ABB BALDOR RELIANCE

Customer information packet

ZDNRPM18054C

5HP, 1750RPM, 3PH, 60HZ, 1838C, TENV, FOOT,

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11/29/2026 11:23:51 AM

Specifications

Enclosure	TENV
Frame	FL1838C
Frame Material	Aluminum
Frequency	60.00 Hz
Output @ Frequency	5.000 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	Polyrex EM (-20F +300F)
Current @ Voltage	7.200 A @ 460.0 V
Duty Rating	CONT
Feedback Device	TACHOMETER
Frame Prefix	FL
Heater Indicator	No Heater
High Voltage Full Load Amps	7.2 a
Insulation Class	H
Motor Standards	NEMA
Mounting Arrangement	F3
Overall Length	17.87 IN
Product Family	General Industrial
Pulley End Bearing Type	Ball
Pulley Face Code	C-Face
Service Factor	1.00
Shaft Diameter	1.125 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Speed	1770 rpm
Thermal Device - Bearing	None

Part Detail

Revision	C
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	L3221A
Layout	617228-003
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	5	1770	7.2	460	60
CONT	5	3540	6.2	460	120
CONT	5	1770	14.4	230	60
CONT	5	3540	12.4	230	120

CAT.NO.	ZDNRPM18054C	**SPEC. NO.**	P18T0369				
SER.NO		**FR**	FL 1838C	**INSUL**	H		
PH.	3	**MAX SAFE SPEED**	7200	**AMB.**	40	**MIN. AMB.**	-25
DESIGN NO.	L3221A	**TYPE**		**ENCL.**	TENV		
S.F.	1.0	**D.E. BRG.**	45BC02JPP30A				
ENCL MOD		**O.D.E. BRG.**	35BC02JPP30A				

REL S.O.	-	VOLTS	460	ENCLOSURE	TENV	WYE CONN EQ CKT OHMS PER PHASE			
FRAME	FL1838	AMPS	7.2	MAX SAFE RPM	7200	(AT BASE RATING, 25 ℃)			
HP	5	DUTY	CONT	IM (AMPS)	4.4	R1	.803	X1	2.62
BASE SPEED	1770	S.F.	1.0	P.F.@NL/FL	.069/.745	R2	.523	X2	3.46
PHASE/HERTZ	3/60	AMB ℃/INSUL	60/H	WK^2 ($Lb\text{-}Ft^2$)	.528			XM	59.7

RATED FULL LOAD DATA

	RPM	HP	TORQUE LB-FT	FUND VOLTS	FREQ-HZ	AMPS
BASE SPEED	1770	5.01	15	460	60	7.44
MAX SPEED	3534	5.00	7	460	120	6.76
MIN SPEED	0	0	15	16.7	.989	7.44

LOAD PERFORMANCE AT BASE SPEED

	RPM	HP	TORQUE LB-FT	FUND VOLTS	FREQ-HZ	AMPS
NO LOAD	1800	0	0	460	60	4.30
1/4	1792	1.25	4	460	60	4.71
1/2	1785	2.50	7	460	60	5.38
3/4	1778	3.75	11	460	60	6.30
FULL LOAD	1770	5.00	15	460	60	7.44
O/L	1718	12.1	37	460	60	15.8

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

REMARKS: TYPICAL DATA

BALDOR · DODGE · RELIANCE

DR. BY B. GRANT
CK. BY B. GRANT
APP. BY T. CUFR
DATE 3-7-06

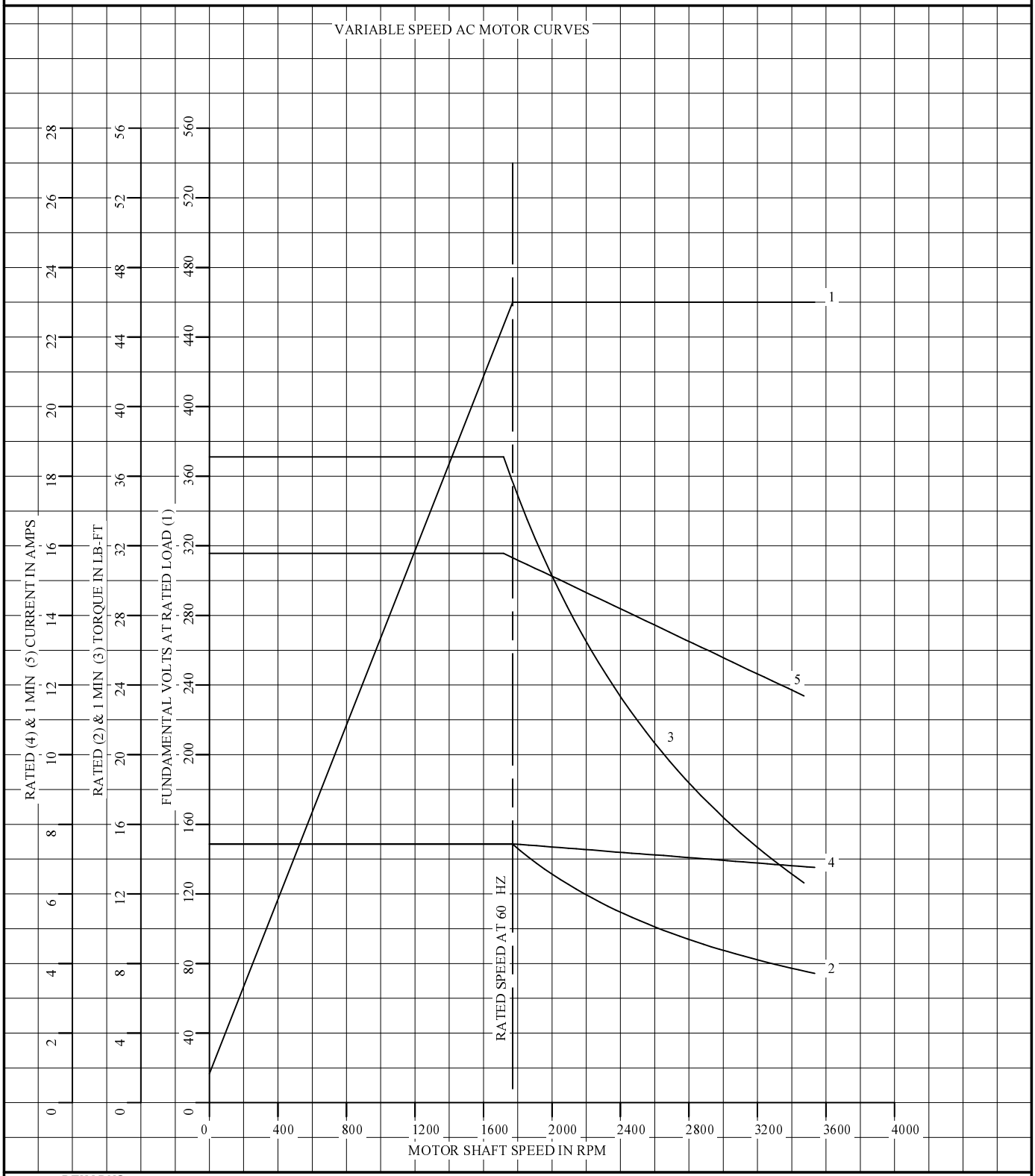
A-C MOTOR PERFORMANCE DATA L3221A
ISSUE DATE 3-7-06

Printed on 12/12/07 12:47 @ ushnghengdev

ABB BALDOR RELIANCE

CUSTOMER INFORMATION PACKET ZDNRPM18054C - 5HP, 1750RPM, 3PH, 60HZ, 1838C, TENV, FOOT,

REL S.O.	-	VOLTS	460	ENCLOSURE	TENV	WYE CONN EQ CKT OHMS PER PHASE	
FRAME	FL1838	AMPS	7.2	MAX SAFE RPM	7200	(AT BASE RATING, 25 ℃)	
HP	5	DUTY	CONT	IM (AMPS)	4.4	R1 .803	X1 2.62
BASE SPEED	1770	S.F.	1.0	P.F.@NL/FL	.069/.745	R2 .523	X2 3.46
PHASE/HERTZ	3/60	AMB ℃/INSUL	60/H	WK^2 (Lb-Ft^2)	.528		XM 59.7



REMARKS: TYPICAL DATA
DATA VALID FOR NAMEPLATE SPEED RANGE ONLY

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DR. BY B. GRANT
CK. BY B. GRANT
APP. BY T. CUFR
DATE 3-7-06

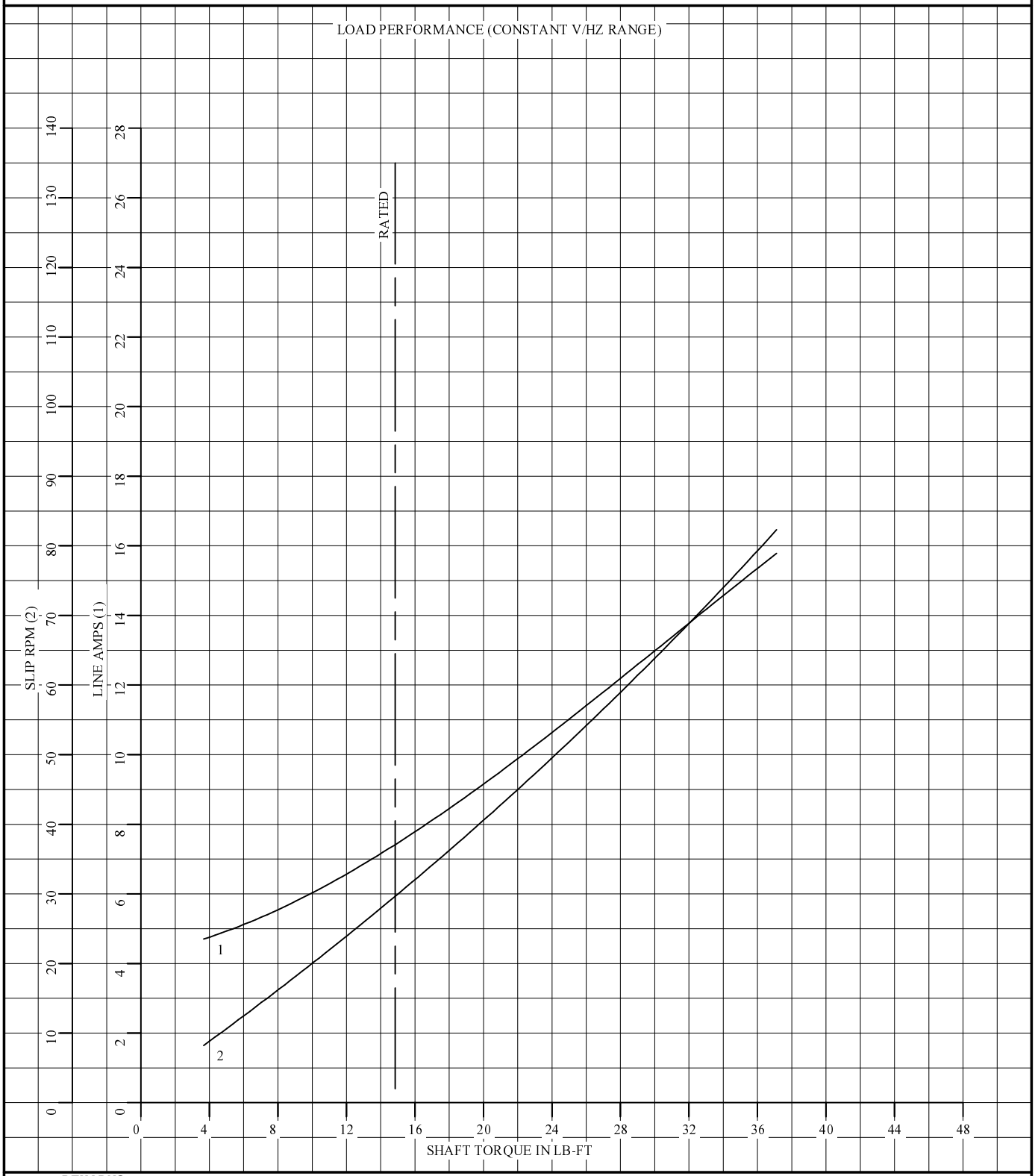
A-C MOTOR PERFORMANCE CURVES

L3221A
SH 1 OF 2
ISSUE DATE 3-7-06

ABB BALDOR RELIANCE

CUSTOMER INFORMATION PACKET ZDNRPM18054C - 5HP, 1750RPM, 3PH, 60HZ, 1838C, TENV, FOOT,

REL S.O.	-	VOLTS	460	ENCLOSURE	TENV	WYE CONN EQ CKT OHMS PER PHASE	
FRAME	FL1838	AMPS	7.2	MAX SAFE RPM	7200	(AT BASE RATING, 25 ℃)	
HP	5	DUTY	CONT	IM (AMPS)	4.4	R1 .803	X1 2.62
BASE SPEED	1770	S.F.	1.0	P.F.@NL/FL	.069/.745	R2 .523	X2 3.46
PHASE/HERTZ	3/60	AMB ℃/INSUL	60/H	WK^2 (Lb-Ft^2)	.528		XM 59.7



REMARKS: TYPICAL DATA
DATA VALID FOR NAMEPLATE SPEED RANGE ONLY

BALDOR · DODGE · RELIANCE

DR. BY	B. GRANT
CK. BY	B. GRANT
APP. BY	T. CUFR
DATE	3-7-06

A-C MOTOR PERFORMANCE CURVES

L3221A
SH 2 OF 2
ISSUE DATE 3-7-06

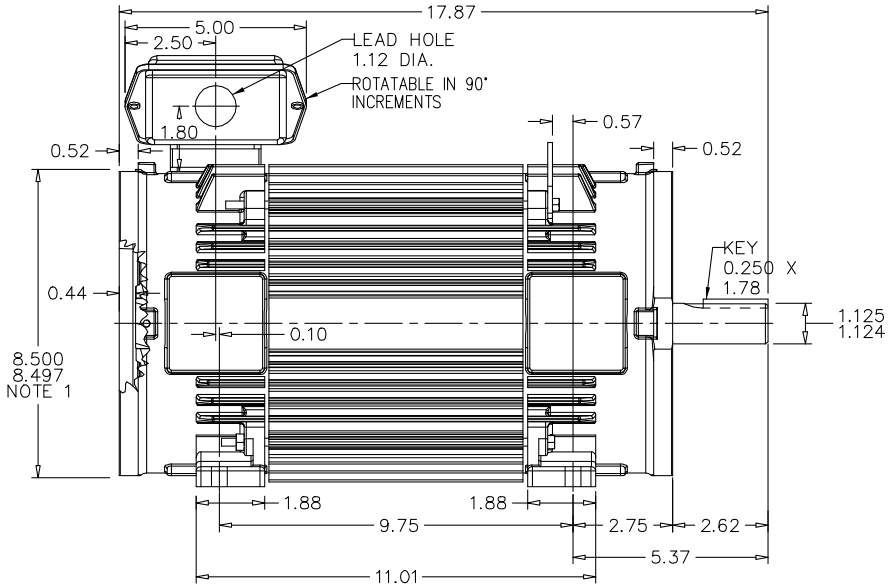
617228-003

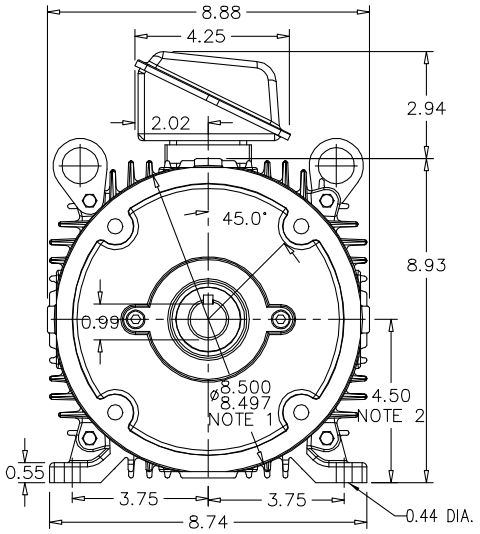
RPM–AC FINNED FRAME VARIABLE SPEED ALTERNATING CURRENT MOTOR
FL1838C

ENCLOSURE: TOTALLY ENCLOSED
MOUNTING: FOOT / NEMA 180TC 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: 143 LBS. (MAY VARY 15%)
DIMENSIONS ARE IN INCHES SCALE: 1.00

617228-003

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

REV. DESC: ADD DIMENSION FROM FOOT HOLE TO END OD SHAFT		
REV. LTR: A	VERSION: 01	TDR: 000000892384
FILE: \RGG\00003\495	REVISED: 12:55:38 02/12/2015	BY: RGGWT
MTL: –		

BALDOR

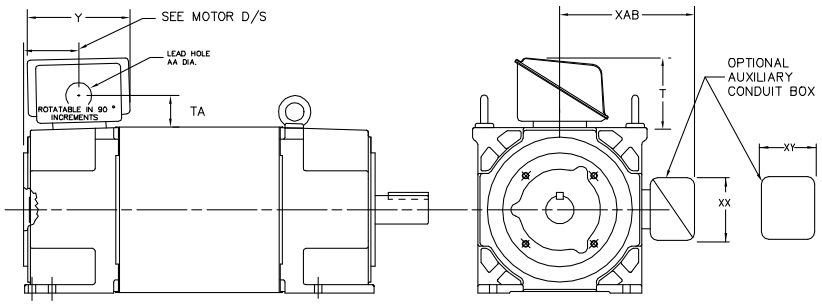
DIM SHT RPM AC TE NON VENT FL1838C FT / 180TC MTG PROV TACH
SH 1 of 1

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: \RGV\00003\692	REVISED: 11:08:56 10/26/2021	BY: RGGRWM
MTL: -		

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

616779-050

RPM AC TACHOMETER DIMENSIONS

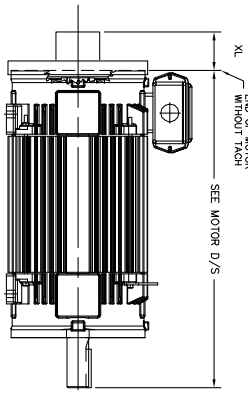
NEMA FRAMES FL180 thru FL440 and IEC FRAMES FDL112 thru FDL280

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
HSD38	3.30 (84)	5
HSD25	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.

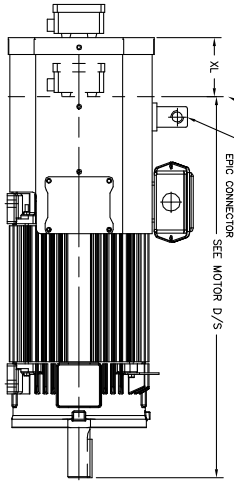
TEAO-BC, IC416-BC

EXCLUDES NEMA FRAMES FL320 THRU FL440

AND

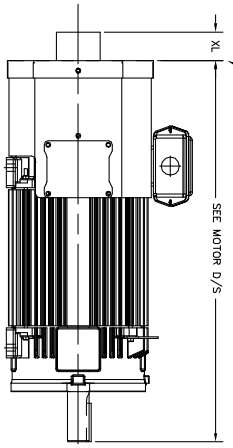
IEC FRAMES FDL200 THRU FDL280

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 AV685	4.50 (115)	10
AVTRON M56	4.50 (115)	5
AVTRON AV67	4.50 (115)	10
HSD38	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 H20	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
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MTL: –		

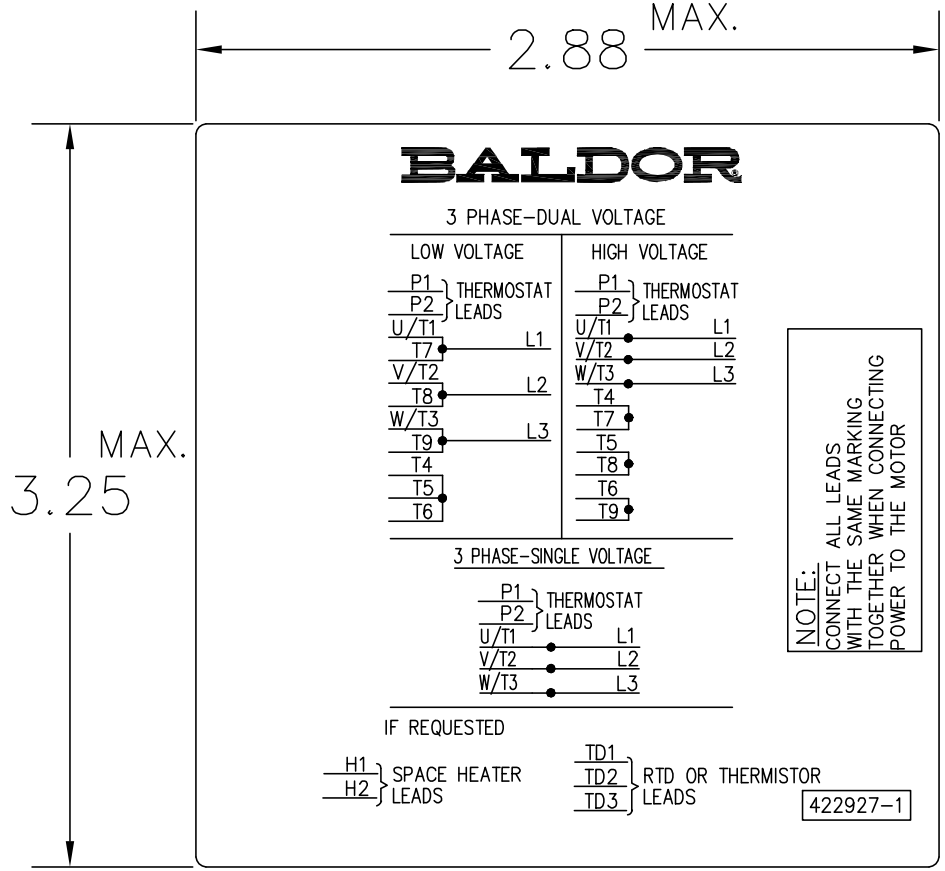
BALDOR - RELIANCE®

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

SH 1 of 1

616779-055

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