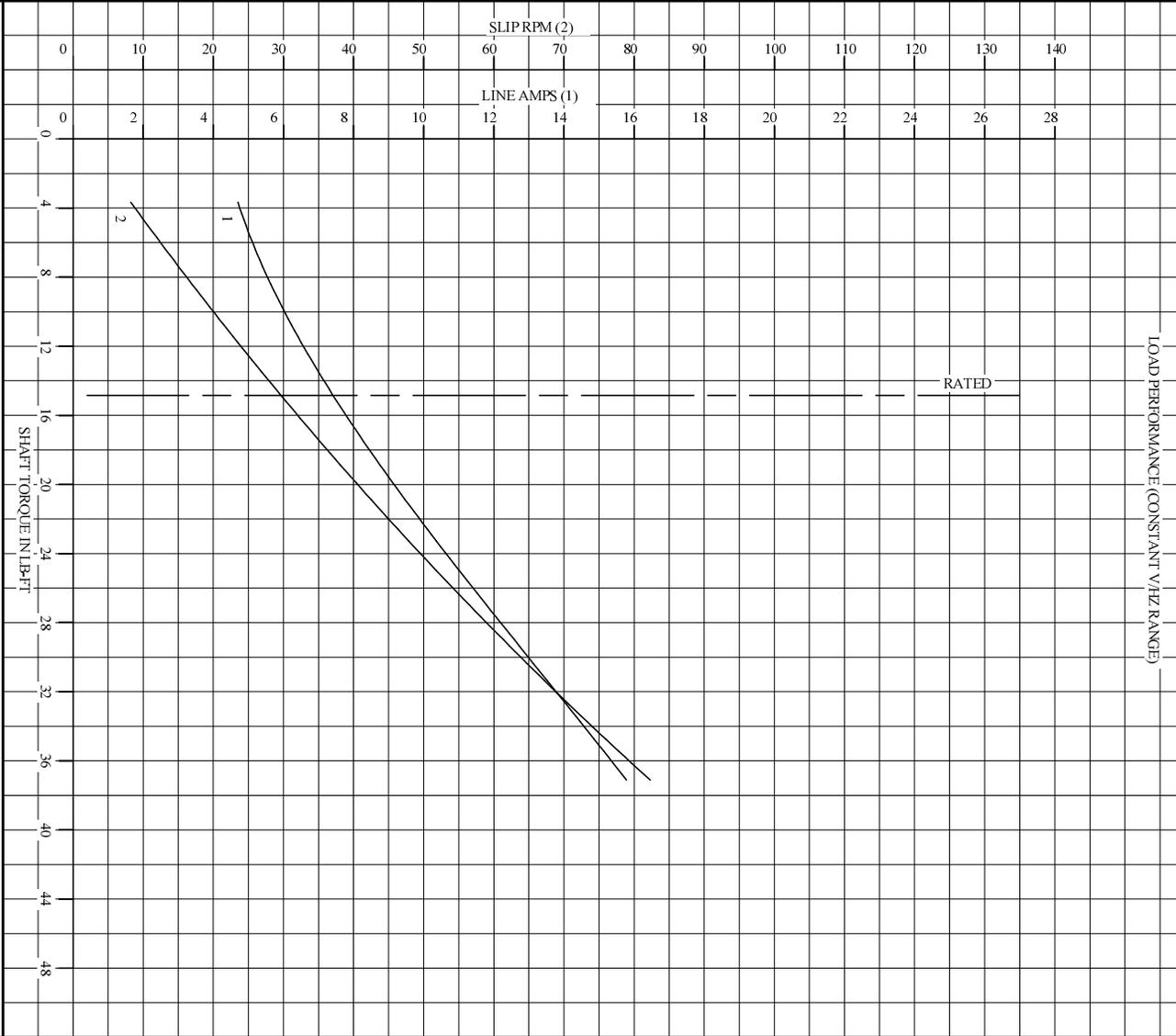
REMARKS: TYPICAL DATA
DATA VALID FOR NAMEPLATE SPEED RANGE ONLY

A-C MOTOR
PERFORMANCE
CURVES

DR. BY	B. GRANT
CK. BY	B. GRANT
APP. BY	T. CURR
DATE	3-7-06

L3221A
SH 1 OF 2
ISSUE DATE 3-7-06

REL S.O.	-	VOLTS	460	ENCLOSURE	TENV	WYE CONN EQ CKT OHMS PER PHASE
FRAME	FL1838	AMPS	7.2	MAX SAFE RPM	7200	(AT BASE RATING, 25 °C)
HP	5	DUTY	CONT	IM (AMPS)	4.4	R1 .803
BASE SPEED	1770	S.F.	1.0	P.F.@NL/FL	.069/.745	R2 .523
PHASE/HERTZ	3/60	AMB C/INSUL	60/H	WK ² (LB-FC ²)	.528	X1 2.62
						X2 3.46
						XN 59.7



REMARKS: TYPICAL DATA
DATA VALID FOR NAMEPLATE SPEED RANGE ONLY

BALDOR

A-C MOTOR

PERFORMANCE

CURVES

DR. BY	B. GRANT
CK. BY	B. GRANT
APP. BY	T. CURR
DATE	3-7-06

L3221A

SH20F2

ISSUE DATE 3-7-06

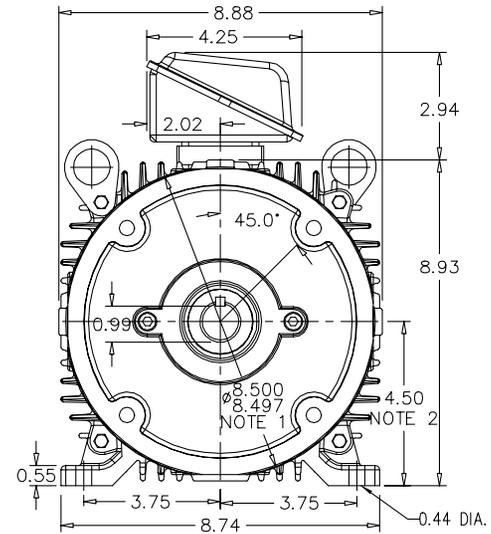
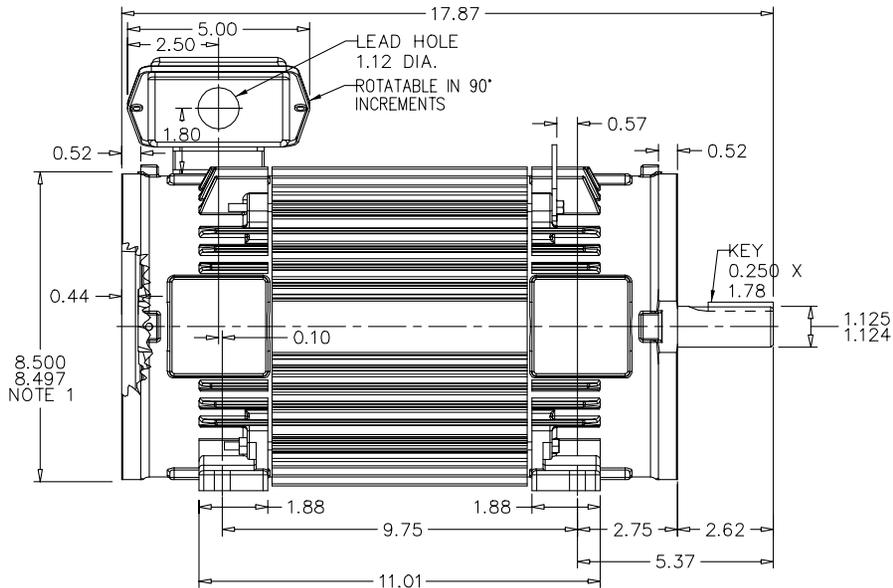
RPM-AC FINNED FRAME VARIABLE SPEED ALTERNATING CURRENT MOTOR
FL1838C

617228-003

ENCLOSURE: TOTALLY ENCLOSED
MOUNTING: FOOT / NEMA 180TC C-FACE
DRIVE METHOD: COUPLED OR BELTED

COOLING: NON-VENTILATED

ACCESSORIES: PROVISIONS FOR TACHOMETER MOUNTING ONLY WHEN SPECIFIED



NOTE 1: C-FACE & TACHOMETER MOUNTING
1/2-13 TAP, 1.00 DEEP, ON A 7.25 DIA. BOLT CIRCLE
FACE RUNOUT AND ECCENTRICITY 0.004 MAX. T.I.R.

NOTE 2: SHAFT HEIGHT WILL NOT BE EXCEEDED
SHIMS UP TO 0.03 INCHES IN THICKNESS ARE USUALLY
REQUIRED FOR COUPLED OR GREARED MACHINES

TERMINAL BOX MAY BE LOCATED F1 OR F2 IF SPECIFIED
40 AMP STEEL TERMINAL BOX SHOWN
REFER TO 616779-50 FOR SPECIFIED TERMINAL BOX DIMENSIONS
REFER TO 616779-55 FOR SPECIFIED TACHOMETER DIMENSIONS

MOTOR WEIGHT: 143 LBS. (MAY VARY 15%)
DIMENSIONS ARE IN INCHES SCALE: 1.00

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

REV. DESC: ADD DIMENSION FROM FOOT HOLE TO END OD SHAFT	VERSION: 01	TDR: 000000892384
REV. LTR: A	REVISED: 12:55:38 02/12/2015	BY: RGGWT
FILE: \RGG\00003\495		
MTL: -		

BALDOR

DIM SHT RPM AC TE NON VENT FL1838C FT / 180TC MTG PROV TACH
SH 1 of 1

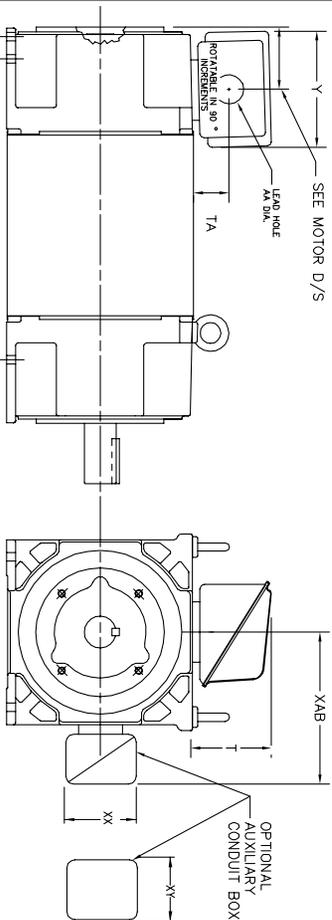
617228-003

616779-050

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 & FDL11	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	0754520008	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	0754600628	7.25	2.50	5.25	1.5 TAP
FL210 & RL210	CAST IRON	N	110	0754600628	7.25	2.50	5.25	1.5 TAP
FL210 & RL210	MILL	Y	100	706310056A	7.75	2.30	4.40	PG29/PG16
FL210 & RL210	MILL	Y	160	706310056B	9.00	3.06	5.40	PG36/PG16
FDL13 & RDL13	MILL	Y	160	7063100638	14.39	7.43	12.15	BLANK

FL250 & RL250	STEEL	N	61	0754520008	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	0754600628	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	CAST IRON	N	210	706320013A	10.50	4.88	9.00	4.0 TAP
FL250 & RL250	CAST IRON	N	510	706320014D	15.00	7.56	12.81	5.0 TAP
FL250 & RL250	MILL	Y	100	706310056A	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	7063100638	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	7063200128	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	400	7063100638	14.39	7.43	12.15	BLANK

FRAME SIZE	XAB	XX	XY	PART NUMBER	FRAME SIZE	XAB	XX	XY	PART NUMBER
FL180/TL180/RL280/VL132	7.38	4.25	4.25	603C007-26-A	FL180/TL180/RL280/VL132	10.88	8.00	8.00	706310-3-B
FL180/TL180/RL280/VL160	8.44	4.25	4.25	603C007-26-A	FL180/TL180/RL280/VL160	11.88	8.00	8.00	706310-3-B
FL280/TL180/RL280/VL180	9.12	4.25	4.25	603C007-26-A	FL280/TL180/RL280/VL180	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 KEPT FOR LEAD OUTLET AT TOP SIDES OR BOTTOM TERMINAL BOX CAN BE KEPT FOR LEAD OUTLET AT TOP SIDES OR BOTTOM OF C-1 MOUNTING IS SPECIFIED. BOX LOCATED ON TOP WHEN SPECIFIED.

050-667919

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

REV. DESC: REPLACE CONDUIT BOX TABLE	VERSION: 04	TDR: 00001047838
REV. LTR: D	REVISED: 11:46:16 10/19/2017	BY: RGGWT
FILE: \\RGG\00003\692		
MTL: -		

BALDOR

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

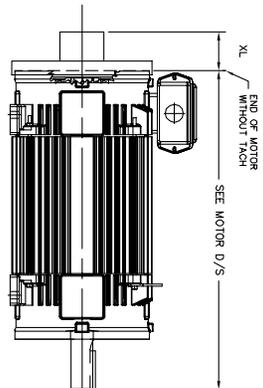
SH 1 of 1

RPM AC TACHOMETER DIMENSIONS
 NEMA FRAMES FL180 thru FL440 and IEC FRAMES FDL112 thru FDL280
 DIMENSIONS ARE IN INCHES(mm)

DPTV, DPSY, TEPV, TESY, TENV & TEAO-PB
 IC06, IC17, IC37, IC410, & IC416-PB

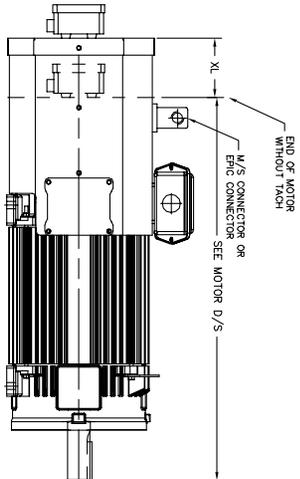
616779-055

TACH. MODEL	XL Inche(st/mm)	LBS.
BELT DR DYNAPAR HS35	2.88 (74)	5
DYNAPAR H20 *	7.50(191)MAX	10
NORTHSTAR HS35M	3.31 (84)	10
NORTHSTAR ST67	2.88 (74)	5
DYNAPAR HS6	10.56 (268)	40
AVTRON M3 DR M4	3.62 (92)	10
TAMAGAWA TSS013(X1)	6.00 (152)	10
NORTHSTAR ST65	2.88 (74)	5
NORTHSTAR ST85	2.00 (51)	5
BELT H20B	10.19 (259)	15
TAMAGAWA TS2151	2.64 (67)	15
BELT HS35	7.50 (191)	15
DYNAPAR HS20	2.00 (50.8)	5
DYNAPAR X23	12.88 (327)	10
STIEGMANN SRK25	7.25 (184.4)	10
NORTHSTAR HS035	3.00 (76.2)	10
HEIDENHAIN EGN425	2.5 (63.5)	5
AVTRON HS35M	4.19 (106.4)	5
HEIDENHAIN ERN480	5.00 (76.2)	5
DYNAPAR HD25	7.00 (177.8)	10
DYNAPAR H22	3.62 (92.1)	5
AVTRON M285	2.54 (64.5)	9
AVTRON A1850	2.54 (64.5)	9
AVTRON A156	4.50 (115)	15
HS125	3.30 (84)	5
HS125B	3.30 (84)	2
NORTHSTAR P18	3.25 (83)	15
DYNAPAR HA625	5.88 (150)	10
AVTRON A1495	9.50 (241)	18
AVTRON A152	1.93 (49)	.7



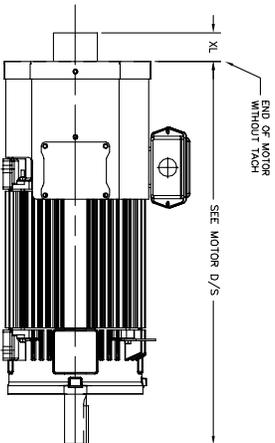
TEAO-BC, IC416-BC
 EXCLUDES NEMA FRAMES FL320 THRU FL440
 AND
 IEC FRAMES FDL200 THRU FDL280

TACH. MODEL	XL Inche(st/mm)	LBS.
BELT DR DYNAPAR HS35	4.50 (115)	10
DYNAPAR H20	4.50 (115)	15
AVTRON M3 DR M4	4.50 (115)	10
NORTHSTAR HS35M	4.50 (115)	15
NORTHSTAR ST65	4.50 (115)	10
NORTHSTAR ST67	4.50 (115)	10
NORTHSTAR ST85	4.50 (115)	5
TAMAGAWA TSS008, TSS013	4.50 (115)	10
DYNAPAR HS20	4.50 (115)	15
STIEGMANN SRK25	4.50 (115)	10
STIEGMANN SRV/SR150	4.50 (115)	3
STIEGMANN SR350	4.50 (115)	15
H20D & H22E	4.50 (115)	15
AVTRON HS35M	4.50 (115)	10
AVTRON A185	4.50 (115)	10
AVTRON HS5	4.50 (115)	5
AVTRON HA67	4.50 (115)	10
HS125	4.50 (115)	5
TS2014	4.50 (115)	10
AVTRON HS45	4.50 (115)	15
DYNAPAR HS038M	4.50 (115)	15
AVTRON A152	4.50 (115)	.7



TEFC, IC411

TACH. MODEL	XL Inche(st/mm)	LBS.
BELT HS35	2.88 (74)	7
NORTHSTAR HS35M	3.31 (84)	10
DYNAPAR H20	3.75 (95)	15
DYNAPAR HS35, HS038	2.88 (74)	7
H20XD	9.75 (248)	35
EM25	7.90 (201)	35
AVTRON HS35M	4.19 (106)	2
STIEGMANN SRK20	3.75 (95)	1
DYNAPAR H20	2.00 (51)	1
NORTHSTAR HS035	2.81 (71)	2
NORTHSTAR HS038	3.30 (84)	5
AVTRON A152	1.93 (49)	.7



950-671919

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

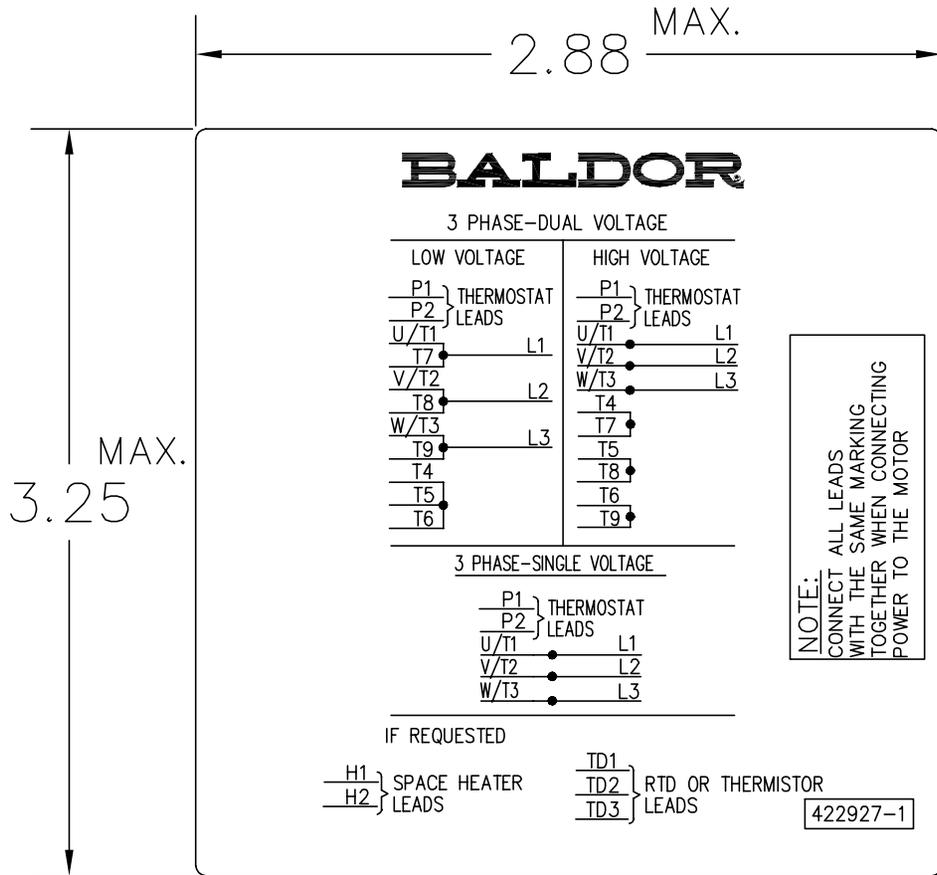
REV. DESC: REVISE "EXCLUDES" NOTE ON TEAO-BC MOTORS	VERSION: 22	TDR: 000001040214
REV. LTR: X	FILE: \RGG\00003\694	REVISD: 01:53:13 08/18/2017
MTL: -	BY: RGGWT	

BALDOR

DIM SHT TACH DIM NEMA FL180 - FL440 IEC FDL112 - FDL280

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