

BALDOR • RELIANCE

Customer information packet

CEM3711T

10HP, 3490RPM, 3PH, 60HZ, 215TC, 3728M, TEFC, F

Class - None

Division - Not Applicable

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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	10.000 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	CSA EEV CURUSEEV NEMA PREMIUM NEMA_PREMIUM UR
Ambient Temperature	40 °C
Auxillary Box	No Auxillary Box
Auxillary Box Lead Termination	None
Base Indicator	Rigid
Bearing Grease Type	Polyrex EM (-20F +300F)
Blower	None
Current @ Voltage	23.200 A @ 230.0 V 24.900 A @ 208.0 V 11.600 A @ 460.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	90.2 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK

Part detail

Revision	S
Type	AC
Mech. spec.	37G814
Base	
Status	PRD/A
Elec. spec.	37WGS864
Layout	37LYG814
Eff. date	05-02-2024
CD Diagram	CD0005
Poles	02
Leads	9#14
Proprietary	False
Created date	11-28-2011

Front Face Code	Standard
Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	11.6 a
Insulation Class	F
Inverter Code	Inverter Duty
KVA Code	G
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	9 @ 14 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3730M
Mounting Arrangement	F1
Number of Poles	2
Overall Length	18.63 IN
Power Factor	88
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 Extension Location	Pulley End
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	3490 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.	CEM3711T						
SPEC	37G814S864G1						
HP	10						
VOLTS	230/460						
AMPS	23.2/11.6						
RPM	3490						
FRAME	215TC	HZ	60	PH	3		
SF	1.15	CODE	G	DES	B	CLASS	F
NEMA NOM. EFF	90.2	PF	88				
RATING	40C AMB-CONT						
CC	010A						
ENCL	TEFC	SER					
DE	6307	ODE	6206				
VPWM INVERTER READY							
CT6-60H(10:1)VT3-60H(20:1	50Hz 10HP 190/380V 28.2/14.1A						SF1.0

Parts list

Part number	Description	Quantity
SA234919	SA 37G814S864G1	1.000 ea
RA221884	RA 37G814S864G1	1.000 ea
36FN3000C02SP	EXFN, PLASTIC, 5.25 OD, 1.175 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
HA7000A02	KEY RETAINER RING, 1 1/8 DIA, 1 3/8 DIA	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 *** NLA IN 5 GALLON	0.028 ga
HA3104A14	THRUBOLT- 5/16-18 X12.125(OHIO)	4.000 ea
LC0005	CONN.DIA.,TY M,9-LD,DUAL VOLT,REVERSING	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

MN416A01	TAG-INSTAL-MAINT no wire (2500bx)4/22	1.000 ea
LB1624	COMBINED WARNING LABEL, ISO/ANSI PICTOGR	1.000 ea

AC Induction Motor Performance Data

Record # 53399

Typical performance - not guaranteed values

Winding: 37WGS864-R028		Type: 3730M		Enclosure: TEFC	
Nameplate Data			460 V, 60 Hz: High Voltage Connection		
Rated Output (HP)	10	Full Load Torque	14.94 LB-FT		
Volts	230/460	Start Configuration	direct on line		
Full Load Amps	23.2/11.6	Breakdown Torque	46.1 LB-FT		
R.P.M.	3490	Pull-up Torque	19.3 LB-FT		
Hz	60 Phase	3	Locked-rotor Torque	23.7 LB-FT	
NEMA Design Code	B KVA Code	G	Starting Current	77.3 A	
Service Factor (S.F.)	1.15	No-load Current	3.66 A		
NEMA Nom. Eff.	90.2 Power Factor	88	Line-line Res. @ 25°C	1.05 Ω	
Rating - Duty	40C AMB-CONT		Temp. Rise @ Rated Load	78°C	
S.F. Amps			Temp. Rise @ S.F. Load	97°C	
			Locked-rotor Power Factor	33.7	
			Rotor inertia	0.273 LB-FT ²	

Load Characteristics 460 V, 60 Hz, 10 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	57	78	85	88	90	89	88
Efficiency	88.6	91.7	91.6	90.6	89.1	87.3	90
Speed	3573	3548	3520	3489	3455	3417	3464
Line amperes	4.56	6.49	8.9	11.6	14.6	17.9	13.5

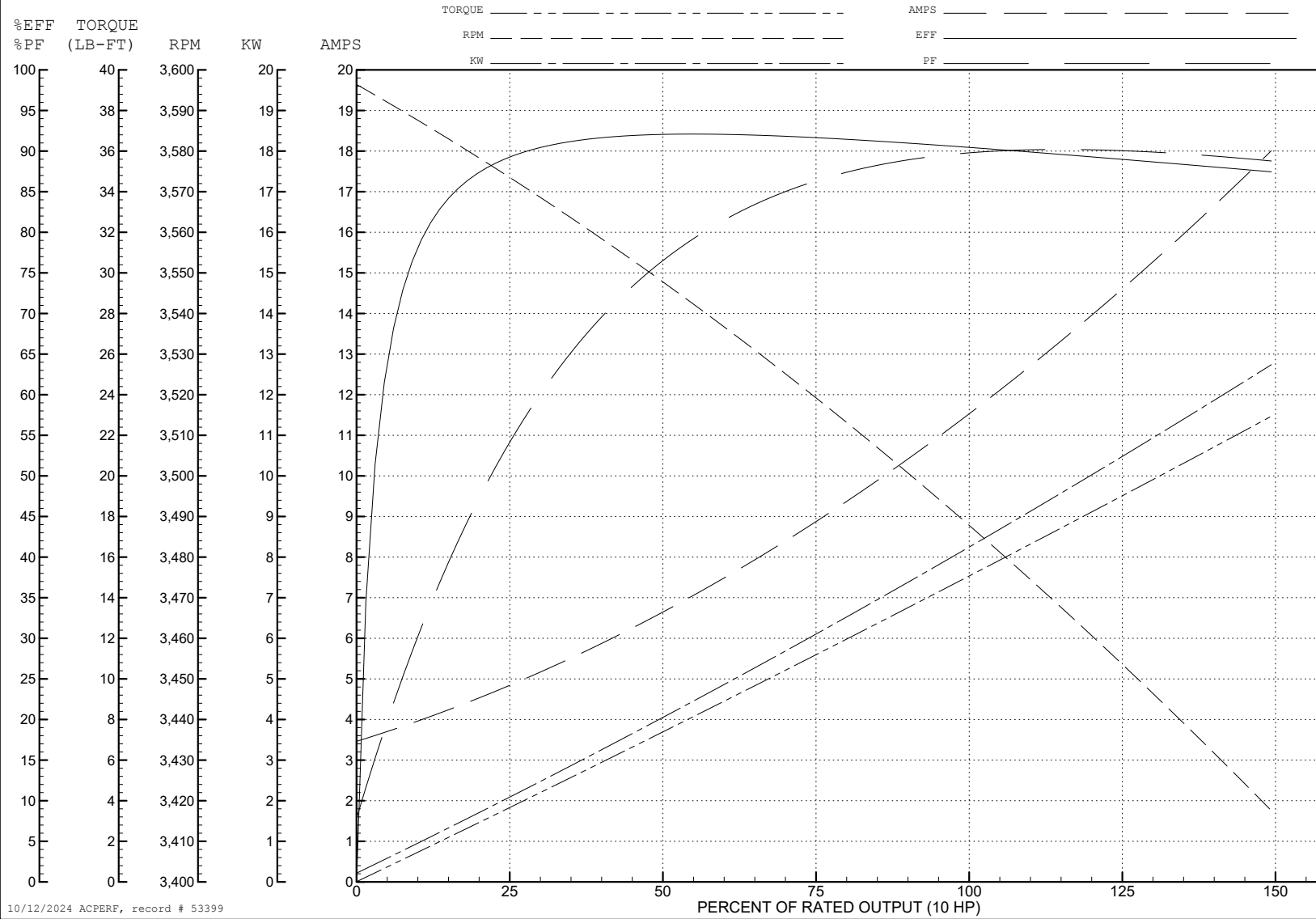
ABB Motors and Mechanical Inc.

WINDING # 37WGS864

Typical performance - not guaranteed values.

10 HP 3 PH 60 HZ 3490 RPM 460 V 3730M

TORQUES (LB-FT): PO=46.1 PU=19.3 LR=23.7 LRA=77.3



10/12/2024 ACPERF, record # 53399

AC Induction Motor Performance Data

Record # 59174

Typical performance - not guaranteed values

Winding: 37WGS864-R028		Type: 3728M	Enclosure: TEFC
Nameplate Data		230 V, 60 Hz: Low Voltage Connection	
Rated Output (HP)	10	Full Load Torque	15 LB-FT
Volts	230/460	Start Configuration	direct on line
Full Load Amps	23.6/11.8	Breakdown Torque	45.7 LB-FT
R.P.M.	3490	Pull-up Torque	21.9 LB-FT
Hz	60 Phase	Locked-rotor Torque	25.4 LB-FT
NEMA Design Code	B KVA Code	Starting Current	152 A
Service Factor (S.F.)	1.15	No-load Current	8.25 A
NEMA Nom. Eff.	90.2 Power Factor	Line-line Res. @ 25°C	0.248 Ω
Rating - Duty	40C AMB-CONT	Temp. Rise @ Rated Load	79°C
S.F. Amps		Temp. Rise @ S.F. Load	98°C
		Locked-rotor Power Factor	33.1
		Rotor inertia	0.255 LB-FT ²

Load Characteristics 230 V, 60 Hz, 10 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	53	74	84	87	88	89	88
Efficiency	86.7	91	91.4	90.6	89.1	87.3	90
Speed	3575	3547	3516	3482	3445	3401	3464
Line amperes	9.88	13.7	18.2	23.6	29.5	36	27.1

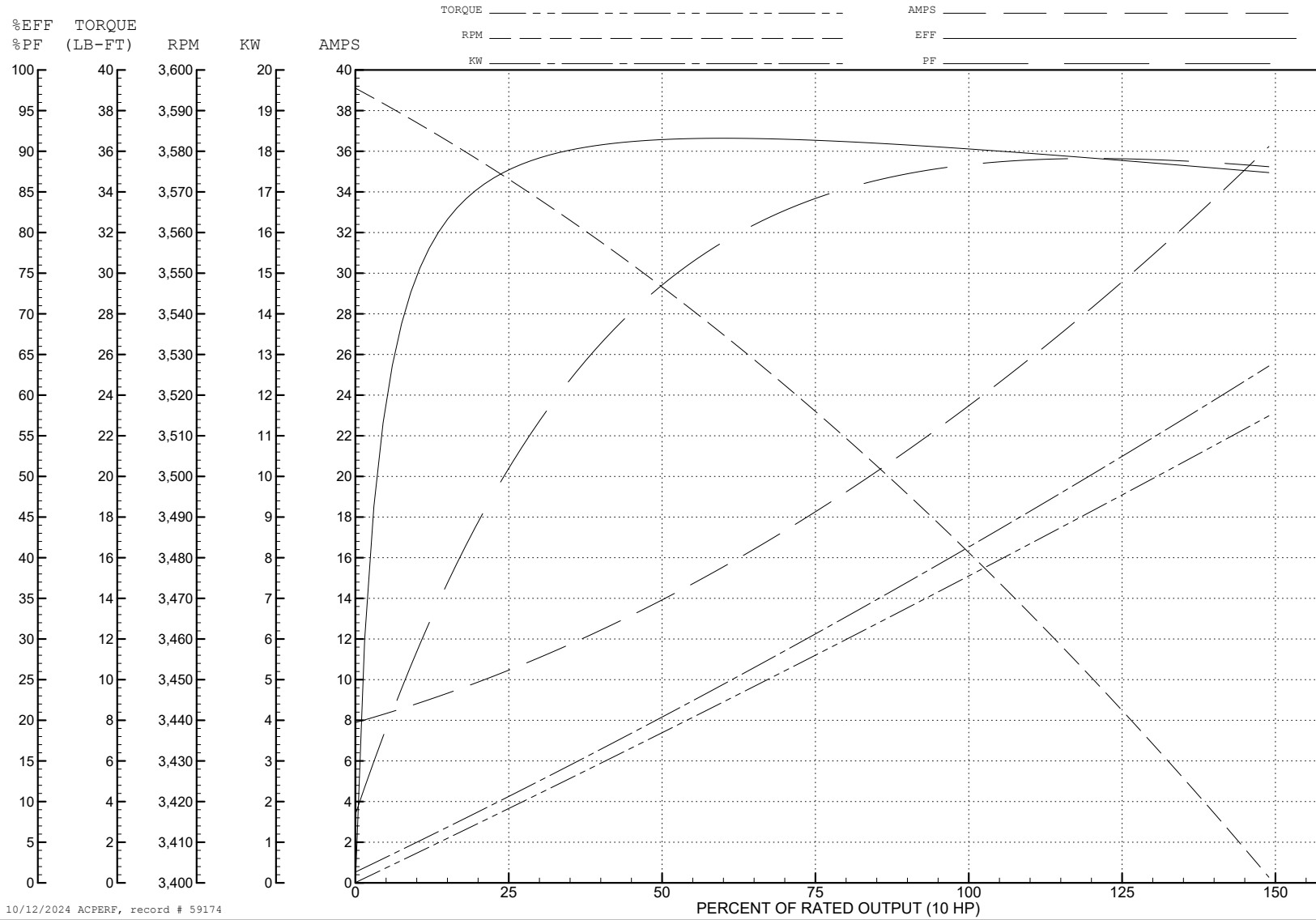
ABB Motors and Mechanical Inc.

WINDING # 37WGS864

Typical performance - not guaranteed values.

10 HP 3 PH 60 HZ 3490 RPM 230 V 3728M

TORQUES (LB-FT): PO=45.7 PU=21.9 LR=25.4 LRA=152



10/12/2024 ACPERF, record # 59174

AC Induction Motor Performance Data

Record # 69805

Typical performance - not guaranteed values

Winding: 37WGS864-R028		Type: 3728M		Enclosure: TEFC	
Nameplate Data			480 V, 60 Hz: High Voltage Connection		
Rated Output (HP)	10	Full Load Torque	14.97 LB-FT		
Volts	230/460	Start Configuration	direct on line		
Full Load Amps	23.6/11.8	Breakdown Torque	50.07 LB-FT		
R.P.M.	3490	Pull-up Torque	24.32 LB-FT		
Hz	60 Phase	3	Locked-rotor Torque	28.21 LB-FT	
NEMA Design Code	B	KVA Code	G	Starting Current	80.47 A
Service Factor (S.F.)	1.15	No-load Current	4.85 A		
NEMA Nom. Eff.	90.2	Power Factor	87	Line-line Res. @ 25°C	0.991 Ω
Rating - Duty	40C AMB-CONT		Temp. Rise @ Rated Load	78°C	
S.F. Amps			Temp. Rise @ S.F. Load	97°C	
			Locked-rotor Power Factor	33.1	
			Rotor inertia	0.255 LB-FT ²	

Load Characteristics 480 V, 60 Hz, 10 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	46	67	78	83	86	87	85
Efficiency	85.9	90.5	91.2	90.5	89.3	87.6	89.8
Speed	3577	3550	3521	3489	3454	3414	3468
Line amperes	5.56	7.29	9.34	11.81	14.5	17.52	13.4

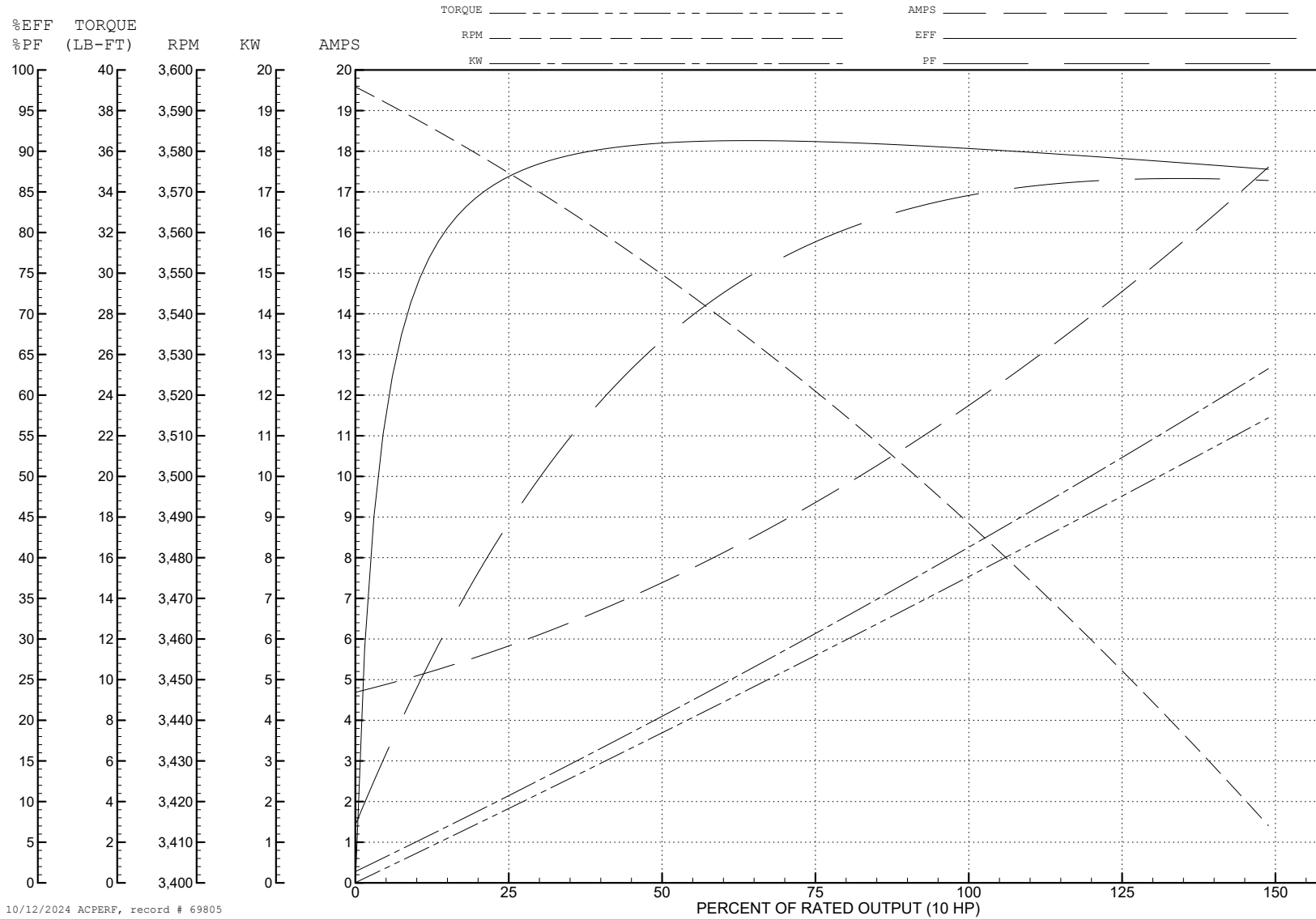
ABB Motors and Mechanical Inc.

WINDING # 37WGS864

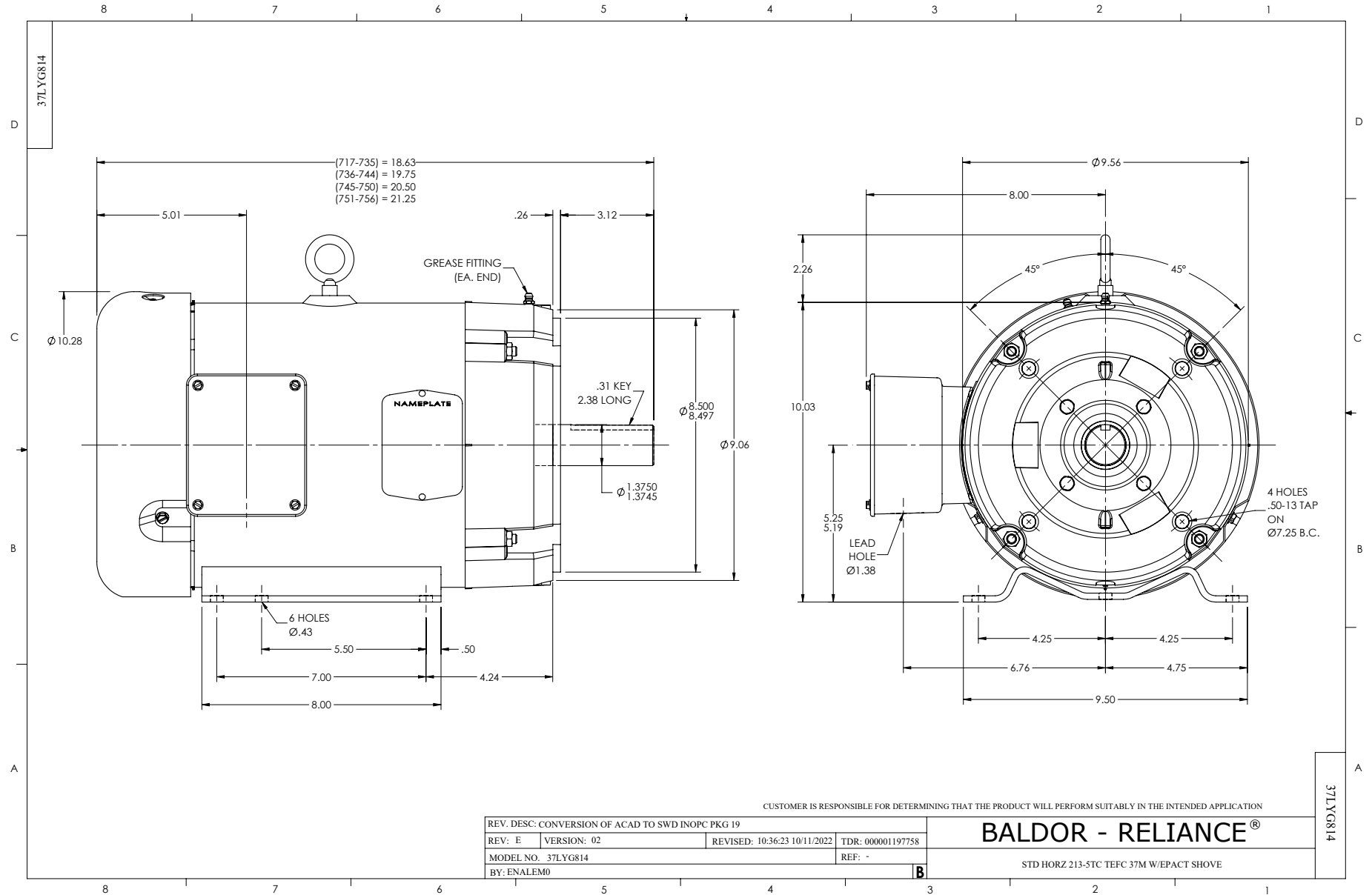
Typical performance - not guaranteed values.

10 HP 3 PH 60 HZ 3490 RPM 480 V 3728M

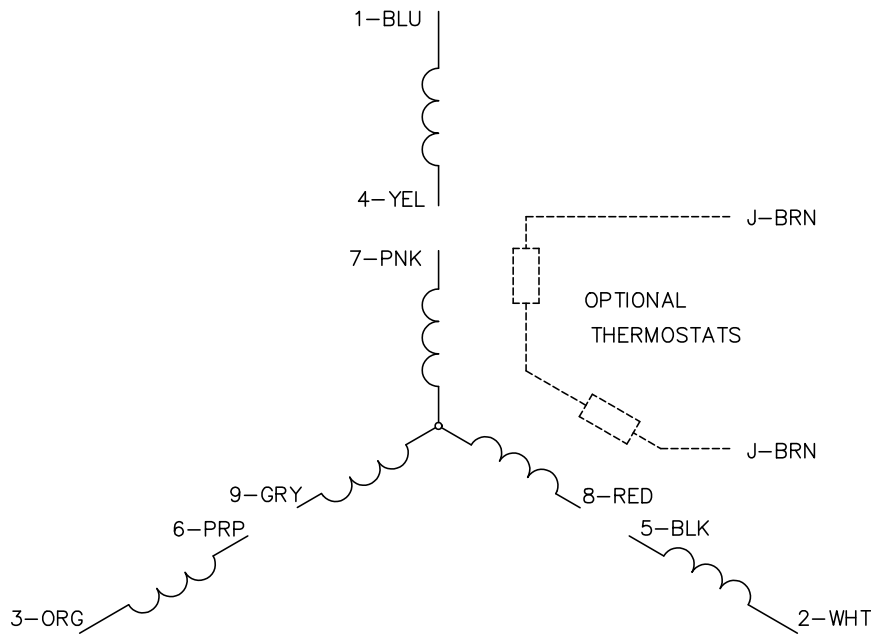
TORQUES (LB-FT): PO=50.07 PU=24.32 LR=28.21 LRA=80.47



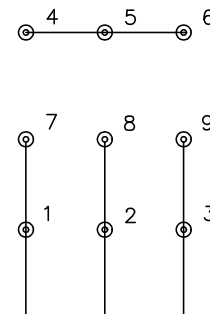
10/12/2024 ACPERF, record # 69805



CD0005

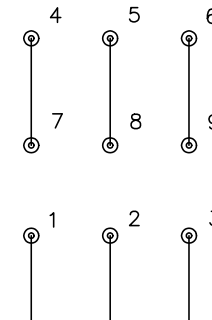


LOW VOLTAGE
(2Y)



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
S00000		FILE: AAA00005140	MDL: -
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BALDOR ELECTRIC Co.

3PH, DV, 9 LEADS

CD0005