

BALDOR • RELIANCE

Customer information packet

VEBM3710T-D

7.5HP, 1770RPM, 3PH, 60HZ, 213TC, 3738M, TEFC

Class - None

Division - Not Applicable

Specifications

Enclosure	TEFC
Frame	213TC
Frame Material	Steel
Frequency	60.00 Hz
Motor Letter Type	Three Phase
Output @ Frequency	7.500 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	460.0 V @ 60 HZ 230.0 V @ 60 HZ
XP Class and Group	None
XP Division	Not Applicable
Agency Approvals	CE CSA NEMA PREMIUM UR WEEE
Ambient Temperature	40 °C
Auxillary Box	No Auxillary Box
Auxillary 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

Part detail

Revision	A
Type	AC
Mech. spec.	37M909
Base	
Status	PRD/A
Elec. spec.	37WGL864
Layout	37LYM909
Eff. date	12-12-2022
CD Diagram	CD0005
Poles	04
Leads	9#14
Proprietary	False
Created date	02-01-2021

Front Shaft Indicator	None
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	26.17 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
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

NP3469L									
CAT.NO.	VEBM3710T-D								
SPEC.	37M909L864G1								
HP	7.5/5.6KW								
VOLTS	230/460								
AMP	19/9.5								
RPM	1770 1/MIN IP44 IC411 64KG								
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-S1 CONT								
CC	010A	USABLE AT 208V					20		
DE	6307	ODE	6206						
ENCL	TEFC	SN							
	IE3-92.0(75%)91.4(50%)								

AC Induction Motor Performance Data

Record # 85467

Preliminary Data Sheet

Winding: 37WGL864-R001		Type: 3738M	Enclosure: TEFC		
Nameplate Data		460 V, 60 Hz: High Voltage Connection			
Rated Output (HP)	7.5	Full Load Torque	22.2 LB-FT		
Volts	230/460	Start Configuration	direct on line		
Full Load Amps	19.0/9.5	Breakdown Torque	69.8 LB-FT		
R.P.M.	1770	Pull-up Torque	31.5 LB-FT		
Hz	60 Phase	3	Locked-rotor Torque	41 LB-FT	
NEMA Design Code	A	KVA Code	J	Starting Current	70.7 A
Service Factor (S.F.)	1.15	No-load Current	4.32 A		
NEMA Nom. Eff.	91.7	Power Factor	80	Line-line Res. @ 25°C	1.48 Ω
Rating - Duty	40C	AMB-CONT		Temp. Rise @ Rated Load	64°C
S.F. Amps	21.4/10.7			Temp. Rise @ S.F. Load	84°C
				Locked-rotor Power Factor	41.9
				Rotor inertia	0.934 lb-ft ²

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

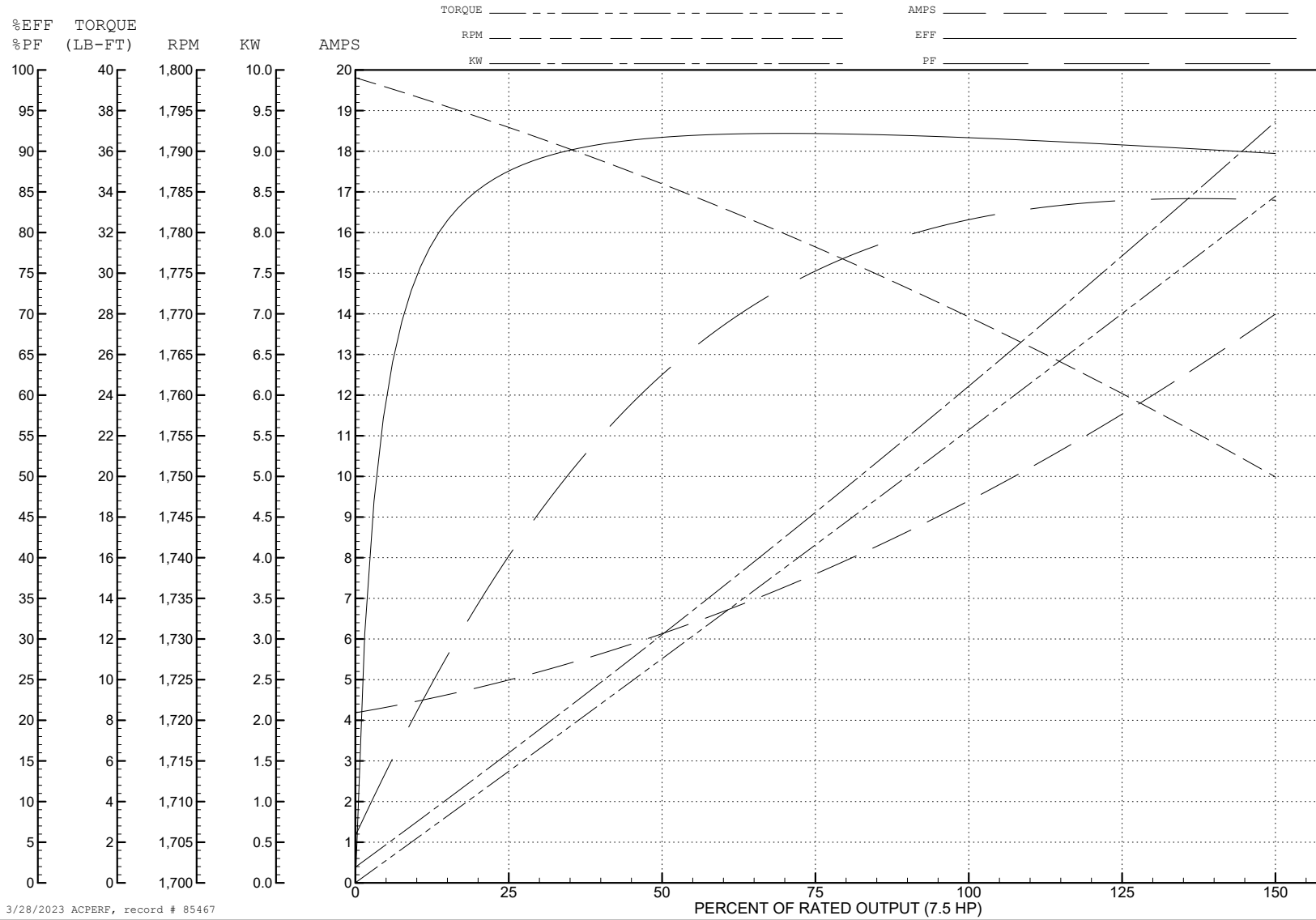
ABB Motors and Mechanical Inc.

WINDING # 37WGL864

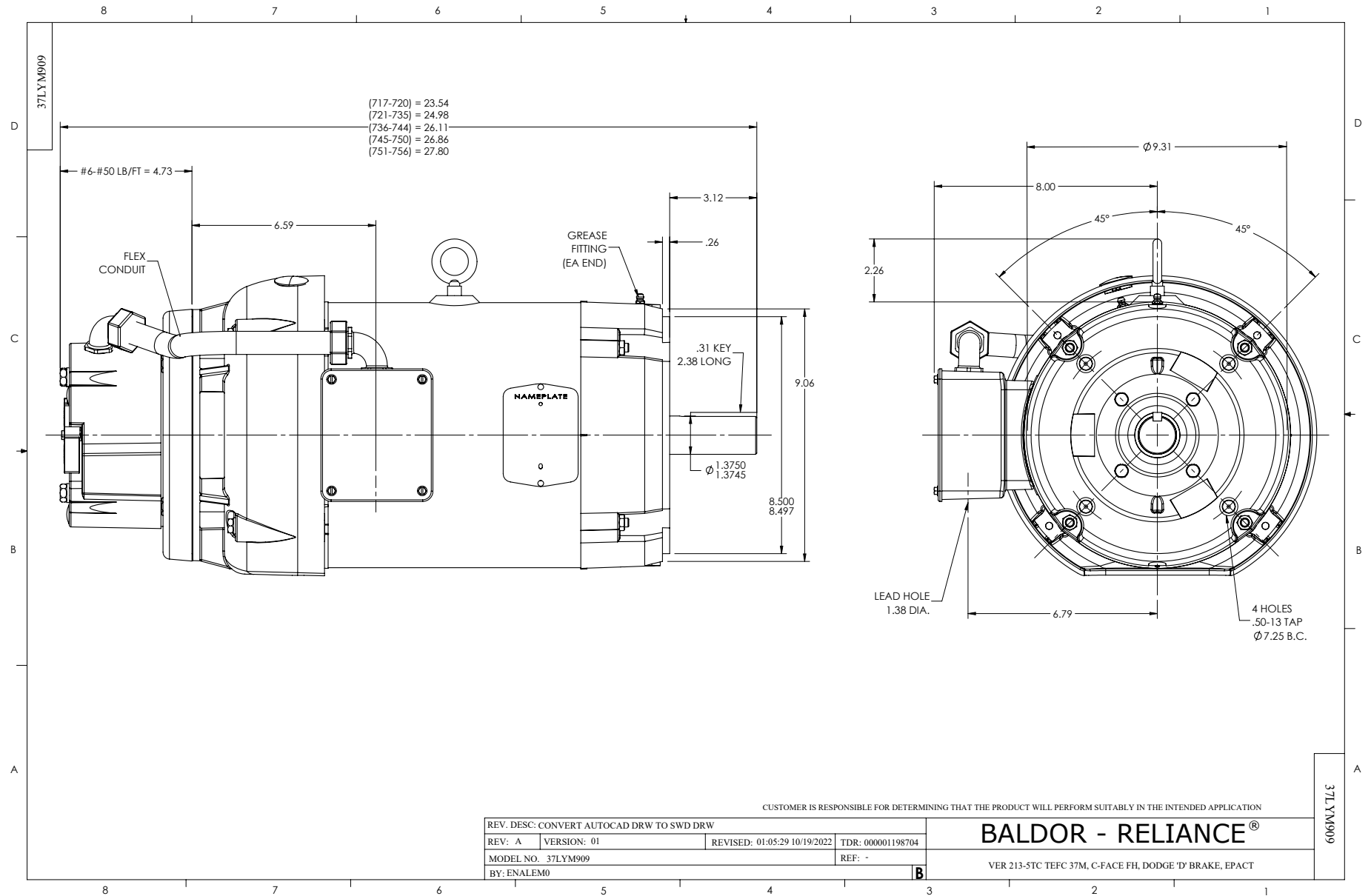
7.5 HP 3 PH 60 HZ 1770 RPM 460 V 3738M

Typical performance - not guaranteed values.

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



3/28/2023 ACPERF, record # 85467



CD0005



LOW VOLTAGE
(2Y)



LINE

HIGH VOLTAGE
(1Y)



LINE

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			
REV. LTR: E	BY: JLP	REVISED: 01/19/99 10:15	TDR: 0171435
S00000		FILE: AAA00005140	MDL: -
		MTL: -	

BALDOR ELECTRIC Co.

3PH, DV, 9 LEADS

CD2120

WIRING CONNECTIONS (1 PHASE VAC)

	POWER LINE A	POWER LINE B	CAP TOGETHER	CAP ALONE
AC LOW VOLT.	B1	B2	B3 & B5	B4
AC HIGH VOLT.	B1 & B5	B2	---	B3 CAP ALONE B4 CAP ALONE
DC VOLT.	B1	B2	B3 & B5	B4

B1 WHITE
B2 BLACK
B3 GRAY
B4 BLUE
B5 RED

CD2120

REV. DESC: NEW		
REV. LTR: -	VERSION: 00	TDR: 000000741785
FILE: \CKA\00037\282	REVISED: 12: 28:11 04/12/2012	
MTL: -	BY: CKRONSO	

BALDOR • DODGE • RELIANCE

D-SERIES MOTOR BRAKE 5LD AC\DC
SH 1 of 1