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BALDOR • RELIANCE

Product Information Packet

ZDBRPM25504

50HP, 1750RPM,3PH,60HZ,2570,TEBC,FOOT

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Part Detail							
Revision:	A	**Status:**	PRD/A	**Change #:**		**Proprietary:**	No
Type:	AC	**Prod. Type:**		**Elec. Spec:**	L3380A	**CD Diagram:**	422927-001
Enclosure:	TEBC	**Mfg Plant:**		**Mech. Spec:**		**Layout:**	617573-342
Frame:	FL2570Z	**Mounting:**	F3	**Poles:**	04	**Created Date:**	04-10-2015
Base:		**Rotation:**	R	**Insulation:**	H	**Eff. Date:**	08-27-2015
Leads:						**Replaced By:**	
Literature:		**Elec. Diagram:**					

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Nameplate 000613006NS

DUTY	HP	RPM	AMPS	VOLTS	HZ
CONT	50	1775	65	460	60
CONT	50	3545	60	460	120

CAT.NO.	ZDBRPM25504	**SPEC. NO.**	P25T0313				
SER.NO		**FR**	FL 2570Z	**INSUL**	H		
PH.	3	**MAX SAFE SPEED**	5000	**AMB.**	40	**MIN. AMB.**	-25
DESIGN NO.	L3380A	**TYPE**		**ENCL.**	TEAO-BC		
S.F.	1.0	**D.E. BRG.**	65BC03JPP30A				
ENCL MOD		**O.D.E. BRG.**	50BC03JPP30A				

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REL S.O.	-	VOLTS	460	ENCLOSURE	TEBC	WYE CONN EQ CKT OHMS PER PHASE			
FRAME	FL2570	AMPS	65	MAX SAFE RPM	5000	(AT BASE RATING, 25 ℃)			
HP	50	DUTY	CONT	IM (AMPS)	34	R1	.0778	X1	.380
BASE SPEED	1775	S.F.	1.0	P.F.@NL/FL	.049/.795	R2	.0486	X2	.480
PHASE/HERTZ	3/60	AMB ℃/INSUL	40/H	WK^2 (Lb-Ft^2)	3.84			XM	8.13

RATED FULL LOAD DATA

	RPM	HP	TORQUE LB-FT	FUND VOLTS	FREQ-HZ	AMPS
BASE SPEED	1774	50.0	148	460	60	65.1
MAX SPEED	3542	50.0	74	460	120	59.8
MIN SPEED	0	0	148	14.6	.875	65.1

LOAD PERFORMANCE AT BASE SPEED

	RPM	HP	TORQUE LB-FT	FUND VOLTS	FREQ-HZ	AMPS
NO LOAD	1800	0	0	460	60	33.0
1/4	1794	12.5	37	460	60	36.0
1/2	1787	25.0	74	460	60	43.4
3/4	1781	37.5	111	460	60	53.4
FULL LOAD	1774	50.0	148	460	60	65.1
O/L	1741	98.1	296	460	60	122

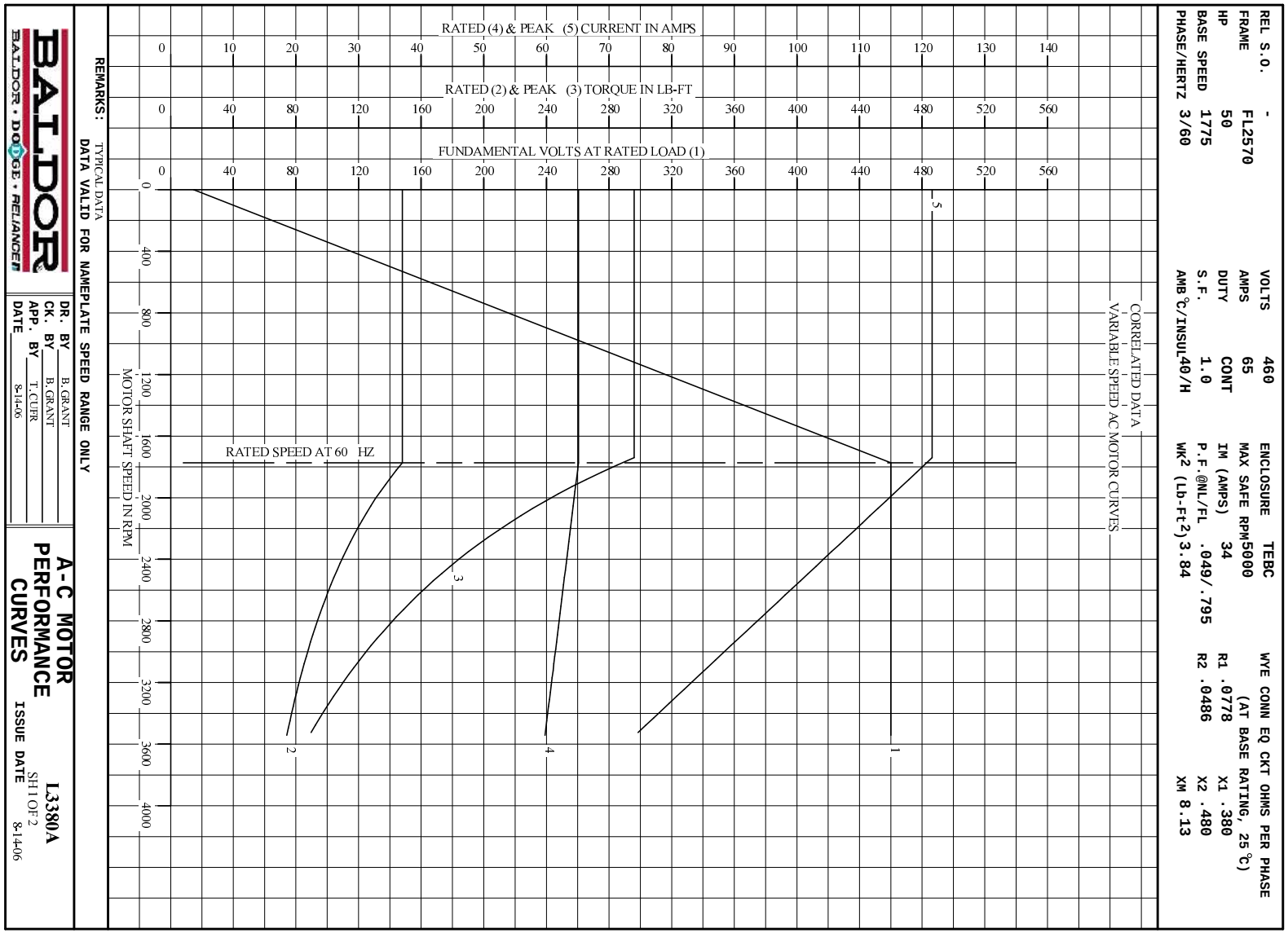
BLOWER DATA	VOLTS	PH/HZ	FL AMPS	LR AMPS	FRAME	CFM

REMARKS: TYPICAL DATA
CORRELATED DATA

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DR. BY B. GRANT
CK. BY B. GRANT
APP. BY T. CUFR
DATE 8-14-06

A-C MOTOR PERFORMANCE DATA L3380A
ISSUE DATE 8-14-06



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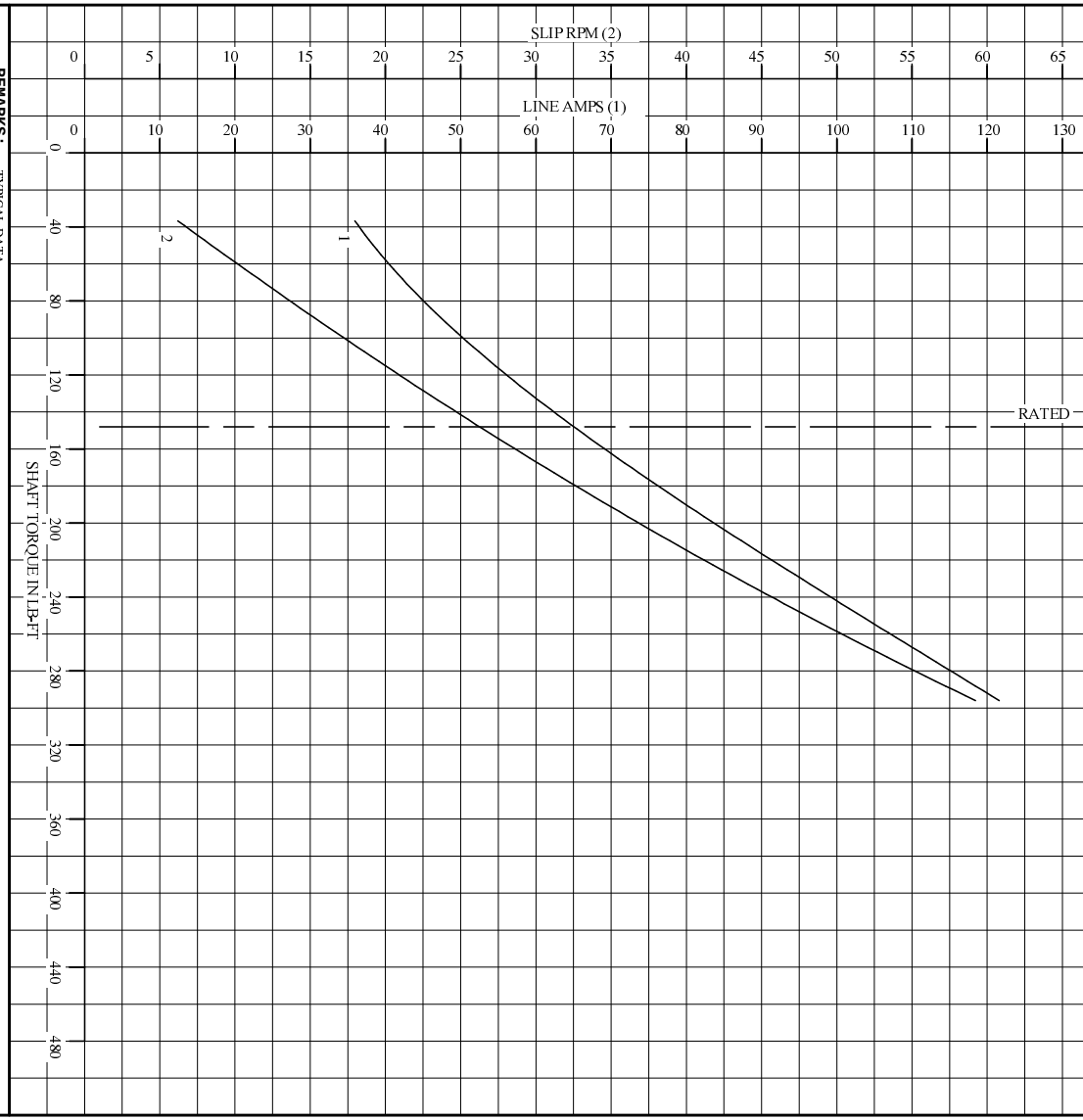
REL S.O. -
FRAME FL2570
HP 50
BASE SPEED 1775
PHASE/HERTZ 3/60

VOLTS 460
AMPS 65
DUTY CONT
S.F. 1.0
AMB°C/INSUL 40/H

ENCLOSURE TEBC
MAX SAFE RPM 5000
IM (AMPS) 34
P.F.@NL/FL .049/.795
WK² (lb-Ft²) 3.84

WYE CONN EQ CKT OHMS PER PHASE (AT BASE RATING, 25°C)
R1 .0778 X1 .380
R2 .0486 X2 .480
XM 8.13

CORRELATED DATA
LOAD PERFORMANCE (CONSTANT V/HZ RANGE)



REMARKS: TYPICAL DATA
DATA VALID FOR NAMEPLATE SPEED RANGE ONLY

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CK. BY B. GRANT
APP. BY T. CUFR
DATE 8-14-06

A-C MOTOR PERFORMANCE CURVES

L3380A
SH 2 OF 2
ISSUE DATE 8-14-06

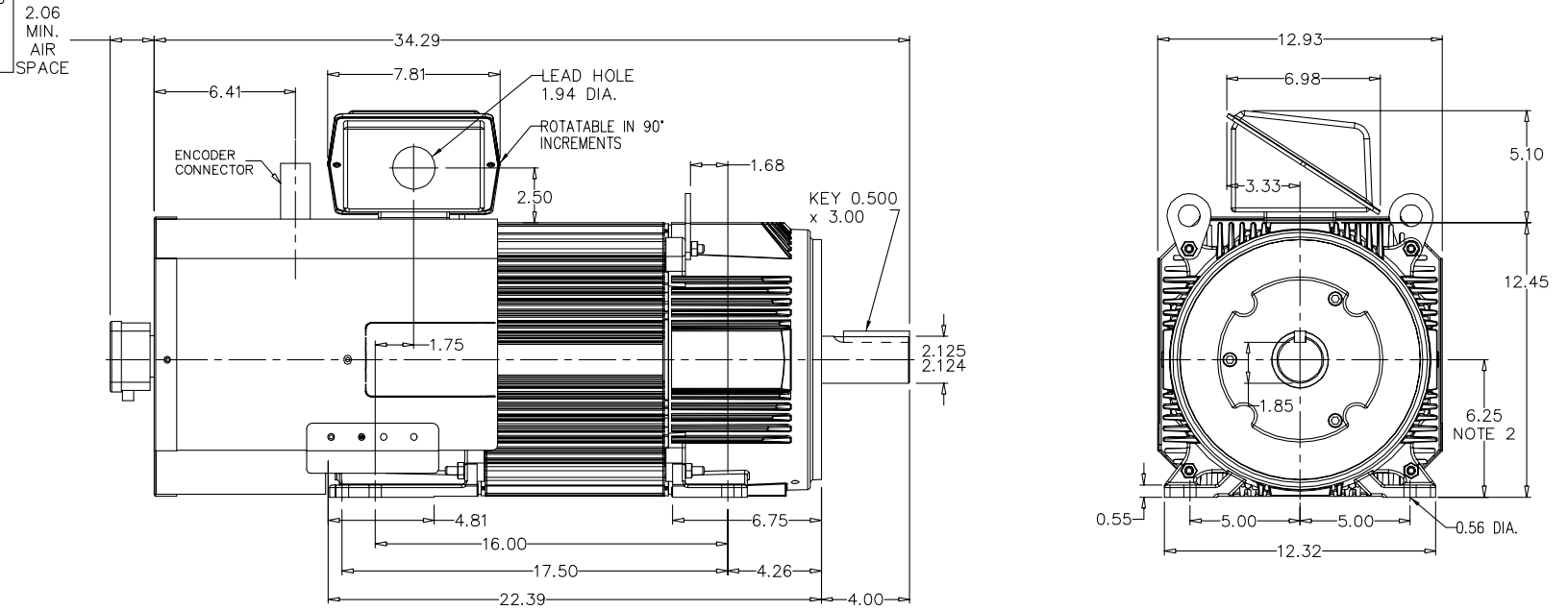
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617573-342

RPM–AC FINNED FRAME VARIABLE SPEED ALTERNATING CURRENT MOTOR
FL2570Z

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

COOLING: BLOWER COOLED
ACCESSORIES: ENCODER



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
121 AMP STEEL TERMINAL BOX SHOWN
REFER TO 616779–50 FOR SPECIFIED TERMINAL BOX DIMENSIONS

MOTOR WEIGHT: 475 LBS. (MAY VARY 15%)
DIMENSIONS ARE IN INCHES SCALE: 1.00

617573-342

CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT THIS PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION.

REV. DESC: CHANGE TO GENERIC CONNECTOR AND ENCODER		
REV. LTR: B	VERSION: 02	TDR: 000000984829
FILE: \RGG\00025\788	REVISED: 01:22:34 06/27/2016	BY: RGGWT
MTL: –		

BALDOR
DIM SHT,RPMAC,TEBC,FL2570Z,ENCODER
SH 1 of 1

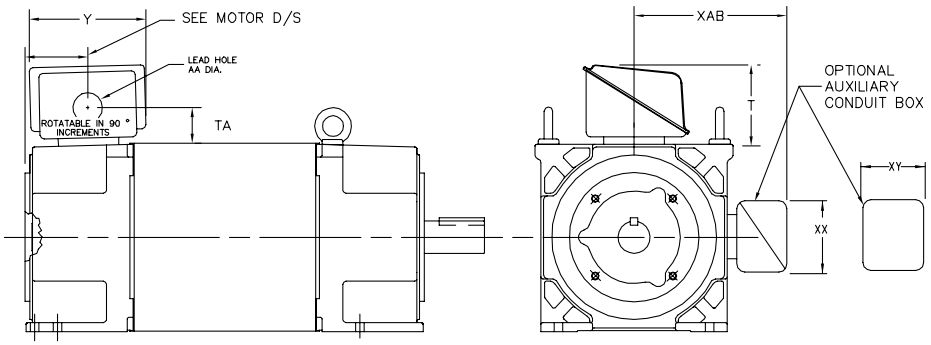
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616779-050

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



TERMINAL BOX	Y	TA	T	AA	MAX AMPS	REMARKS
706310-63B	14.39	7.43	12.15	--	400	TERMINAL STRIP
706310-226R	9.00	3.06	5.40	Pg36 & Pg16	160	TERMINAL STRIP
706310-225R	7.75	2.30	4.40	Pg29 & Pg16	100	TERMINAL STRIP
706310-56B	9.00	3.06	5.40	Pg36 & Pg16	160	TERMINAL STRIP
706310-56A	7.75	2.30	4.40	Pg29 & Pg16	100	TERMINAL STRIP
706320-14D	15.00	7.56	12.81	5	510	CAST IRON
706320-13A	10.50	4.88	9.00	4.0 TAP	210	CAST IRON
706320-12B	9.25	4.81	8.56	3	140	CAST IRON
75460-62B	7.25	2.50	5.25	1.5 TAP	110	CAST IRON
706320-4C	5.75	2.38	4.38	1.0 TAP	60	CAST IRON FL180 ONLY
706310-3R	16.00	4.40	7.81	3	590	MILL
706310-3X	8.00	2.38	5.00	–	160	MILL
702658-1C	14.62	7.56	12.70	5	500	STEEL
706320-16A	9.00	4.12	8.44	4.59	305	STEEL
706320-9A	7.25	3.50	7.06	2.50	160	STEEL
75454-1AJ	7.69	2.38	5.25	1.94	121	STEEL
75452-B	6.34	2.00	4.12	1.75	61	STEEL
75452-G	6.34	2.00	4.12	–	61	STEEL SPECIAL
706320-5A	6.12	2.38	4.38	1.75/2.00	75	STEEL FL180 ONLY
706320-3A	5.00	1.62	3.00	1.12	40	STEEL FL180 ONLY
706320-7A	7.62	2.00	7.00	2.5/3.0	208	STEEL FL180 ONLY

OPTIONAL AUXILIARY CONDUIT BOX DIMENSIONS (MAXIMUM)									
FRAME SIZE	XAB	XX	XY	PART NUMBER	FRAME SIZE	XAB	XX	XY	PART NUMBER
FL210/FDL132/RL210/RDL132	7.38	4.25	4.25	602007-26-A	FL210/FDL132/RL210/RDL132	10.88	8.00	8.00	706310-3-B
FL250/FDL160/RL250/RDL160	8.44	4.25	4.25	602007-26-A	FL250/FDL160/RL250/RDL160	11.88	8.00	8.00	706310-3-B
FL280/FDL180/RL280/RDL180	9.12	4.25	4.25	602007-26-A	FL280/FDL180/RL280/RDL180	12.62	8.00	8.00	706310-3-B

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

TERMINAL BOX CAN BE ROTATED FOR LEAD OUTLET AT TOP, SIDES OR BOTTOM. TERMINAL BOX LOCATED ON OPPOSITE SIDE WHEN F-2, W-1, W-4, W-5, W-7, OR C-1 MOUNTING IS SPECIFIED. BOX LOCATED ON TOP WHEN SPECIFIED.

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

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REV. DESC: BOX # 706320-9A,CHANGE AA DIM FROM 2 TO 2.50 | TDR: 000000785386
REV. LTR: C | VERSION: 03
FILE: \RGC\00003\692 | REVISED: 08:40:55 02/11/2013 | BY: RGGWT
MTL: – | DIM SHT NEMA RL210-RL280 FL180-FL280 IEC RDL132-RDL180 SH 1 of 1

616779-050

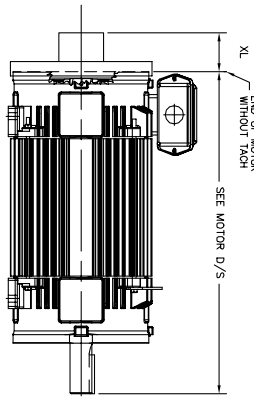
RPM AC TACHOMETER DIMENSIONS

NEMA FRAMES FL180 thru FL440 and IEC FRAMES FDL112 thru FDL280

DIMENSIONS ARE IN INCHES(mm)

DPFV, DPSV, TEPV, TESV, TENV & TEAO-PB

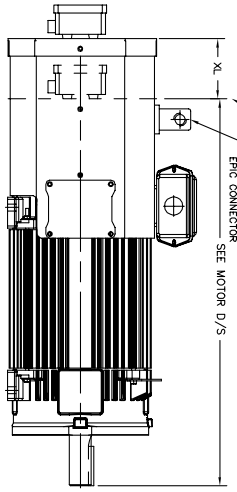
IC06, IC17, IC37, IC410, & IC416-PB



* THIS DIMENSION INCLUDES COVER FOR X/T MOTOR.

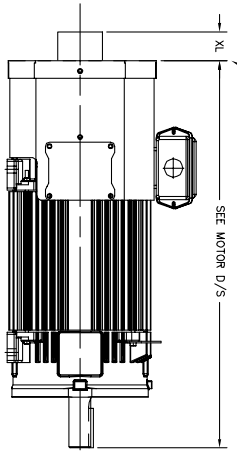
TACH MODEL	XL Inches(mm)	LBS.
BEI DR DYNAPAR HS35	2.88 (74)	5
DYNAPAR H20 *	7.50(191)MAX.	10
NORTHSTAR HS35M	3.31 (84)	10
NORTHSTAR ST67	2.88 (74)	5
DYNAPAR H56	10.56 (268)	40
AVTRON M3 DR M4	3.62 (92)	10
TAMAGAWA TS5013(XT)	6.00 (152)	10
NORTHSTAR ST56	2.88 (74)	5
NORTHSTAR ST85	2.00 (51)	5
BEI H36D	10.19 (259)	15
TAMAGAWA TS2151	2.64 (67)	15
BEI H25	7.50 (191)	15
DYNAPAR HS20	2.00 (50.8)	5
DYNAPAR X25	12.88 (327)	10
STEGMANN SRM25	7.25 (184.4)	10
NORTHSTAR HS035	3.00 (76.2)	10
HEIDENHAIN EON425	2.5 (63.5)	5
AVTRON HS35M	4.19 (106.4)	5
HEIDENHAIN ERN480	5.00 (76.2)	5
DYNAPAR H025	7.00 (177.8)	10
DYNAPAR H22	3.62 (92.1)	5
AVTRON M285	2.54 (64.5)	9
AVTRON AV850	2.54 (64.5)	9
AVTRON AV56	4.50 (115)	15
HS038	3.30 (84)	5
HS025	3.30 (84)	2
NORTHSTAR RT8	3.25 (83)	15
AVTRON AV485	5.88 (150)	10
DYNAPAR H46425	5.88 (150)	10
AVTRON AV485	9.50 (241)	18

TEAO-BC, IC416-BC



TACH MODEL	XL Inches(mm)	LBS.
BEI 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 ST56	4.50 (115)	10
NORTHSTAR ST67	4.50 (115)	10
NORTHSTAR ST85	4.50 (115)	5
TAMAGAWA TS5008, TS5013	4.50 (115)	10
DYNAPAR HS20	4.50 (115)	15
STEGMANN SRM25	4.50 (115)	10
STEGMANN SRS/SRM50	4.50 (115)	3
STEGMANN SRS60	4.50 (115)	15
H25D & H25E	4.50 (115)	15
AVTRON HS35M	4.50 (115)	10
AVTRON AV85	4.50 (115)	10
AVTRON M56	4.50 (115)	10
AVTRON AV67	4.50 (115)	5
HSD38	4.50 (115)	5
TS2014	4.50 (115)	10
AVTRON HS45	4.50 (115)	15
DYNAPAR HSD38M	4.50 (115)	15

TEFC, IC411



TACH MODEL	XL Inches(mm)	LBS.
BEI HS35	2.88 (74)	7
NORTHSTAR HS35M	3.31 (84)	10
DYNAPAR H20	3.75 (95)	15
DYNAPAR HS35, HSD38 H20(XT)	2.88 (74) 9.75 (248)	7 35
E0N425	7.90 (201)	35
AVTRON HS35M	4.19 (106)	2
STEGMAN SRM50	3.75 (95)	1
DYNAPAR H20	2.00 (51)	1
NORTHSTAR HS035	2.81 (71)	2
NORTHSTAR HS038	3.30 (84)	5

616779-055

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

REV. DESC: ADD TAMAGAWA TS5008 (B1248085)		
REV. LTR: U	VERSION: 19	TDR: 000000895710
FILE: \RGG\00003\694	REVISED: 08:00:14 03/06/2015	BY: RGGWT
MTL: –		

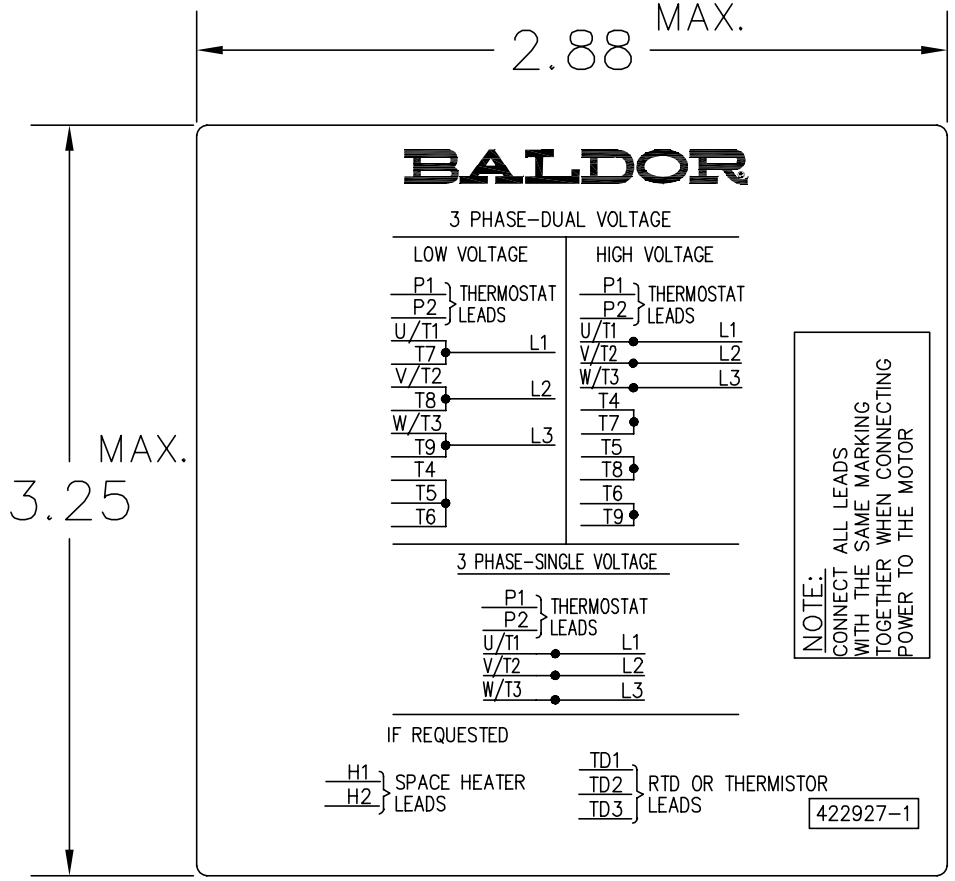
BALDOR

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

SH 1 of 1

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422927-001



NOTE:
DATA TO BE SIZED SO THAT IT FITS INTO MATERIAL DECAL DIMENSIONS. MAKE LETTERS & NUMBERS AS LARGE AS POSIBLE.

MATERIAL: CERAMATIC DGF-P4
PERMA GRIP ADHESIVE

ALL LETTERS, NUMBERS AND LINES TO BE BLACK ON WHITE BACKGROUND.

REV. DESC: CHANGE BACKGROUND COLOR FROM GOLD TO WHITE			BALDOR
REV. LTR: B	VERSION: 02	TDR: 000000788708	
FILE: \RGG\00000\203		REVISED: 08:09:29 03/04/2013	EXTERNAL CONNECTION LABEL
MTL: –		BY: RGGWT	SH 1 of 1

422927-001

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