

ABB BALDOR RELIANCE III

Customer information packet

ZDFRPM18104C

10HP, 1750RPM, 3PH, 60HZ, 1844C, TEFC, FOOT

Specifications

Enclosure	TEFC
Frame	FL1844C
Frame Material	Aluminum
Frequency	60.00 Hz
Output @ Frequency	10.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	460.0 V @ 60 HZ
Agency Approvals	CCSA US
	UR
Auxiliary Box	NO AUXILLARY BOX
Base Indicator	Rigid
Bearing Grease Type	No Grease
Current @ Voltage	13.900 A @ 460.0 V
Duty Rating	CONT
Feedback Device	TACHOMETER
Frame Prefix	FL
Heater Indicator	No Heater
High Voltage Full Load Amps	13.9 a
Insulation Class	H
Motor Standards	NEMA
Mounting Arrangement	F3
Overall Length	25.33 IN
Product Family	General Industrial
Pulley End Bearing Type	Ball
Pulley Face Code	C-Face
Service Factor	1.00
Shaft Diameter	1.375 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Speed	1765 rpm
Thermal Device - Bearing	None

Part Detail

Revision	B
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	L3219A
Layout	617232-013
Eff. date	12-21-2021
CD Diagram	422927-001
Poles	04
Leads	
Proprietary	False
Created date	04-10-2015

Thermal Device - Winding

Normally Closed Thermostat

Nameplate

000613006MY							
	DUTY	HP	RPM	AMPS	VOLTS	HZ	
	CONT	10	1765		13.9	460	60
	CONT	10	3530		12.1	460	120
	CONT	10	1765		27.8	230	60
	CONT	10	3530		24.2	230	120
CAT.NO.	ZDFRPM18104C		SPEC. NO.		P18T0371		
SER.NO			FR	FL 1844CZ	INSUL	H	
PH.	3	MAX SAFE SPEED		7200	AMB.	40	MIN. AMB.
DESIGN NO.	L3219A	TYPE			ENCL.	TEFC	-25
S.F.	1.0		D.E. BRG.		45BC02JPP30A		
ENCL MOD			O.D.E. BRG.		35BC02JPP30A		

Parts List

Part number	Description	Quantity
WS286780	WS P18T0371	1.000 ea
RA282988	RA P18T0371	1.000 ea
000613006MY	NP-RPMAC INVERTER DUTY	1.000 ea
LB1613	LABEL, QR CODE, ADHESIVE LABEL	1.000 ea
000692000XM	LABEL QR CODE	1.000 ea
411716004A	219P039 - 219P039 - LA	1.000 ea
033775004EA	DRSCR #6-1/4 304 S.S.	4.000 ea
422927001	C/D LABEL	1.000 ea
032003168CB	THRU BOLT	4.000 ea
BP5248	BP5248	1.000 ea
033102012AG	HXNUT LEAD CONN 1/4-20 GR5 ZP	4.000 ea
034017012AB	LCKW 1/4 STD. PLATED 034017012AF	4.000 ea
036000016DB	HHCS	2.000 ea
036000050JB	M8-1,25 X 50 MHHCS	2.000 ea
400638001D	WAVEN (Customer number 43699)	1.000 ea
411693051B	LUG, LIFTING	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
807580002BAA	BRKT,DE,FL181 807580-1WCC	1.000 ea
BP5068BJ01	BRUSH, .187 X .187 X 1.00	1.000 ea
807580003AAB	BRKT,ODE180AC 807580-1WCC	1.000 ea
036000012HB	HHCS M6X12MM LONG PLATED	2.000 ea
036000040JB	HHCS,DE BRKT (M8-1.25X40MM PLTD.) AA	4.000 ea
036000012HB	HHCS M6X12MM LONG PLATED	3.000 ea
036620009AB	M8 EXTERNAL LK WASHER	1.000 ea
065530000B	GASK	1.000 ea
075451000A	COVER, CONDUIT BOX	1.000 ea
078546001NA	EXT FAN 7.50 OD&1.126 DIA BORE 78546-1G	1.000 ea
415000103G	TLUG	1.000 ea
422962051Y	STUB SHAFT	1.000 ea
415072001A	CLAMP	1.000 ea

417733001A	GSK C/ BOX BASE	2.000 ea
034180010DA	KEY 1/4X1/4X1-1/4L	1.000 ea
418010006A	CAST,MPLATE,180-280,EX1,7BY	1.000 ea
418018074A	GROUND LABEL G100 METRIC 160 D.C.	1.000 ea
418057373A	SCREW SHEET METAL	3.000 ea
607980163C	TETHER KIT	1.000 ea
607980163D	TETHER KIT	1.000 ea
607980192A	RF,BEI,HS35,TWISTLOCK	1.000 ea
706320003A	CONDUIT BOX	1.000 ea
807505050A	COVER, FAN	1.000 ea
807505051A	GRILL, FAN COVER	1.000 ea
418057243A	GROOVE PIN	1.000 ea
807504052C	FL180 FRAME	1.000 ea
000640000P	TAG WINDING THERMOST	1.000 ea
004824007CQR	C2 PAINT SYSTEM MEDIUM GRAY CHARCOAL MET	0.100 ea
034180020EA	KEY 5/16X5/16X2-1/2 L	1.000 ea
LB1549	LABEL, BLANK 1.375 X 2.250 IMPRINTABLE	1.000 ea
004824007AB	PAINT,XT	0.100 ea

REL S.O.	-	VOLTS	460	ENCLOSURE	TEFC	WYE CONN	EQ	CKT	OHMS	PER PHASE
FRAME	FL1844	AMPS	13.9	MAX SAFE RPM	7200	(AT BASE RATING, 25 °C)				
HP	10	DUTY	CONT	IM (AMPS)	8	R1	.439	X1	1.50	
BASE SPEED	1765	S.F.	1.0	P.F.@NL/FL	.063/.768	R2	.308	X2	1.86	
PHASE/HERTZ	3/60	AMB °C/INSUL	40/H	WK ² (Lb-Ft ²)	.645			XM	33.2	

RATED FULL LOAD DATA

	RPM	HP	TORQUE LB-FT	FUND VOLTS	FREQ-HZ	AMPS
BASE SPEED	1766	10.0	30	460	60	14.1
MAX SPEED	3527	10.0	15	460	120	12.5
MIN SPEED	0	0	30	17.6	1.14	14.1

LOAD PERFORMANCE AT BASE SPEED

	RPM	HP	TORQUE LB-FT	FUND VOLTS	FREQ-HZ	AMPS
NO LOAD	1800	0	0	460	60	7.89
1/4	1791	2.50	7	460	60	8.59
1/2	1783	5.01	15	460	60	9.97
3/4	1775	7.50	22	460	60	11.8
FULL LOAD	1766	10.0	30	460	60	14.1
O/L	1725	19.6	60	460	60	25.1

BLOWER
DATA

VOLTS	PH/HZ	FL AMPS	LR AMPS	FRAME	CFM

REMARKS: TYPICAL DATA

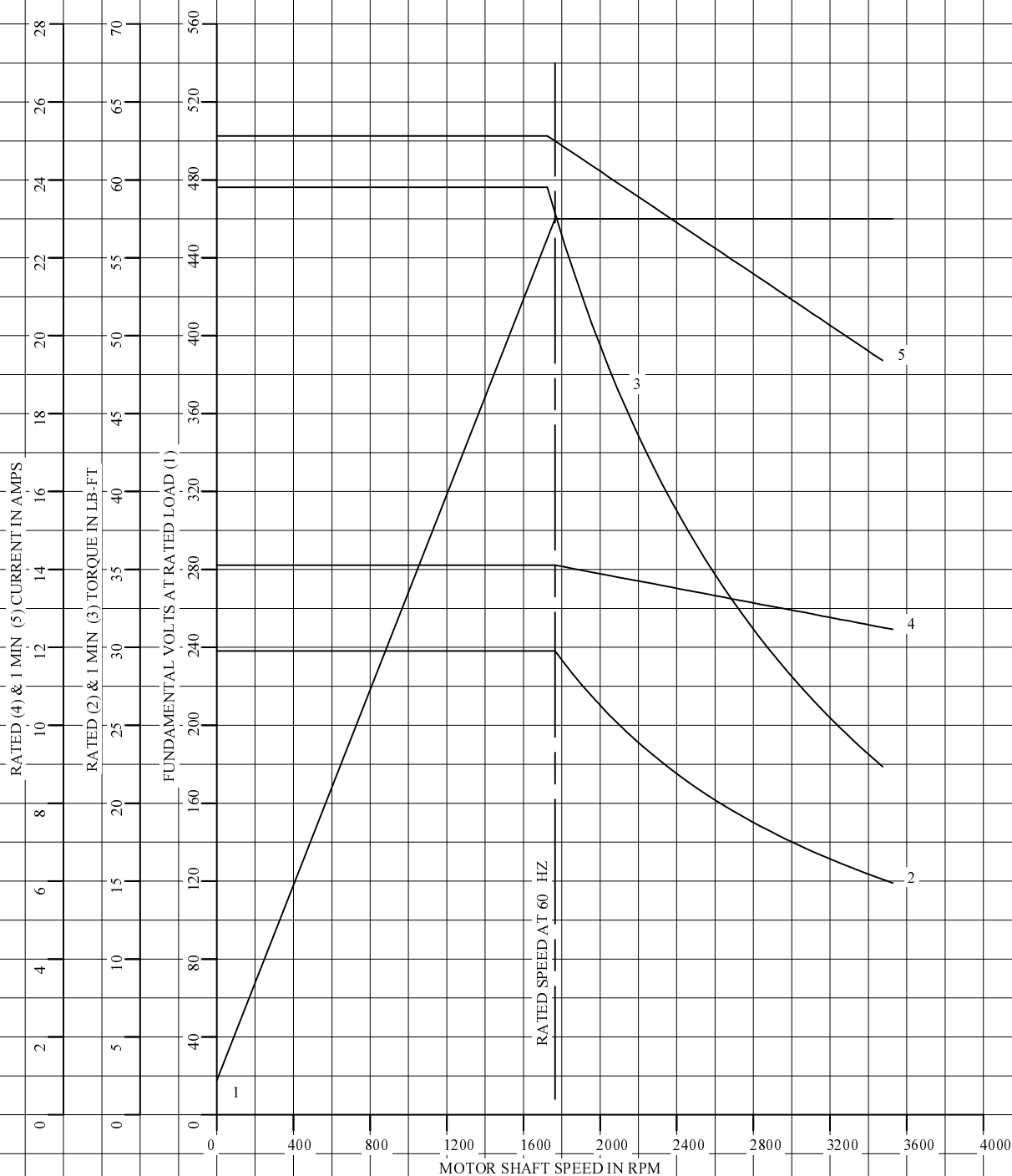


DR. BY	B. GRANT
CK. BY	B. GRANT
APP. BY	T. CUFR
DATE	3-8-06

A-C MOTOR
PERFORMANCE DATA
L3219A
ISSUE DATE 3-8-06

REL S.O.	-	VOLTS	460	ENCLOSURE	TEFC	WYE CONN	EQ	CKT	OHMS PER PHASE
FRAME	FL1844	AMPS	13.9	MAX SAFE RPM	7200	(AT BASE RATING, 25 °C)			
HP	10	DUTY	CONT	IM (AMPS)	8	R1	.439	X1	1.50
BASE SPEED	1765	S.F.	1.0	P.F. @NL/FL	.063/.768	R2	.308	X2	1.86
PHASE/HERTZ	3/60	AMB °C/INSUL	40/H	WK ² (Lb-Ft ²)	.645	XM 33.2			

VARIABLE SPEED AC MOTOR CURVES



REMARKS: TYPICAL DATA
DATA VALID FOR NAMEPLATE SPEED RANGE ONLY



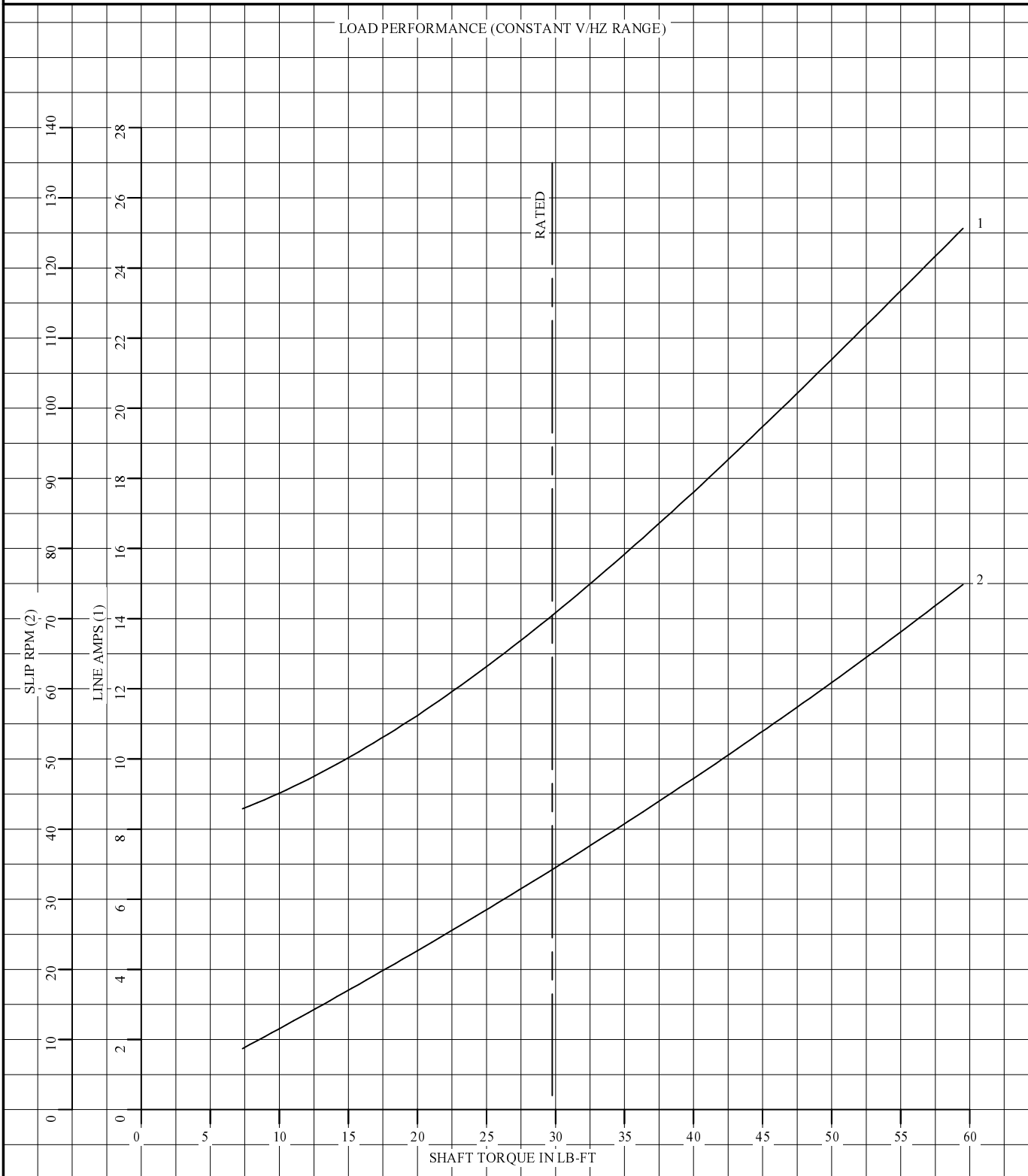
DR. BY B. GRANT
CK. BY B. GRANT
APP. BY T. CUFR
DATE 3-8-06

**A-C MOTOR
PERFORMANCE
CURVES**

L3219A
SH 1 OF 2
ISSUE DATE 3-8-06

REL S.O.	-	VOLTS	460	ENCLOSURE	TEFC	WYE CONN	EQ	CKT	OHMS PER PHASE
FRAME	FL1844	AMPS	13.9	MAX SAFE RPM	7200	(AT BASE RATING, 25 °C)			
HP	10	DUTY	CONT	IM (AMPS)	8	R1	.439	X1	1.50
BASE SPEED	1765	S.F.	1.0	P.F. @NL/FL	.063/.768	R2	.308	X2	1.86
PHASE/HERTZ	3/60	AMB °C/INSUL	40/H	WK ² (Lb-Ft ²)	.645	XM 33.2			

LOAD PERFORMANCE (CONSTANT V/HZ RANGE)



REMARKS: TYPICAL DATA
DATA VALID FOR NAMEPLATE SPEED RANGE ONLY



DR. BY	B. GRANT
CK. BY	B. GRANT
APP. BY	T. CUFR
DATE	3-8-06

**A-C MOTOR
PERFORMANCE
CURVES**

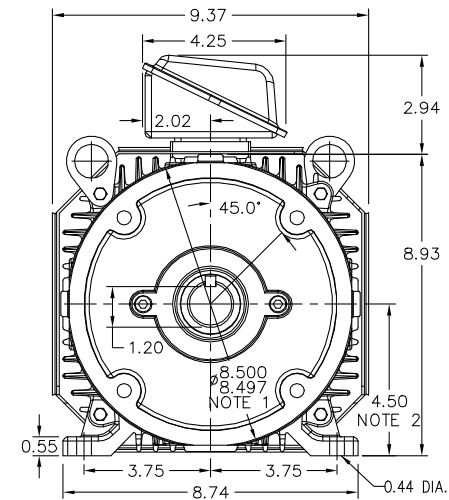
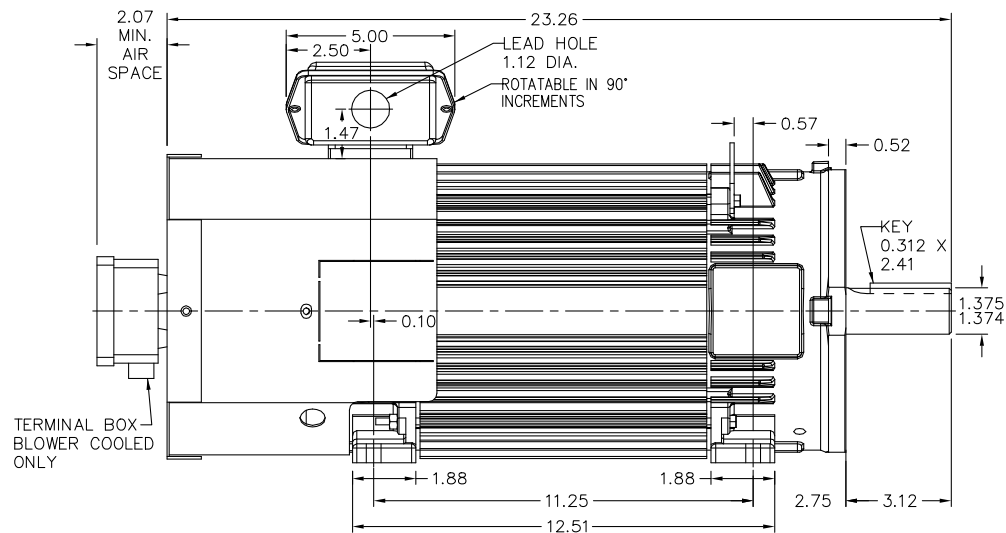
L3219A
SH 2 OF 2
ISSUE DATE 3-8-06

617232-013

RPM-AC FINNED FRAME VARIABLE SPEED ALTERNATING CURRENT MOTOR FL1844CZ

ENCLOSURE: TOTALLY ENCLOSED
 MOUNTING: FOOT / NEMA 210TC 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
 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: 179 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.

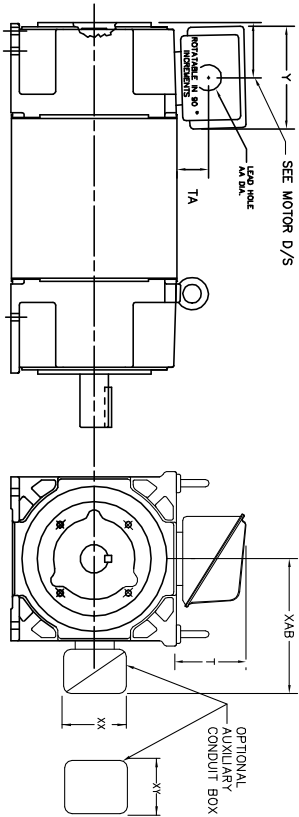
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MTL: -		

BALDOR • DODGE • RELIANCE
DIM SHT RPM AC TEFC / FC FL1844CZ FT / 210TC MTG PROV TACH
SH 1 of 1

617232-013

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	75	706320003A	6.12	2.35	4.38	1.75/2.00
FL180	STEEL	N	208	706320007A	6.62	2.00	7.00	2.50/2.00
FL180	CAST IRON	Y/N	100	706320004C	6.75	2.50	4.38	1.0/1.75
FL180 & FDL11	MILL	Y	100	706310056A	7.75	2.30	4.40	PG29/PG16

FL210 & RL210	STEEL	N	61	075452000B	6.34	2.00	4.12	1.75
FL210 & RL210	STEEL	N	121	075452001A	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	075460052B	7.25	2.50	5.25	1.5 TAP
FL210 & RL210	MILL	Y	100	706310229A	7.75	2.30	4.40	PG29/PG16
FL210 & RL210	MILL	Y	160	706310056A	9.00	3.06	5.40	PG36/PG16
FL210 & RL210	MILL	Y/N	235	706310057A	11.42	4.00	6.72	2.50

FL250 & RL250	STEEL	N	61	075452000B	6.34	2.00	4.12	1.75
FL250 & RL250	STEEL	N	121	075452001A	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	075460052B	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	MILL	Y	100	706310229A	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/N	235	706310057A	11.42	4.00	6.72	2.50
FL250 & RL250	MILL	Y	400	706310063B	14.39	7.43	12.15	BLANK

FL280 & RL280	STEEL	N	160	706320029A	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	706320012B	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/N	235	706310057A	11.42	4.00	6.72	2.50
FL280 & RL280	MILL	Y	400	706310063B	14.39	7.43	12.15	BLANK

FRAME SIZE	YAB	XX	XY	PART NUMBER	FRAME SIZE	YAB	XX	XY	PART NUMBER
FL210/FL180/RL210/RL182	7.38	4.25	4.25	602007-26-A	FL210/FL180/RL210/RL182	10.88	8.00	8.00	706310-3-B
FL250/FL160/RL250/RL160	8.44	4.25	4.25	602007-26-A	FL250/FL160/RL250/RL160	11.88	8.00	8.00	706310-3-B
FL280/FL180/RL280/RL180	9.12	4.25	4.25	602007-26-A	FL280/FL180/RL280/RL180	12.62	8.00	8.00	706310-3-B

(1) 1" AW CONDUIT.
(2) 1" AW PIPE TAP.
(3) CUSTOMER TO PROVIDE WIRE TIE CONDUIT.
(4) 2" DIA. SA OR 1" DIA. DIA. W/4C

TERMINAL BOX CAN BE ROTATED FOR LEAD OUTLET AT TOP, SIDES OR BOTTOM.
TERMINAL BOX LOCATED ON OPPOSITE SIDE WHEN F-2, V-1, V-4, V-5, V-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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BALDOR - RELIANCE®

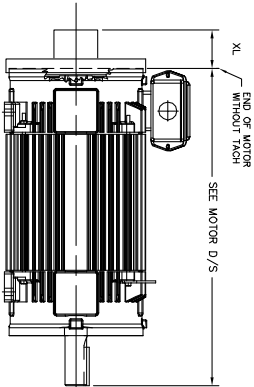
DIM SHT NEMA RL210-RL280 FL180-FL280 IEC RDL132-RDL180

SH 1 of 1

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

DIMENSIONS ARE IN INCHES(mm)

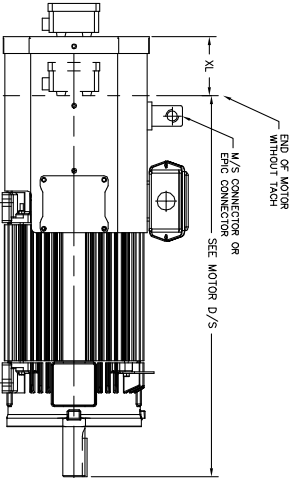
DPV, DPSV, TEPV, TESV, TENV & TEO-PB
IC06, IC17, IC37, IC410, & IC416-PB



* THIS DIMENSION INCLUDES COVER FOR X/T MOTOR.

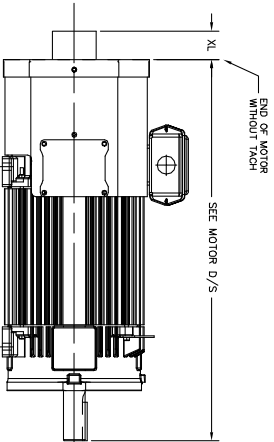
TACH MODEL	XL Inches(mm)	LBS.
BEL DR DYNAPAR HS35	2.88 (74)	5
DYNAPAR H20	7.50 (191) MAX	10
NORHSTAR HS35M	3.31 (84)	10
NORHSTAR ST67	2.88 (74)	5
DYNAPAR HS6	10.56 (268)	40
AVTRON M3 DR M4	3.62 (92)	10
TAMAGAMA TS5013(XT)	6.00 (152)	10
NORHSTAR ST56	2.88 (74)	5
NORHSTAR ST85	2.00 (51)	5
BEL T880	10.19 (259)	15
TAMAGAMA TS2151	6.61 (167)	15
BEL T825	7.50 (191)	15
DYNAPAR HS20	2.00 (50.8)	5
DYNAPAR X25	12.88 (327)	10
STEGMANN SRM25	7.25 (184.4)	10
NORHSTAR HS035	3.00 (76.2)	10
HEIDENHAIN EDW425	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 H02	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
HS025	3.30 (84)	5
NORHSTAR R18	3.25 (83)	15
DYNAPAR H0625	5.88 (150)	10
AVTRON AA485	9.50 (241)	18
AVTRON AV32	1.93 (49)	7
DYNAPAR RH25	3.80 (97)	1.6
AVTRON AV85	2.40 (61.5)	3

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



TACH MODEL	XL Inches(mm)	LBS.
BEL DR DYNAPAR HS35	4.50 (115)	10
DYNAPAR H20	4.50 (115)	15
AVTRON M3 DR M4	4.50 (115)	10
NORHSTAR HS35M	4.50 (115)	15
NORHSTAR ST56	4.50 (115)	10
NORHSTAR ST67	4.50 (115)	10
NORHSTAR S185	4.50 (115)	5
NORHSTAR TS5013	4.50 (115)	10
DYNAPAR HS20	4.50 (115)	15
STEGMANN SRM25	4.50 (115)	10
STEGMANN SRM50	4.50 (115)	3
HE25 & HE56	4.50 (115)	15
AVTRON HS35M	4.50 (115)	10
AVTRON AV85	4.50 (115)	10
AVTRON M56	4.50 (115)	5
AVTRON AV67	4.50 (115)	10
HS038	4.50 (115)	5
TS2014	4.50 (115)	10
AVTRON HS45	4.50 (115)	15
DYNAPAR HS038M	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
NORHSTAR HS35M	3.31 (84)	10
DYNAPAR H20	3.75 (95)	15
DYNAPAR HS35, HS038	2.88 (74)	7
H00(XT)	9.75 (248)	35
EDW425	7.90 (201)	35
AVTRON HS35M	4.19 (106)	2
STEGMANN SRM50	3.75 (95)	1
DYNAPAR HS20	2.00 (51)	1
NORHSTAR HS035	2.81 (71)	2
NORHSTAR HS038	3.30 (84)	5
AVTRON AV32	1.93 (49)	7

550-6677919

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

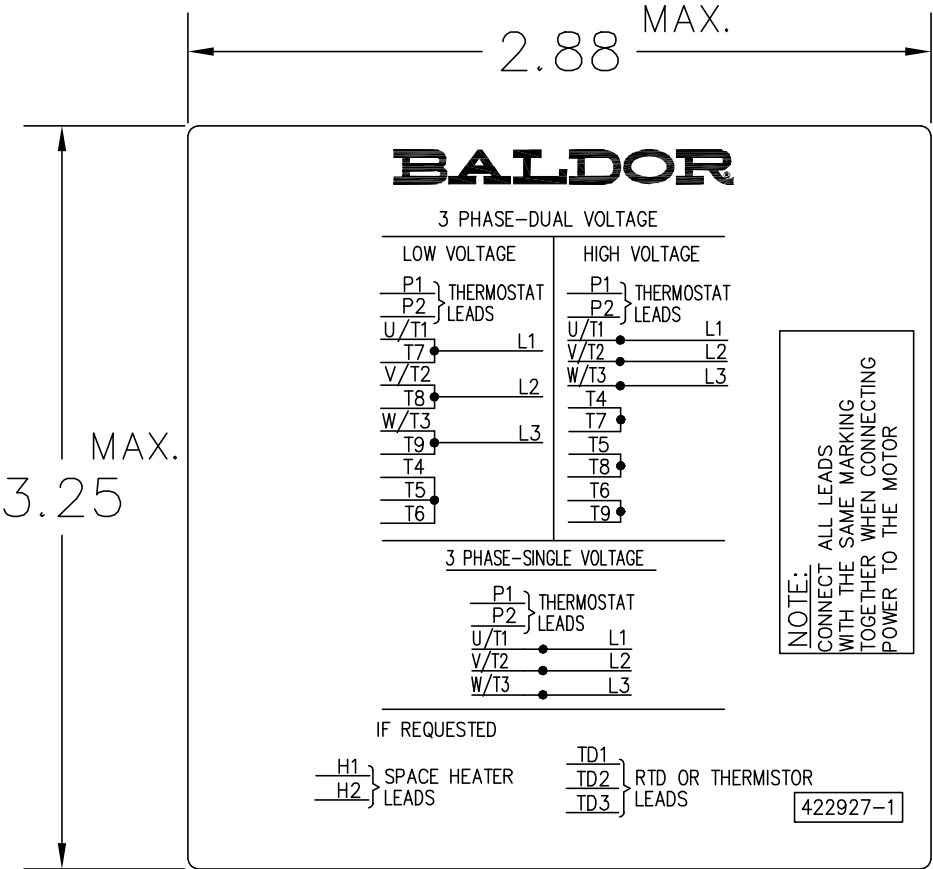
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BALDOR - RELIANCE®

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	
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BALDOR

EXTERNAL CONNECTION LABEL

SH 1 of 1