

BALDOR • RELIANCE

Customer information packet

EM3711T

10HP, 3490RPM, 3PH, 60HZ, 215T, 3728M, TEFC, F1

Class - None

Division - Not Applicable

Specifications

Enclosure	TEFC
Frame	215T
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	T
Type	AC
Mech. spec.	37H244
Base	
Status	PRD/A
Elec. spec.	37WGS864
Layout	37LYH244
Eff. date	05-02-2024
CD Diagram	CD0005
Poles	02
Leads	9#14
Proprietary	False
Created date	01-03-2011

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	No 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	17.89 IN
Power Factor	88
Product Family	General Purpose
Pulley End Bearing Type	Ball
Pulley Face Code	Standard
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.	EM3711T						
SPEC	37H244S864G2						
HP	10						
VOLTS	230/460						
AMPS	23.2/11.6						
RPM	3490						
FRAME	215T		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

Accessories

Part number	Description	Multiplier
37-1304	C FACE KIT	A8

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	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 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

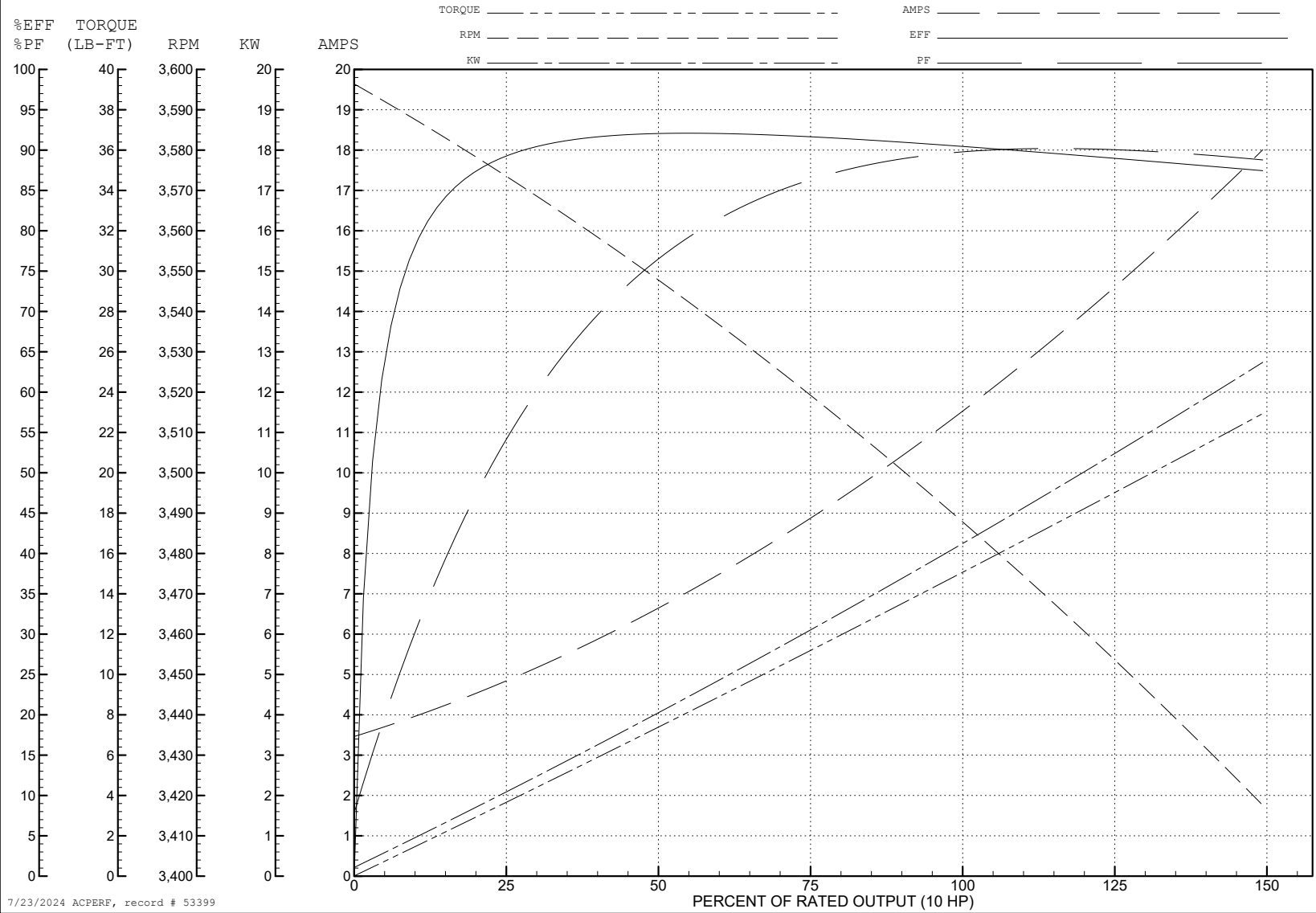
ABB Motors and Mechanical Inc.

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



7/23/2024 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	3	Locked-rotor Torque	25.4 LB-FT	
NEMA Design Code	B KVA Code	G	Starting Current	152 A	
Service Factor (S.F.)	1.15	No-load Current	8.25 A		
NEMA Nom. Eff.	90.2 Power Factor	87	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

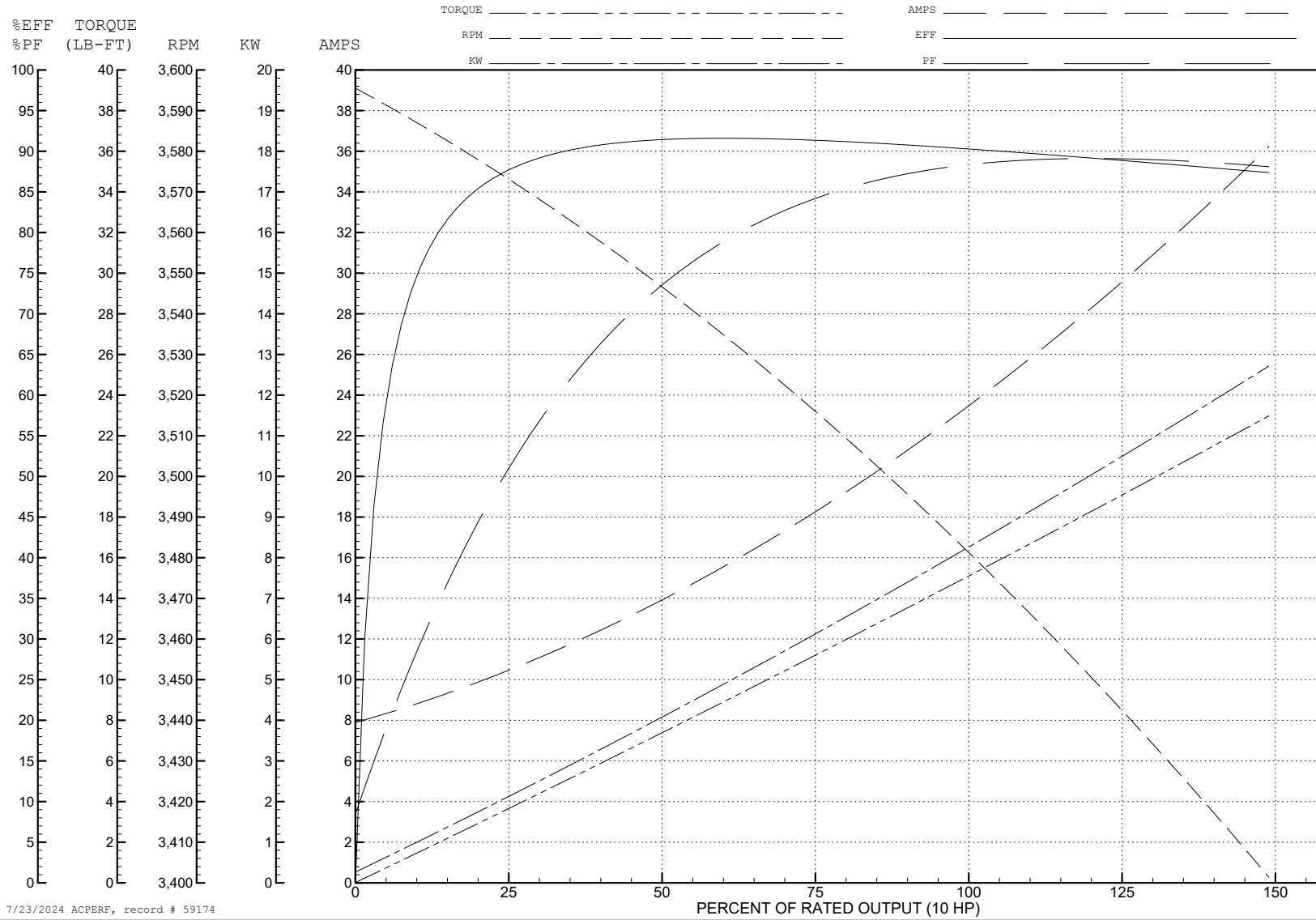
ABB Motors and Mechanical Inc.

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



7/23/2024 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	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 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

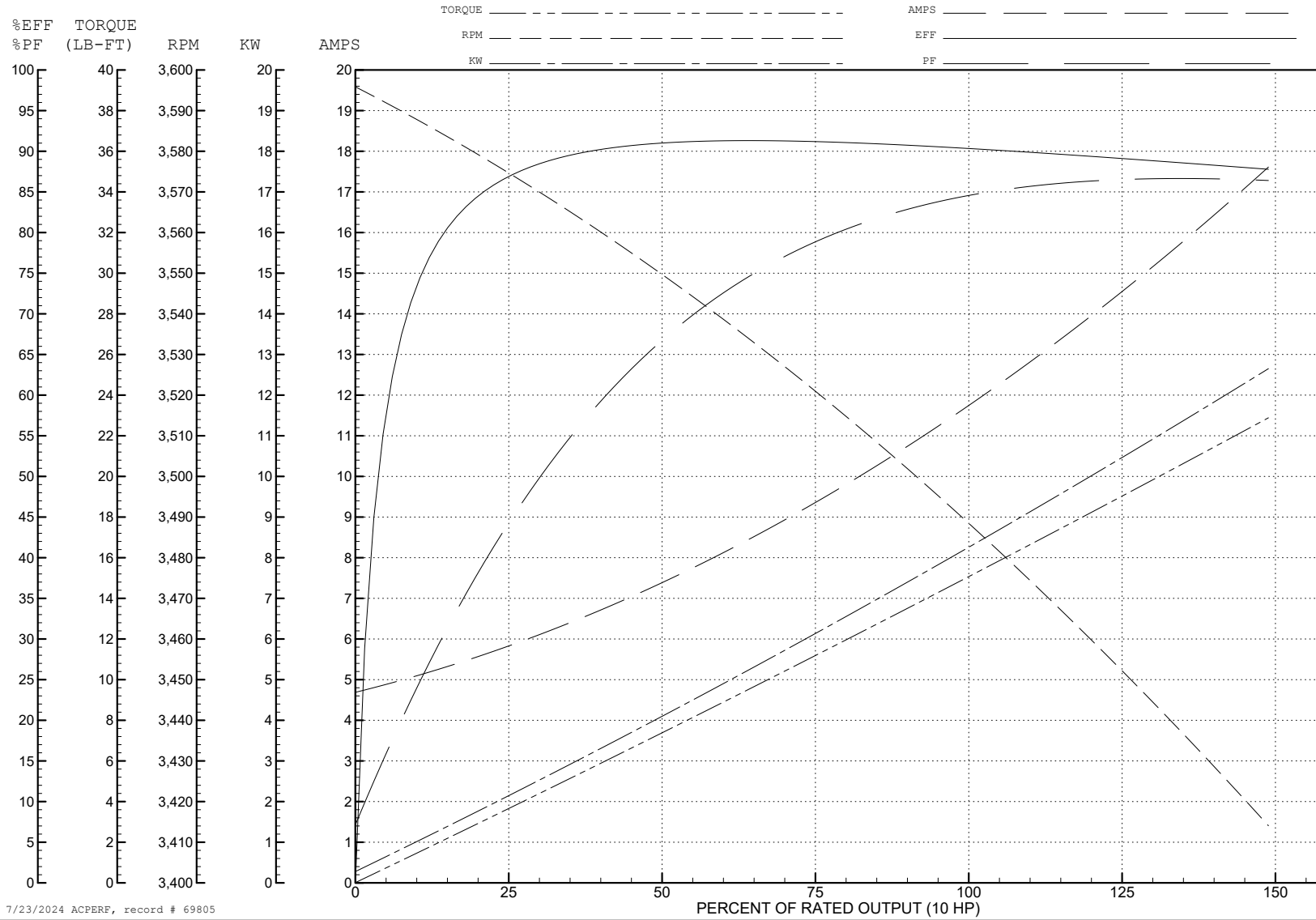
ABB Motors and Mechanical Inc.

WINDING # 37WGS864

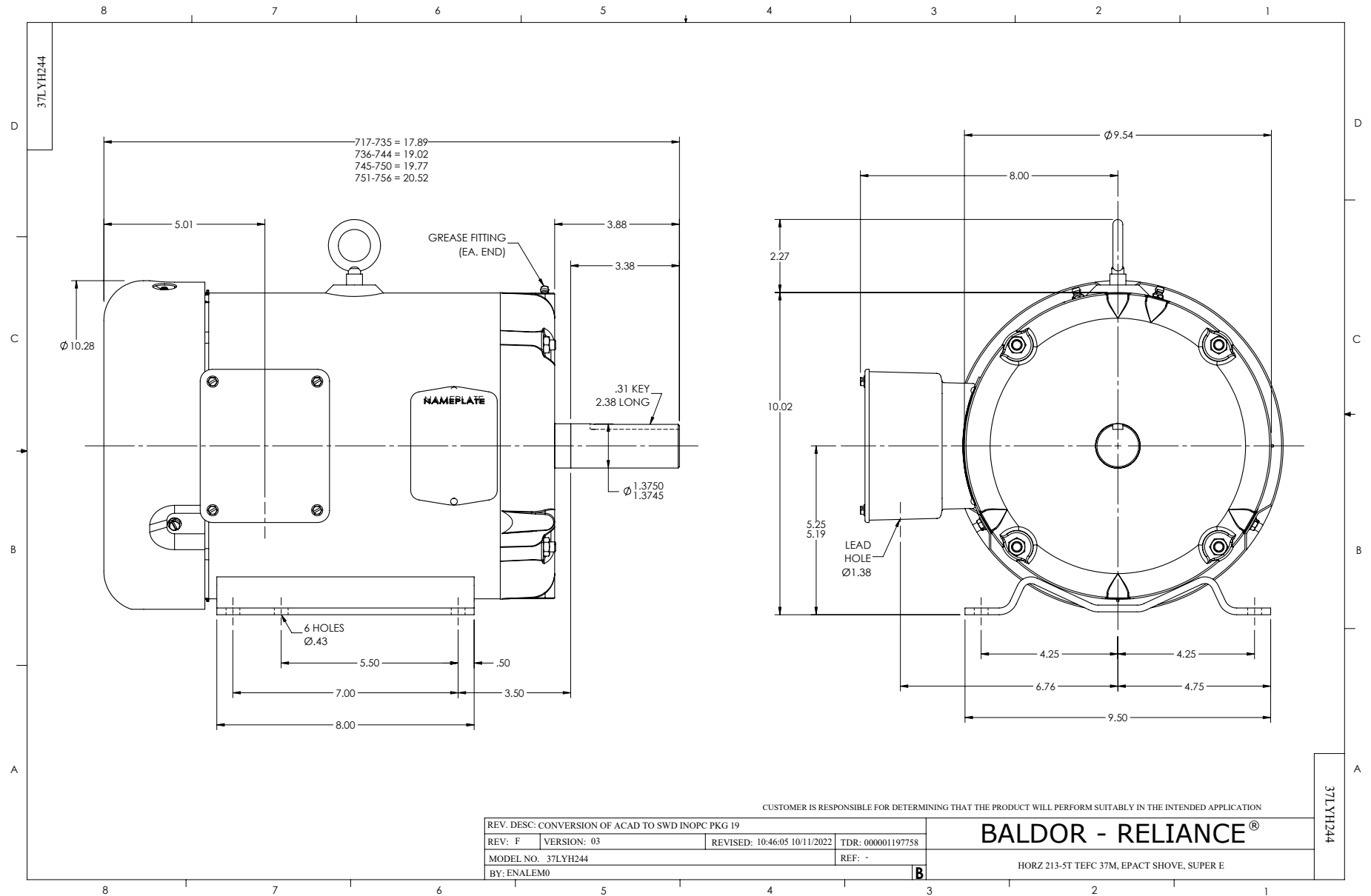
Typical performance - not guaranteed values.

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

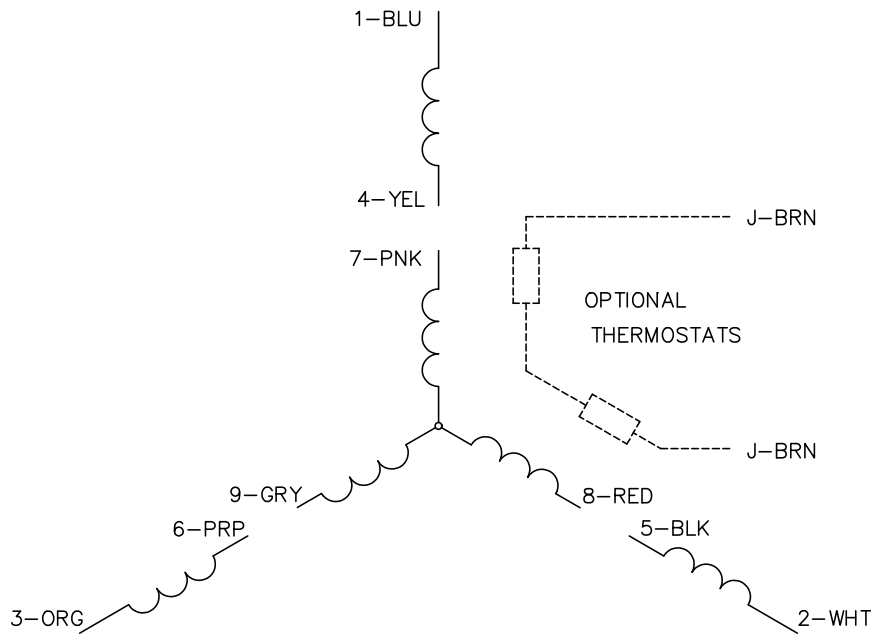
TORQUES (LB-FT): PO=50.07 PU=24.32 LR=28.21 LRA=80.47



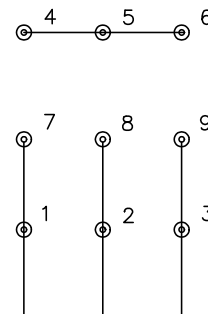
7/23/2024 ACPERF, record # 69805



CD0005

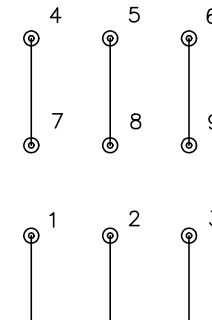


LOW VOLTAGE
(2Y)



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

500000

FILE: AAA00005140

MDL: -

MTL: -

BALDOR ELECTRIC Co.

3PH, DV, 9 LEADS

CD0005