BALDOR • RELIANCE

Product Information Packet

CEM3711T

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

Part Detail

Revision:	P	**Status:**	PRD/A	**Change #:**		**Proprietary:**	No
Type:	AC	**Elec. Spec:**	37WGS864	**CD Diagram:**	CD0005	**Mfg Plant:**	
Mech. Spec:	37G814	**Layout:**	37LYG814	**Poles:**	02	**Created Date:**	11-28-2011
Base:	RG	**Eff. Date:**	07-03-2019	**Leads:**	9#14		

Specs

Catalog Number:	CEM3711T	**Insulation Class:**	F
Enclosure:	TEFC	**Inverter Code:**	Inverter Duty
Frame:	215TC	**KVA Code:**	G
Frame Material:	Steel	**Lifting Lugs:**	Standard Lifting Lugs
Output @ Frequency:	10.000 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:**	3730M
XP Division:	Not Applicable	**Mounting Arrangement:**	F1
Agency Approvals:	UR	**Power Factor:**	88
	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:	Rigid	**Rodent Screen:**	None
Bearing Grease Type:	Polyrex EM (-20F +300F)	**RoHS Status:**	ROHS COMPLIANT
Blower:	None	**Shaft Extension Location:**	Pulley End

Current @ Voltage:	11.600 A @ 460.0 V
	23.200 A @ 230.0 V
	24.900 A @ 208.0 V
Design Code:	B
Drip Cover:	No Drip Cover
Duty Rating:	CONT
Electrically Isolated Bearing:	Not Electrically Isolated
Feedback Device:	NO FEEDBACK
Front Face Code:	Standard
Front Shaft Indicator:	None
Heater Indicator:	No Heater

Shaft Ground Indicator:	No Shaft Grounding
Shaft Rotation:	Reversible
Shaft Slinger Indicator:	No Slinger
Speed Code:	Single Speed
Motor Standards:	NEMA
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	**USABLE AT 208V**	24.9					
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 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

Parts List (continued)

Part Number	Description	Quantity
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
HA3104A14	THRUBOLT- 5/16-18 X12.125(OHIO)	4.000 EA
LC0005E01	CONN.DIA./WARNING LABEL (LC0005/LB1119N)	1.000 EA
NP3441LUA	ALUM SUPER-E VPWM INV READY UL CSA-EEV C	1.000 EA
G0PA1000	PKG GRP, PRINT PK1026A06	1.000 EA
MN416A01	TAG-INSTAL-MAINT no wire (1200/bx) 1/21	1.000 EA

AC Induction Motor Performance Data
Record # 53399
Typical performance - not guaranteed values

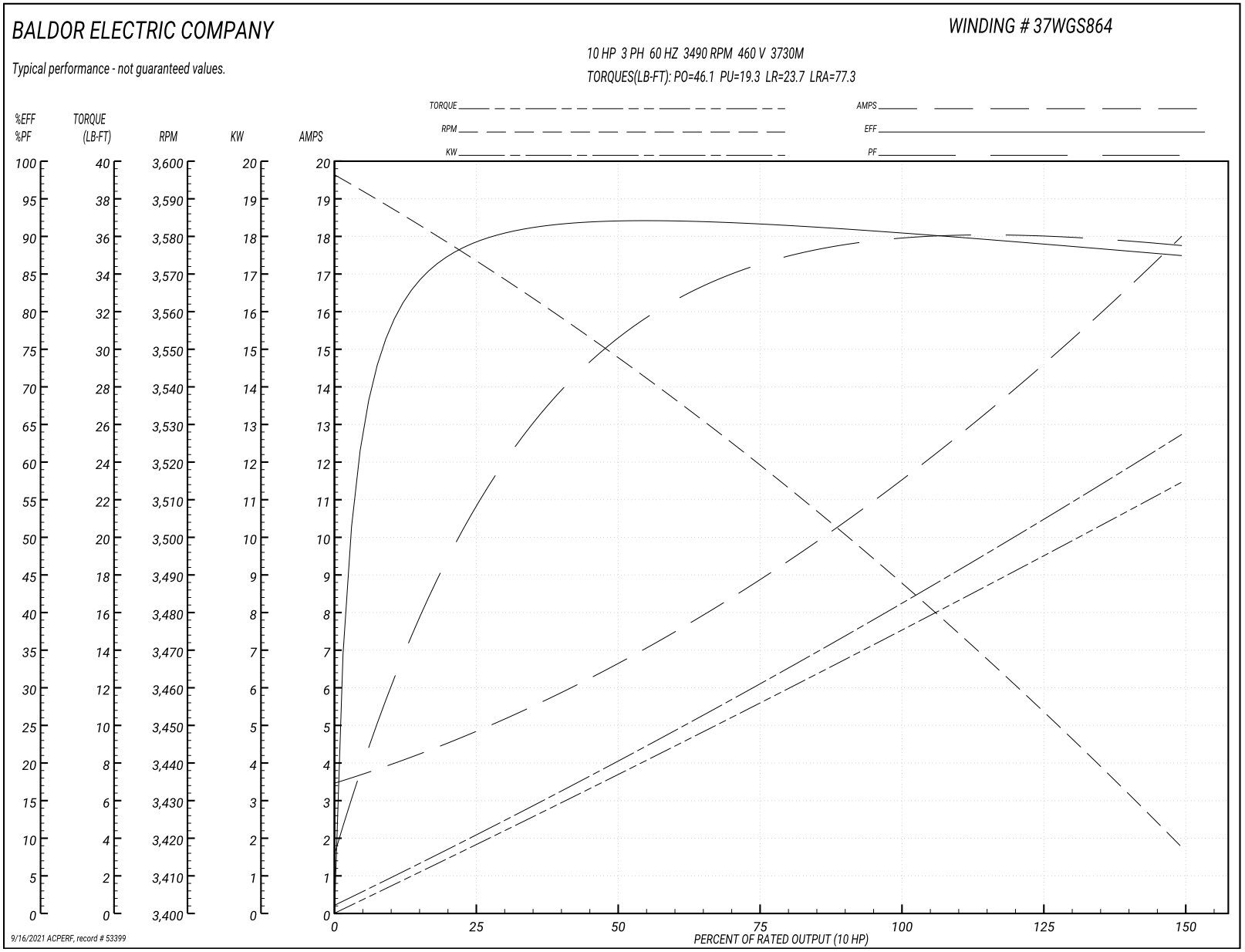
Winding: 37WGS864-R028	**Type:** 3730M	**Enclosure:** TEFC

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. @ 25ºC**	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-FT2

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

Performance Graph at 460V, 60Hz, 10.0HP Typical performance - Not guaranteed values



AC Induction Motor Performance Data
Record # 59174
Typical performance - not guaranteed values

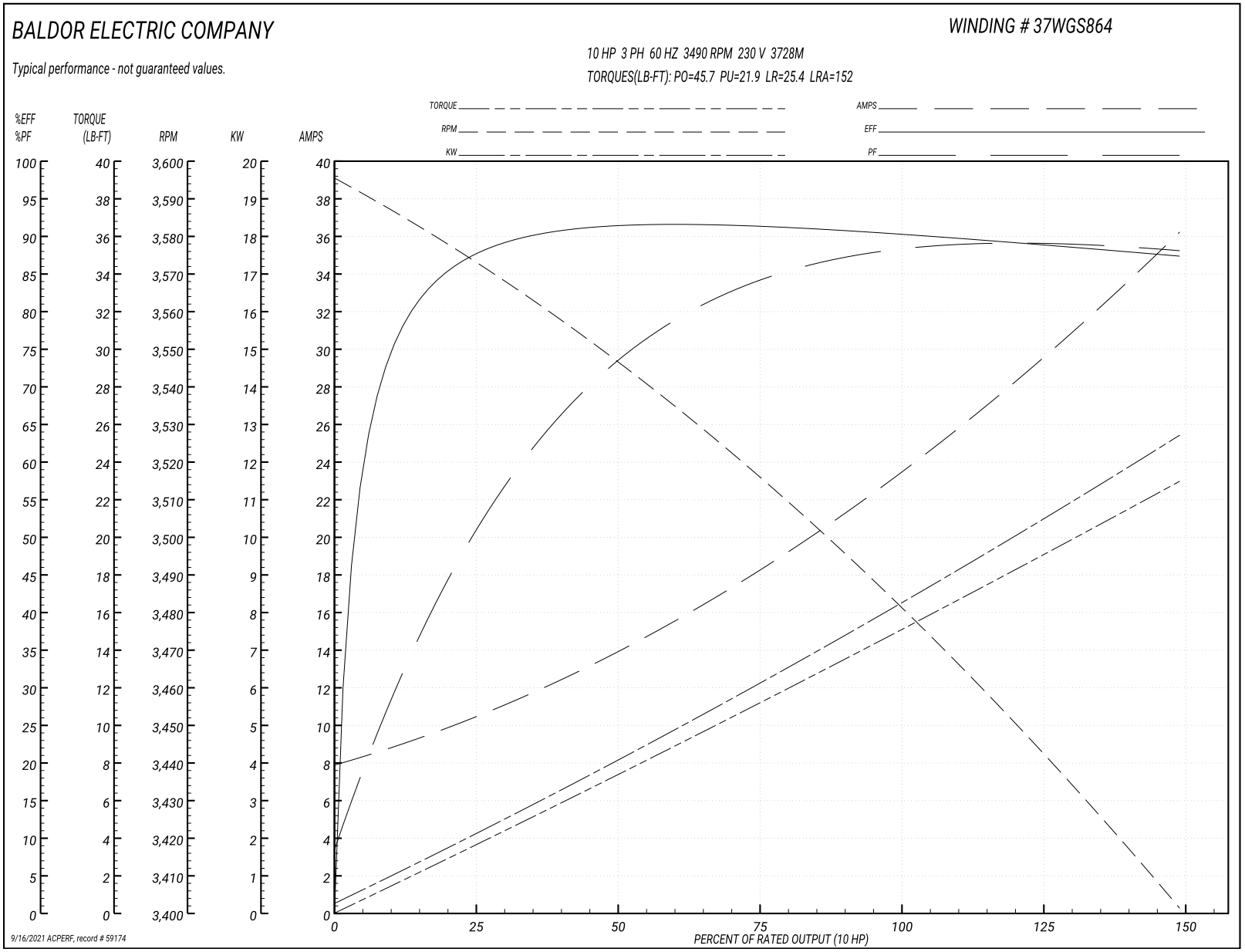
Winding: 37WGS864-R028	**Type:** 3728M	**Enclosure:** TEFC

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. @ 25ºC**	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-FT2

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

Performance Graph at 230V, 60Hz, 10.0HP Typical performance - Not guaranteed values



AC Induction Motor Performance Data
Record # 69805
Typical performance - not guaranteed values

Winding: 37WGS864-R028 **Type:** 3728M **Enclosure:** TEFC

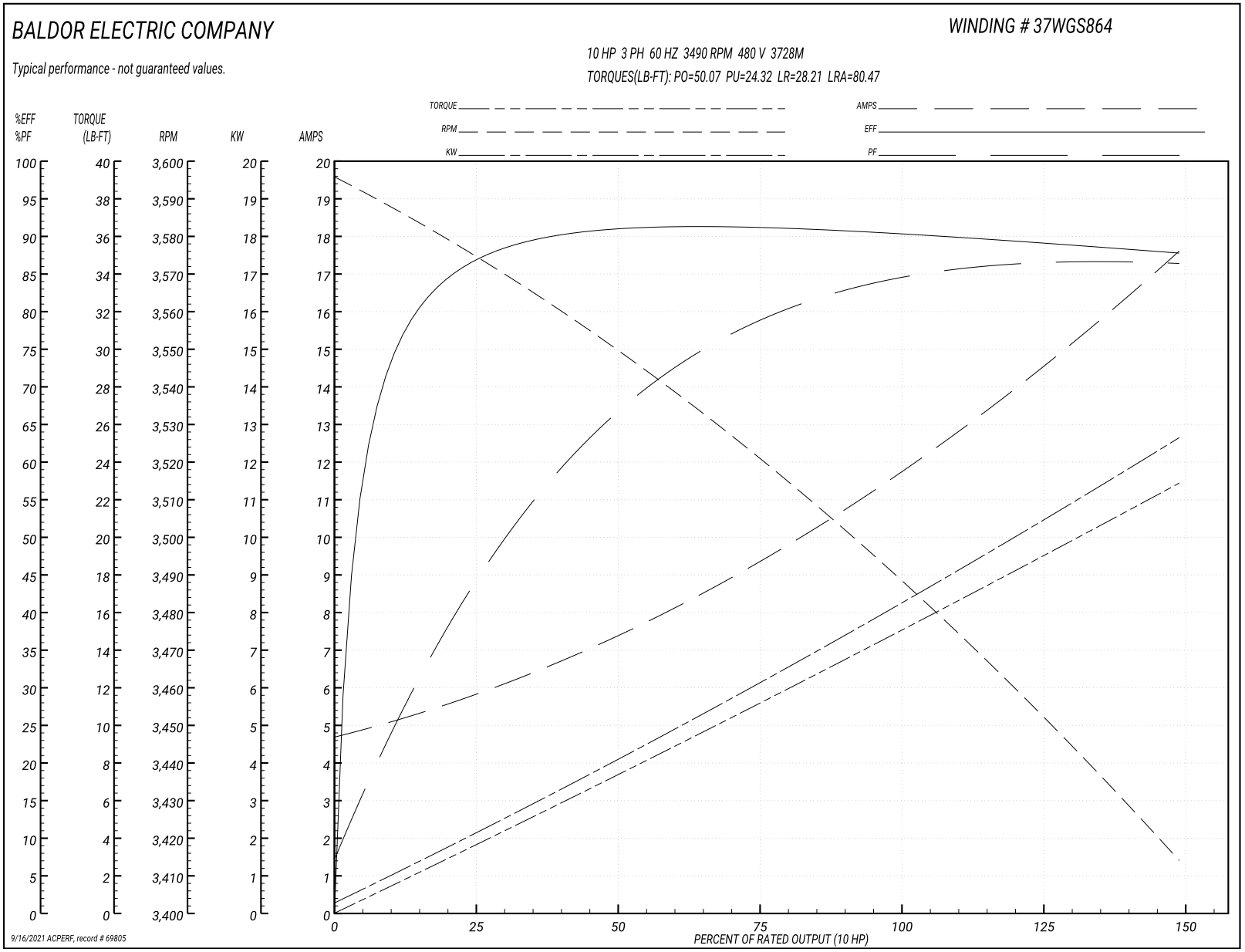
Nameplate Data		
Rated Output (HP)		10
Volts		230/460
Full Load Amps		23.6/11.8
R.P.M.		3490
Hz	60 **Phase**	3
NEMA Design Code	B **KVA Code**	G
Service Factor (S.F.)		1.15
NEMA Nom. Eff.	90.2 **Power Factor**	87
Rating - Duty		40C AMB-CONT
S.F. Amps		

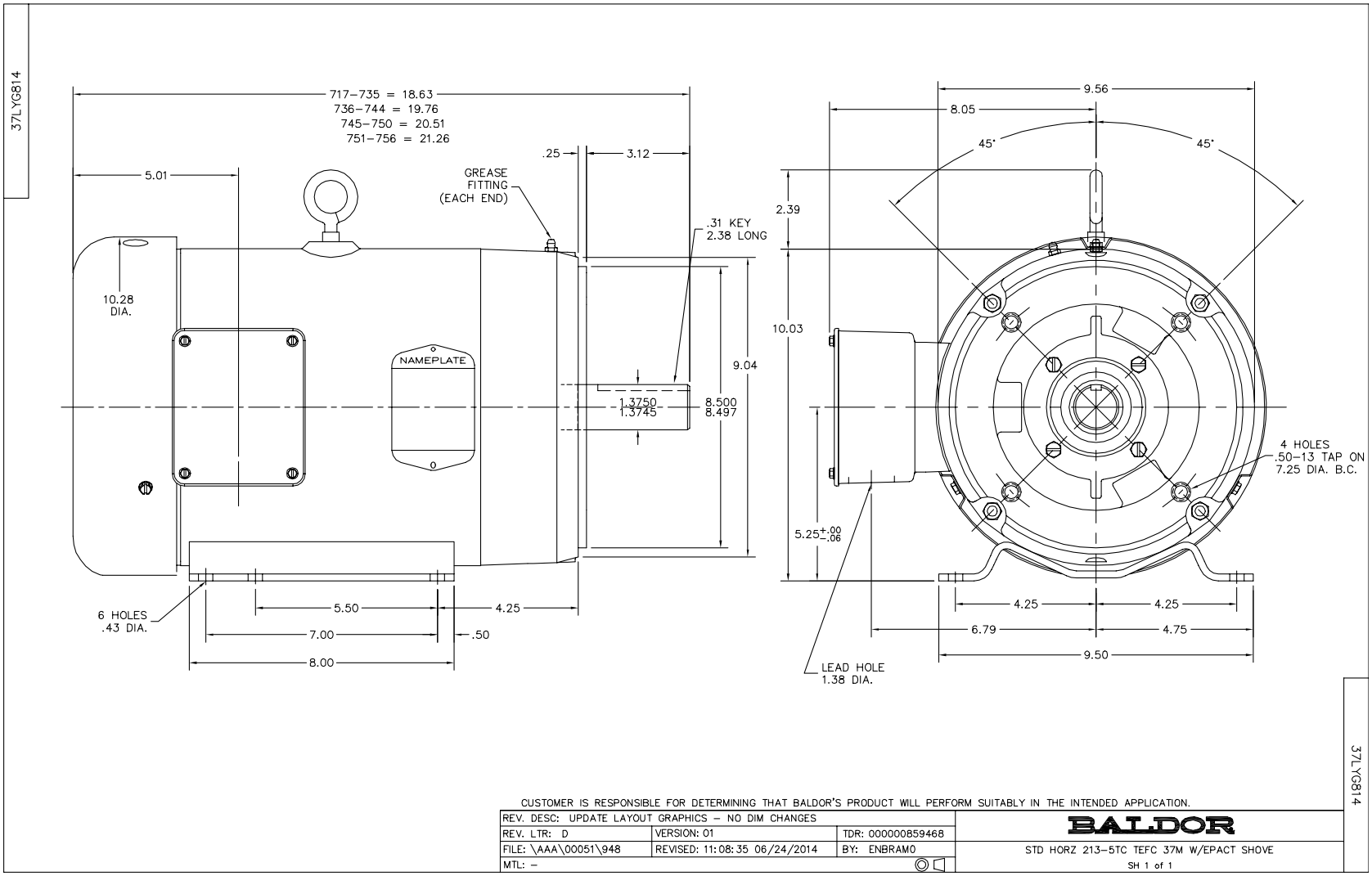
480 V, 60 Hz: High Voltage Connection	
Full Load Torque	14.97 LB-FT
Start Configuration	direct on line
Breakdown Torque	50.07 LB-FT
Pull-up Torque	24.32 LB-FT
Locked-rotor Torque	28.21 LB-FT
Starting Current	80.47 A
No-load Current	4.85 A
Line-line Res. @ 25ºC	0.991 Ω
Temp. Rise @ Rated Load	78°C
Temp. Rise @ S.F. Load	97°C
Locked-rotor Power Factor	33.1
Rotor inertia	0.255 LB-FT2

Load Characteristics 480 V, 60 Hz, 10 HP

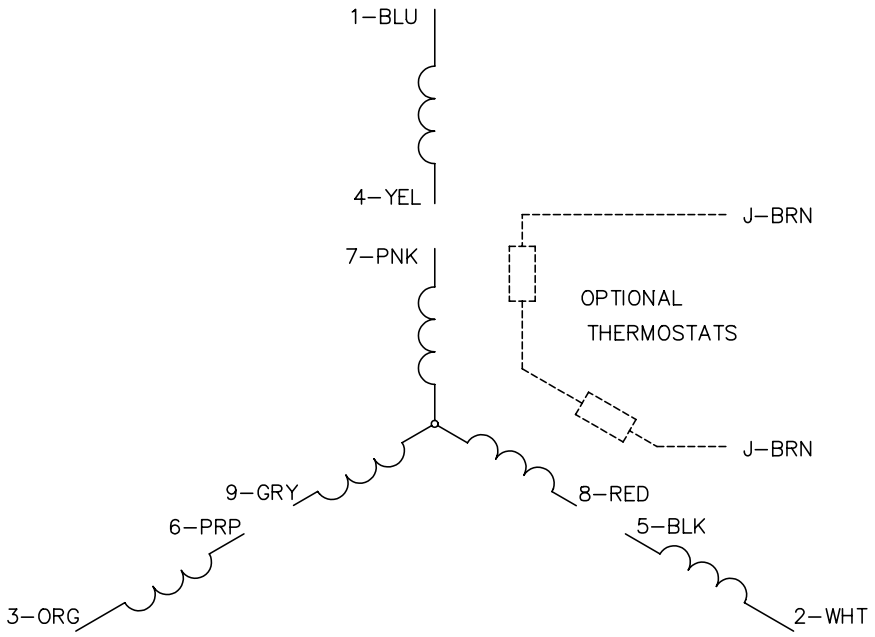
% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	46	67	78	83	86	87	85
Efficiency	85.9	90.5	91.2	90.5	89.3	87.6	89.8
Speed	3577	3550	3521	3489	3454	3414	3468
Line amperes	5.56	7.29	9.34	11.81	14.5	17.52	13.4

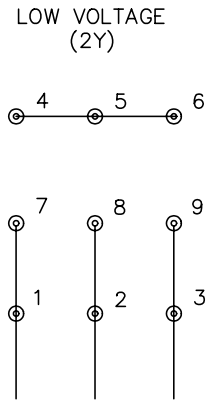
Performance Graph at 480V, 60Hz, 10.0HP Typical performance - Not guaranteed values

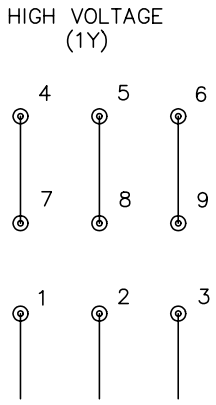



37LYG814
717–735 = 18.63
736–744 = 19.76
745–750 = 20.51
751–756 = 21.26
.25
3.12
5.01
GREASE FITTING (EACH END)
.31 KEY
2.38 LONG
10.28 DIA.
NAMEPLATE
9.04
1.3750
1.3745
8.500
8.497
6 HOLES .43 DIA.
5.50
4.25
7.00
.50
8.00
9.56
8.05
45°
45°
2.39
10.03
4 HOLES .50–13 TAP ON 7.25 DIA. B.C.
5.25 +.00 −.06
4.25
4.25
6.79
4.75
9.50
LEAD HOLE 1.38 DIA.
37LYG814
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT BALDOR'S PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION.
REV. DESC: UPDATE LAYOUT GRAPHICS – NO DIM CHANGES
REV. LTR: D
VERSION: 01
TDR: 000000859468
FILE: \AAA\00051\948
REVISED: 11:08:35 06/24/2014
BY: ENBRAM0
MTL: –
BALDOR
STD HORZ 213–5TC TEFC 37M W/EPACT SHOVE
SH 1 of 1

CD0005







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			BALDOR ELECTRIC Co.
REV. LTR: E	BY: JLP	REVISED: 01/19/99 10:15	TDR: 0171435
CD0005		FILE: AAA00005140	MDL: –
		MTL: –	3PH, DV, 9 LEADS