ABB BALDOR RELIANCE

Customer information packet

IDBRPM587004

700HP, 1750, 460V, FL5824, TEBC, F3

8/22/2026 8:24:36 PM

Specifications

Enclosure	TEBC
Frame	FL5824Z
Frame Material	Exposed Laminations
Frequency	878.00 Hz
Output @ Frequency	700.000 HP @ 878 HZ
Phase	3
Synchronous Speed @ Frequency	1800 RPM @ 878 HZ
Voltage @ Frequency	460.0 V @ 878 HZ
Agency Approvals	CCSA US
Auxiliary Box	NO AUXILLARY BOX
Base Indicator	Rigid
Bearing Grease Type	Polyrex EM (-20F +300F)
Current @ Voltage	818.000 A @ 460.0 V
Duty Rating	CONT
Feedback Device	ENCODER
Frame Prefix	FL
Heater Indicator	No Heater
High Voltage Full Load Amps	818.0 a
Insulation Class	H
IP Rating	NONE
Motor Standards	NEMA
Mounting Arrangement	F3
Overall Length	98.80 IN
Product Family	General Industrial
Pulley End Bearing Type	Ball
Pulley Face Code	Standard
Service Factor	1.00
Shaft Diameter	4.875 IN
Shaft Ground Indicator	Shaft Grounding
Shaft Rotation	Reversible
Speed	1750 rpm
Starting Method	Full Voltage

Part Detail

Revision	B
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	L9018A
Layout	619708-013
Eff. date	12-17-2024
CD Diagram	422927-001
Poles	06
Leads	
Proprietary	False
Created date	07-29-2021

Thermal Device - Bearing	None
Thermal Device - Winding	Normally Closed Thermostat

Nameplate

000613006MY

DUTY	HP	RPM	AMPS	VOLTS	HZ
CONT	700	1750	818	460	87.8
CONT	700	2100	802	460	105.4

CAT.NO.	IDBRPM587004		**SPEC. NO.**	F58-A000-0044			
SER.NO		**FR**	FL5824Z	**INSUL**	H		
PH.	3	**MAX SAFE SPEED**	2250	**AMB.**	40	**MIN. AMB.**	-25
DESIGN NO.	L9018A	**TYPE**		**ENCL.**	TEAO-BC		
S.F.	1.00	**D.E. BRG.**	140BC02J30X				
ENCL MOD		**O.D.E. BRG.**	130RU02M30X				
	IP44						

		VOLTS	460	ENCLOSURE	TEBC	WYE CONN EQ CKT OHMS PER PHASE (AT BASE RATING, 25°C)			
FRAME	FL5824	AMPS	818	MAX SAFE SPEED	2250				
HP	700	DUTY	CONT	IM (AMPS)	311	R1	.00119	X1	.0334
BASE SPEED	1750	S.F.	1.0	P.F. @NL / FL	.023/.841	R2	.00089	X2	.0345
PHASE/HZ	3/87.8	AMB.°C / INSUL	40/H	WK² (Lb-Ft²)	582			XM	.821

RATED FULL LOAD DATA

	RPM	HP	TORQUE LB-FT	FUND VOLTS	FREQ-HZ	AMPS
BASE SPEED	1750	700	2101	460	87.8	820
MAX SPEED	2101	700	1750	460	105.4	803
MIN SPEED	0	0	2101	2.78	.2992	820

LOAD PERFORMANCE AT BASE SPEED

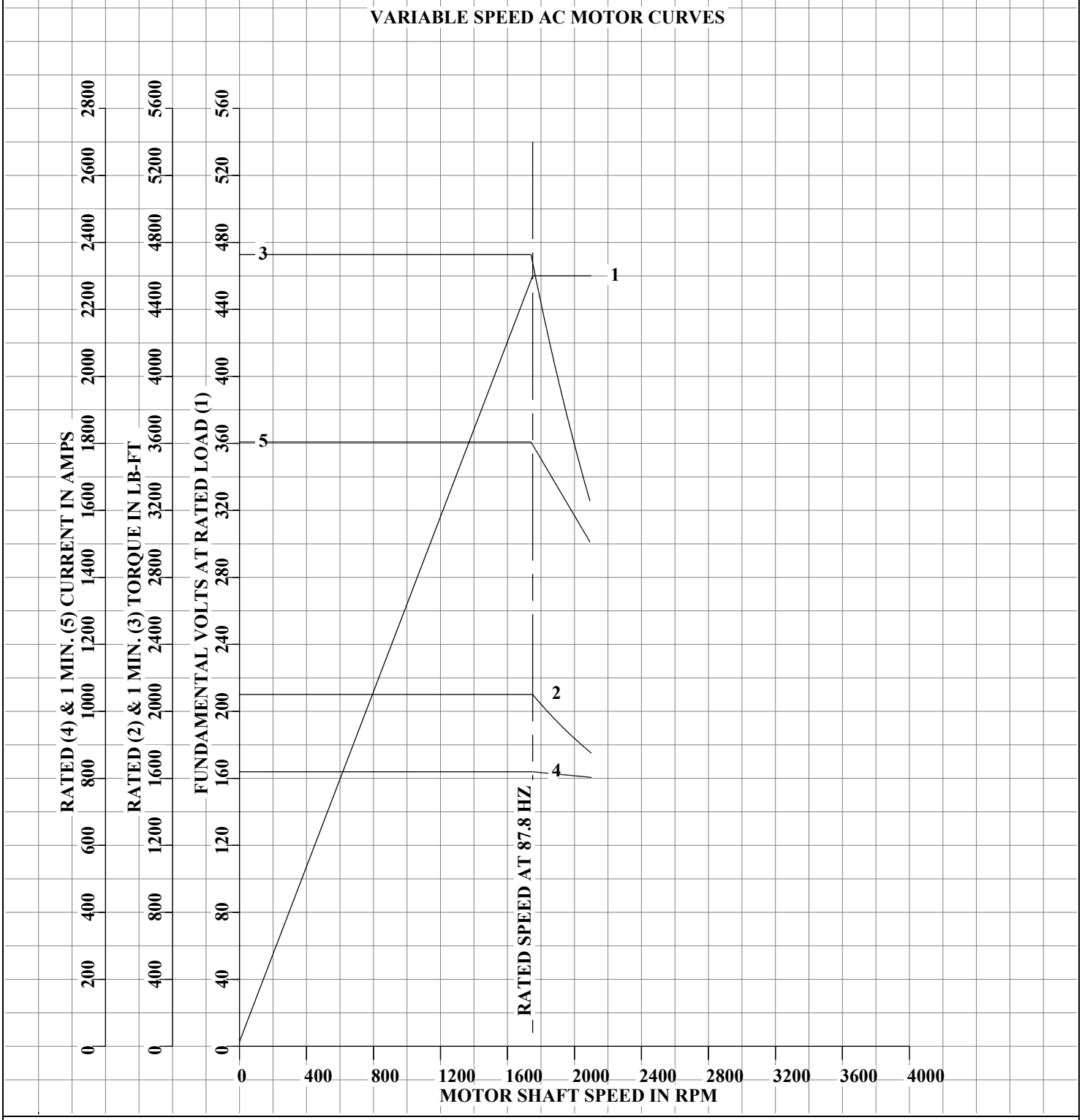
	RPM	HP	TORQUE LB-FT	FUND VOLTS	FREQ-HZ	AMPS
NO LOAD	1756	0	0	460	87.8	311
1/4	1755	175	524	460	87.8	371
1/2	1753	350	1049	460	87.8	495
3/4	1752	525	1573	460	87.8	648
FULL LOAD	1750	700	2101	460	87.8	820
0/L	1741	1567	4727	460	87.8	1804

REMARKS:
TYPICAL DATA

ABB	DRAWN BY: C. ETIENNE CHECKED BY: C. ETIENNE APPROVED BY: J. MARTIN DATE: 7/16/21	AC MOTOR PERFORMANCE DATA	L9018A ISSUE DATE 7/16/21

SPEC		VOLTS	460	ENCLOSURE	TEBC	WYE CONN EQ CKT OHMS PER PHASE (AT BASE RATING, 25°C)			
FRAME	FL5824	AMPS	818	MAX SAFE SPEED	2250				
HP	700	DUTY	CONT	IM (AMPS)	311	R1	.00119	X1	.0334
BASE SPEED	1750	S.F.	1.0	P.F. @NL / FL	.023/.841	R2	.00089	X2	.0345
PHASE/HZ	3/87.8	AMB.°C / INSUL	40/H	WK² (Lb-Ft²)	582			XM	.821

VARIABLE SPEED AC MOTOR CURVES

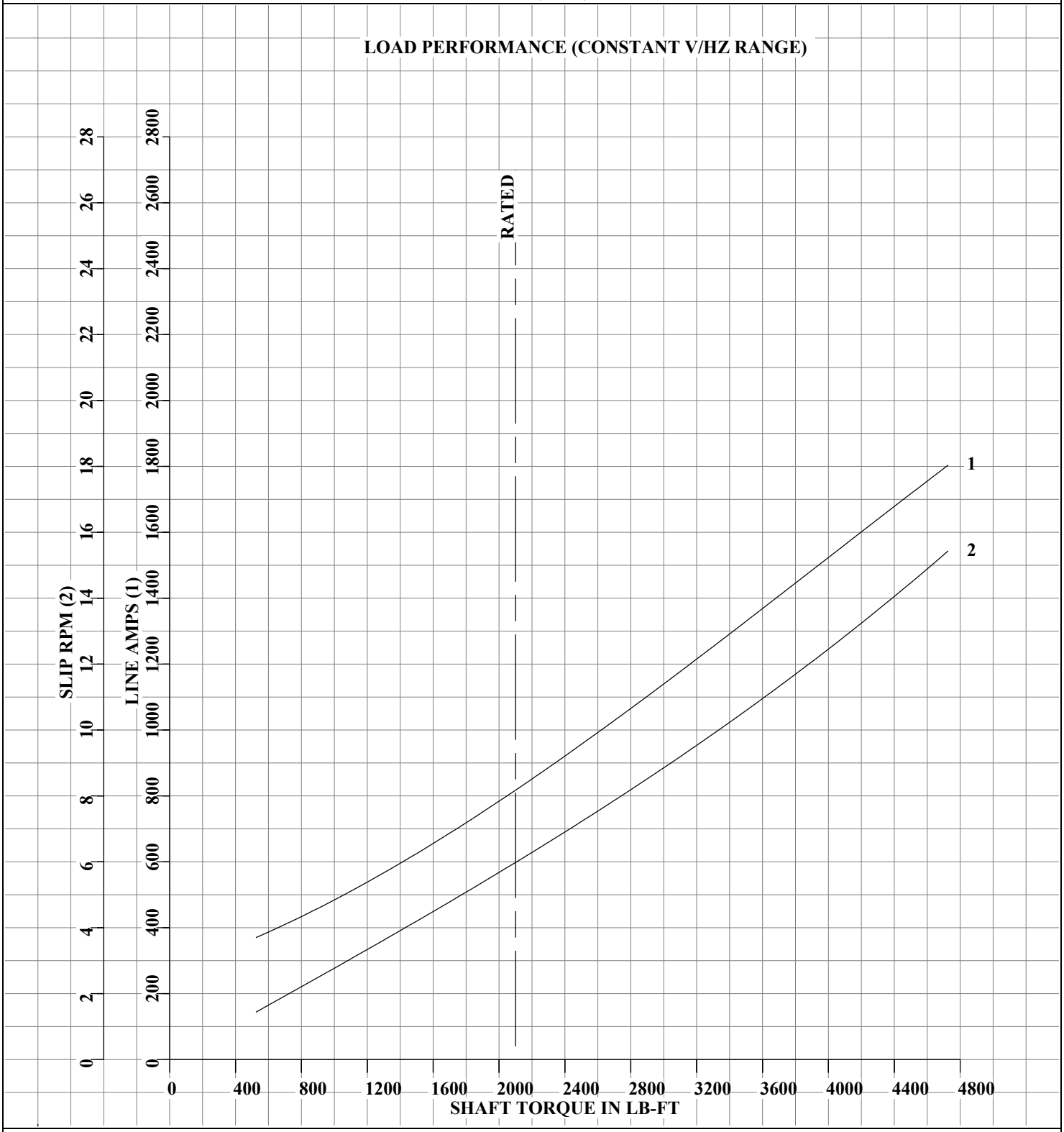


TYPICAL DATA, DATA VALID FOR NAMEPLATE SPEED RANGE ONLY

ABB	DRAWN BY: C. ETIENNE CHECKED BY: C. ETIENNE APPROVED BY: J. MARTIN DATE: 7/16/21	AC MOTOR PERFORMANCE DATA	L9018A ISSUE DATE: 7/16/21

		VOLTS	460	ENCLOSURE	TEBC	WYE CONN EQ CKT OHMS PER PHASE (AT BASE RATING, 25°C)			
FRAME	FL5824	AMPS	818	MAX SAFE SPEED	2250				
HP	700	DUTY	CONT	IM (AMPS)	311	R1	.00119	X1	.0334
BASE SPEED	1750	S.F.	1.0	P.F. @NL / FL	.023/.841	R2	.00089	X2	.0345
PHASE/HZ	3/87.8	AMB.°C / INSUL	40/H	WK² (Lb-Ft²)	582			XM	.821

LOAD PERFORMANCE (CONSTANT V/HZ RANGE)



TYPICAL DATA, DATA VALID FOR NAMEPLATE SPEED RANGE ONLY

ABB	DRAWN BY: C. ETIENNE CHECKED BY: C. ETIENNE APPROVED BY: J. MARTIN DATE: 7/16/21	AC MOTOR PERFORMANCE DATA	L9018A ISSUE DATE: 7/16/21

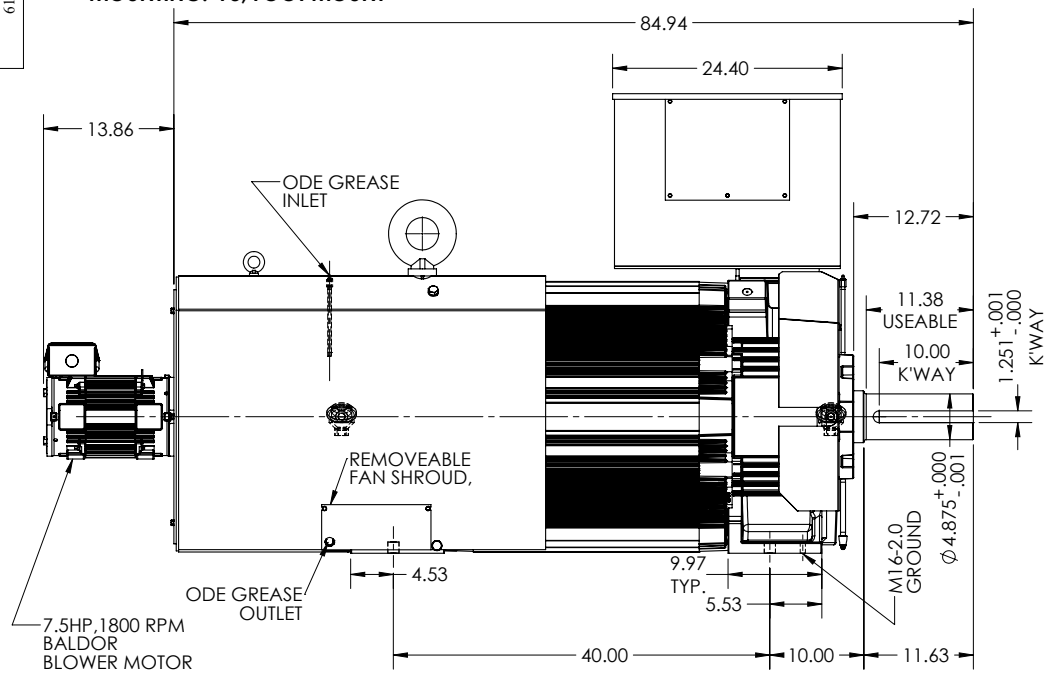
RPM-AC FINNED FRAME VARIABLE SPEED ALTERNATING CURRENT MOTOR
FL5824-TEBC

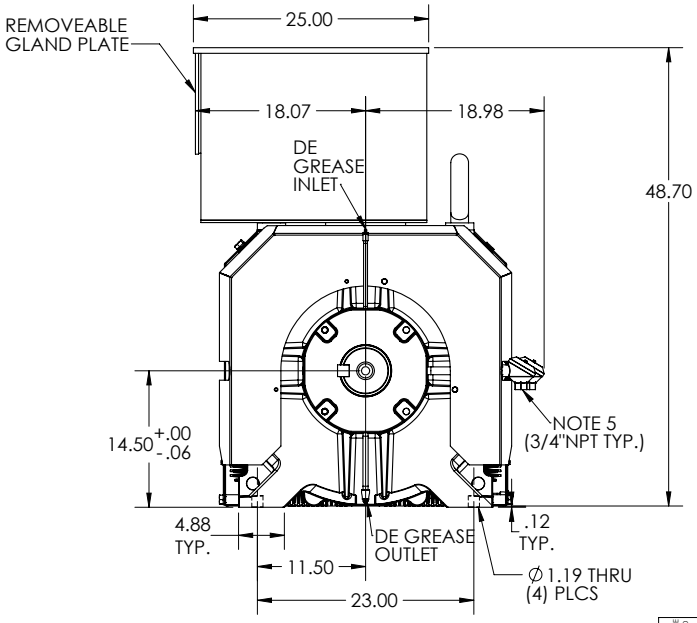
ENCLOSURE: TOTALLY ENCLOSED

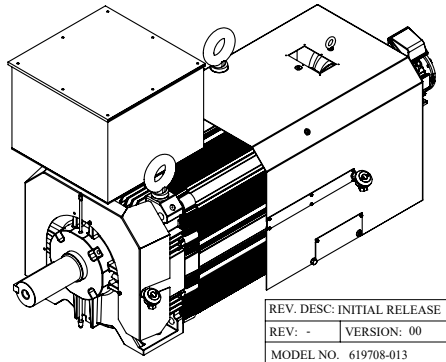
COOLING: BLOWER COOLED

MOUNTING: F3, FOOT MOUNT

619708-013







NOTES:
1. MOTOR WEIGHTS MAY VARY +/- 15%
2. SHAFT RUNOUT 0.003 T.I.R. MAX
3. DIMENSIONS ARE IN INCHES
4. FOR COUPLED DUTY ONLY
5. AUX. C/BOXES ONLY WHEN BEARING RTD'S ARE SPECIFIED

FL5824	7240
FRAME SIZE	WT (LBS)

REV. DESC: INITIAL RELEASE			
REV: -	VERSION: 00	REVISED: 03:02:47 07/27/2021	TDR: 000001172668
MODEL NO. 619708-013			
BY: USWATUR			B

BALDOR

DIM SHEET,FL5824-TEBC,FOOT MNT MOTOR,F3, 24X24X18 BOX

619708-013

RPM-AC FINNED FRAME VARIABLE SPEED ALTERNATING CURRENT MOTOR

617226-328

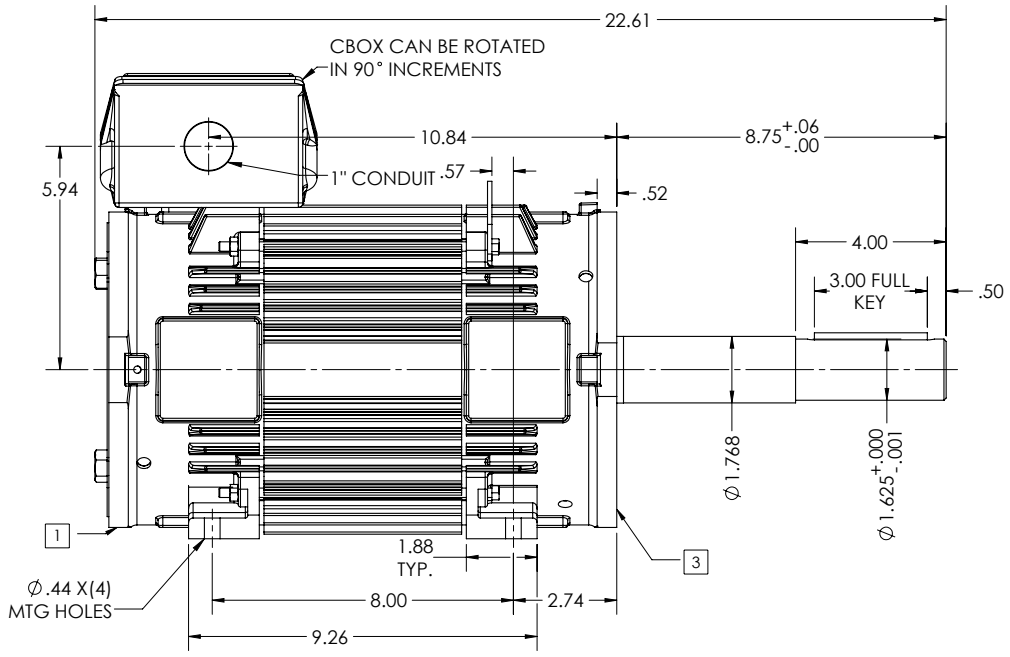
ENCLOSURE: TOTALLY ENCLOSED

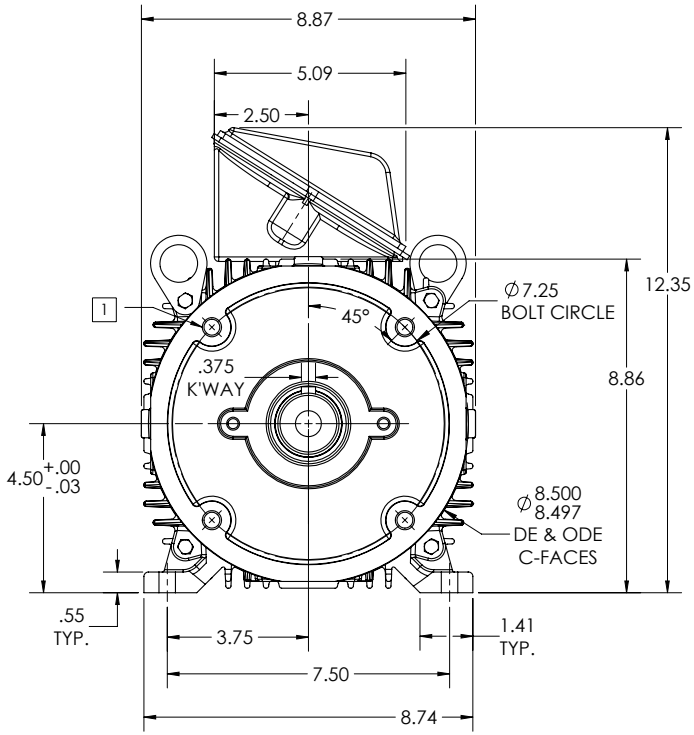
FL1831CZ

COOLING: TEAO/TENV

MOUNTING: F3 FOOT/NEMA 180 C-FACE

DRIVE METHOD: DIRECT DRIVE





NOTES:
1. C-FACE & ODE TACH MOUNTING PROVISIONS = (4) 1/2-13 TAP X 1.0 DP
2. MOTOR WEIGHTS MAY VARY BY 15% DEPENDING ON RATING.
3. C-FACE FIT & FACE ECCENTRICITY = 0.004" T.I.R MAX
4. DIMENSIONS ARE IN INCHES
5. MAXIMUM PERMISSIBLE SHAFT RUNOUT WHEN MEASURED AT END OF SHAFT EXTENSION IS .003" T.I.R.
6. IF MOUNTING CLEARANCE DETAILS ARE REQUIRED, CONSULT FACTORY.

2 WEIGHT (LBS): 158.6

REV. DESC: INITIAL RELEASE			
REV: -	VERSION: 00	REVISED: 04:28:17 03/06/2017	TDR: 000001018909
MODEL NO. 617226-328			REF: -
BY: MGHJMZ2			B

BALDOR

DIM SHT FL1831CZ RPM AC TENV FT / NEMA 180 C FACE MTG

617226-328

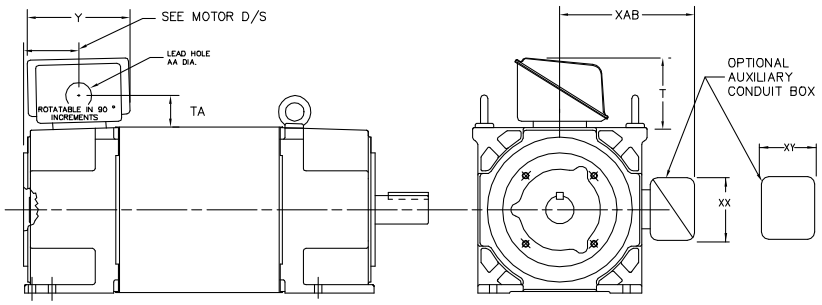
SHEET NUMBER 1 OF 1

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.

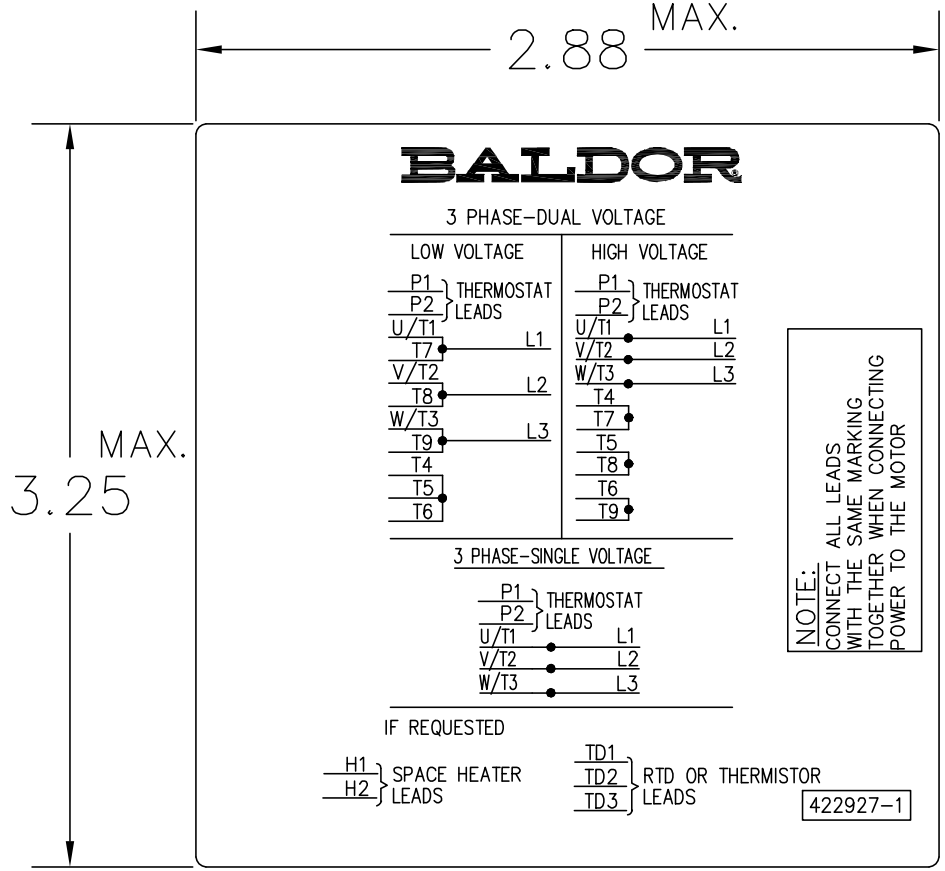
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT BALDOR'S PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION.

BALDOR - RELIANCE®

REV. DESC: ADD 706310-637 & 639 BOX | TDR: 000001180260
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

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