

**BALDOR • RELIANCE**

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# Customer information packet

## CEM3711T

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

Class - None

Division - Not Applicable

## Specifications

Enclosure	TEFC
Frame	215TC
Frame Material	Steel
Frequency	60.00 Hz
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
XP Class and Group	None
XP Division	Not Applicable
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

<b>Front Face Code</b>	Standard
<b>Front Shaft Indicator</b>	None
<b>Heater Indicator</b>	No Heater
<b>High Voltage Full Load Amps</b>	11.6 a
<b>Insulation Class</b>	F
<b>Inverter Code</b>	Inverter Duty
<b>KVA Code</b>	G
<b>Lifting Lugs</b>	Standard Lifting Lugs
<b>Locked Bearing Indicator</b>	Locked Bearing
<b>Motor Lead Exit</b>	Ko Box
<b>Motor Lead Quantity/Wire Size</b>	9 @ 14 AWG
<b>Motor Lead Termination</b>	Flying Leads
<b>Motor Standards</b>	NEMA
<b>Motor Type</b>	3730M
<b>Mounting Arrangement</b>	F1
<b>Number of Poles</b>	2
<b>Overall Length</b>	18.63 IN
<b>Power Factor</b>	88
<b>Product Family</b>	General Purpose
<b>Pulley End Bearing Type</b>	Ball
<b>Pulley Face Code</b>	C-Face
<b>Pulley Shaft Indicator</b>	Standard
<b>Rodent Screen</b>	None
<b>RoHS Status</b>	ROHS COMPLIANT
<b>Service Factor</b>	1.15
<b>Shaft Diameter</b>	1.375 IN
<b>Shaft Extension Location</b>	Pulley End
<b>Shaft Ground Indicator</b>	No Shaft Grounding
<b>Shaft Rotation</b>	Reversible
<b>Shaft Slinger Indicator</b>	No Slinger
<b>Speed</b>	3490 rpm
<b>Speed Code</b>	Single Speed
<b>Starting Method</b>	Direct on line
<b>Thermal Device - Bearing</b>	None

<b>Thermal Device - Winding</b>	None
<b>Vibration Sensor Indicator</b>	No Vibration Sensor
<b>Winding Thermal 1</b>	None
<b>Winding Thermal 2</b>	None

**Nameplate**

**NP3441LUA**

<b>CAT.NO.</b>	CEM3711T						
<b>SPEC</b>	37G814S864G1						
<b>HP</b>	10						
<b>VOLTS</b>	230/460						
<b>AMPS</b>	23.2/11.6						
<b>RPM</b>	3490						
<b>FRAME</b>	215TC	<b>HZ</b>	60	<b>PH</b>	3		
<b>SF</b>	1.15	<b>CODE</b>	G	<b>DES</b>	B	<b>CLASS</b>	F
<b>NEMA NOM. EFF</b>	90.2	<b>PF</b>	88				
<b>RATING</b>	40C AMB-CONT						
<b>CC</b>	010A						
<b>ENCL</b>	TEFC	<b>SER</b>					
<b>DE</b>	6307	<b>ODE</b>	6206				
<b>VPWM INVERTER READY</b>							
<b>CT6-60H(10:1)VT3-60H(20:1</b>	50Hz 10HP 190/380V 28.2/14.1A						SF1.0

**AC Induction Motor Performance Data**

Record # 53399

Typical performance - not guaranteed values

Winding: 37WGS864-R028		Type: 3730M	Enclosure: TEFC	
<b>Nameplate Data</b>			<b>460 V, 60 Hz: High Voltage Connection</b>	
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	Locked-rotor Torque	23.7 LB-FT	
NEMA Design Code	B KVA Code	Starting Current	77.3 A	
Service Factor (S.F.)	1.15	No-load Current	3.66 A	
NEMA Nom. Eff.	90.2 Power Factor	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 <sup>2</sup>	

**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

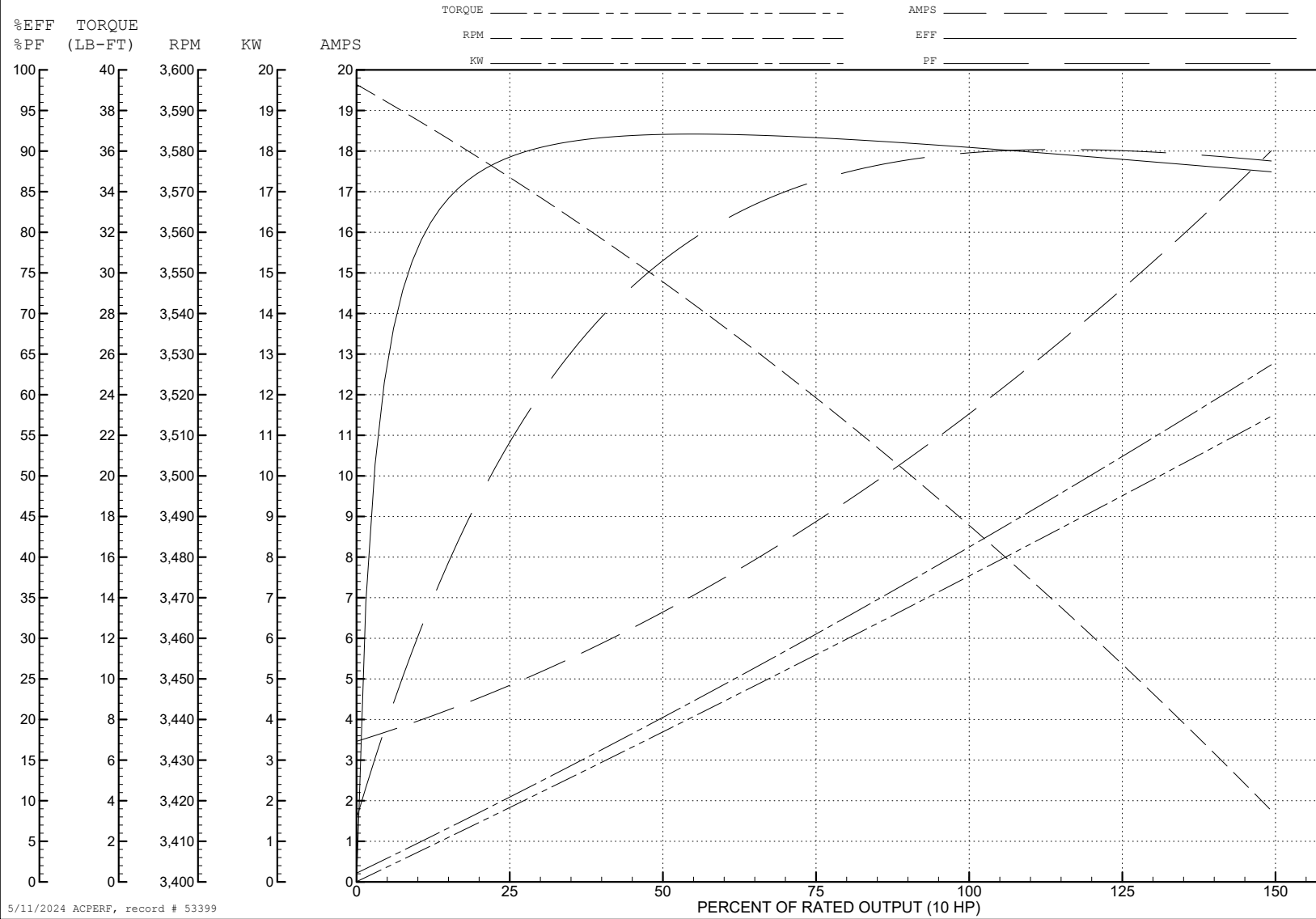
ABB Motors and Mechanical Inc.

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



5/11/2024 ACPERF, record # 53399

**AC Induction Motor Performance Data**

Record # 59174

Typical performance - not guaranteed values

Winding: 37WGS864-R028		Type: 3728M	Enclosure: TEFC
<b>Nameplate Data</b>		<b>230 V, 60 Hz: Low Voltage Connection</b>	
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 <sup>2</sup>

**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



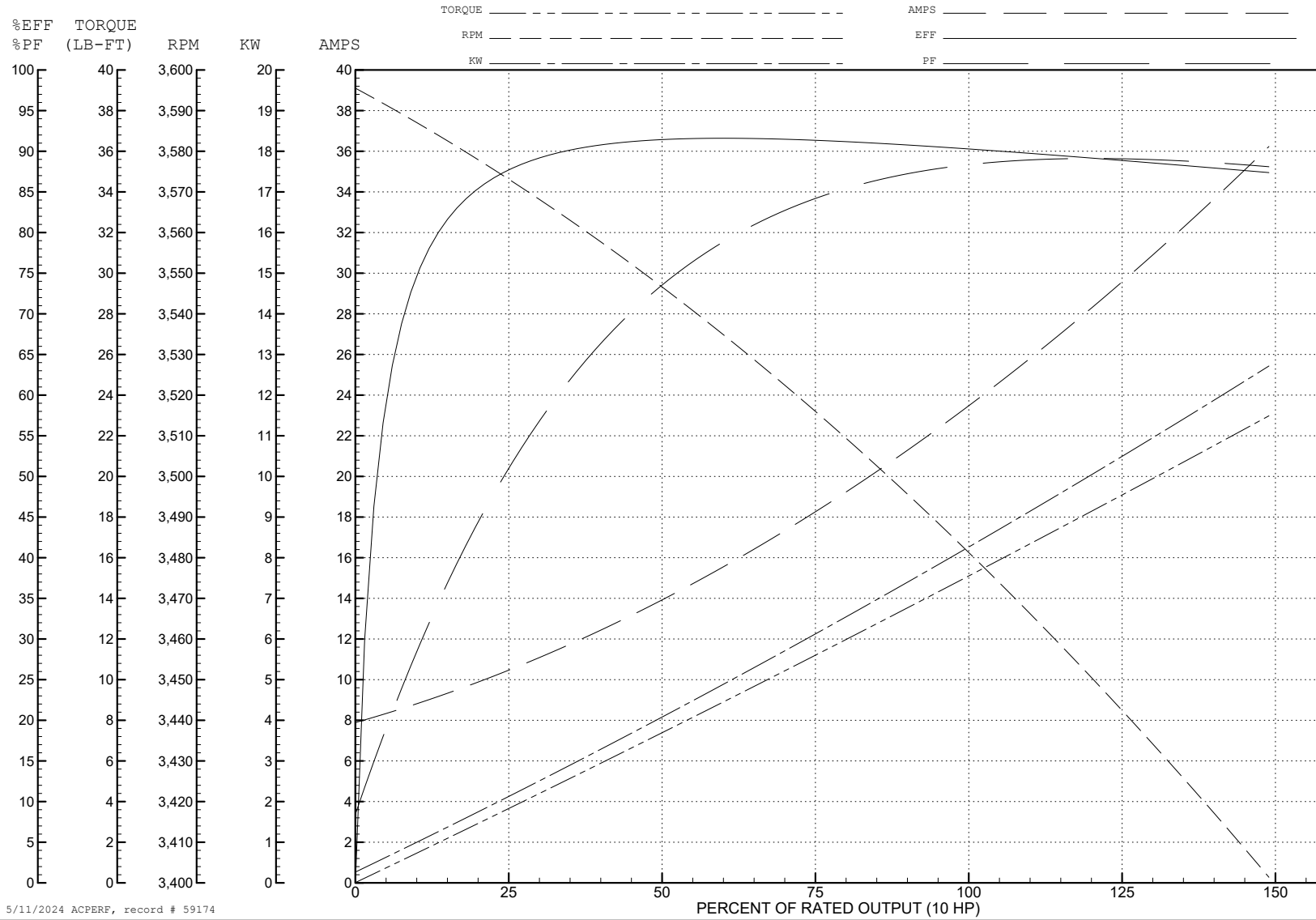
ABB Motors and Mechanical Inc.

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



**AC Induction Motor Performance Data**

Record # 69805

Typical performance - not guaranteed values

Winding: 37WGS864-R028		Type: 3728M	Enclosure: TEFC
<b>Nameplate Data</b>		<b>480 V, 60 Hz: High Voltage Connection</b>	
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	Locked-rotor Torque	28.21 LB-FT
NEMA Design Code	B KVA Code	Starting Current	80.47 A
Service Factor (S.F.)	1.15	No-load Current	4.85 A
NEMA Nom. Eff.	90.2 Power Factor	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 <sup>2</sup>

**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

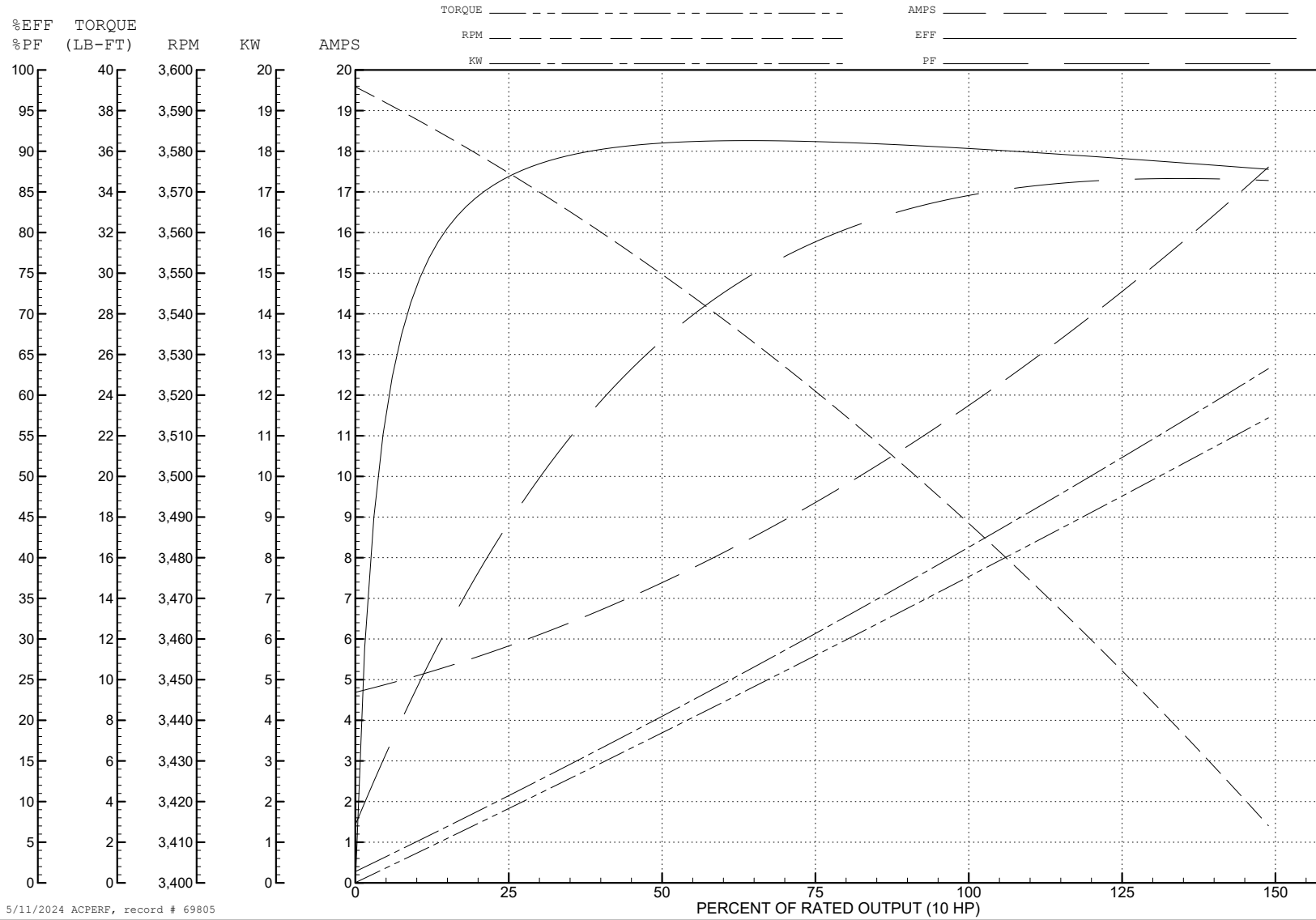
ABB Motors and Mechanical Inc.

WINDING # 37WGS864

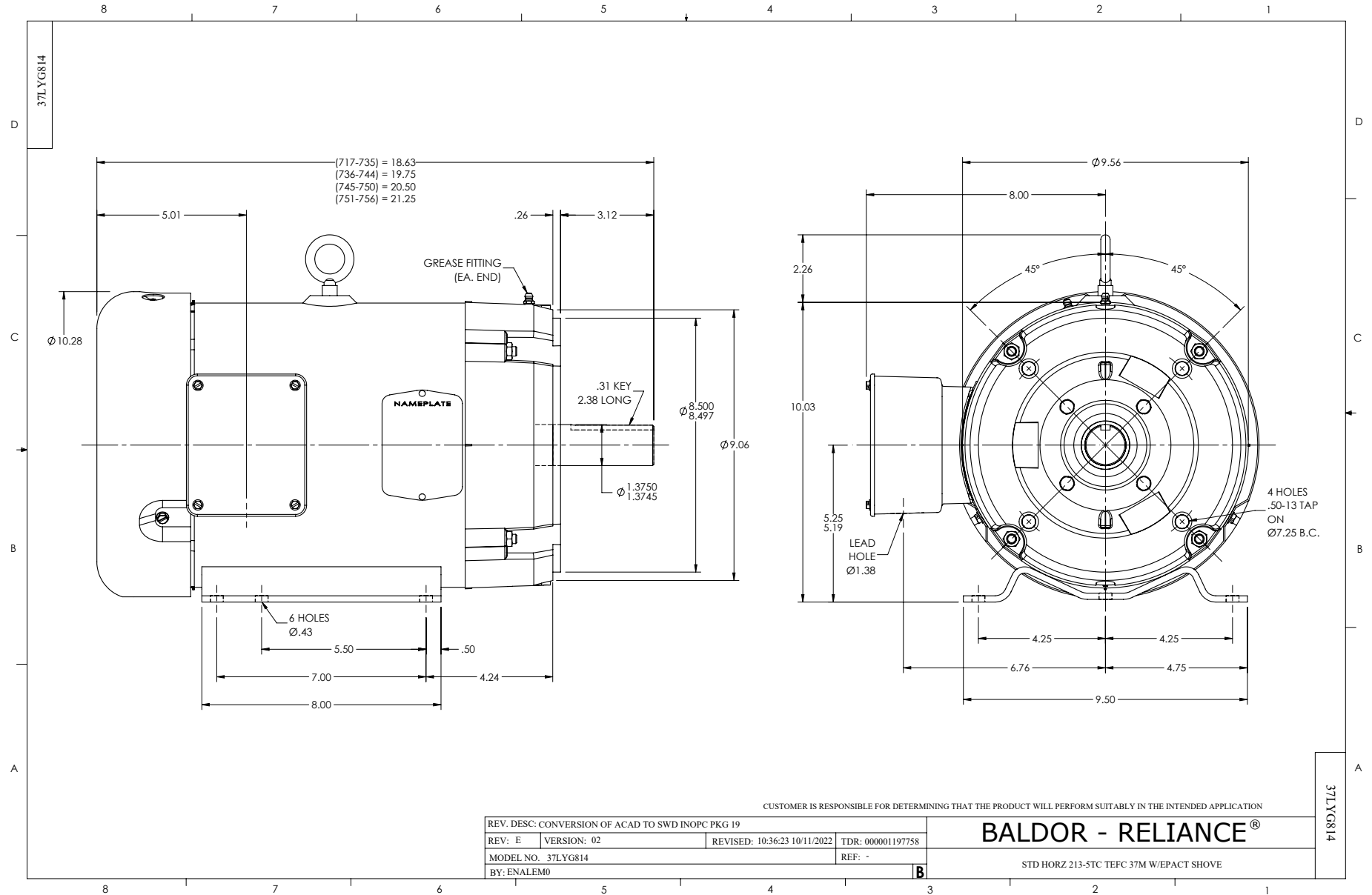
Typical performance - not guaranteed values.

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

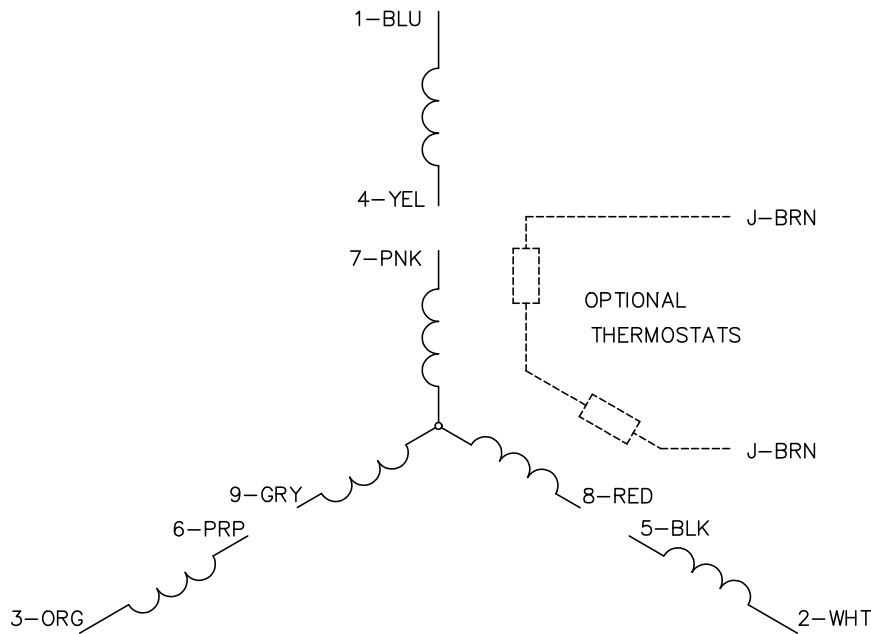
TORQUES (LB-FT): PO=50.07 PU=24.32 LR=28.21 LRA=80.47



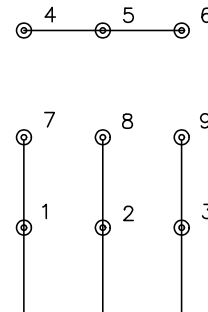
5/11/2024 ACPERF, record # 69805



CD0005

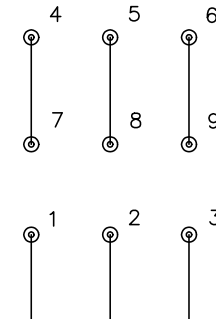


LOW VOLTAGE  
(2Y)



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.

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