ABB BALDOR RELIANCE

Customer information packet

ZDNRPM18074C

7.5HP, 1750RPM, 3PH, 60HZ, 1852C, TENV, FOOT

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11/8/2026 8:29:56 PM

Specifications

Enclosure	TENV
Frame	FL1852CZ
Frame Material	Aluminum
Frequency	60.00 Hz
Output @ Frequency	7.500 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	11.000 A @ 460.0 V
Duty Rating	CONT
Feedback Device	TACHOMETER
Frame Prefix	FL
Heater Indicator	No Heater
High Voltage Full Load Amps	11.0 a
Insulation Class	H
Motor Standards	NEMA
Mounting Arrangement	F3
Overall Length	26.37 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	1775 rpm
Thermal Device - Bearing	None

Part Detail

Revision	A
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	L3222A
Layout	617234-013
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	7.5	1775	11	460	60
CONT	7.5	3560	9	460	120.5
CONT	7.5	1775	22	230	60
CONT	7.5	3560	18	230	120.5

CAT.NO.	ZDNRPM18074C		**SPEC. NO.**	P18T0370			
SER.NO		**FR**	FL 1852CZ	**INSUL**	H		
PH.	3	**MAX SAFE SPEED**	7200	**AMB.**	40	**MIN. AMB.**	-25
DESIGN NO.	L3222A	**TYPE**		**ENCL.**	TENV		
S.F.	1.0	**D.E. BRG.**	45BC02JPP30A				
ENCL MOD		**O.D.E. BRG.**	35BC02JPP30A				

		VOLTS	460	ENCLOSURE	TENV	WYE CONN EQ CKT OHMS PER PHASE (AT BASE RATING, 25°C)			
FRAME	FL1852	AMPS	11	MAX SAFE SPEED	7200				
HP	7.5	DUTY	CONT	IM (AMPS)	6.5	R1	.425	X1	1.56
BASE SPEED	1775	S.F.	1.0	P.F. @NL / FL	.061/.742	R2	.324	X2	2.31
PHASE/HZ	3/60	AMB.°C / INSUL	40/H	WK² (Lb-Ft²)	.8			XM	40.3

RATED FULL LOAD DATA

	RPM	HP	TORQUE LB-FT	FUND VOLTS	FREQ-HZ	AMPS
BASE SPEED	1774	7.51	22	460	60	10.9
MAX SPEED	3557	7.51	11	460	120.5	9.84
MIN SPEED	0	0	22	13.0	.8780	10.9

LOAD PERFORMANCE AT BASE SPEED

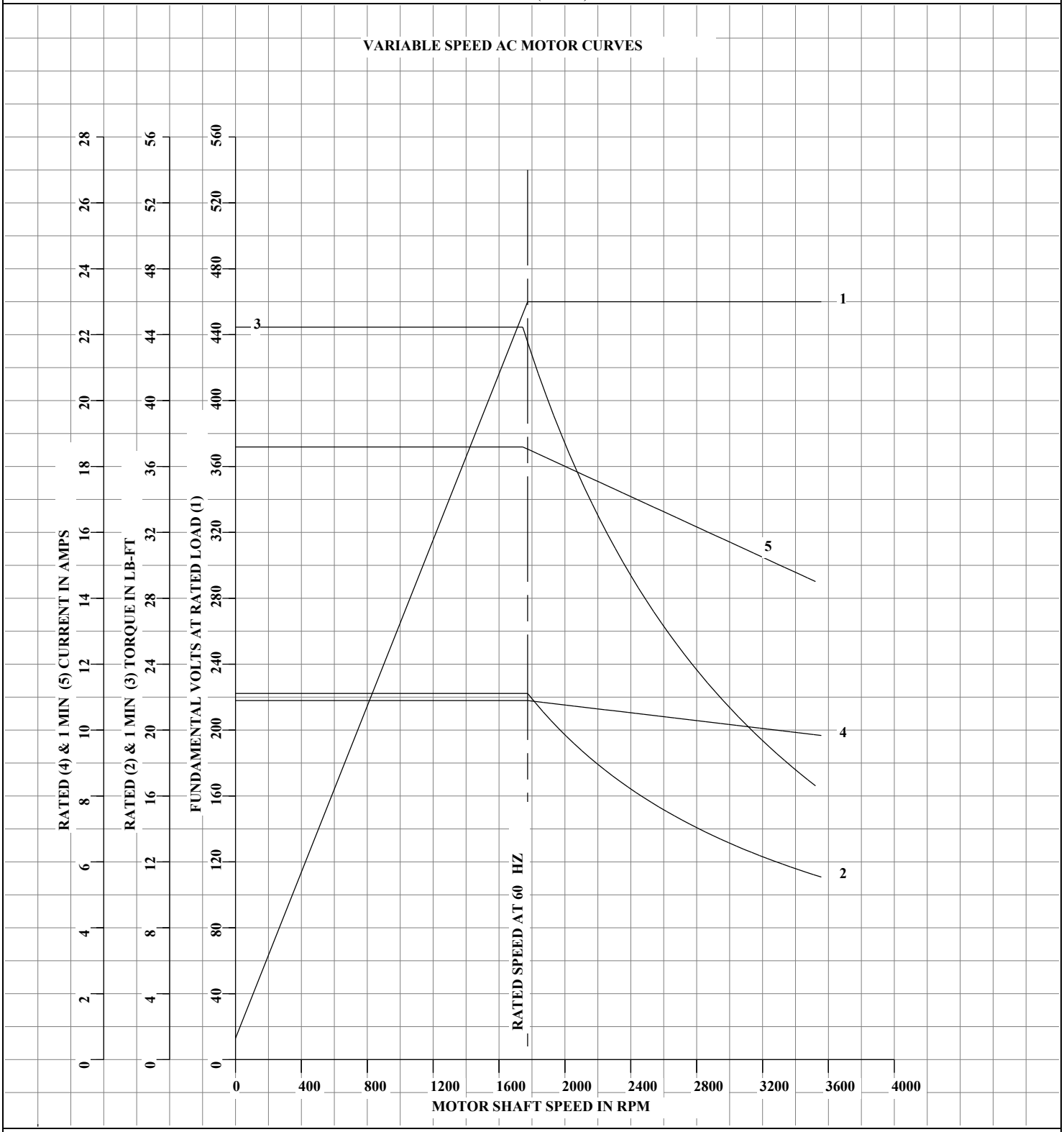
	RPM	HP	TORQUE LB-FT	FUND VOLTS	FREQ-HZ	AMPS
NO LOAD	1800	0	0	460	60	6.38
1/4	1793	1.88	6	460	60	6.96
1/2	1787	3.75	11	460	60	7.92
3/4	1780	5.63	17	460	60	9.26
FULL LOAD	1774	7.51	22	460	60	10.9
0/L	1744	14.8	44	460	60	18.6

REMARKS:
TYPICAL DATA

ABB	DRAWN BY: B. GRANT CHECKED BY: B. GRANT APPROVED BY: T. CUFR DATE: 3-7-06	AC MOTOR PERFORMANCE DATA	L3222A ISSUE DATE 3-16-20

SPEC		**VOLTS**	**460**	**ENCLOSURE**	**TENV**	**WYE CONN EQ CKT OHMS PER PHASE (AT BASE RATING, 25°C)**			
FRAME	**FL1852**	**AMPS**	**11**	**MAX SAFE SPEED**	**7200**				
HP	**7.5**	**DUTY**	**CONT**	**IM (AMPS)**	**6.5**	**R1**	**.425**	**X1**	**1.56**
BASE SPEED	**1775**	**S.F.**	**1.0**	**P.F. @NL / FL**	**.061/.742**	**R2**	**.324**	**X2**	**2.31**
PHASE/HZ	**3/60**	**AMB.°C / INSUL**	**40/H**	**WK² (Lb-Ft²)**	**.8**			**XM**	**40.3**

VARIABLE SPEED AC MOTOR CURVES

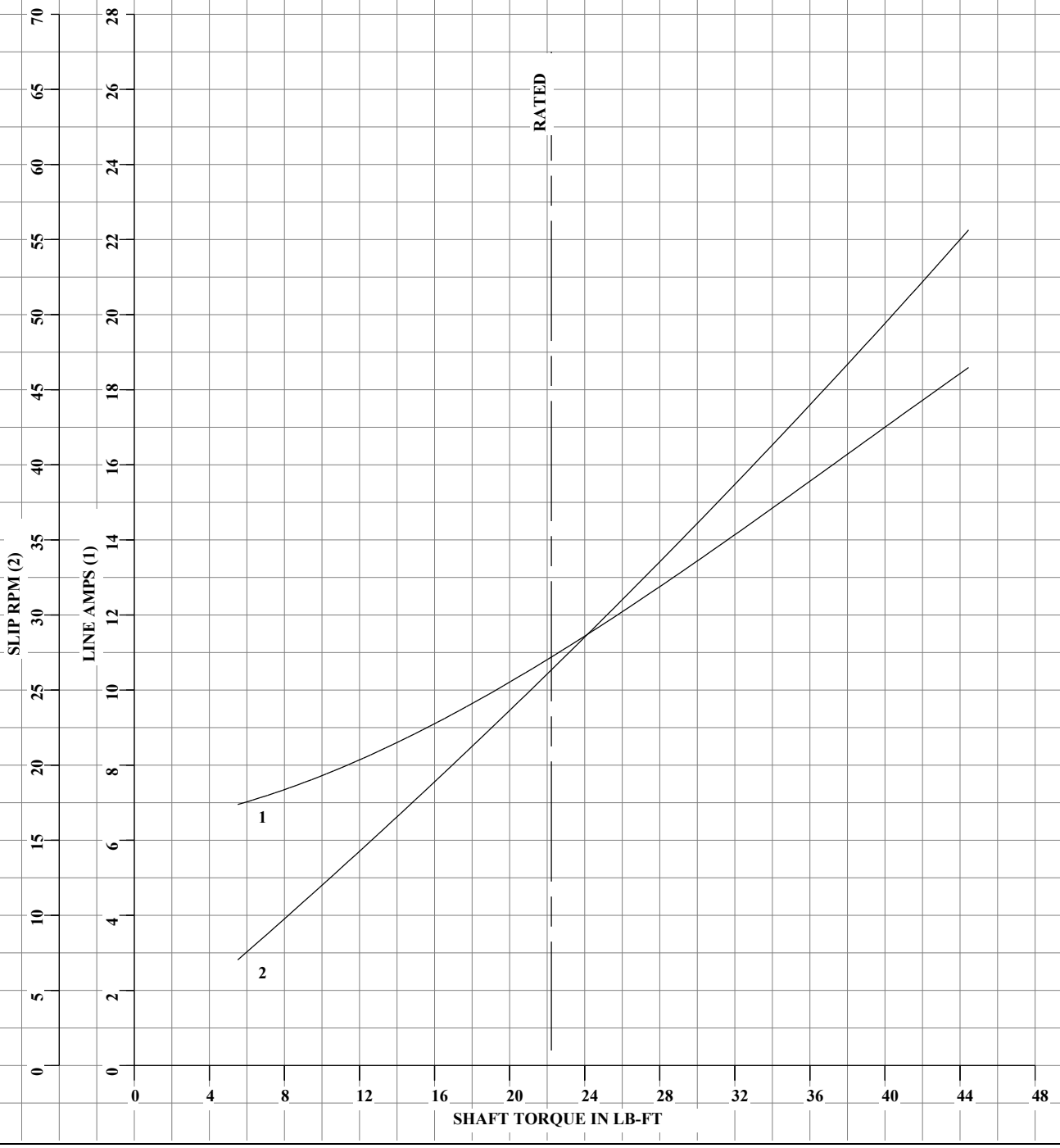


TYPICAL DATA, DATA VALID FOR NAMEPLATE SPEED RANGE ONLY

ABB	DRAWN BY: B. GRANT CHECKED BY: B. GRANT APPROVED BY: T. CUFR DATE: 3-7-06	AC MOTOR PERFORMANCE DATA	L3222A ISSUE DATE: 3-16-20

SPEC		VOLTS	460	ENCLOSURE	TENV	WYE CONN EQ CKT OHMS PER PHASE (AT BASE RATING, 25°C)			
FRAME	FL1852	AMPS	11	MAX SAFE SPEED	7200				
HP	7.5	DUTY	CONT	IM (AMPS)	6.5	R1	.425	X1	1.56
BASE SPEED	1775	S.F.	1.0	P.F. @NL / FL	.061/.742	R2	.324	X2	2.31
PHASE/HZ	3/60	AMB.°C / INSUL	40/H	WK² (Lb-Ft²)	.8			XM	40.3

LOAD PERFORMANCE (CONSTANT V/HZ RANGE)



TYPICAL DATA, DATA VALID FOR NAMEPLATE SPEED RANGE ONLY

ABB	DRAWN BY: B. GRANT CHECKED BY: B. GRANT APPROVED BY: T. CUFR DATE: 3-7-06	AC MOTOR PERFORMANCE DATA	L3222A ISSUE DATE: 3-16-20

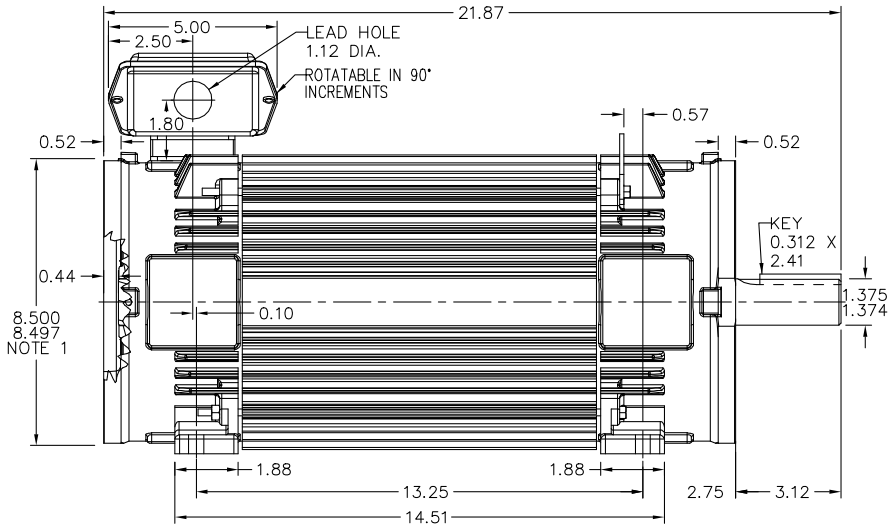
617234-013

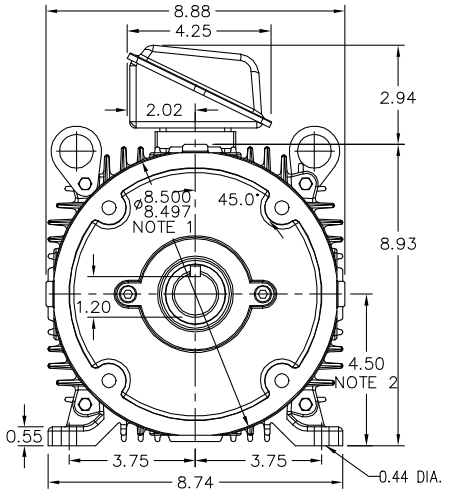
RPM–AC FINNED FRAME VARIABLE SPEED ALTERNATING CURRENT MOTOR
FL1852CZ

ENCLOSURE: TOTALLY ENCLOSED
MOUNTING: FOOT / NEMA 210TC 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: 194 LBS. (MAY VARY 15%)
DIMENSIONS ARE IN INCHES SCALE: 1.00

617234-013

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

REV. DESC: LOADED TO BUS		
REV. LTR: –	VERSION: 00	TDR: 000000481267
FILE: \RGG\00003\410	REVISED: 11:13:35 11/14/2008	BY: CONBAT
MTL: –		

BALDOR • DODGE • RELIANCE

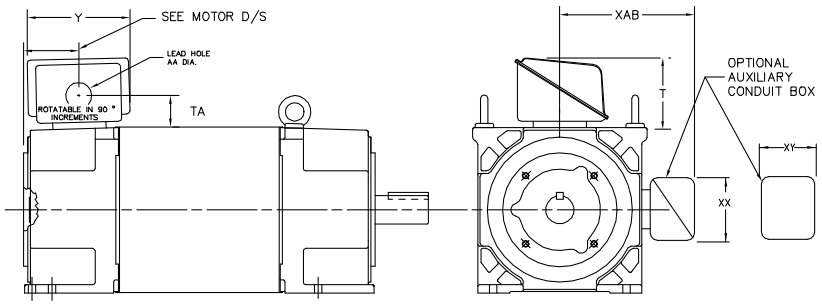
DIM SH 210TC RPMAC TENV FL1852CZ FT MT PROV FOR TACH
SH 1 of 1

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	75	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	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	075452000B	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	075460062B	7.25	2.50	5.25	1.5 TAP
FL210 & RL210 FDL13 & RDL13	MILL	Y	100	706310225R 706310056A	7.75	2.30	4.40	PG29/PG16
FL210 & RL210 FDL13 & RDL13	MILL	Y	160	706310226R 706310056B	9.00	3.06	5.40	PG36/PG16
FL210 & RL210 FDL13 & RDL13	MILL	Y/N	235	706310637A	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	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	075460062B	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 FDL16 & RDL16	MILL	Y	100	706310225R 706310056A	7.75	2.30	4.40	PG29/PG16
FL250 & RL250 FDL16 & RDL16	MILL	Y	160	706310226R 706310056B	9.00	3.06	5.40	PG36/PG16
FL250 & RL250 FDL16 & RDL16	MILL	Y/N	235	706310637A	11.42	4.00	6.72	2.50
FL250 & RL250 FDL16 & RDL16	MILL	Y	400	706310063B	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	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 FDL18 & RDL18	MILL	Y	100	706310056A	7.75	2.30	4.40	PG29/PG16
FL280 & RL280 FDL18 & RDL18	MILL	Y	160	706310056B	9.00	3.06	5.40	PG36/PG16
FL280 & RL280 FDL18 & RDL18	MILL	Y/N	235	706310637A	11.42	4.00	6.72	2.50
FL280 & RL280 FDL18 & RDL18	MILL	Y	400	706310063B	14.39	7.43	12.15	BLANK

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.

BALDOR - RELIANCE®

REV. DESC: ADD 706310-637 & 639 BOX		TDR: 00000118O260
REV. LTR: F	VERSION: 06	
FILE: \RGS\00003\692	REVISED: 11:08:56 10/26/2021	BY: RGSRWM
MTL: -		

DIM SHT NEMA RL210-RL280 FL180-FL280 IEC RDL132-RDL180
SH 1 of 1

616779-050

RPM AC TACHOMETER DIMENSIONS

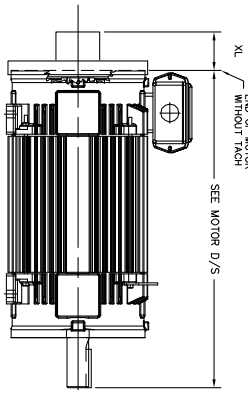
NEMA FRAMES FL180 thru FL440 and IEC FRAMES FDL112 thru FDL280

DIMENSIONS ARE IN INCHES(mm)

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

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

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 H38D	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 HD25	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
DYNAPAR HA625	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



* THIS DIMENSION INCLUDES COVER FOR X/T MOTOR.

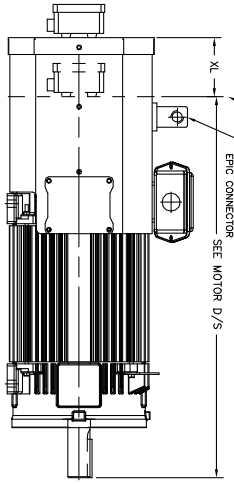
TEAO-BC, IC416-BC

EXCLUDES NEMA FRAMES FL320 THRU FL440

AND

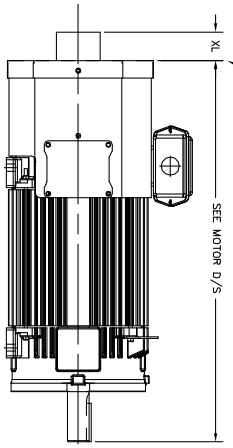
IEC FRAMES FDL200 THRU FDL280

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 AV485	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 HSD38M	4.50 (115)	15
AVTRON AV32	4.50 (115)	.7
AVTRON AV850	4.50 (115)	9



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	2.88 (74)	7
H20(XT)	9.75 (248)	35
EON425	7.90 (201)	35
AVTRON HS35M	4.19 (106)	2
STEGMANN SRM50	3.75 (95)	1
DYNAPAR HS20	2.00 (51)	1
NORTHSTAR HS035	2.81 (71)	2
NORTHSTAR HS038	3.30 (84)	5
AVTRON AV32	1.93 (49)	.7



616779-055

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

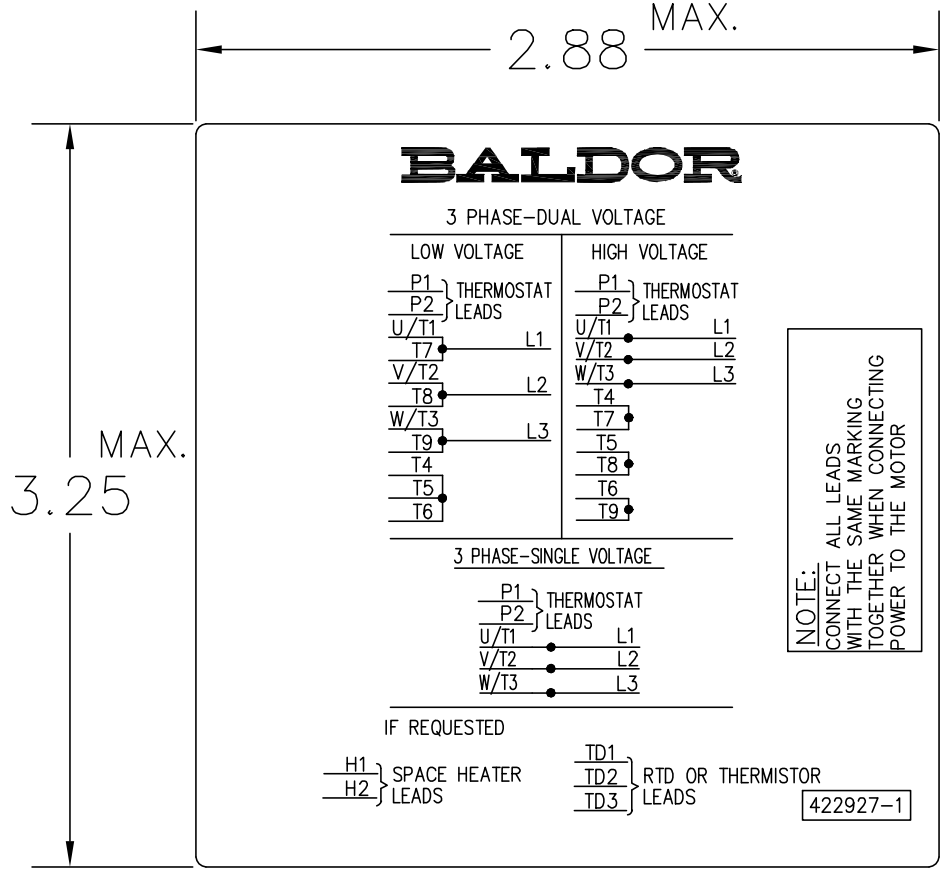
REV. DESC: ADD AV85		
REV. LTR: AA	VERSION: 25	TDR: 000001111552
FILE: \RGG\00003\694	REVISED: 03:54:15 06/26/2019	BY: RGGRWM
MTL: -		

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 POSIBLE.

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			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