ABB BALDOR RELIANCE

Customer information packet

VEBM3710T

7.5HP, 1770RPM, 3PH, 60HZ, 213TC, 3738M, TEFC
Class - None
Division - Not Applicable

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Specifications

Enclosure	TEFC
Frame	213TC
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	230.0 V @ 60 HZ
	460.0 V @ 60 HZ
Agency Approvals	CSA
	CSA EEV
	NEMA PREMIUM
	UR
Ambient Temperature	40 °C
Auxiliary Box	NO AUXILLARY BOX
Auxiliary Box Lead Termination	None
Base Indicator	No Mounting
Bearing Grease Type	Polyrex EM (-20F +300F)
Blower	None
Current @ Voltage	9.500 A @ 460.0 V
	20.000 A @ 208.0 V
	19.000 A @ 230.0 V
Design Code	A
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

Part Detail

Revision	C
Type	AC
Mech. spec.	37F721
Base	
Status	PRD/A
Elec. spec.	37WGL864
Layout	37LYF721
Eff. date	05-01-2024
CD Diagram	CD0005
Poles	04
Leads	9#14
Proprietary	False
Created date	02-02-2021

Heater Indicator	No Heater
High Voltage Full Load Amps	9.5 a
Insulation Class	F
Inverter Code	Inverter Ready
KVA Code	J
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Motor Lead Quantity/Wire Size	9 @ 14 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3738M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	27.89 IN
Power Factor	80
Product Family	General Purpose
Pulley End Bearing Type	Ball
Pulley Face Code	C-Face
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	No Slinger
Speed	1770 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

NP1259L									
CAT.NO.	VEBM3710T								
SPEC.	37F721L864G1								
HP	7.5								
VOLTS	230/460								
AMP	19/9.5								
RPM	1770								
FRAME	213TC	**HZ**	60			**PH**	3		
SER.F.	1.15	**CODE**	J	**DES**	A	**CL**	F		
NEMA-NOM-EFF	91.7	**PF**	80						
RATING	40C AMB-CONT								
CC	010A								
DE	6307	**ODE**	6306						
ENCL	TEFC	**SN**							

AC Induction Motor Performance Data
Record # 85467
Preliminary Data Sheet

Winding: 37WGL864-R001	**Type:** 3738M	**Enclosure:** TEFC

Nameplate Data			
Rated Output (HP)			7.5
Volts			230/460
Full Load Amps			19.0/9.5
R.P.M.			1770
Hz	60	**Phase**	3
NEMA Design Code	A	**KVA Code**	J
Service Factor (S.F.)			1.15
NEMA Nom. Eff.	91.7	**Power Factor**	80
Rating - Duty			40C AMB-CONT
S.F. Amps			21.4/10.7

460 V, 60 Hz: High Voltage Connection	
Full Load Torque	22.2 LB-FT
Start Configuration	direct on line
Breakdown Torque	69.8 LB-FT
Pull-up Torque	31.5 LB-FT
Locked-rotor Torque	41 LB-FT
Starting Current	70.7 A
No-load Current	4.32 A
Line-line Res. @ 25ºC	1.48 Ω
Temp. Rise @ Rated Load	64°C
Temp. Rise @ S.F. Load	84°C
Locked-rotor Power Factor	41.9
Rotor inertia	0.934 lb-ft²

Load Characteristics 460 V, 60 Hz, 7.5 HP

% of Rated Load	**25**	**50**	**75**	**100**	**125**	**150**	**S.F.**
Power Factor	42	64	75	80	83	84	83
Efficiency	87.1	91.4	92	91.7	90.7	89.6	90.7
Speed	1793	1786	1778	1770	1760	1750	1761
Line amperes	4.83	6.03	7.64	9.5	11.6	13.9	10.7

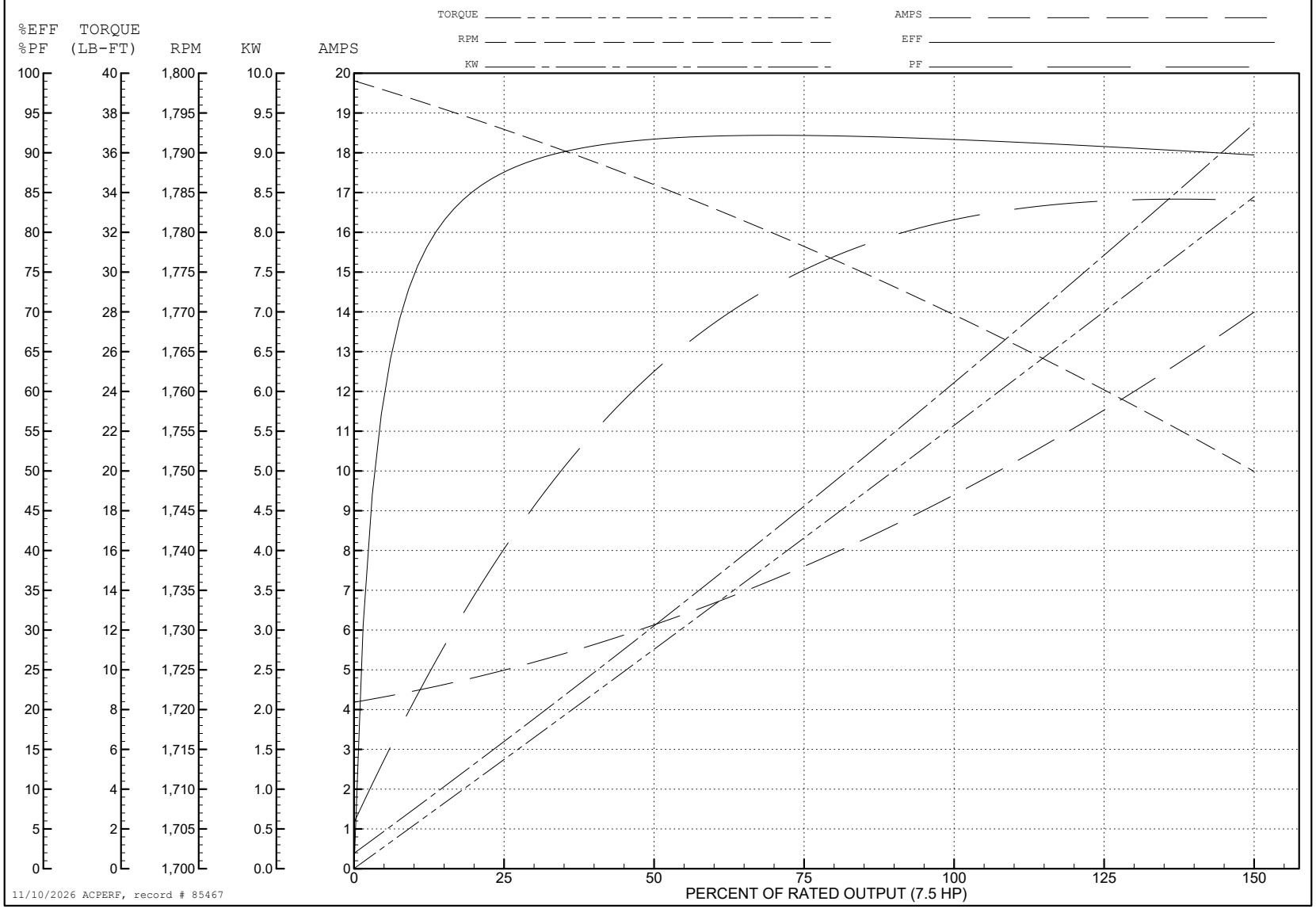
ABB Motors and Mechanical Inc.

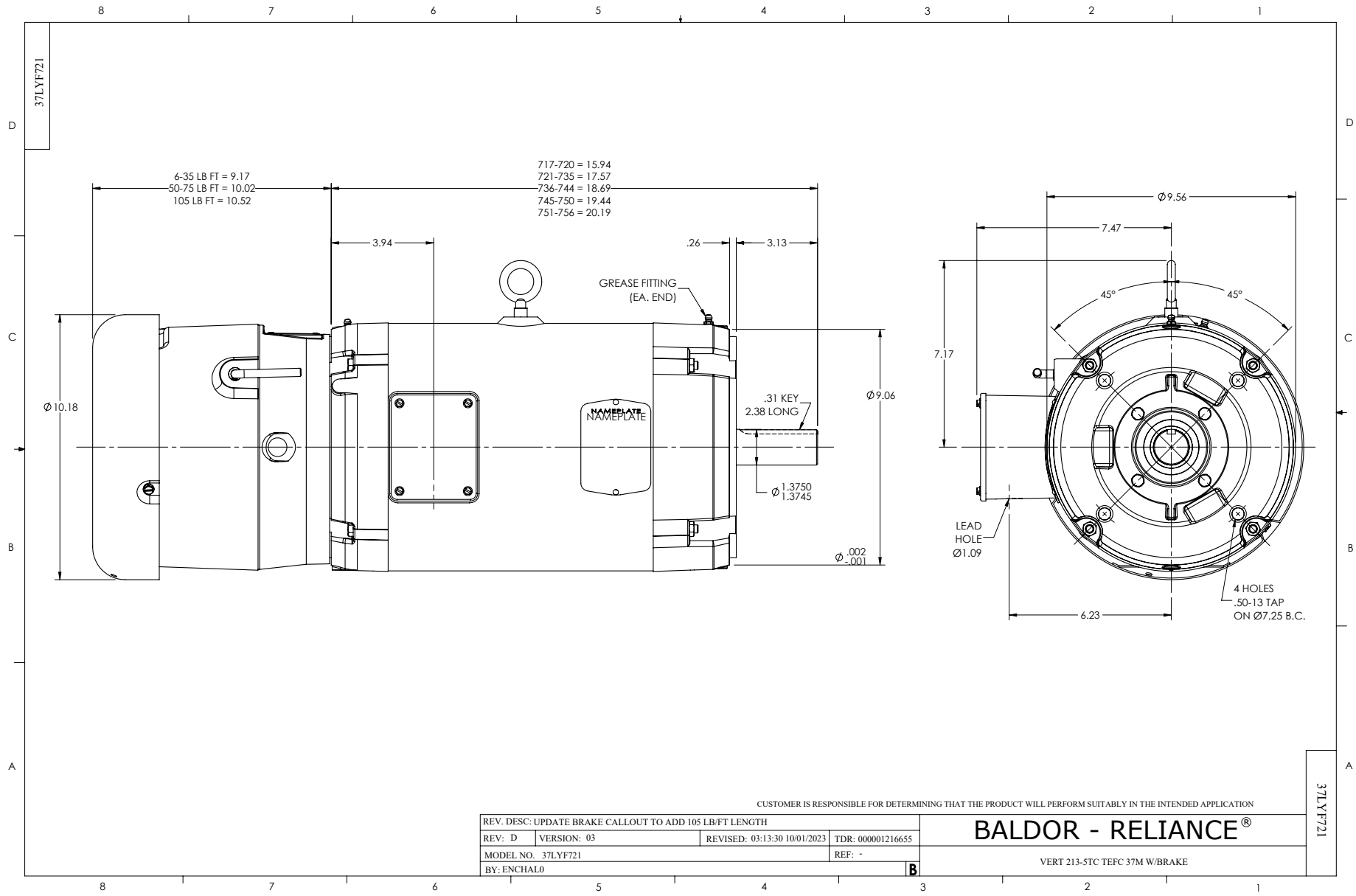
WINDING # 37WGL864

7.5 HP 3 PH 60 HZ 1770 RPM 460 V 3738M

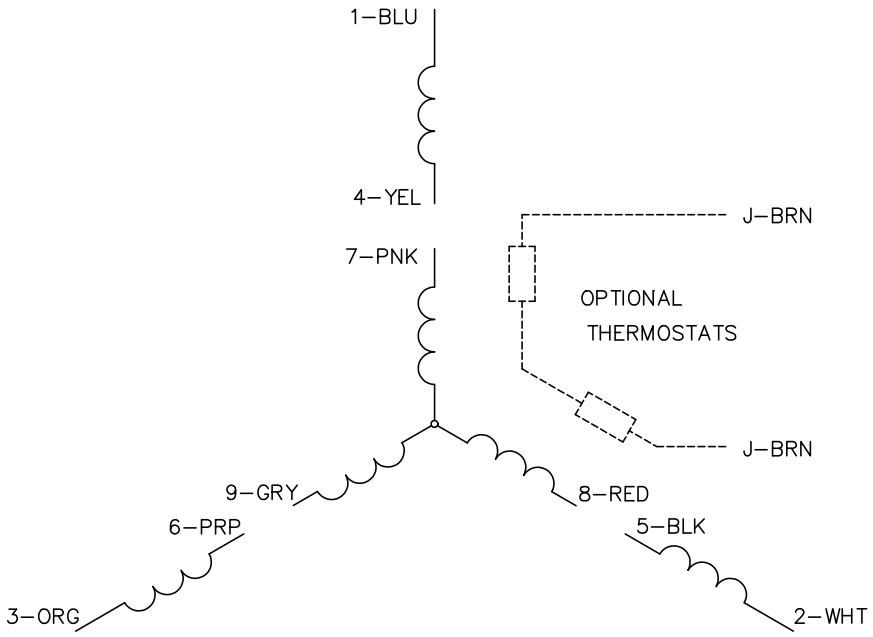
Typical performance - not guaranteed values.

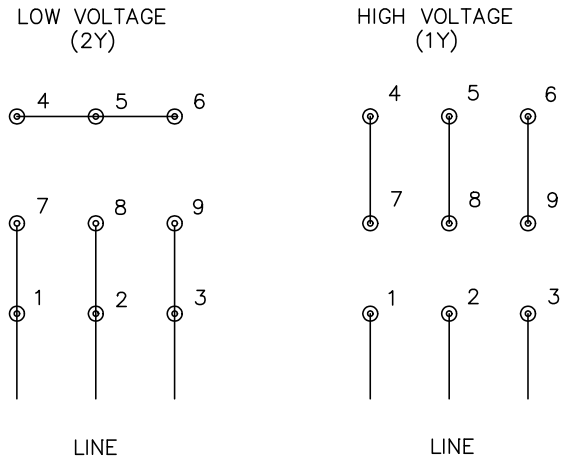
TORQUES(LB-FT): PO=69.8 PU=31.5 LR=41 LRA=70.7




37LYF721
6-35 LB FT = 9.17
50-75 LB FT = 10.02
105 LB FT = 10.52
717-720 = 15.94
721-735 = 17.57
736-744 = 18.69
745-750 = 19.44
751-756 = 20.19
3.94
.26
3.13
GREASE FITTING
(EA. END)
Ø10.18
NAMEPLATE
NAMEPLATE
.31 KEY
2.38 LONG
Ø9.06
Ø1.3750
1.3745
Ø.002
-.001
Ø9.56
7.47
45°
45°
7.17
LEAD
HOLE
Ø1.09
4 HOLES
.50-13 TAP
ON Ø7.25 B.C.
6.23
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT THE PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION
REV. DESC: UPDATE BRAKE CALLOUT TO ADD 105 LB/FT LENGTH
REV: D
VERSION: 03
REVISED: 03:13:30 10/01/2023
TDR: 000001216655
MODEL NO. 37LYF721
REF: -
BY: ENCHAL0
B
BALDOR - RELIANCE®
VERT 213-5TC TEFC 37M W/BRAKE
37LYF721

CD0005





NOTES:

1. INTERCHANGE ANY TWO LINE LEADS TO REVERSE ROTATION.
2. OPTIONAL THERMOSTATS ARE PROVIDED WHEN SPECIFIED.
3. ACTUAL NUMBER OF INTERNAL PARALLEL CIRCUITS MAY BE A MULTIPLE OF THOSE SHOWN ABOVE.
4. LEAD COLORS ARE OPTIONAL. LEADS MUST ALWAYS BE NUMBERED AS SHOWN.

CD0005

REV. DESC: REVISE TO SHOW OPTIONAL COLORS			BALDOR ELECTRIC Co.
REV. LTR: E	BY: JLP	REVISED: 01/19/99 10:15	TDR: 0171435
CD0005		FILE: AAA00005140	MDL: –
		MTL: –	3PH, DV, 9 LEADS