

BALDOR® • RELIANCE 

Product Information Packet

VEM3710T

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

Part Detail							
Revision:	A	Status:	PRD/A	Change #:		Proprietary:	No
Type:	AC	Elec. Spec:	37WGL864	CD Diagram:	CD0005	Mfg Plant:	
Mech. Spec:	37A003	Layout:	37LYA003	Poles:	04	Created Date:	02-02-2021
Base:	N	Eff. Date:	06-01-2021	Leads:	9#14		

Specs			
Catalog Number:	VEM3710T	Insulation Class:	F
Enclosure:	TEFC	Inverter Code:	Inverter Ready
Frame:	213TC	KVA Code:	J
Frame Material:	Steel	Lifting Lugs:	Standard Lifting Lugs
Output @ Frequency:	7.500 HP @ 60 HZ	Locked Bearing Indicator:	Locked Bearing
Synchronous Speed @ Frequency:	1800 RPM @ 60 HZ	Motor Lead Quantity/Wire Size:	9 @ 14 AWG
Voltage @ Frequency:	460.0 V @ 60 HZ	Motor Lead Exit:	Ko Box
	230.0 V @ 60 HZ	Motor Lead Termination:	Flying Leads
XP Class and Group:	None	Motor Type:	3738M
XP Division:	Not Applicable	Mounting Arrangement:	F1
Agency Approvals:	UR	Power Factor:	80
	CSA EEV	Product Family:	General Purpose
	CSA	Pulley End Bearing Type:	Ball
Auxillary Box:	No Auxillary Box	Pulley Face Code:	C-Face
Auxillary Box Lead Termination:	None	Pulley Shaft Indicator:	Standard
Base Indicator:	No Mounting	Rodent Screen:	None
Bearing Grease Type:	Polyrex EM (-20F +300F)	RoHS Status:	ROHS COMPLIANT
Blower:	None	Shaft Extension Location:	Pulley End

Current @ Voltage:	19.000 A @ 230.0 V	Shaft Ground Indicator:	No Shaft Grounding
	20.000 A @ 208.0 V	Shaft Rotation:	Reversible
	9.500 A @ 460.0 V	Shaft Slinger Indicator:	No Slinger
Design Code:	A	Speed Code:	Single Speed
Drip Cover:	No Drip Cover	Motor Standards:	NEMA
Duty Rating:	CONT	Starting Method:	Direct on line
Electrically Isolated Bearing:	Not Electrically Isolated	Thermal Device - Bearing:	None
Feedback Device:	NO FEEDBACK	Thermal Device - Winding:	None
Front Face Code:	Standard	Vibration Sensor Indicator:	No Vibration Sensor
Front Shaft Indicator:	None	Winding Thermal 1:	None
Heater Indicator:	No Heater	Winding Thermal 2:	None

Nameplate NP3441LUA							
CAT.NO.	VEM3710T						
SPEC	37A003L864G1						
HP	7.5						
VOLTS	230/460						
AMPS	19/9.5						
RPM	1770						
FRAME	213TC	HZ	60	PH	3		
SF	1.15	CODE	J	DES	A	CLASS	F
NEMA NOM. EFF	91.7	PF	80				
RATING	40C AMB-CONT						
CC	010A	USABLE AT 208V					20
ENCL	TEFC	SER					
DE	6307	ODE	6206				
VPWM INVERTER READY							
CT6-60H(10:1)VT3-60H(20:1							
	50HZ 7.5HP 190/380V 22.4/11.2A						
	SF1.0						

Parts List		
Part Number	Description	Quantity
SA390604	SA 37A003L864G1	1.000 EA
RA381056	RA 37A003L864G1	1.000 EA
37FN3002C01	EXFN, PLASTIC, 6.00 OD, 1.155 ID	1.000 EA
HW3200A01	3/8-16X3/4 I-BLT 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
37EP3101A01	FR ENDPLATE, FOR ROUTING PURPOSES	1.000 EA
HW4500A01	1641B(ALEMITE)400 UNIV, GREASE FITT	1.000 EA
HW5100A06	W2420-025 WVY WSHR (WB)	1.000 EA
37PE3300A01	PUEP ASSEMBLY FOR ROUTING	1.000 EA
HW4500A01	1641B(ALEMITE)400 UNIV, GREASE FITT	1.000 EA
10XN2520A30	HEX HD CAP SCREW-STD THD-.25 X 20 THD PE	4.000 EA
HW1001A25	LOCKWASHER 1/4, ZINC PLT .493 OD, .255 I	4.000 EA
XY3118A12	5/16-18 HEX NUT DIRECTIONAL SERRATION	4.000 EA
51XB1214A20	12-14X1.25 HXWSSLD SERTYB	1.000 EA
07FH4007SP	PRIMED	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

Parts List (continued)		
Part Number	Description	Quantity
LB1115N	LABEL,LIFTING DEVICE (ON ROLLS)	1.000 EA
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	2.000 EA
MJ1000A02	GREASE, MOBIL POLYREX EM - 124047	0.050 LB
MG1000Y03	MUNSELL 2.53Y 6.70/ 4.60, GLOSS 20,	0.028 GA
HA3104A17	5/16-18X13.250 T-BLT/OHIO	4.000 EA
LC0005E01	CONN.DIA./WARNING LABEL (LC0005/LB1119N)	1.000 EA
NP3441LUA	ALUM SUPER-E VPWM INV READY UL CSA-EEV C	1.000 EA
37PA1074	PALLET PACK GRP, PRINT BOX PK1026A06	1.000 EA
PK3082	STYROFOAM CRADLE	2.000 EA
MN416A01	TAG-INSTAL-MAINT no wire (2100/bx) 4/22	1.000 EA

AC Induction Motor Performance Data

Record # 85467

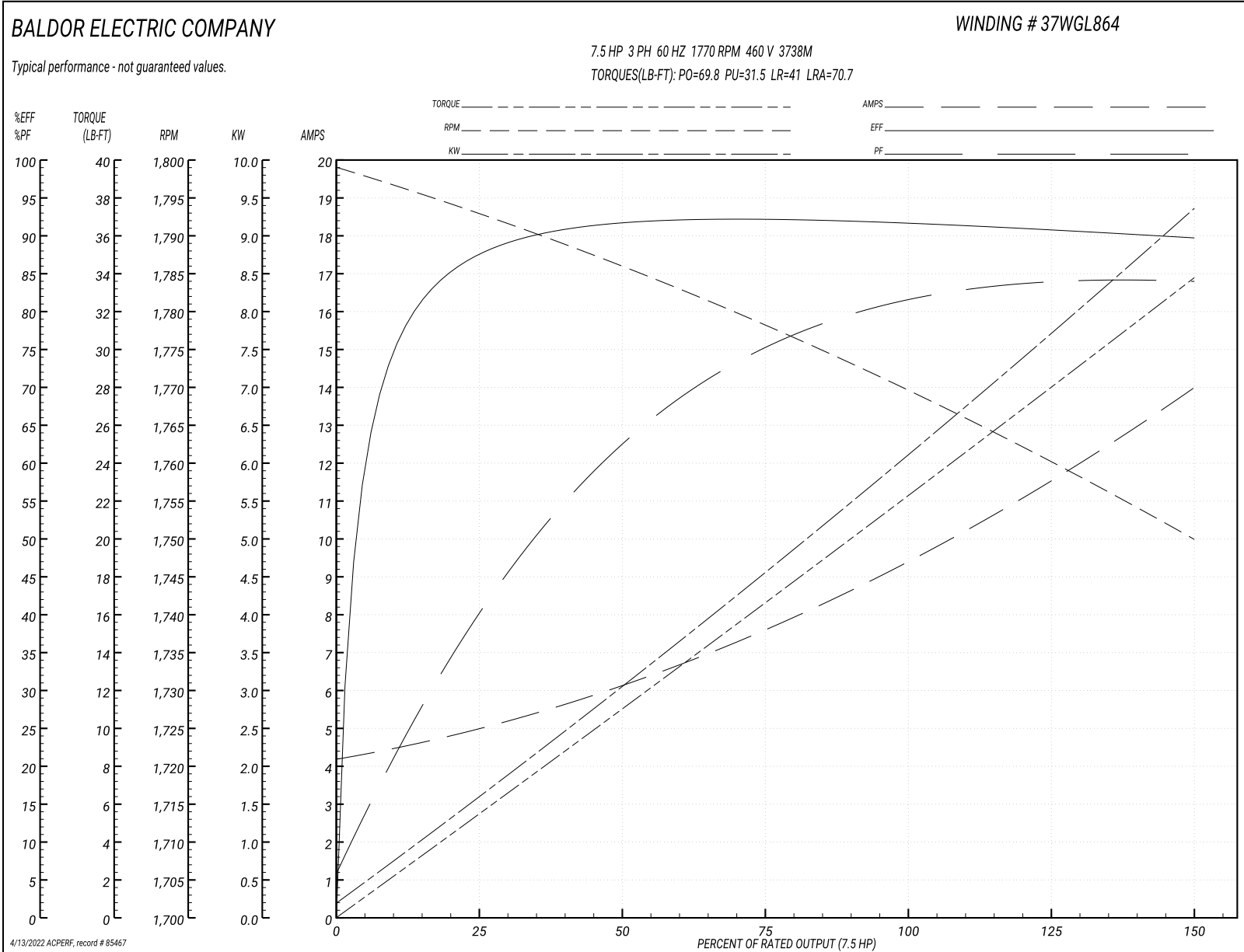
Preliminary Data Sheet

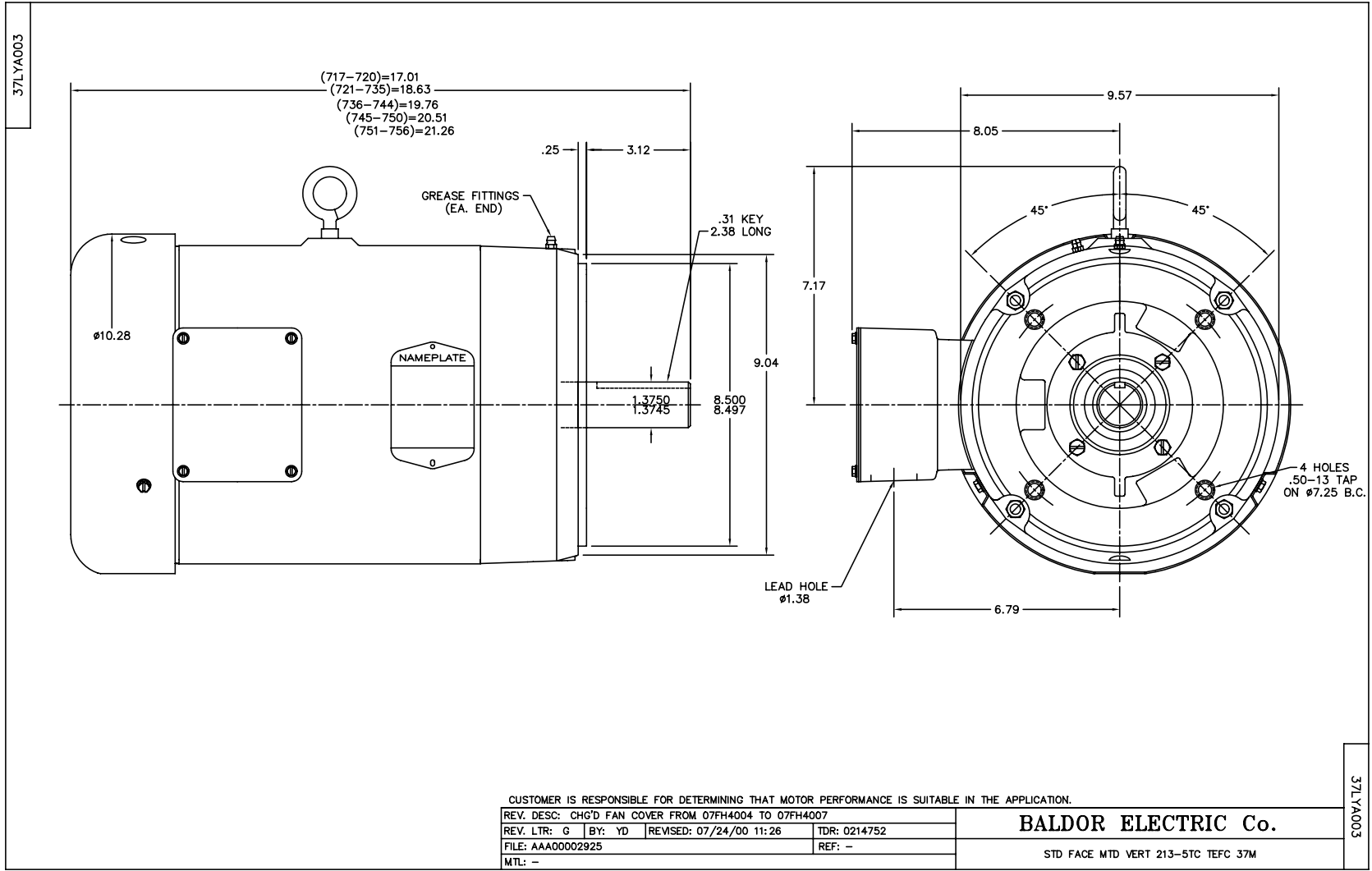
Winding: 37WGL864-R001		Type: 3738M		Enclosure: TEFC	
Nameplate Data			460 V, 60 Hz: High Voltage Connection		
Rated Output (HP)	7.5	Full Load Torque	22.2 LB-FT		
Volts	230/460	Start Configuration	direct on line		
Full Load Amps	19.0/9.5	Breakdown Torque	69.8 LB-FT		
R.P.M.	1770	Pull-up Torque	31.5 LB-FT		
Hz	60 Phase	Locked-rotor Torque	41 LB-FT		
NEMA Design Code	A KVA Code	Starting Current	70.7 A		
Service Factor (S.F.)	1.15	No-load Current	4.32 A		
NEMA Nom. Eff.	91.7 Power Factor	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

Performance Graph at 460V, 60Hz, 7.5HP Typical performance - Not guaranteed values





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.

REV. DESC: REVISE TO SHOW OPTIONAL COLORS

REV. LTR: E BY: JLP

REVISED: 01/19/99 10:15

TDR: 0171435

90000

FILE: AAA00005140

MDL: -

MTL: -

BALDOR ELECTRIC Co.

3PH, DV, 9 LEADS

CD0005