

ABB BALDOR RELIANCE III

Customer information packet

FDEM3710T-5

7.5HP, 1760RPM, 3PH, 60HZ, 213T, 3738M, TEFC, F

Class - None

Division - Not Applicable

Specifications

Enclosure	TEFC
Frame	213T
Frame Material	Steel
Frequency	60.00 Hz
Haz Area Class and Group	None
Haz Area Division	Not Applicable
Motor Letter Type	Three Phase
Output @ Frequency	7.500 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	575.0 V @ 60 HZ
Agency Approvals	NEMA PREMIUM CURUSEEV
Ambient Temperature	40 °C
Auxiliary Box	NO AUXILLARY BOX
Auxiliary Box Lead Termination	None
Base Indicator	Rigid
Bearing Grease Type	Polyrex EM (-20F +300F)
Blower	None
Current @ Voltage	7.500 A @ 575.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	91.7 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	7.5 a
Insulation Class	F
Inverter Code	Inverter Ready
KVA Code	H

Part Detail

Revision	E
Type	AC
Mech. spec.	37N377
Base	
Status	PRD/A
Elec. spec.	37WGR124
Layout	37LYN377
Eff. date	11-27-2024
CD Diagram	CD0006
Poles	04
Leads	3#14
Proprietary	False
Created date	06-12-2018

Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	No Locked Bearing
Motor Lead Quantity/Wire Size	3 @ 14 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3738M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	19.02 IN
Power Factor	81
Product Family	General Purpose
Pulley End Bearing Type	Sealed Bearing
Pulley Face Code	Standard
Pulley Shaft Indicator	Standard
Rodent Screen	None
RoHS Status	ROHS COMPLIANT
Service Factor	1.15
Shaft Diameter	1.375 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	Shaft Slinger
Speed	1760 rpm
Speed Code	Single Speed
Starting Method	Direct on line
Thermal Device - Bearing	None
Thermal Device - Winding	None
Vibration Sensor Indicator	No Vibration Sensor
Winding Thermal 1	None
Winding Thermal 2	None

Nameplate

NP3126L									
CAT.NO.	FDEM3710T-5								
SPEC.	37N377R124G2								
HP	7.5								
VOLTS	575								
AMP	7.5								
RPM	1760								
FRAME	213T		HZ	60			PH	3	
SER.F.	1.15	CODE	H	DES	B	CL	F		
NEMA-NOM-EFF	91.7	PF	81						
RATING	40C AMB-CONT								
CC	010A								
DE	6307		ODE	6206					
ENCL	TEFC	SN							
	IP44								

Parts List

Part number	Description	Quantity
SA357058	SA 37N377R124G2	1.000 ea
RA346043	RA 37N377R124G2	1.000 ea
37FN3002C01	EXFN, PLASTIC, 6.00 OD, 1.155 ID	1.000 ea
HW3200A01	3/8-16X3/4 EYEBOLT WELDED F/S	1.000 ea
37CB3006	37 CB CASTING W/1.38 LEAD HOLE @ 6:00	1.000 ea
37GS1000SP	GASKET, CONDUIT BOX STD., .06 THICK LEXI	1.000 ea
51XW2520A12	.25-20 X .75, TAPTITE II, HEX WSHR SLTD	2.000 ea
11XW1032G06	10-32 X .38, TAPTITE II, HEX WSHR SLTD U	1.000 ea
37EP3101A04	FR ENDPLATE, MACH	1.000 ea
HW5100A06	W2420-025 WVY WSHR (WB)	1.000 ea
37PE3100A42	37 PUEP ASSEMBLY FOR SEAL	1.000 ea
HW4600H13	SEAL 1.375 X 2.125 X 0.313 SINGLE LIP DB	1.000 ea
HW4600B33	V-RING SLINGER 1.375 X 1.890 X .35 VITON	1.000 ea
XY3118A12	5/16-18 HEX NUT DIRECTIONAL SERRATION	4.000 ea
07FH4007A07	IEC FH NO GRSR, NOTCH @ 6:00 & 3 F/C HOL	1.000 ea
51XW1032A06	10-32 X .38, TAPTITE II, HEX WSHR SLTD S	3.000 ea
37CB4516	LIPPED LID FOR 37 FRAME NEC KOBX	1.000 ea
37GS1008	37 GS FOR CB LID - LEXIDE	1.000 ea
51XW0832A07	8-32 X .44, TAPTITE II, HEX WSHR SLTD SE	4.000 ea
HW2501F21	KEY, 5/16 SQ X 2.375	1.000 ea
HA7000A02	KEY RETAINER RING, 1 1/8 DIA, 1 3/8 DIA	1.000 ea
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	2.000 ea
MJ5001A27	32220KN GRAY SEALER *MIN BUY 4 QTS=1GAL	0.001 qt
MJ1000A02	GREASE, POLYREX EM EXXON	0.050 lb
MG1025C02	WILKOFASST SG, 787.105, TAN	0.028 ga
HA3104A17	5/16-18X13.250 T-BLT/OHIO	4.000 ea
MN416A01	TAG-INSTAL-MAINT no wire (2500 bx)11/25	1.000 ea
NP3126L	ALUM FARM DUTY SUPER-E UL CSA-EEV PREM	1.000 ea
37PA1074	PALLET PACK GRP, PRINT BOX PK1026A06	1.000 ea
FE-0000001	ZRTG FE ASSEMBLY	1.000 ea
LB1624	COMBINED WARNING LABEL, ISO/ANSI PICTOGR	1.000 ea

AC Induction Motor Performance Data

Record # 35868

Typical performance - not guaranteed values

Winding: 37WGR124-R002				Type: 3738M		Enclosure: TEFC	
Nameplate Data				575 V, 60 Hz: Single Voltage Motor			
Rated Output (HP)		7.5		Full Load Torque		22.18 LB-FT	
Volts		575		Start Configuration		direct on line	
Full Load Amps		7.5		Breakdown Torque		59.92 LB-FT	
R.P.M.		1760		Pull-up Torque		32.51 LB-FT	
Hz	60	Phase	3	Locked-rotor Torque		39.52 LB-FT	
NEMA Design Code		B		KVA Code	H	Starting Current	
Service Factor (S.F.)		1.15		No-load Current		2.91 A	
NEMA Nom. Eff.		91.7	Power Factor	81	Line-line Res. @ 25°C		2.4 Ω
Rating - Duty		40C		AMB-CONT		Temp. Rise @ Rated Load	
S.F. Amps						Temp. Rise @ S.F. Load	
						Locked-rotor Power Factor	
						Rotor inertia	

Load Characteristics 575 V, 60 Hz, 7.5 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	47	68	78	81	83	84	82
Efficiency	88.6	91.8	91.6	91.7	90.9	88.6	91.3
Speed	1791	1783	1773	1764	1753	1740	1757
Line amperes	3.38	4.44	5.83	7.51	9.39	11.39	8.65

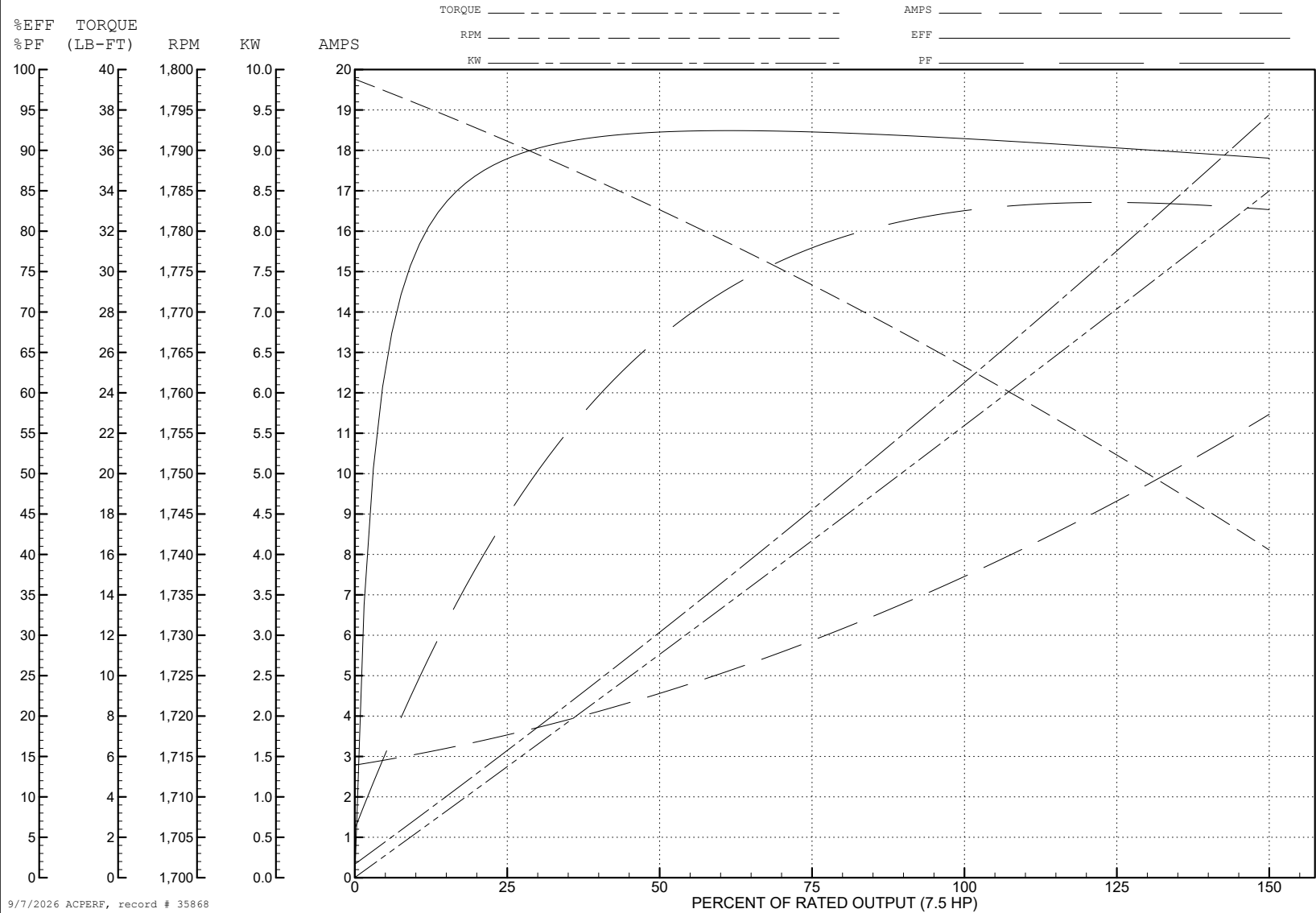
ABB Motors and Mechanical Inc.

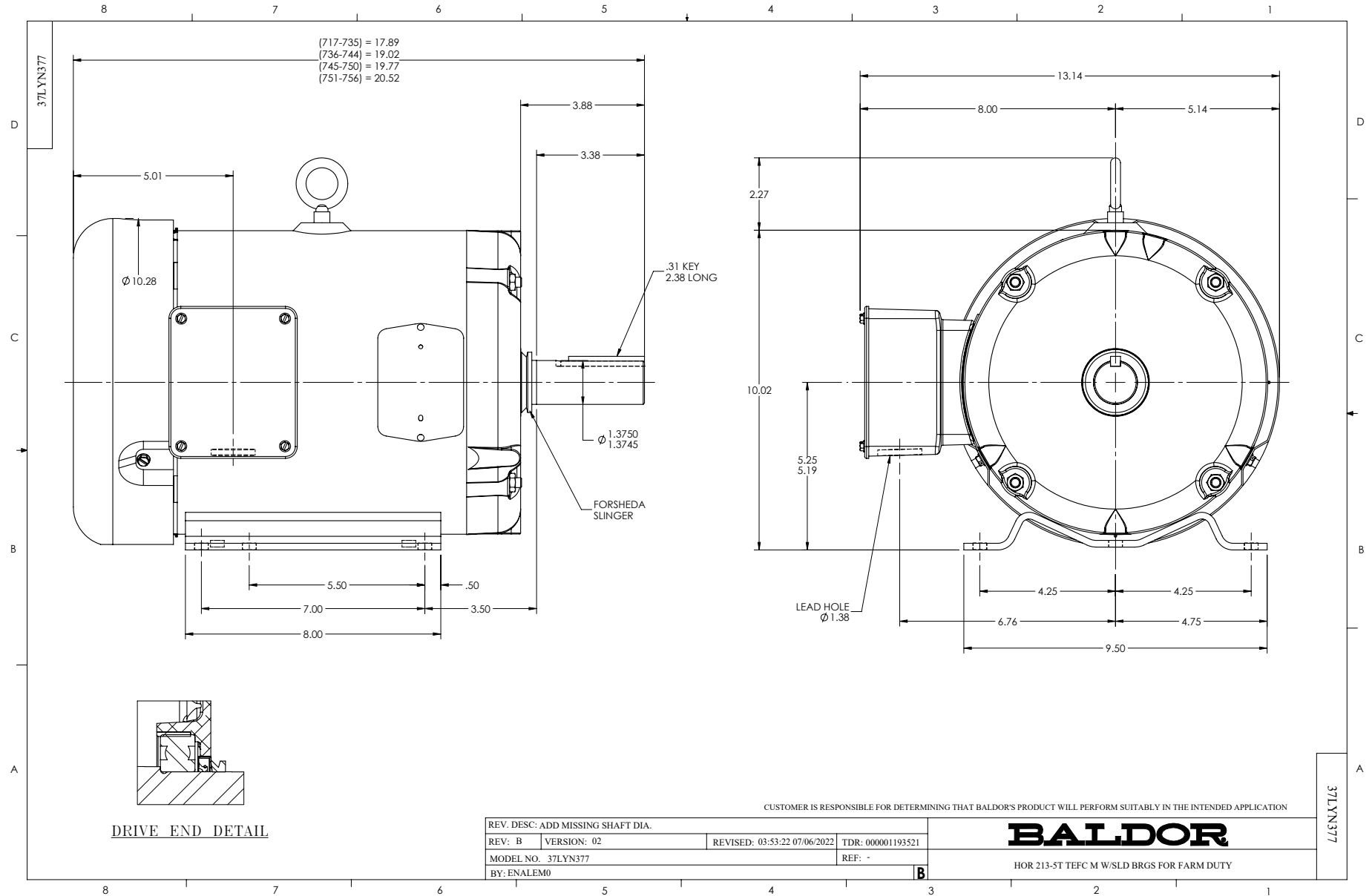
WINDING # 37WGR124

Typical performance - not guaranteed values.

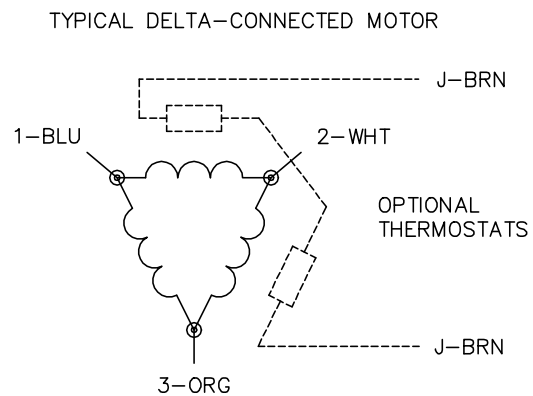
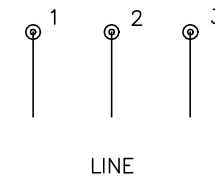
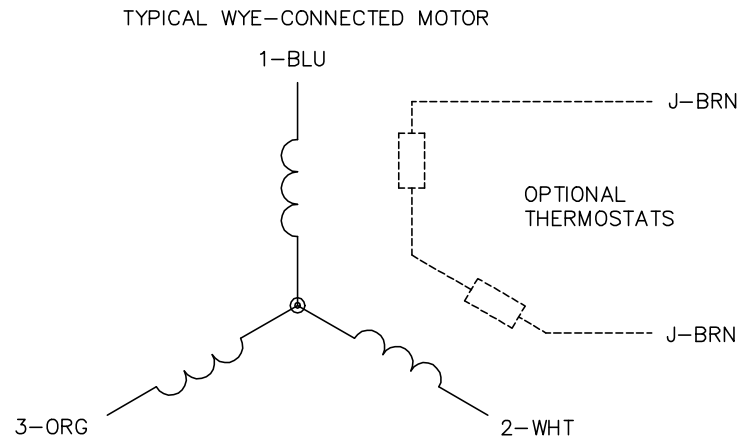
7.5 HP 3 PH 60 HZ 1760 RPM 575 V 3738M

TORQUES (LB-FT) : PO=59.92 PU=32.51 LR=39.52 LRA=48.87





CD0006


NOTES:

1. THREE LEAD MOTOR MAY BE EITHER WYE CONNECTED OR DELTA CONNECTED.
2. INTERCHANGE ANY TWO LINE LEADS TO REVERSE ROTATION.
3. OPTIONAL THERMOSTATS ARE PROVIDED WHEN SPECIFIED.
4. ACTUAL NUMBER OF INTERNAL PARALLEL CIRCUITS MAY VARY.
5. LEAD COLORS ARE OPTIONAL. LEADS MUST BE NUMBERED AS SHOWN.

CD0006

REV. DESC: ADD CLASS CONN00000007

REV. LTR: E

VERSION: 01

TDR: 000001099922

FILE: \AAA\00005\141

REVISED: 10: 24: 49 02/19/2019

BY: ENBRIRO

MTL: -


BALDOR - RELIANCE®

3PH, SV, 3 LEADS, WYE OR DELTA CONNECTED

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