



Product Information Packet

EMOTORS DIRECT INC.

ZDFRPM25404

40HP, 1750RPM, 3PH, 60HZ, 2586, TEFC, FOOT

Part Detail							
Revision:	-	Status:	PRD/A	Change #:		Proprietary:	No
Type:	AC	Elec. Spec:	L3271A	CD Diagram:	422927-001	Mfg Plant:	
Mech. Spec:		Layout:	617581-001	Poles:	04	Created Date:	04-10-2015
Base:		Eff. Date:	04-13-2015	Leads:			

Specs			
Catalog Number:	ZDFRPM25404		
Enclosure:	TEFC		
Frame:	FL2586Z		
Frame Material:	Exposed Laminations		
Output @ Frequency:	40.000 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:	No Grease		
Current @ Voltage:	51.000 A @ 460.0 V		
Duty Rating:	CONT		
Feedback Device:	ENCODER		
Frame Prefix:	FL		
Heater Indicator:	No Heater		
Insulation Class:	H		

Mounting Arrangement:	F3		
Product Family:	General Industrial		
Pulley End Bearing Type:	Ball		
Pulley Face Code:	Standard		
Shaft Ground Indicator:	No Shaft Grounding		
Shaft Rotation:	Reversible		
Motor Standards:	NEMA		
Thermal Device - Bearing:	None		
Thermal Device - Winding:	Normally Closed Thermostat		

Nameplate 000613006NN

	DUTY	HP	RPM	AMPS	VOLTS	HZ	
	CONT	40	1780	51	460	60	
	CONT	40	3560	47	460	120	
CAT.NO.	ZDFRPM25404		SPEC. NO.		P25T0312		
SER.NO			FR	FL 2586Z	INSUL	H	
PH.	3		MAX SAFE SPEED	5000	AMB.	40	
DESIGN NO.	L3271A		TYPE		ENCL.	TEFC	
S.F.	1.0		D.E. BRG.	65BC03JPP30A			
ENCL MOD			O.D.E. BRG.	50BC03JPP30A			

MIN. AMB. 0

Parts List		
Part Number	Description	Quantity
WS286697	WS P25T0312	1.000 EA
RA282905	RA P25T0312	1.000 EA
000613006NN	RPM AC WITH CERTIFIED LOGOS	1.000 EA
000692000FP	NP, WARNING LIFT INSTRUCTIONS	1.000 EA
000692000VD	LABEL WARNING	1.000 EA
036170004EA	ROUND HEAD DRIVE SCREW	4.000 EA
418018122A	LABEL	2.000 EA
422927001	C/D LABEL	1.000 EA
036100080KA	M10-1.50X 80MM HXSOCHDCS	3.000 EA
036500010AB	METRIC NUT M10-1.5PLTD400	4.000 EA
036500010AB	METRIC NUT M10-1.5PLTD400	4.000 EA
036610010AB	MHSLW M10 PLATED	4.000 EA
400638001H	SPRING WASHER (Customer number 43699)	1.000 EA
418057491A	LIFTING LUG	2.000 EA
HA4054	SHORT T-DRAIN FITTING, .125" N.P.T.	1.000 EA
HA4054	SHORT T-DRAIN FITTING, .125" N.P.T.	1.000 EA
609830005ABP	TBOLT	4.000 EA
807582003AAA	BRKT,DE,250AC	1.000 EA
807582004AAB	BRKT,ODE,L250	1.000 EA
032018004AK	HHCS 1/4-20X1/2 PLATED	2.000 EA
034180012FA	KEY 3/8X3/8X1-1/2 L - 360	1.000 EA
036000012HB	HHCS M6X12MM LONG PLATED	3.000 EA
036000020HB	HHCS M6-1.0X20MM PLATED	4.000 EA
036620008AB	M6 METRIC EXT LOCKWASHER	1.000 EA

Parts List (continued)		
Part Number	Description	Quantity
065564000B	GASK 250-280	1.000 EA
075452000B	C/BOX, PAINTED 210-250	1.000 EA
075453000A	CBOXC, PAINTED 250-280	1.000 EA
078548001T	FAN 250	1.000 EA
406673002C	.75 CAP PLUG	1.000 EA
415000103A	T/LUG #14AWG-#4AWG W/HOLE FOR .250 BOLT	1.000 EA
415072001B	CLAMP	1.000 EA
417733004T	GASKET CONDUIT BOX	2.000 EA
418018074A	GROUND LABEL G100 METRIC 160 D.C.	1.000 EA
418057373A	SCREW SHEET METAL	7.000 EA
422962051B	STUB SHAFT	1.000 EA
607980163C	TETHER KIT	1.000 EA
607980163D	TETHER KIT	1.000 EA
607980192A	RF,BEI,HS35,TWISTLOCK	1.000 EA
708533003A	PLATE, BTM FAN/BLOWER	2.000 EA
708534050A	BLOWER SHROUD	1.000 EA
708534051A	FL250 FAN GRILL	1.000 EA
000640000P	TAG WINDING THERMOST	1.000 EA
004824007K	SPECIAL PAINT	0.100 EA
034180024GA	KEY 1/2X1/2X3 L	1.000 EA

REL. S.O.	-	VOLTS	460	ENCLOSURE	TEFC	WYE CONN	EQ	CKT	OHMS	PER PHASE
FRAME	FL2586	AMPS	51	MAX SAFE RPM	5000	(AT BASE RATING, 25 °C)				
HP	40	DUTY	CONT	IM (AMPS)	25	R1	.0669	X1	.338	
BASE SPEED	1780	S.F.	1.0	P.F. @NL/FL	.049/.804	R2	.0458	X2	.610	
PHASE/HERTZ	3/60	AMB °C/INSUL	40/H	WK ² (LB-FT ²)	4.9			XM	10.5	

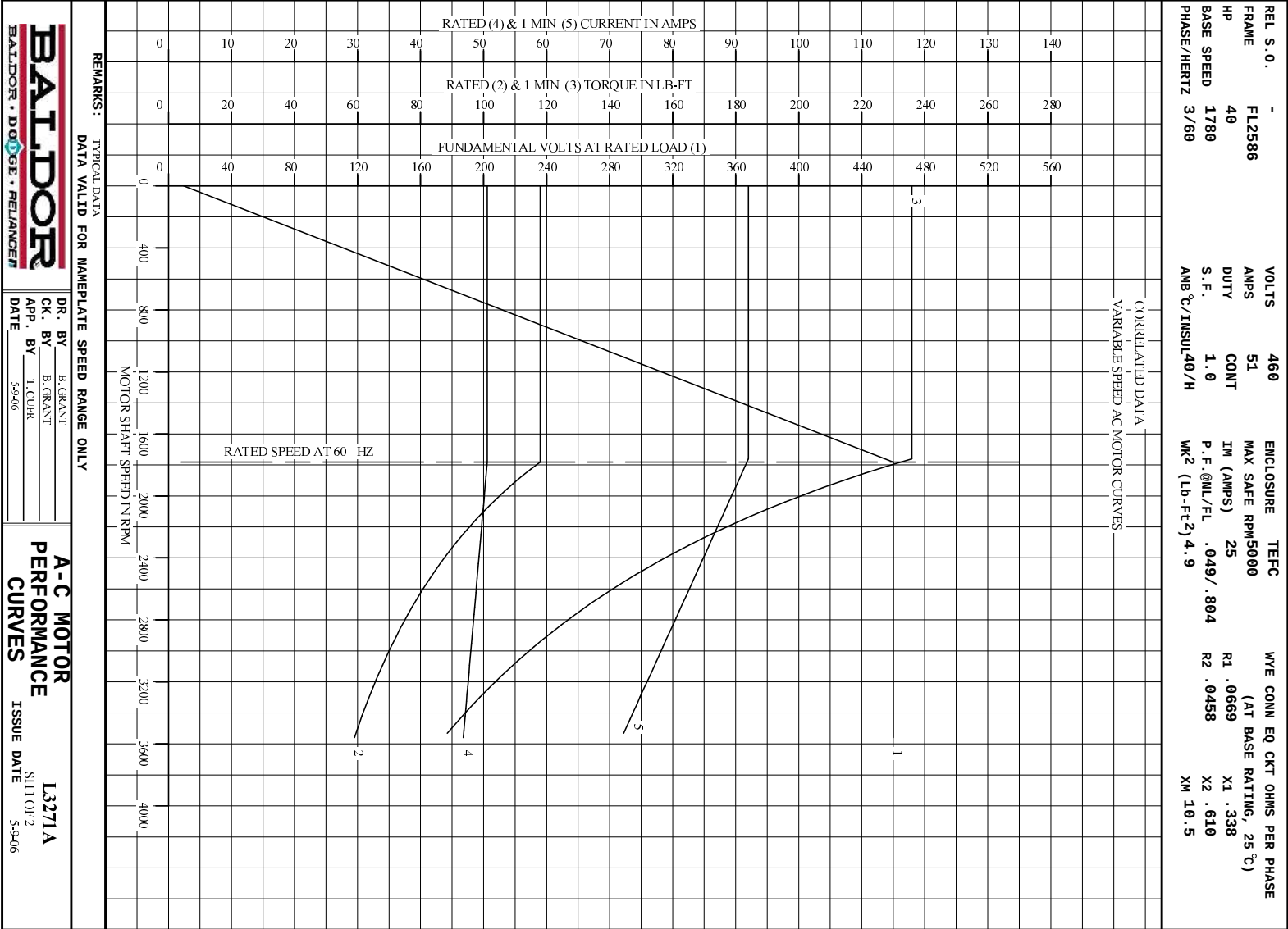
RATED FULL LOAD DATA						
	RPM	HP	TORQUE LB-FT	FUND VOLTS	FREQ-HZ	AMPS
BASE SPEED	1781	40.0	118	460	60	50.6
MAX SPEED	3560	40.0	59	460	120	46.8
MIN SPEED	0	0	118	9.71	.621	50.6

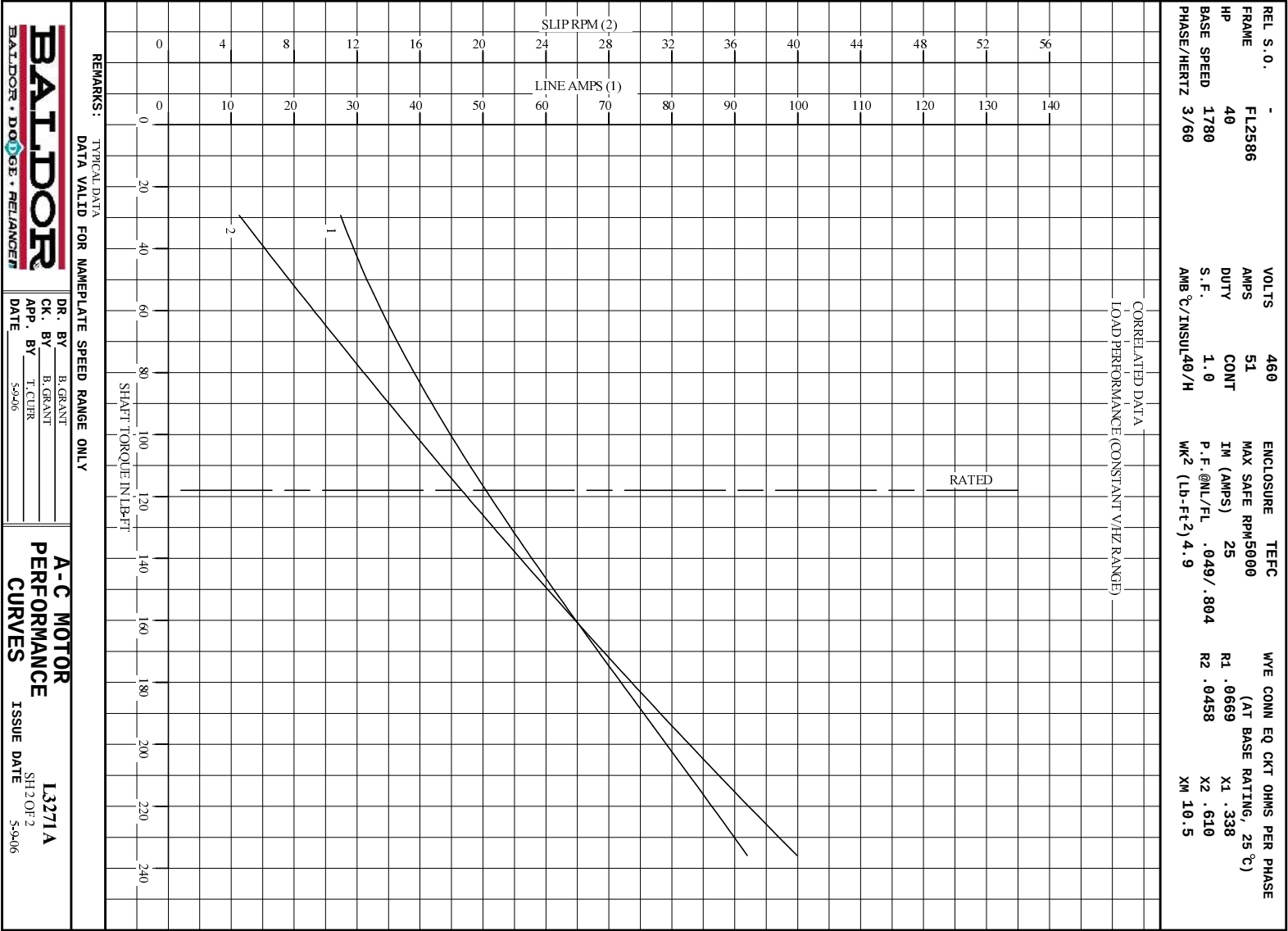
LOAD PERFORMANCE AT BASE SPEED						
	RPM	HP	TORQUE LB-FT	FUND VOLTS	FREQ-HZ	AMPS
NO LOAD	1800	0	0	460	60	24.5
1/4	1795	10.0	29	460	60	27.5
1/2	1791	20.0	59	460	60	33.4
3/4	1786	30.0	88	460	60	41.4
FULL LOAD	1781	40.0	118	460	60	50.6
0/L	1760	79.1	236	460	60	92.0

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

REMARKS: TYPICAL DATA
CORRELATED DATA

		DR. BY <u>B. GRANT</u> CK. BY <u>B. GRANT</u> App. BY <u>T. CUFR</u> DATE <u>5-9-06</u>	A-C MOTOR PERFORMANCE DATA L3271A ISSUE DATE <u>5-9-06</u>
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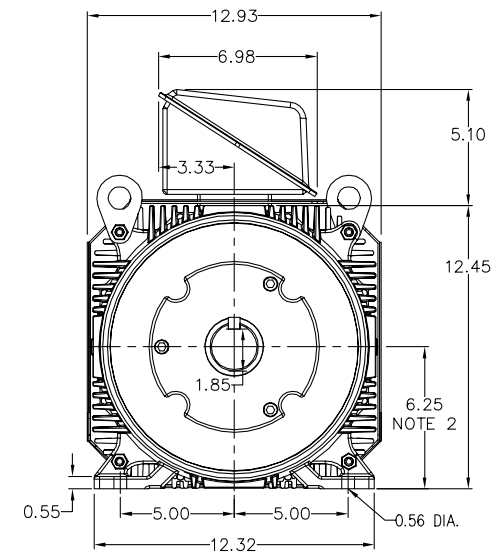
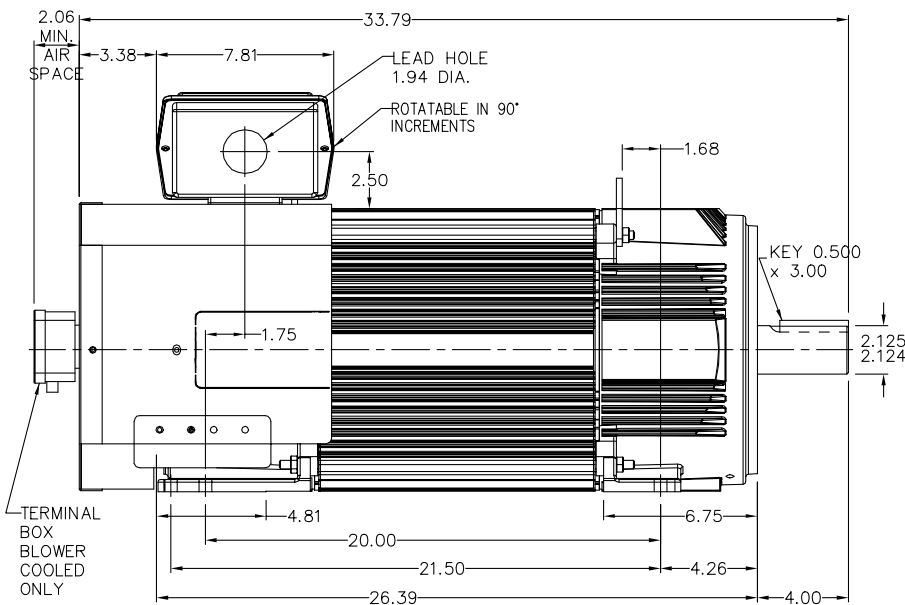


617581-001

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

RPM-AC FINNED FRAME VARIABLE SPEED ALTERNATING CURRENT
MOTOR
FL & UFL2586Z

COOLING: BLOWER COOLED or
FAN COOLED
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
121 AMP STEEL TERMINAL BOX SHOWN
REFER TO 616779-50 FOR SPECIFIED TERMINAL BOX DIMENSIONS
REFER TO 616779-55 FOR SPECIFIED TACHOMETER DIMENSIONS

MOTOR WEIGHT: 605 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: ASSIGNED TO BUSLOAD	VERSION: 00	TDR: 000000475986
REV. LTR: -	FILE: \RGG\00002\904	REVISD: 15:23:16 09/17/2008
MTL: -	BY: CONBAT	

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DIM SHT FL & UFL2586Z RPM AC TE BLWR OR FAN COOLED
SH 1 of 1

617581-001

616779-050

Technical drawing of the motor showing front and side views with dimensions:

- Front View (Left):** Shows the motor's base and mounting feet. Dimensions include Y (total width), TA (terminal box offset), and YAB (total base width).
- Side View (Right):** Shows the motor's profile. Dimensions include T (terminal box height), XX (terminal box width), and XY (terminal box depth).
- Terminal Box (Top):** A rectangular box with a central circular hole. It is labeled "ROTATION IN 90° INCREMENTS" and "LEAD HOLE".
- Optional Auxiliary Conduit Box (Bottom):** A rectangular box connected to the terminal box by a conduit. It is labeled "OPTIONAL AUXILIARY CONDUIT BOX".

[illegible]

F1250 & R1250	STEEL	N	61	07/545-4001/1	6.3	2.00	4.12	1.75	
F1250 & R1250	STEEL	N	121	07/545-4001/2	7.59	2.36	5.25	1.34	
F1250 & R1250	STEEL	N	305	70634000068	9.00	4.12	8.44	4.59	
F1250 & R1250	CAST IRON	N	110	70646000019	7.25	2.50	5.25	1.5	TAP
F1250 & R1250	CAST IRON	N	210	70634000068	10.30	4.85	9.40	4.0	TAP
F1250 & R1250	MILL	Y	100	70631000654	7.75	2.30	4.40	Pc28	/Pg16
F1250 & R1250	MILL	Y	160	70631000658	9.00	3.06	5.40	Pc36	/Pg16
F1250 & R1250	MILL	Y	400	70631006538	14.39	7.43	12.15		BLANK

F1280 & R1280	STEEL	N	160	706.32000194	9.00	2.25	3.50	7.00	2.50
F1280 & R1280	STEEL	N	305	706.32000069	9.00	4.12	8.44	4.89	4.59
F1280 & R1280	STEEL	N	500	706.32000030	14.82	7.18	16.40	3.00	5.00
F1280 & R1280	CAST IRON	N	500	706.32000134	14.82	7.18	16.40	3.00	5.00
F1280 & R1280	CAST IRON	N	210	706.32000134	15.00	4.88	9.00	4.0	TAP
F1280 & R1280	CAST IRON	N	510	706.32000140	15.00	7.56	12.81	5.0	TAP
F1280 & R1280	MILL	Y	100	706.31000654	7.75	2.50	4.40	PC29 /PG16	
F1280 & R1280	MILL	Y	160	706.31000658	9.00	3.06	5.40	PG36 /PG16	
F1280 & R1280	MILL	Y	400	706.31006539	14.39	7.43	12.15		BLANK

[illegible]

- (3) "AA" CONDUIT.
(4) "AA" PIPE TAP.
(5) CUSTOMER TO PROVIDE HOLE FOR CONDUIT.
(6) E-DR -5A OR 1" DR 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.

REV. DESC: ADD C/BOX 706310-225 & -226R		
REV. LTR: E	VERSION: 05	TDR: 000001093792
FILE: \RGG\00003\692	REVISED: 07:27:52 12/18/2018	BY: RGGWT
MTL: -		

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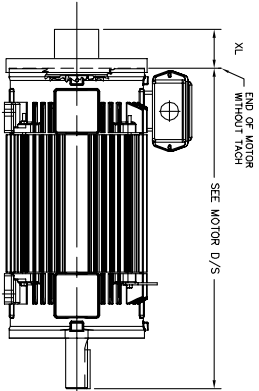
DIM SHT NEMA RL210-RL280 FL180-FL280 IEC RDL132-RDL180

SH 1 of 1

RPM AC TACHOMETER DIMENSIONS
NEMA FRAMES FL180 thru FL440 and IEC FRAMES FDL112 thru FDL280

DIMENSIONS ARE IN INCHES(mm)

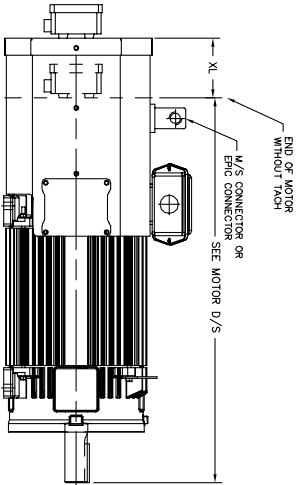
DPRV, DPSY, TEPV, TESY, TENV & TEAO-PB
IC06, IC17, IC37, IC410, & IC416-PB



* THIS DIMENSION INCLUDES COVER FOR X/T MOTOR.

TACH. MODEL	XL Inches(mm)	LBS.
BEL PB 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 H26	10.56 (268)	40
AVTRON X3 PB M4	3.62 (92)	10
TAMAGAMA TS5013(XT)	6.00 (152)	10
NORTHSTAR ST65	2.88 (74)	5
BEL H28B	2.00 (51)	5
BEL H28B	10.19 (259)	15
TAMAGAMA TS2151	2.64 (67)	15
BEL H25	7.50 (191)	15
DYNAPAR HS20	2.00 (50.8)	5
DYNAPAR X25	12.88 (327)	10
STEGMANN SRK25	7.25 (184.4)	10
NORTHSTAR HS105	3.00 (76.2)	10
HEIDENHAIN EON425	2.5 (63.5)	5
AVTRON HS35M	4.19 (106.4)	5
HEIDENHAIN EON480	5.00 (76.2)	5
DYNAPAR HD25	7.00 (177.8)	10
DYNAPAR H22	3.62 (92.1)	5
AVTRON H285	2.54 (64.5)	9
AVTRON AV850	2.54 (64.5)	9
AVTRON AV56	4.50 (115)	15
HS128	3.30 (84)	5
HS125	3.30 (84)	2
NORTHSTAR P18	3.25 (83)	15
DYNAPAR H4625	5.88 (150)	10
AVTRON AV485	9.50 (241)	18
AVTRON AV32	1.93 (49)	.7
DYNAPAR RH25	3.80 (97)	1.6
AVTRON AV85	2.40 (64.5)	3

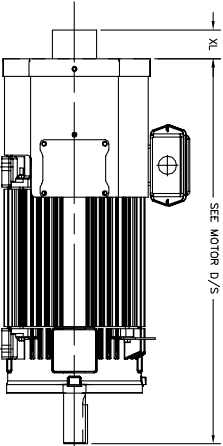
TEAO-BC, IC416-BC
EXCLUDES NEMA FRAMES FL320 THRU FL440
AND
IEC FRAMES FDL200 THRU FDL280



TACH. MODEL	XL Inches(mm)	LBS.
BEL PB DYNAPAR HS35	4.50 (115)	10
DYNAPAR H20	4.50 (115)	15
AVTRON X3 PB M4	4.50 (115)	10
NORTHSTAR HS35M	4.50 (115)	15
NORTHSTAR ST66	4.50 (115)	10
NORTHSTAR ST67	4.50 (115)	10
NORTHSTAR ST65	4.50 (115)	5
TAMAGAMA TS5008, TS5013	4.50 (115)	15
DYNAPAR HS20	4.50 (115)	10
STEGMANN SRK25	4.50 (115)	3
STEGMANN SRK/SRK50	4.50 (115)	15
H25D & H25E	4.50 (115)	15
AVTRON HS35M	4.50 (115)	10
AVTRON AV85	4.50 (115)	10
AVTRON H25	4.50 (115)	5
AVTRON H267	4.50 (115)	10
HS138	4.50 (115)	5
TS2014	4.50 (115)	10
AVTRON HS45	4.50 (115)	15
DYNAPAR HS1038M	4.50 (115)	15
AVTRON AV32	4.50 (115)	.7
AVTRON AV850	4.50 (115)	9

TEFC, IC411

TACH. MODEL	XL Inches(mm)	LBS.
BEL HS35	2.88 (74)	7
NORTHSTAR HS35M	3.31 (84)	10
DYNAPAR H20	3.75 (95)	15
DYNAPAR HS35, HS1038	2.88 (74)	7
H20(XT)	9.75 (248)	35
EN425	7.90 (201)	35
AVTRON HS35M	4.19 (106)	2
STEGMANN SRK50	3.75 (95)	1
DYNAPAR H20	2.00 (51)	1
NORTHSTAR HS105	2.81 (71)	2
NORTHSTAR HS108	3.30 (84)	5
AVTRON AV32	1.93 (49)	.7



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

REV. DESC: ADD AV85	VERSION: 25	TDR: 00000111552
REV. LTR: AA	REVISED: 03:54:15 06/26/2019	BY: RGRWM
FILE: \\RGG\00003\694		
MTL: -		

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DIM SHT TACH DIM NEMA FL180 - FL440 IEC FDL112 - FDL280
SH 1 of 1

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