

BALDOR® • RELIANCE 

Product Information Packet

ZDFRPM21204C

20HP, 1750RPM, 3PH, 60HZ, 2162C, TEFC, FOOT

Part Detail							
Revision:	-	Status:	PRD/A	Change #:		Proprietary:	No
Type:	AC	Elec. Spec:	L3308A	CD Diagram:	422927-001	Mfg Plant:	
Mech. Spec:		Layout:	617517-023	Poles:	04	Created Date:	04-10-2015
Base:		Eff. Date:	04-13-2015	Leads:			

Specs			
Catalog Number:	ZDFRPM21204C		
Enclosure:	TEFC		
Frame:	FL2162C		
Frame Material:	Exposed Laminations		
Output @ Frequency:	20.000 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:	27.000 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:	C-Face		
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	20	1775	27	460	60				
	CONT	20	3545	25	460	120				
CAT.NO.	ZDFRPM21204C		SPEC. NO.	P21T0400						
SER.NO.			FR	FL 2162CZ	INSUL	H				
PH.	3		MAX SAFE SPEED	5000	AMB.	40			MIN. AMB.	0
DESIGN NO.	L3308A		TYPE		ENCL.	TEFC				
S.F.	1.0		D.E. BRG.	50BC03JPP30A						
ENCL MOD			O.D.E. BRG.	45BC02JPP30A						

Parts List		
Part Number	Description	Quantity
WS286736	WS P21T0400	1.000 EA
RA282944	RA P21T0400	1.000 EA
000613006NN	RPM AC WITH CERTIFIED LOGOS	1.000 EA
000692000FP	NP, WARNING LIFT INSTRUCTIONS	1.000 EA
036170004EA	ROUND HEAD DRIVE SCREW	4.000 EA
411716004A	219P039 - 219P039 - LA	1.000 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
400638001AB	WASHER SPRING - 210	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
609830005AN	TBOLT PURGE MTR	4.000 EA
807581003BAA	BRKT,FL210,DE 807581-1WCB	1.000 EA
807581004AAB	BRKT,FL210,DE 807581-2WCB	1.000 EA
032018004AK	HHCS 1/4-20X1/2 PLATED	2.000 EA
034180010DA	KEY 1/4X1/4X1-1/4L	1.000 EA
036000045HB	MHHCS M6X45MM PLATED	4.000 EA
036321020HB	HEXSOCKET FLAT SCREW M	3.000 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
078547001P	FAN 210	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
417733004AC	GASK C/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
708533050A	COVER, FAN	1.000 EA
708533051A	GRILL, FAN COVER	1.000 EA
000640000P	TAG WINDING THERMOST	1.000 EA
004824007K	SPECIAL PAINT	0.100 EA
034180022FA	KEY 3/8X3/8X2-3/4 L	1.000 EA
418010012J	CONDUIT BOX SPACER	1.000 EA

REL. S.O.	-	VOLTS	460	ENCLOSURE	TEFC	WYE CONN EQ CKT OHMS PER PHASE (AT BASE RATING, 25 °C)
FRAME	FL2162	AMPS	27	MAX SAFE RPM	5000	
HP	20	DUTY	CONT	IM (AMPS)	15	R1 .179 X1 .845
BASE SPEED	1775	S.F.	1.0	P.F.@NL/FL	.066/.777	R2 .122 X2 1.09
PHASE/HERTZ	3/60	AMB °C/INSUL	40/H	WK ² (LB-FT ²)	1.92	XM 18.1

RATED FULL LOAD DATA



	RPM	HP	TORQUE LB-FT	FUND VOLTS	FREQ-HZ	AMPS
BASE SPEED	1774	20.0	59	460	60	26.9
MAX SPEED	3543	20.0	30	460	120	24.4
MIN SPEED	0	0	59	13.8	.874	26.9

LOAD PERFORMANCE AT BASE SPEED

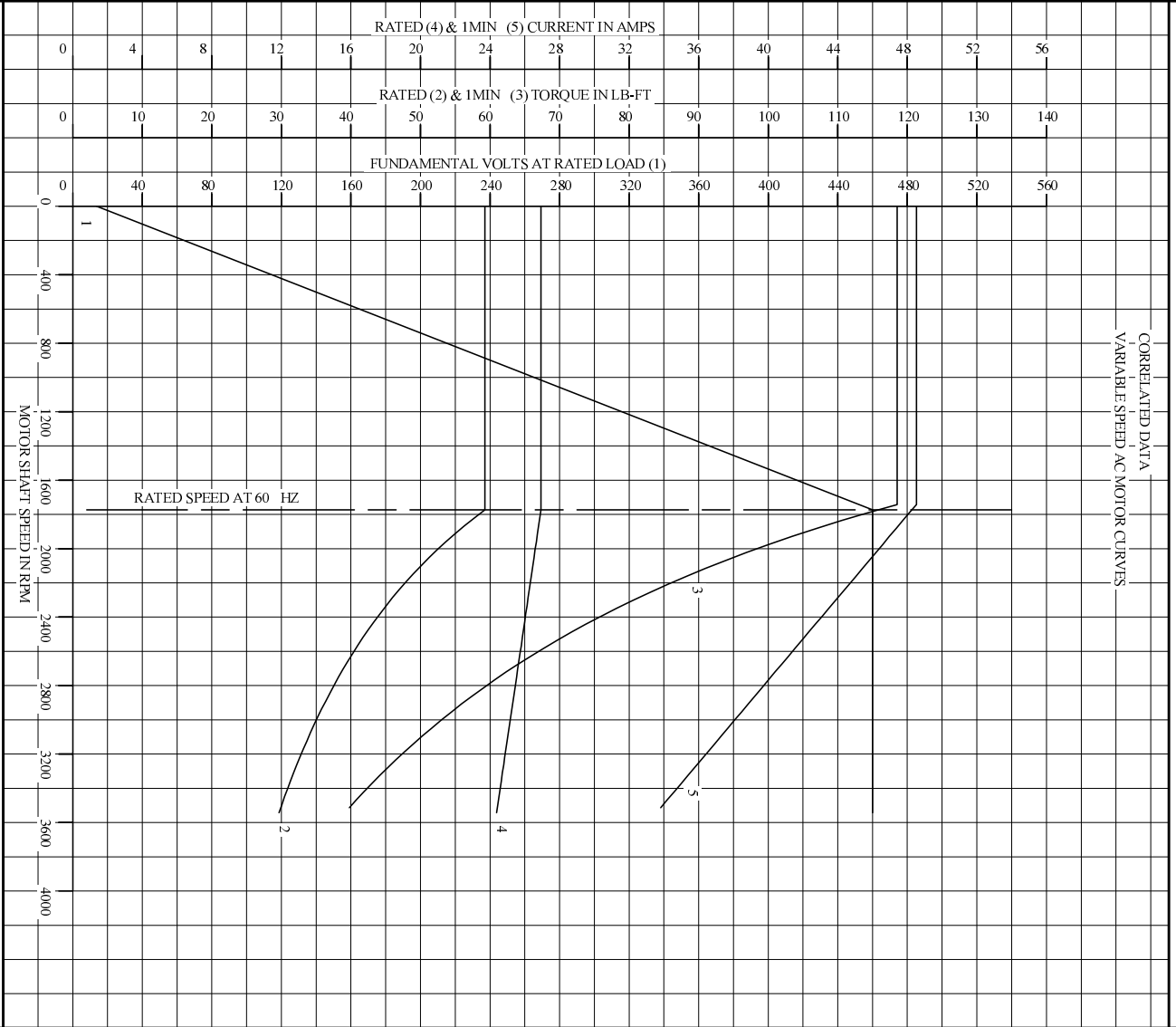
	RPM	HP	TORQUE LB-FT	FUND VOLTS	FREQ-HZ	AMPS
NO LOAD	1800	0	0	460	60	14.4
1/4	1794	5.01	15	460	60	15.7
1/2	1787	10.0	29	460	60	18.6
3/4	1781	15.0	44	460	60	22.4
FULL LOAD	1774	20.0	59	460	60	26.9
O/L	1742	39.3	119	460	60	48.5

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

REMARKS: TYPICAL DATA
CORRELATED DATA

	DR. BY	B. GRANT	A-C MOTOR PERFORMANCE DATA
	CK. BY	B. GRANT	
	APP. BY	T. CUER	
	DATE	6-6-06	
		L3308A ISSUE DATE 6-6-06	

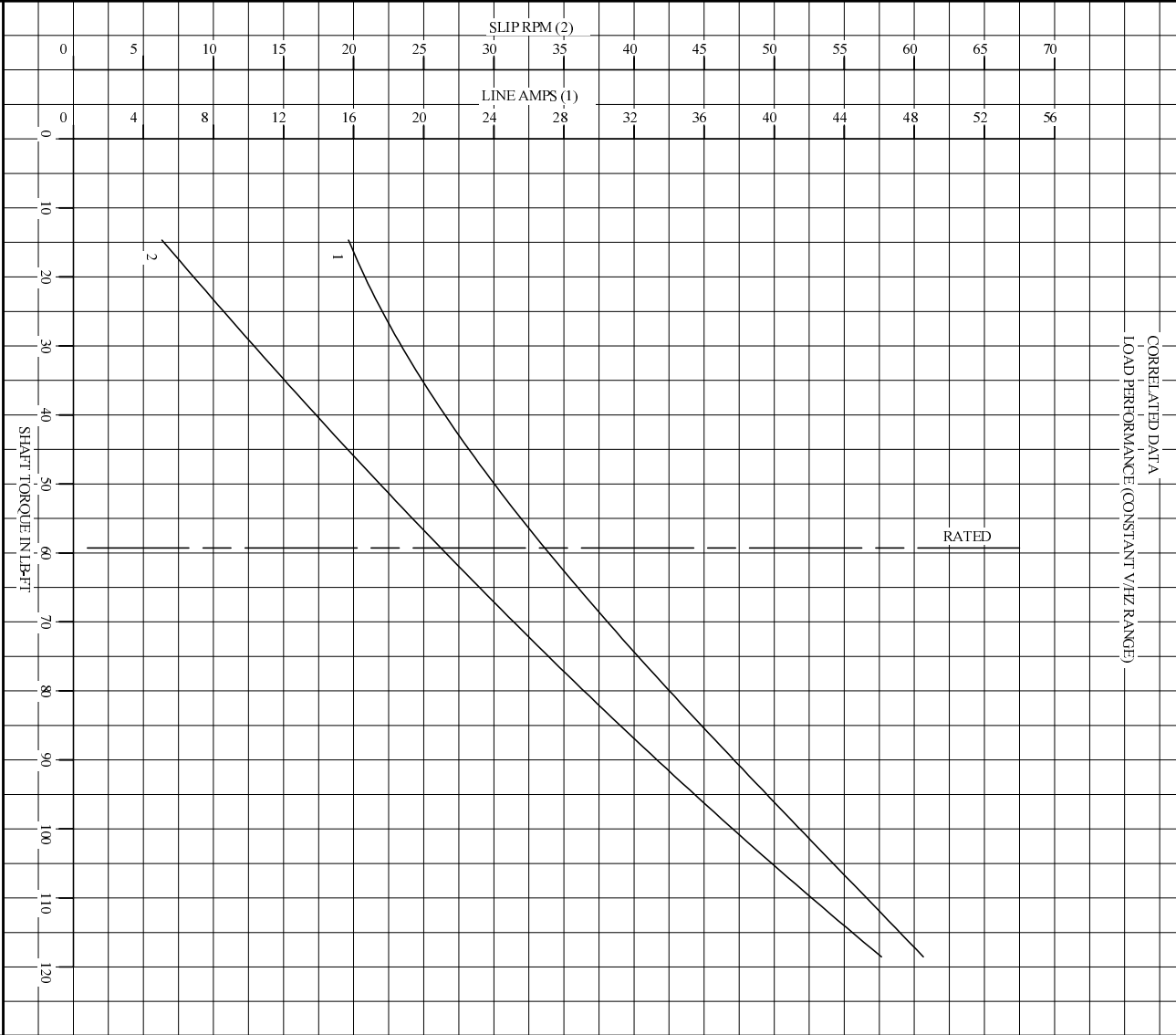
REL S.O.	-	VOLTS	460	ENCLOSURE	TEFC	WYE CONN EQ CRT OHMS PER PHASE
FRAME	FL2162	AMPS	27	MAX SAFE RPM	5000	(AT BASE RATING, 25 °C)
HP	20	DUTY	CONT	IM (AMPS)	15	R1 .179 X1 .845
BASE SPEED	1775	S.F.	1.0	P.F.@NL/FL	.066 / .777	R2 .122 X2 1.09
PHASE/HERTZ	3/60	AMB C _i /INSUL	40/H	WK ² (LB-FT ²)	1.92	XN 18.1



REMARKS: TYPICAL DATA
DATA VALID FOR NAMEPLATE SPEED RANGE ONLY

BALDOR BALDOR • DOUGLASS • RELIANCE	DR. BY	B. GRANT	A-C MOTOR PERFORMANCE CURVES	L3308A
	CK. BY	B. GRANT		
	APP. BY	T. CURR	ISSUE DATE	6-6-06
	DATE	6-6-06		

REL S.O.	-	VOLTS	460	ENCLOSURE	TEFC	WYE CONN EQ CKT OHMS PER PHASE
FRAME	FL2162	AMPS	27	MAX SAFE RPM	5000	(AT BASE RATING, 25°C)
HP	20	DUTY	CONT	IM (AMPS)	15	R1 .179 X1 .845
BASE SPEED	1775	S.F.	1.0	P.F.@NL/FL	.066/.777	R2 .122 X2 1.09
PHASE/HERTZ	3/60	AMB C/INSUL	40/H	WK ² (LB-FC ²)	1.92	XN 18.1



REMARKS: TYPICAL DATA
DATA VALID FOR NAMEPLATE SPEED RANGE ONLY

BALDOR	DR. BY	B. GRANT
• DOUG • RELIANCE	CK. BY	B. GRANT
	APP. BY	T. CURR
	DATE	6-6-06

A-C MOTOR PERFORMANCE CURVES

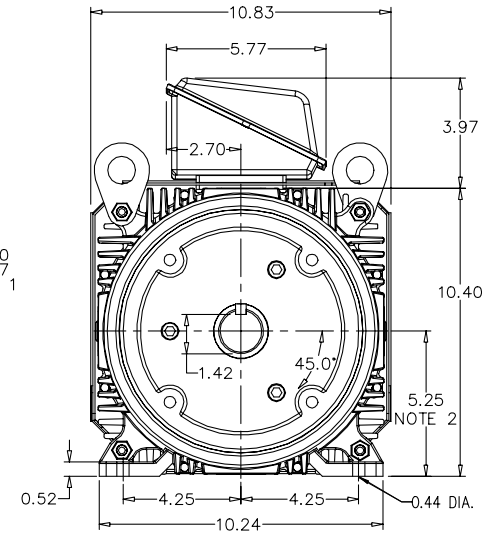
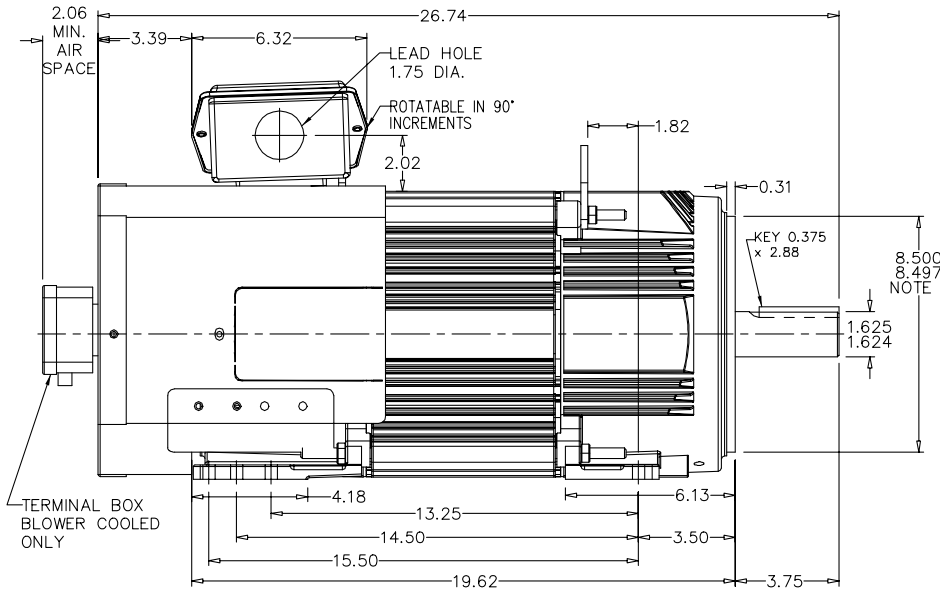
L3308A
SH20F2
ISSUE DATE 6-6-06

617517-023

RPM-AC FINNED FRAME VARIABLE SPEED ALTERNATING
CURRENT MOTOR
FL2162CZ

ENCLOSURE: TOTALLY ENCLOSED
MOUNTING: FOOT / NEMA 250TC C-FACE
DRIVE METHOD: COUPLED OR BELTED

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
61 AMP STEEL TERMINAL BOX SHOWN
REFER TO 616779-50 FOR SPECIFIED TERMINAL BOX DIMENSIONS
REFER TO 616779-55 FOR SPECIFIED TACHOMETER DIMENSIONS

MOTOR WEIGHT: 290 LBS. (MAY VARY 15%)
DIMENSIONS ARE IN INCHES SCALE: 1.00

617517-023

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

REV. DESC: CHANGE DE KEY LENGTH	VERSION: 02	TDR: 000001013340
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FILE: \RGG\00003\195		
MTL: -		

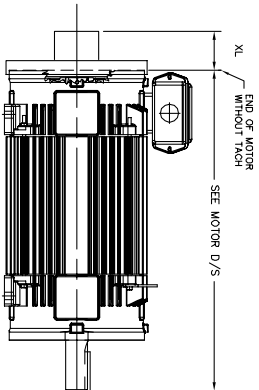
BALDOR
DIM SHT RPMAC TEBC/FC FL2162CZ FT MT PROV FOR TACH
SH 1 of 1

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

616779-055

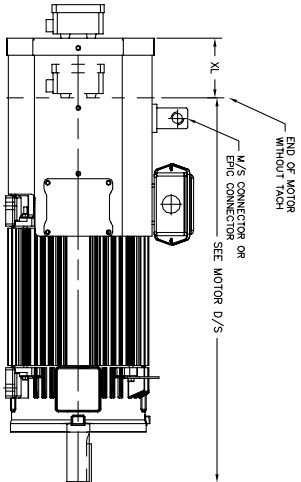
DPV, DPSV, TEPV, TESV, TENV & TEAO-PB
 IC06, IC17, IC37, IC410, & IC416-PB

TACH MODEL	XL Inche(stmm)	LBS.
BELT 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
AYTRON M3 IR M4	3.62 (92)	10
TAMGAMA T55013(X1)	6.00 (152)	10
NORTHSTAR ST65	2.88 (74)	5
NORTHSTAR ST85	2.00 (51)	5
BELT H20B	10.19 (259)	15
TAMGAMA T32151	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
AYTRON 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
AYTRON M285	2.54 (64.5)	9
AYTRON AV850	2.54 (64.5)	9
AYTRON AV56	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
AYTRON AV495	9.50 (241)	18
AYTRON AV32	1.93 (49)	1.7
DYNAPAR RH25	3.80 (97)	1.6
AYTRON AV85	2.40 (64.5)	3

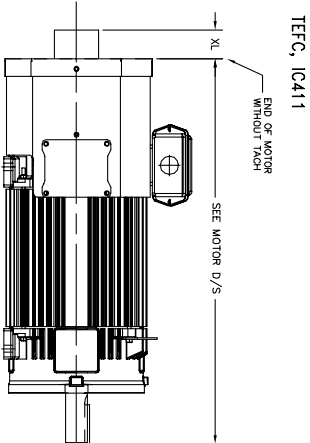


TEAO-BC, IC416-BC
 EXCLUDES NEMA FRAMES FL320 THRU FL440
 AND
 IEC FRAMES FDL200 THRU FDL280

TACH MODEL	XL Inche(stmm)	LBS.
BELT DYNAPAR HS35	4.50 (115)	10
DYNAPAR H20	4.50 (115)	15
AYTRON M3 IR M4	4.50 (115)	10
NORTHSTAR HS35M	4.50 (115)	15
NORTHSTAR ST65	4.50 (115)	10
NORTHSTAR ST85	4.50 (115)	10
NORTHSTAR ST67	4.50 (115)	5
TAMGAMA T55008, T55013	4.50 (115)	10
DYNAPAR HS20	4.50 (115)	15
STIEGMANN SRK25	4.50 (115)	10
STIEGMANN SRV/SRMS0	4.50 (115)	3
STIEGMANN SR350	4.50 (115)	15
H20D & H25E	4.50 (115)	15
AYTRON HS35M	4.50 (115)	10
AYTRON AV85	4.50 (115)	10
AYTRON HS5	4.50 (115)	5
AYTRON HA67	4.50 (115)	10
HS125	4.50 (115)	5
TS2014	4.50 (115)	10
AYTRON HS45	4.50 (115)	15
DYNAPAR HS038M	4.50 (115)	15
AYTRON AV32	4.50 (115)	7
AYTRON AV850	4.50 (115)	9



TACH MODEL	XL Inche(stmm)	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
EMAS	7.90 (201)	35
AYTRON 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
AYTRON AV32	1.93 (49)	1.7



950-671919

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

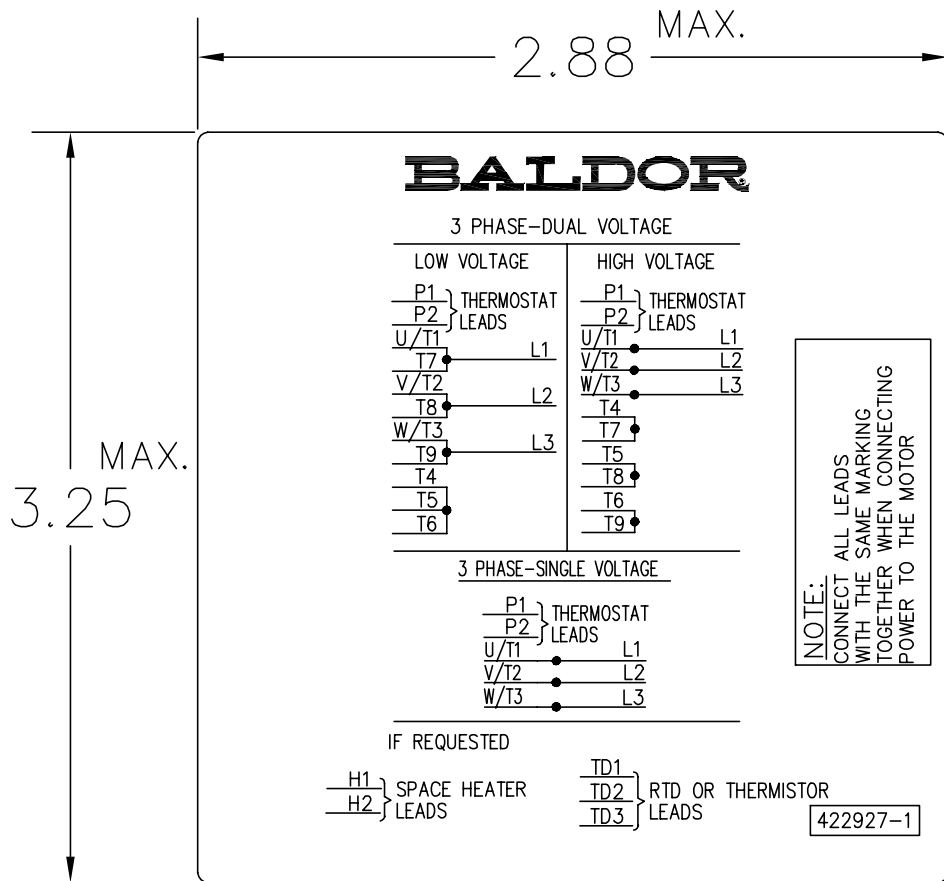
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MTL: -		

BALDOR - RELIANCE®

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

Marketing maintained PDF of MN406:

<http://www.baldor.com/support/Literature/Load.ashx/MN406?ManNumber=MN406>