

ABB BALDOR RELIANCE III

Customer information packet

VEM3713T

15HP, 3495RPM, 3PH, 60HZ, 215TC, 3744M, TEFC, F

Class - None

Division - Not Applicable

Specifications

Enclosure	TEFC
Frame	215TC
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	15.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	3600 RPM @ 60 HZ
Voltage @ Frequency	230.0 V @ 60 HZ 460.0 V @ 60 HZ
Agency Approvals	NEMA PREMIUM CURUSEEV
Ambient Temperature	40 °C
Auxiliary Box	NO AUXILLARY BOX
Auxiliary Box Lead Termination	None
Base Indicator	No Mounting
Bearing Grease Type	Polyrex EM (-20F +300F)
Blower	None
Current @ Voltage	17.700 A @ 460.0 V 35.500 A @ 230.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	91.0 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	17.7 a
Insulation Class	F

Part Detail

Revision	A
Type	AC
Mech. spec.	37H329
Base	
Status	PRD/A
Elec. spec.	37WGZ713
Layout	37LYH329
Eff. date	04-06-2026
CD Diagram	CD0180
Poles	02
Leads	9#14
Proprietary	False
Created date	11-07-2025

Inverter Code	Inverter Ready
KVA Code	H
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	3744M
Mounting Arrangement	F1
Number of Poles	2
Overall Length	19.76 IN
Power Factor	86
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	3495 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

NP3441LUA									
CAT.NO.	VEM3713T								
SPEC	37H329Z713								
HP	15								
VOLTS	230/460								
AMPS	35.5/17.7								
RPM	3495								
FRAME	215TC		HZ	60		PH	3		
SF	1.15	CODE	J	DES	A	CLASS	F		
NEMA NOM. EFF	91	PF	86						
RATING	40C AMB-CONT								
CC	010A								
ENCL	TEFC	SER							
DE	6307	ODE	6206						
VPWM INVERTER READY		SFA 40.4/20.2							
CT6-60H(10:1)VT3-60H(20:1									
	50HZ 15HP 190/380V 40.8/20.4A							SF1.0	

Parts List

Part number	Description	Quantity
SA443095	SA 37H329Z713	1.000 ea
RA435591	RA 37H329Z713	1.000 ea
37FN3002B01	EXFN, PLASTIC, 7.50 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
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
37EP3300A01	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
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	2.000 ea
MJ1000A02	GREASE, POLYREX EM EXXON	0.050 lb
MG1050Y01	CELEROL BALDOR GOLD *5 GALLON BUCKET*	0.028 ga
HA3104A17	5/16-18X13.250 T-BLT/OHIO	4.000 ea
LC0181	CONNECTION LABEL	1.000 ea
NP3441LUA	AL SUPER-E VPWM INV RDY,UL EEV,NEMA PREM	1.000 ea
37PA1074	PALLET PACK GRP, PRINT BOX PK1026A06	1.000 ea
PK3082	STYROFOAM CRADLE	1.000 ea

MN416A01	TAG-INSTAL-MAINT no wire (2500 bx)11/25	1.000 ea
LB1624	COMBINED WARNING LABEL, ISO/ANSI PICTOGR	1.000 ea

AC Induction Motor Performance Data

Record # 116703

Typical performance - not guaranteed values

Winding: 37WGZ713-R002			Type: 3744M		Enclosure: TEFC	
Nameplate Data			460 V, 60 Hz: High Voltage Connection			
Rated Output (HP)		15	Full Load Torque		22.44 LB-FT	
Volts		230/460	Start Configuration		direct on line	
Full Load Amps		35.5/17.7	Breakdown Torque		119 LB-FT	
R.P.M.		3495	Pull-up Torque		38 LB-FT	
Hz	60 Phase	3	Locked-rotor Torque		54.1 LB-FT	
NEMA Design Code		A	KVA Code		J	
Service Factor (S.F.)		1.15	Starting Current		146 A	
NEMA Nom. Eff.		91	Power Factor		86	
Rating - Duty		40C AMB-CONT	Line-line Res. @ 25°C		0.53818 Ω	
S.F. Amps		40.4/20.2	Temp. Rise @ Rated Load		87°C	
			Temp. Rise @ S.F. Load		114°C	
			Locked-rotor Power Factor		32.1	
			Rotor inertia		0.401 lb-ft²	

Load Characteristics 460 V, 60 Hz, 15 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	54	75	84	88	90	90	89
Efficiency	87.7	91.6	92.1	91.6	90.6	89.3	91
Speed	3575.5	3553	3529.7	3502.4	3472.3	3441.9	3484
Line amperes	7.4	10.1	13.5	17.4	21.6	26.1	19.9

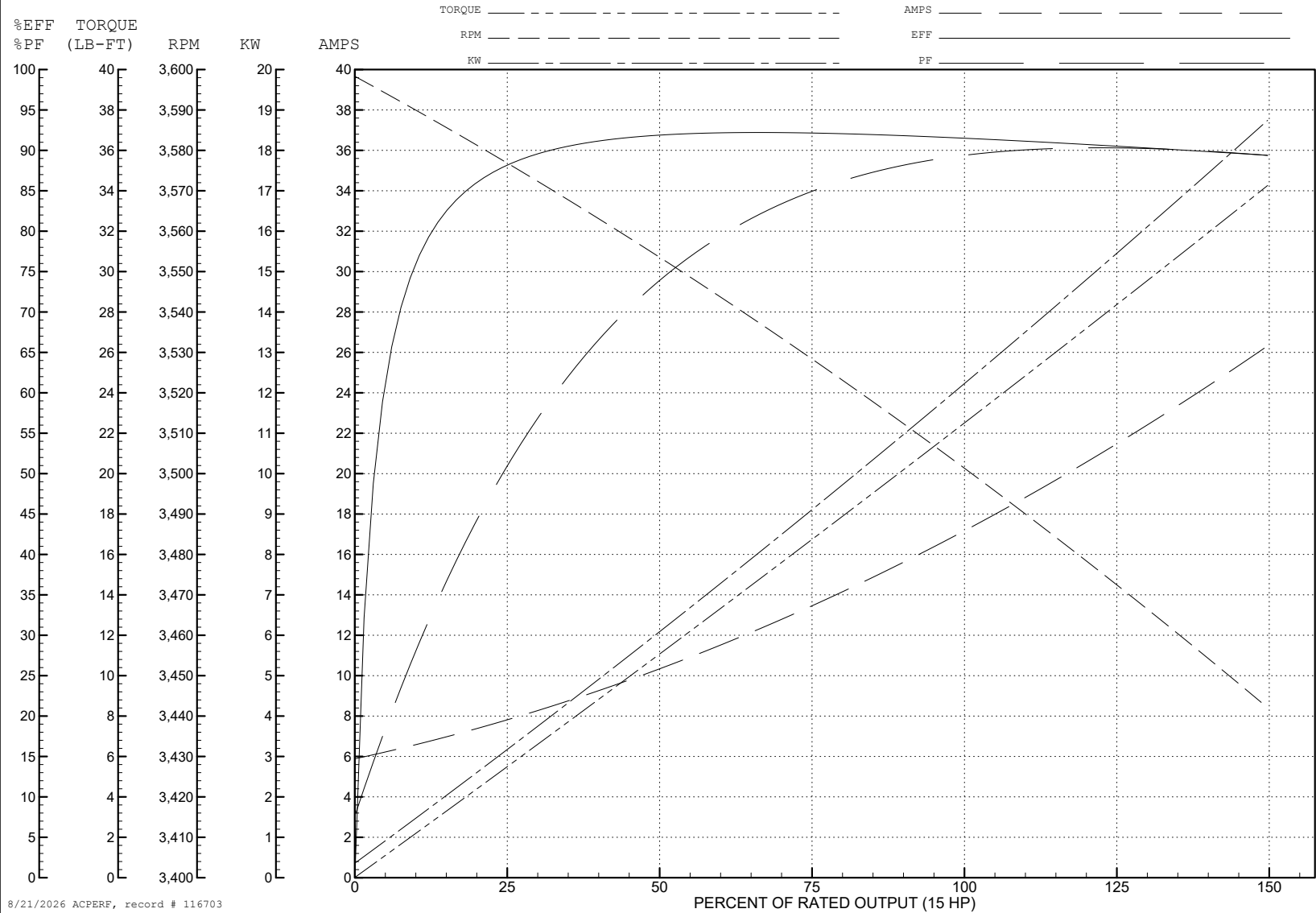
ABB Motors and Mechanical Inc.

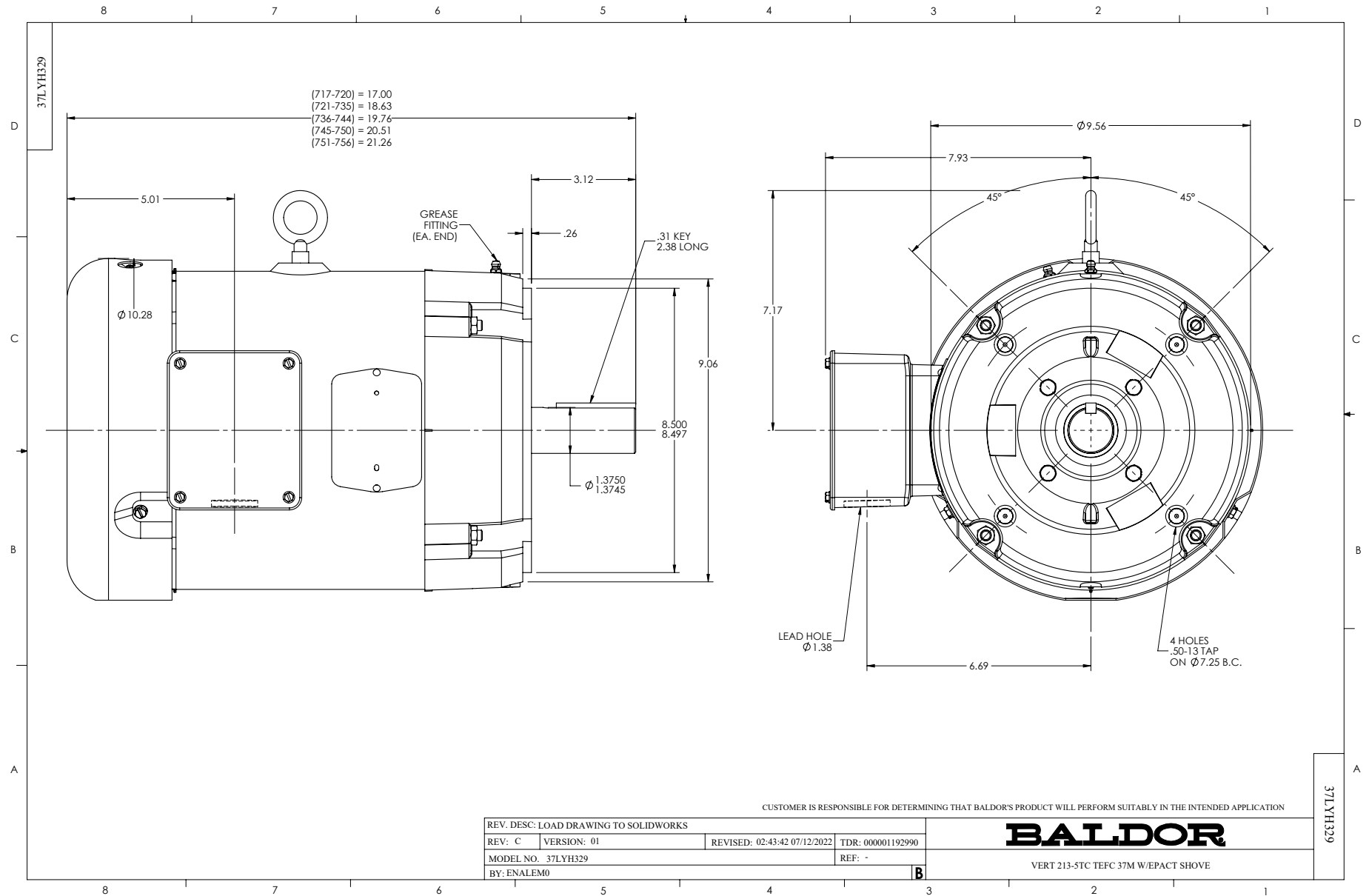
WINDING # 37WGZ713

Typical performance - not guaranteed values.

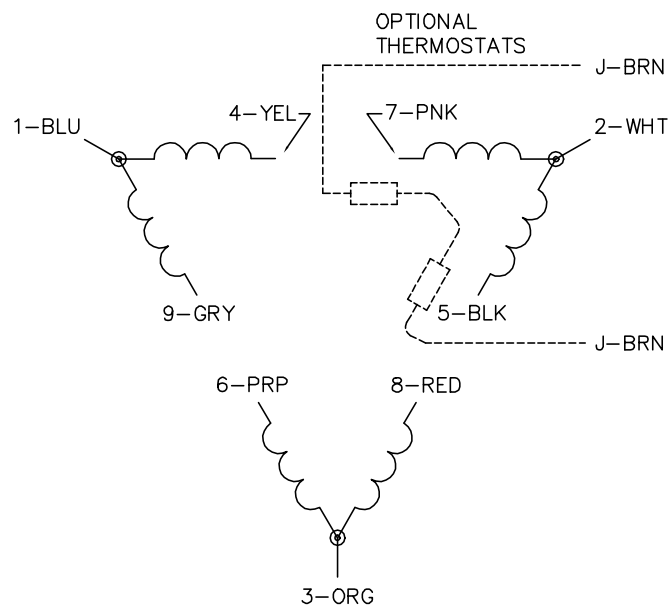
15 HP 3 PH 60 HZ 3495 RPM 460 V 3744M

TORQUES (LB-FT): PO=119 PU=38 LR=54.1 LRA=146

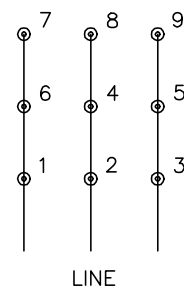




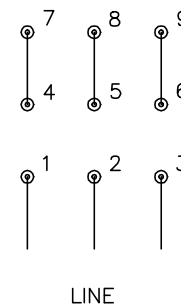
CD0180



LOW VOLTAGE
(2D)



HIGH VOLTAGE
(1D)



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: ADD CLASS CONN00000007

REV. LTR: D

VERSION: 01

TDR: 000001099922

FILE: \AAA\00005\148

REVISED: 10: 25: 29 02/19/2019

BY: ENBRIRO

MTL: -



BALDOR - RELIANCE®

3PH, DV, 9 LEADS, DELTA CONNECTION

SH 1 of 1

CD0180