

**BALDOR® • RELIANCE** 

**Product Information Packet**

**PFC EQUIPMENT**

**VEM3713T**

**52M 2P TEFC VER 215TC SUPER E**

Part Detail							
Revision:	A	Status:	PRD/A	Change #:		Proprietary:	No
Type:	AC	Elec. Spec:	37WGR228	CD Diagram:	CD0180	Mfg Plant:	
Mech. Spec:	37H329	Layout:	37LYH329	Poles:	02	Created Date:	03-14-2019
Base:	N	Eff. Date:	07-18-2019	Leads:	9#14		

Specs			
Catalog Number:	VEM3713T	Insulation Class:	F
Enclosure:	TEFC	Inverter Code:	Inverter Ready
Frame:	215TC	KVA Code:	J
Frame Material:	Steel	Lifting Lugs:	Standard Lifting Lugs
Output @ Frequency:	15.000 HP @ 60 HZ	Locked Bearing Indicator:	Locked Bearing
Synchronous Speed @ Frequency:	3600 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:	3752M
XP Division:	Not Applicable	Mounting Arrangement:	F1
Agency Approvals:	UR	Power Factor:	89
	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

<b>Current @ Voltage:</b>	17.000 A @ 460.0 V	<b>Shaft Ground Indicator:</b>	No Shaft Grounding
	34.000 A @ 230.0 V	<b>Shaft Rotation:</b>	Reversible
	36.800 A @ 208.0 V	<b>Shaft Slinger Indicator:</b>	No Slinger
<b>Design Code:</b>	A	<b>Speed Code:</b>	Single Speed
<b>Drip Cover:</b>	No Drip Cover	<b>Motor Standards:</b>	NEMA
<b>Duty Rating:</b>	CONT	<b>Starting Method:</b>	Direct on line
<b>Electrically Isolated Bearing:</b>	Not Electrically Isolated	<b>Thermal Device - Bearing:</b>	None
<b>Feedback Device:</b>	NO FEEDBACK	<b>Thermal Device - Winding:</b>	None
<b>Front Face Code:</b>	Standard	<b>Vibration Sensor Indicator:</b>	No Vibration Sensor
<b>Front Shaft Indicator:</b>	None	<b>Winding Thermal 1:</b>	None
<b>Heater Indicator:</b>	No Heater	<b>Winding Thermal 2:</b>	None

Nameplate NP3441LUA

CAT.NO.	VEM3713T				
SPEC	37H329R228G1				
HP	15				
VOLTS	230/460				
AMPS	34/17				
RPM	3500				
FRAME	215TC	HZ	60	PH	3
SF	1.15	CODE	J	DES	A
NEMA NOM. EFF	91	PF	89	CLASS	F
RATING	40C AMB-CONT				
CC	010A	USABLE AT 208V			36.8
ENCL	TEFC	SER			
DE	6307	ODE	6206		
VPWM INVERTER READY					
CT6-60H(10:1)VT3-60H(20:1)					
	50HZ 15HP 190/380V 40.8/20.4A				SF1.0

Parts List		
Part Number	Description	Quantity
SA367720	SA 37H329R228G1	1.000 EA
RA357196	RA 37H329R228G1	1.000 EA
37FN3002B01	EXFN, PLASTIC, 7.50 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

<b>Parts List (continued)</b>		
<b>Part Number</b>	<b>Description</b>	<b>Quantity</b>
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	2.000 EA
LB1115N	LABEL,LIFTING DEVICE (ON ROLLS)	1.000 EA
MJ1000A02	GREASE, MOBIL POLYREX EM - 124047	0.050 LB
MG1000Y03	MUNSELL 2.53Y 6.70/ 4.60, GLOSS 20,	0.028 GA
HA3104A25	THRUBOLT .31-18 X 14.75	4.000 EA
LB1119N	WARNING LABEL	1.000 EA
LC0181	CONNECTION LABEL	1.000 EA
NP3441LUA	ALUM SUPER-E VPWM INV READY UL CSA-EEV C	1.000 EA
37PA1039	PALLET PACK GRP, PRINT PK1026A06	1.000 EA
PK3082	STYROFOAM CRADLE	1.000 EA
MN416A01	TAG-INSTAL-MAINT no wire (1200/bx) 3/19	1.000 EA

**AC Induction Motor Performance Data**

Record # 53380 - Typical performance - not guaranteed values

<b>Winding:</b> 37WGR228-R023	<b>Type:</b> 3752M	<b>Enclosure:</b> TEFC
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Nameplate Data				460 V, 60 Hz: High Voltage Connection	
Rated Output (HP)	15			Full Load Torque	22.12 LB-FT
Volts	230/460			Start Configuration	direct on line
Full Load Amps	34/17			Breakdown Torque	103 LB-FT
R.P.M.	3500			Pull-up Torque	40.16 LB-FT
Hz	60	Phase	3	Locked-rotor Torque	57.59 LB-FT
NEMA Design Code	A	KVA Code	J	Starting Current	150 A
Service Factor (S.F.)	1.15			No-load Current	5.55 A
NEMA Nom. Eff.	91	Power Factor	89	Line-line Res. @ 25°C	0.47 Ω
Rating - Duty	40C AMB-CONT			Temp. Rise @ Rated Load	68°C
S.F. Amps				Temp. Rise @ S.F. Load	79°C
				Locked-rotor Power Factor	30.9
				Rotor inertia	0.474 LB-FT <sup>2</sup>

Load Characteristics 460 V, 60 Hz, 15 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	56	78	85	89	90	90	89
Efficiency	86.8	91	91.9	91.4	90.8	89.8	91.3
Speed	3579	3557	3534	3500	3484	3456	3495
Line amperes	6.7	9.57	13.19	17.03	21.12	25.61	19.5

Performance Graph at 460V, 60Hz, 15.0HP Typical performance - Not guaranteed values

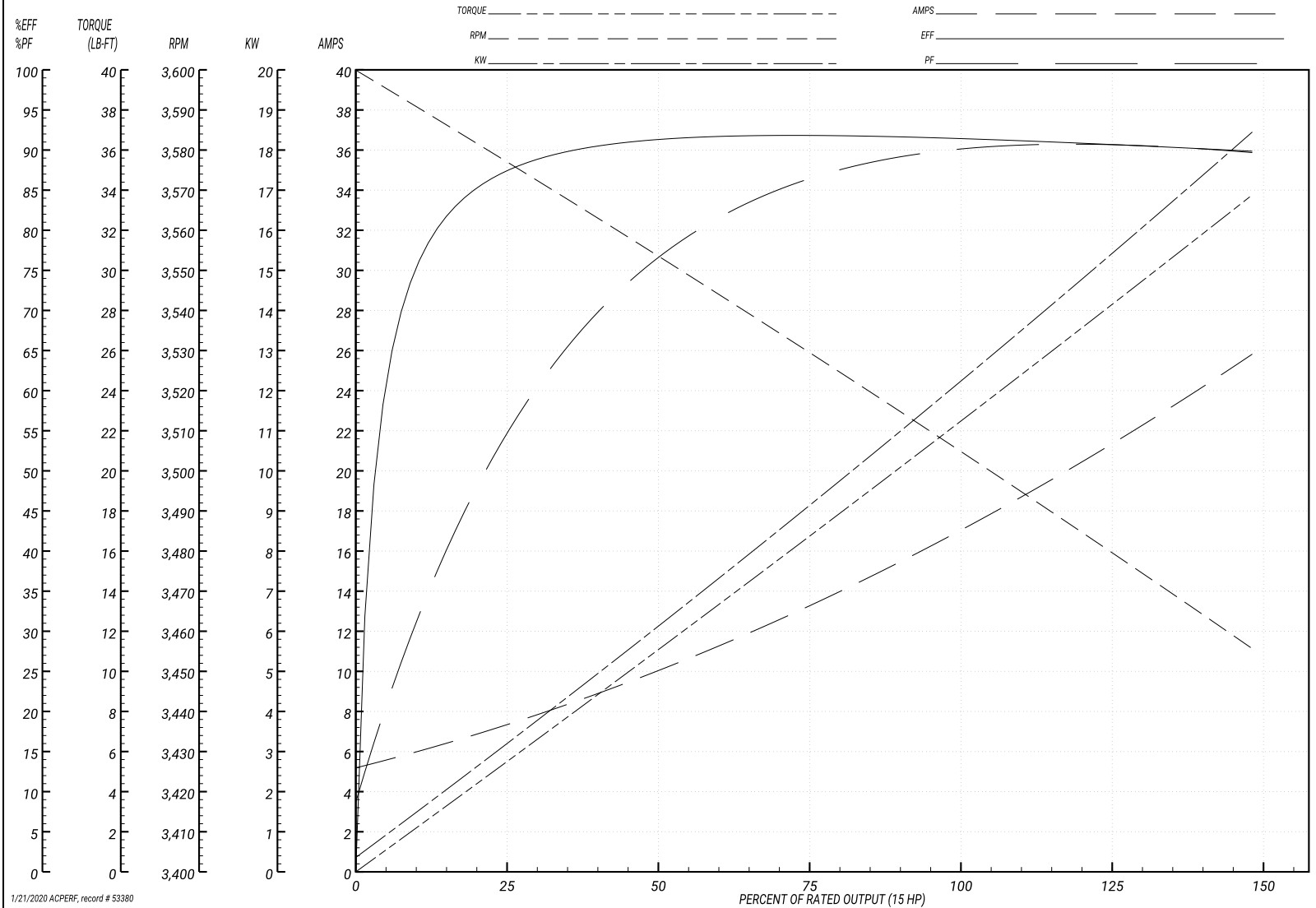
ABB Motors and Mechanical Inc.

WINDING # 37WGR228

Typical performance - not guaranteed values.

15 HP 3 PH 60 HZ 3500 RPM 460 V 3752M

TORQUES(LB-FT): PO=103 PU=40.16 LR=57.59 LRA=150



1/21/2020 ACPERF, record # 53380



**AC Induction Motor Performance Data**

Record # 57899 - Typical performance - not guaranteed values

<b>Winding:</b> 37WGR228-R023	<b>Type:</b> 3752M	<b>Enclosure:</b> TEFC
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Nameplate Data				230 V, 60 Hz: Low Voltage Connection	
Rated Output (HP)	15			Full Load Torque	22.1 LB-FT
Volts	230/460			Start Configuration	direct on line
Full Load Amps	34/17			Breakdown Torque	104 LB-FT
R.P.M.	3500			Pull-up Torque	40.3 LB-FT
Hz	60	Phase	3	Locked-rotor Torque	57.8 LB-FT
NEMA Design Code	A	KVA Code	J	Starting Current	300 A
Service Factor (S.F.)	1.15			No-load Current	11.1 A
NEMA Nom. Eff.	91	Power Factor	89	Line-line Res. @ 25°C	0.111 Ω
Rating - Duty	40C AMB-CONT			Temp. Rise @ Rated Load	67°C
S.F. Amps				Temp. Rise @ S.F. Load	82°C
				Locked-rotor Power Factor	30.3
				Rotor inertia	0.474 LB-FT <sup>2</sup>

Load Characteristics 230 V, 60 Hz, 15 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	56	77	85	89	90	90	90
Efficiency	86.8	91.1	92	91.8	91	90	91.3
Speed	3579	3558	3534	3510	3485	3456	3495
Line amperes	13.4	19.1	26.4	34	42.2	51.2	38.9

Performance Graph at 230V, 60Hz, 15.0HP Typical performance - Not guaranteed values

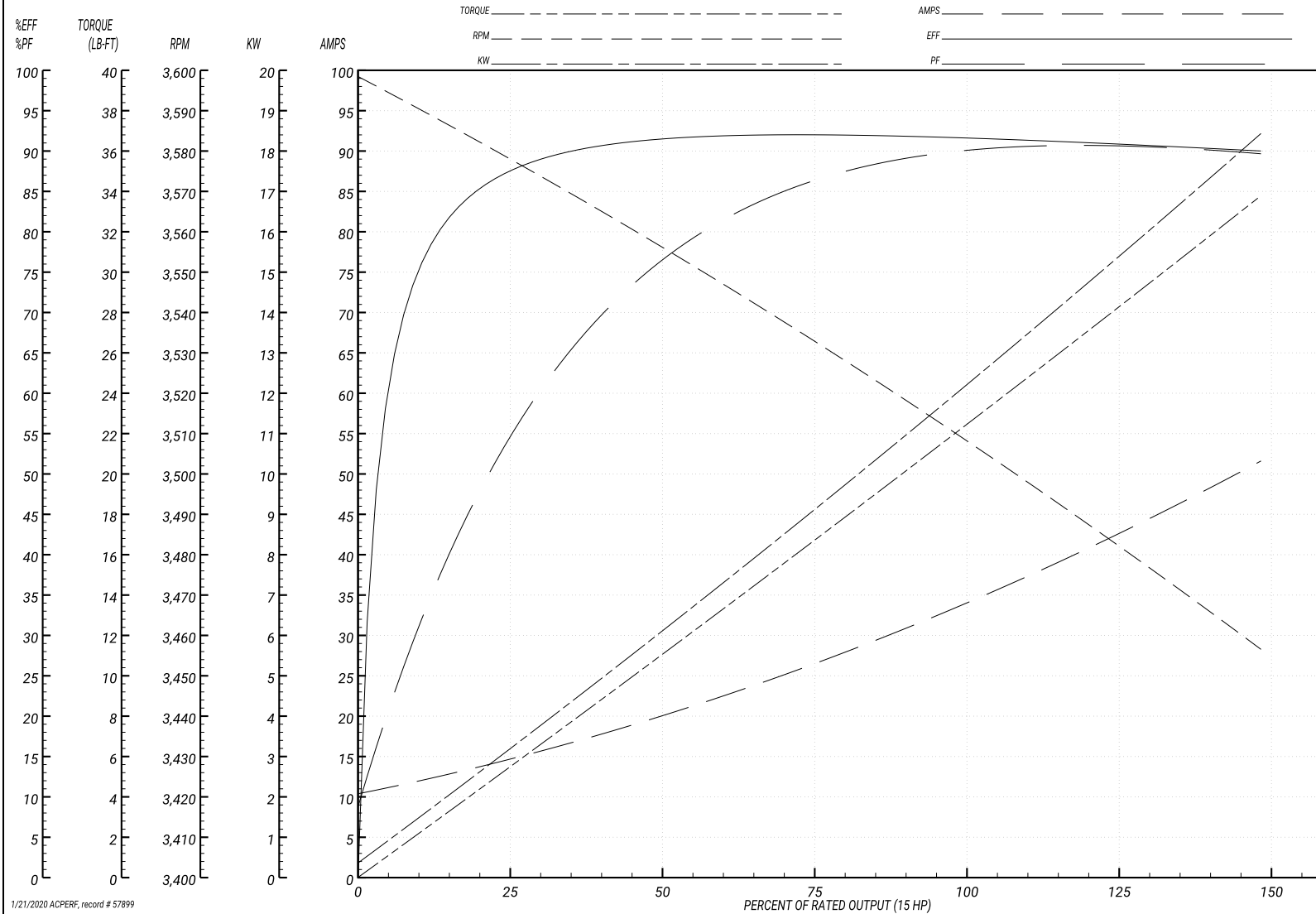
ABB Motors and Mechanical Inc.

WINDING # 37WGR228

Typical performance - not guaranteed values.

15 HP 3 PH 60 HZ 3500 RPM 230 V 3752M

TORQUES(LB-FT): PO=104 PU=40.3 LR=57.8 LRA=300



1/21/2020 ACPERF, record # 57899

**AC Induction Motor Performance Data**

Record # 70097 - Typical performance - not guaranteed values

<b>Winding:</b> 37WGR228-RXXX	<b>Type:</b> 3752M	<b>Enclosure:</b> TEFC
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Nameplate Data				380 V, 50 Hz: High Voltage Connection	
Rated Output (HP)	15			Full Load Torque	17.68 LB-FT
Volts	230/460			Start Configuration	direct on line
Full Load Amps	34/17			Breakdown Torque	98.71 LB-FT
R.P.M.	3500			Pull-up Torque	42.31 LB-FT
Hz	60	Phase	3	Locked-rotor Torque	60.68 LB-FT
NEMA Design Code	A	KVA Code	J	Starting Current	146 A
Service Factor (S.F.)	1.15			No-load Current	5.43 A
NEMA Nom. Eff.	91	Power Factor	89	Line-line Res. @ 25°C	0.47 Ω
Rating - Duty	40C AMB-CONT			Temp. Rise @ Rated Load	52°C
S.F. Amps				Temp. Rise @ S.F. Load	63°C
				Locked-rotor Power Factor	34.6
				Rotor inertia	0.474 LB-FT <sup>2</sup>

Load Characteristics 380 V, 50 Hz, 10 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	51	73	82	87	89	90	88
Efficiency	81.7	88	89.8	89.9	89.6	88.9	89.7
Speed	2982	2964	2945	2918	2905	2883	2910
Line amperes	6.27	8.45	11.29	14.27	17.46	20.98	16.2

Performance Graph at 380V, 50Hz, 10.0HP Typical performance - Not guaranteed values

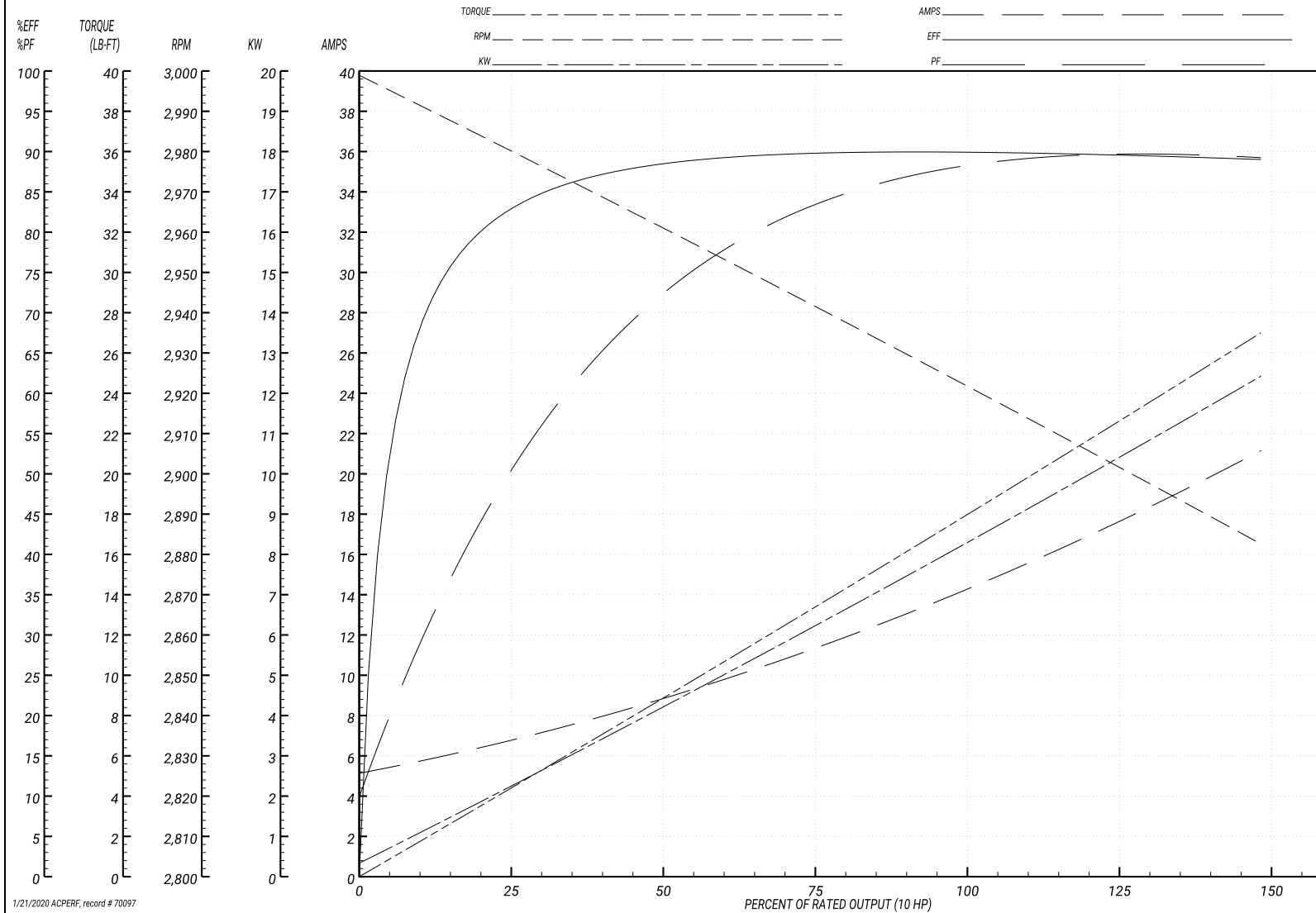
ABB Motors and Mechanical Inc.

WINDING # 37WGR228

Typical performance - not guaranteed values.

10 HP 3 PH 50 HZ 3500 RPM 380 V 3752M

TORQUES(LB-FT): PO=98.71 PU=42.31 LR=60.68 LRA=146



1/21/2020 ACPERF, record # 70097

**AC Induction Motor Performance Data**

Record # 73419 - Typical performance - not guaranteed values

<b>Winding:</b> 37WGR228-RXXX	<b>Type:</b> 3752M	<b>Enclosure:</b> TEFC
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Nameplate Data				480 V, 60 Hz: High Voltage Connection	
Rated Output (HP)	15			Full Load Torque	22.12 LB-FT
Volts	230/460			Start Configuration	direct on line
Full Load Amps	34/17			Breakdown Torque	113 LB-FT
R.P.M.	3500			Pull-up Torque	44.76 LB-FT
Hz	60	Phase	3	Locked-rotor Torque	64.18 LB-FT
NEMA Design Code	A	KVA Code	J	Starting Current	159 A
Service Factor (S.F.)	1.15			No-load Current	6.32 A
NEMA Nom. Eff.	91	Power Factor	89	Line-line Res. @ 25°C	0.47 Ω
Rating - Duty	40C AMB-CONT			Temp. Rise @ Rated Load	67°C
S.F. Amps				Temp. Rise @ S.F. Load	83°C
				Locked-rotor Power Factor	31.2
				Rotor inertia	0.474 LB-FT <sup>2</sup>

Load Characteristics 480 V, 60 Hz, 15 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	50	72	82	86	88	89	87
Efficiency	86.2	90.7	91.8	91.5	90.9	90.1	91.1
Speed	3580	3560	3538	3506	3491	3465	3497
Line amperes	7.28	9.85	13.18	16.77	20.58	24.75	19.1

Performance Graph at 480V, 60Hz, 15.0HP Typical performance - Not guaranteed values

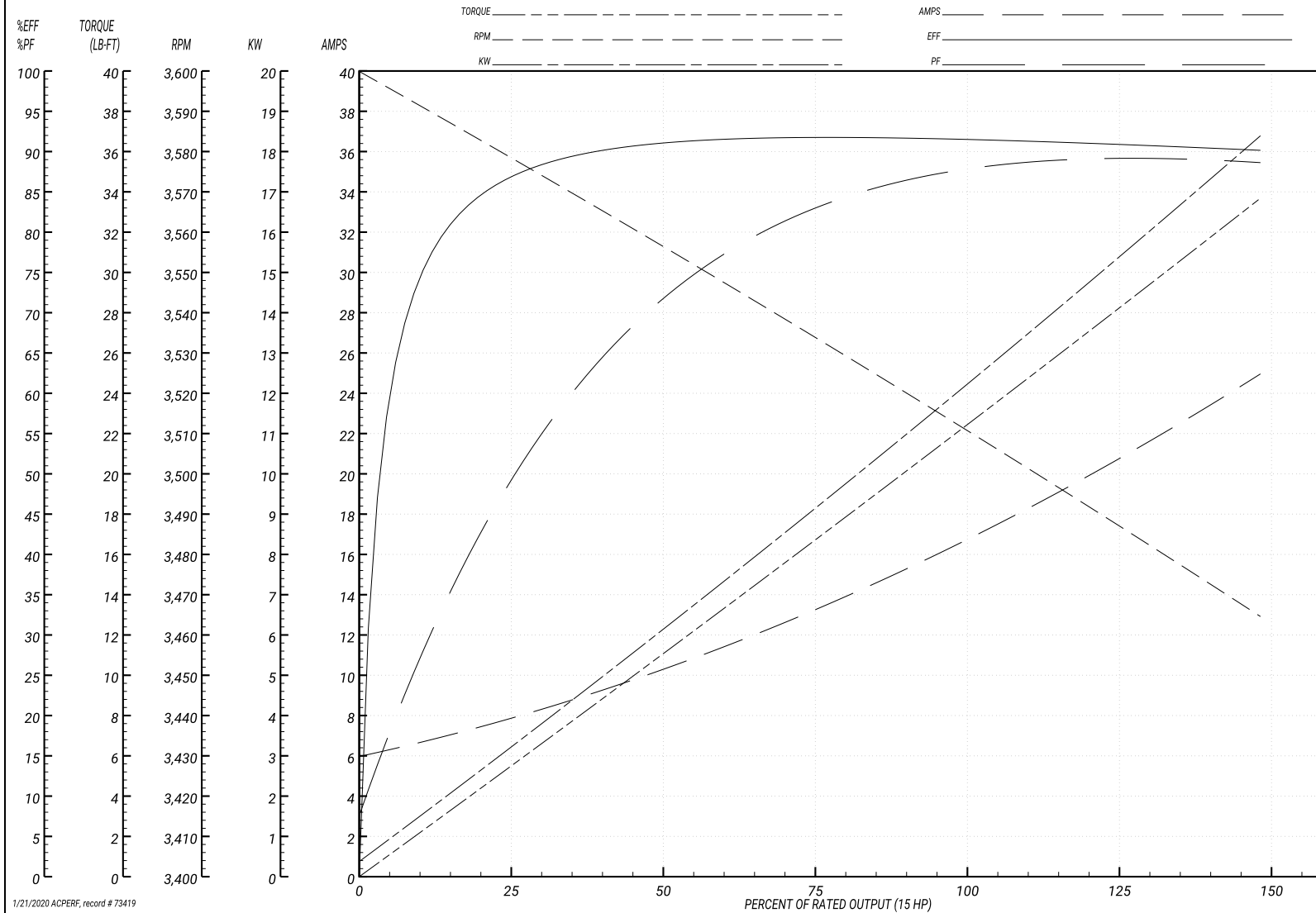
ABB Motors and Mechanical Inc.

WINDING # 37WGR228

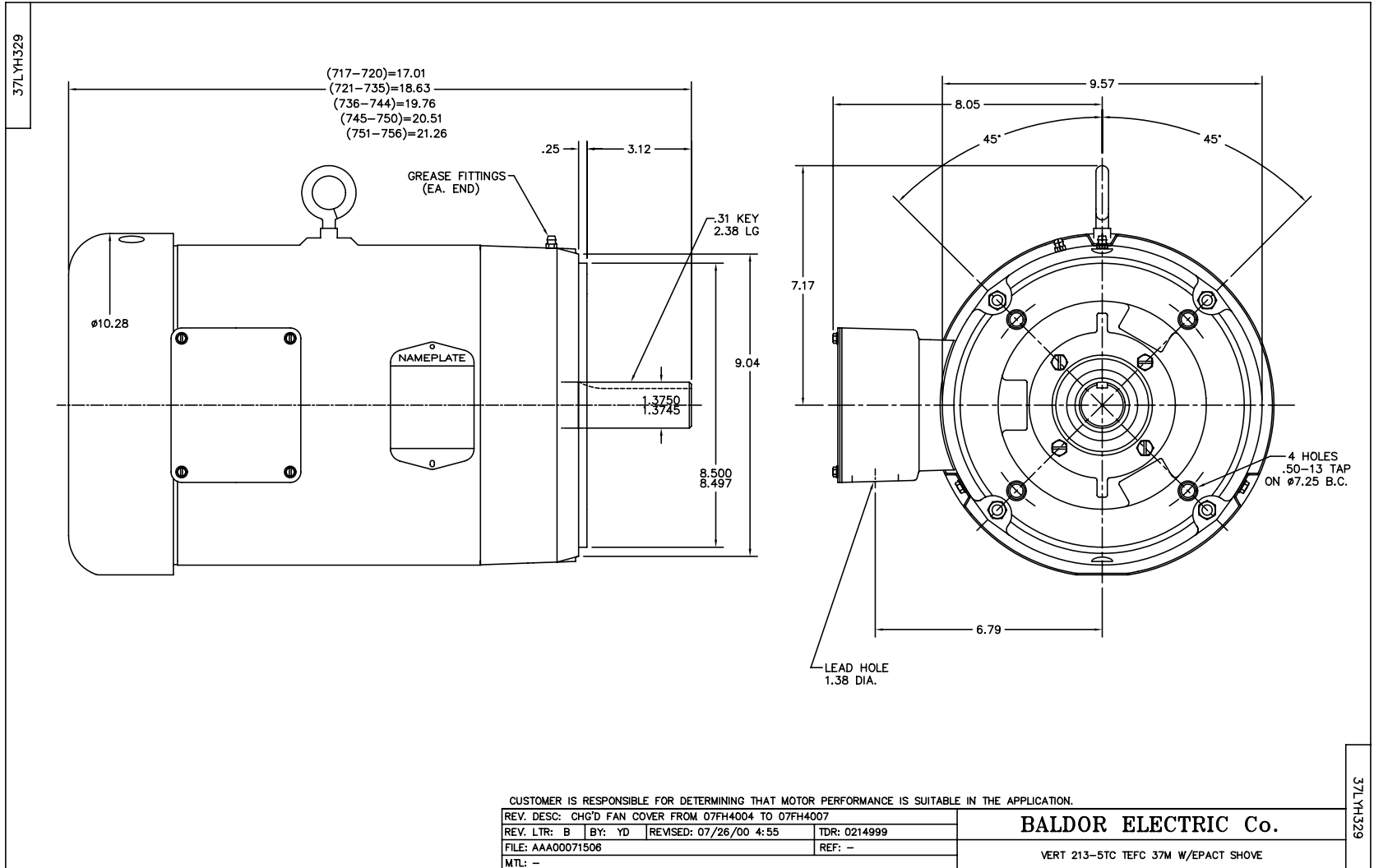
Typical performance - not guaranteed values.

15 HP 3 PH 60 HZ 3500 RPM 480 V 3752M

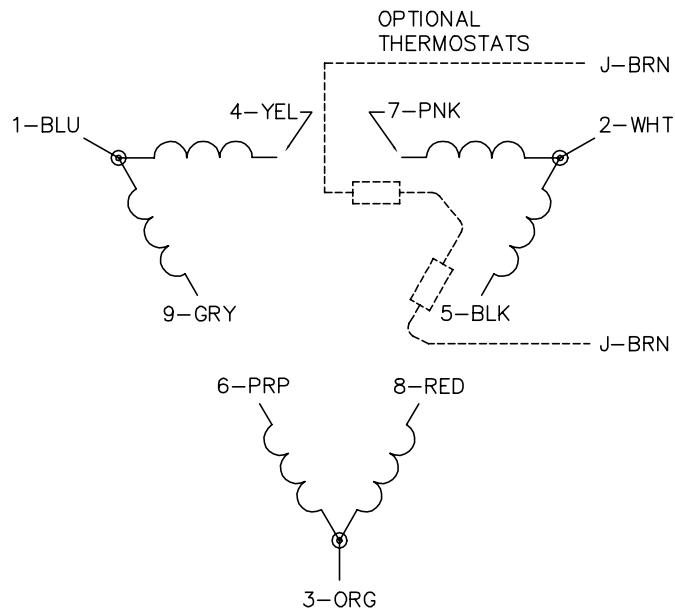
TORQUES(LB-FT): PO=113 PU=44.76 LR=64.18 LRA=159



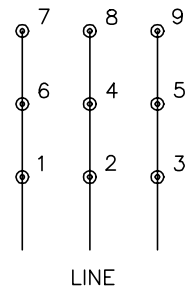
1/21/2020 ACPERF, record # 73419



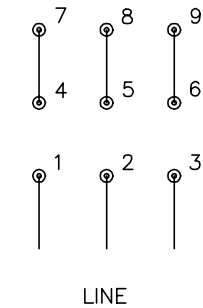
CD0180



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.

CD0180

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



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