

# **BALDOR® • RELIANCE**

## **Product Information Packet**

# **CEM3711T**

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

Part Detail							
Revision:	M	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:	07-19-2017	Leads:	9#14		

Specs			
Catalog Number:	CEM3711T	Insulation Class:	F
Enclosure:	TEFC	Inverter Code:	Inverter Ready
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:	3728M
XP Division:	Not Applicable	Mounting Arrangement:	F1
Agency Approvals:	UR	Power Factor:	87
	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

<b>Current @ Voltage:</b>	11.800 A @ 460.0 V	<b>Shaft Ground Indicator:</b>	No Shaft Grounding
	23.600 A @ 230.0 V	<b>Shaft Rotation:</b>	Reversible
	24.900 A @ 208.0 V	<b>Shaft Slinger Indicator:</b>	No Slinger
<b>Design Code:</b>	B	<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

<b>Nameplate NP3441LUA</b>										
<b>CAT.NO.</b>	CEM3711T									
<b>SPEC</b>	37G814S864G1									
<b>HP</b>	10									
<b>VOLTS</b>	230/460									
<b>AMPS</b>	23.6/11.8									
<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>	87						
<b>RATING</b>	40C AMB-CONT									
<b>CC</b>	010A				<b>USABLE AT 208V</b>					24.9
<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

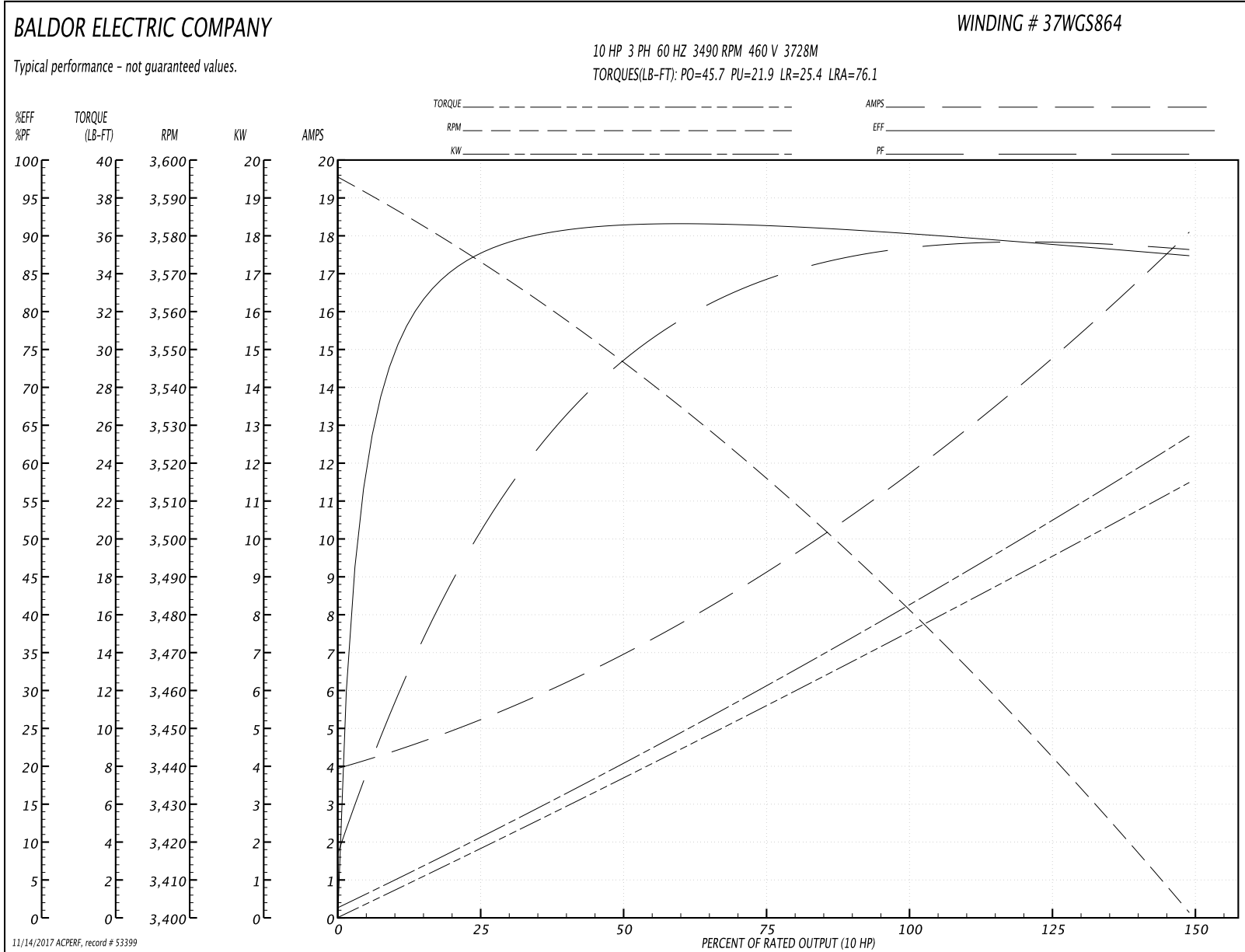
<b>Winding:</b> 37WGS864-R028	<b>Type:</b> 3728M	<b>Enclosure:</b> TEFC
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Nameplate Data				460 V, 60 Hz: High Voltage Connection	
Rated Output (HP)	10			Full Load Torque	15 LB-FT
Volts	230/460			Start Configuration	direct on line
Full Load Amps	23.6/11.8			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	76.1 A
Service Factor (S.F.)	1.15			No-load Current	4.12 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	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 460 V, 60 Hz, 10 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	53	74	84	87	89	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	4.94	6.85	9.1	11.8	14.7	18	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

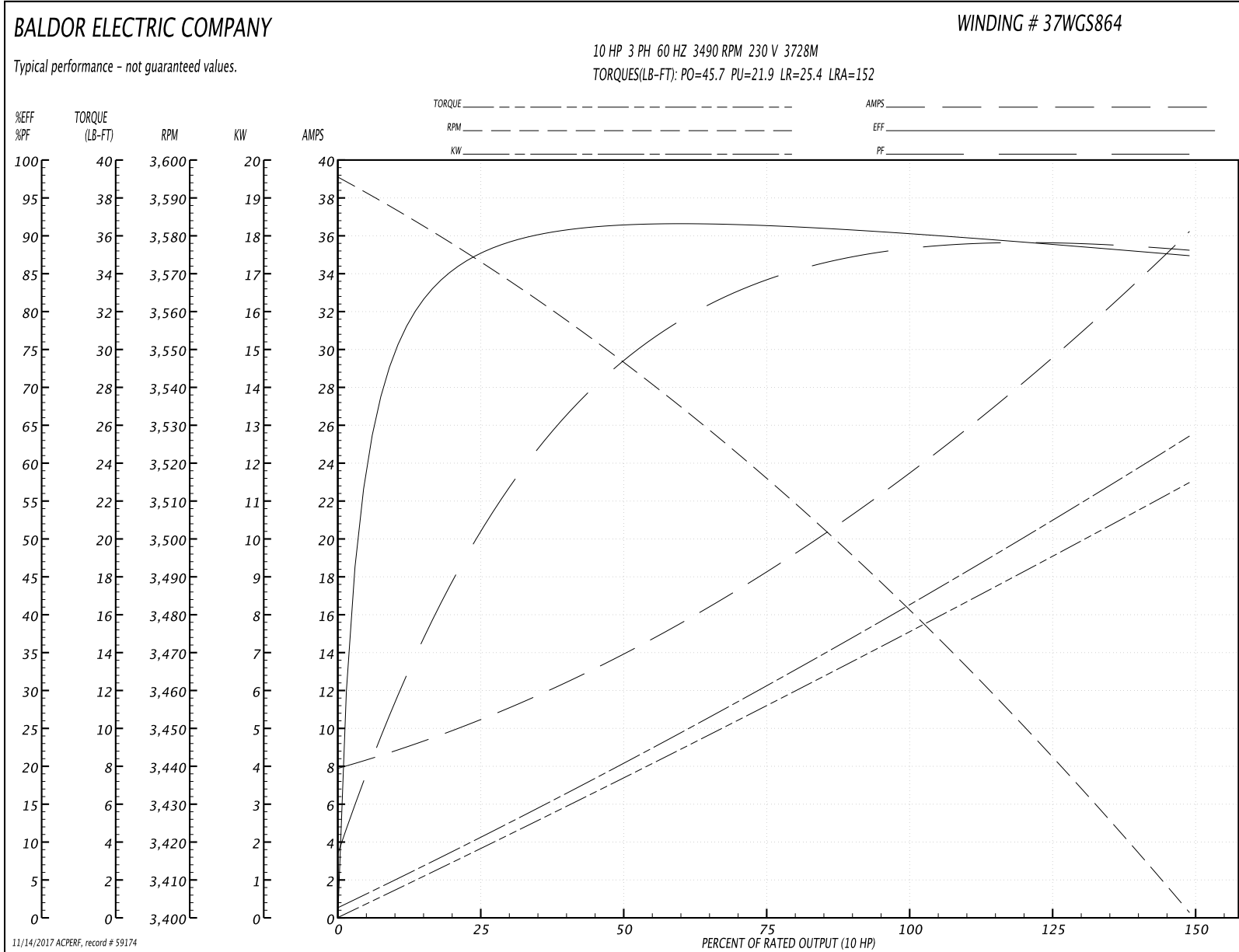
<b>Winding:</b> 37WGS864-R028	<b>Type:</b> 3728M	<b>Enclosure:</b> TEFC
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Nameplate Data				230 V, 60 Hz: Low Voltage Connection	
Rated Output (HP)	10			Full Load Torque	15 LB-FT
Volts	230/460			Start Configuration	direct on line
Full Load Amps	23.6/11.8			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 <sup>2</sup>

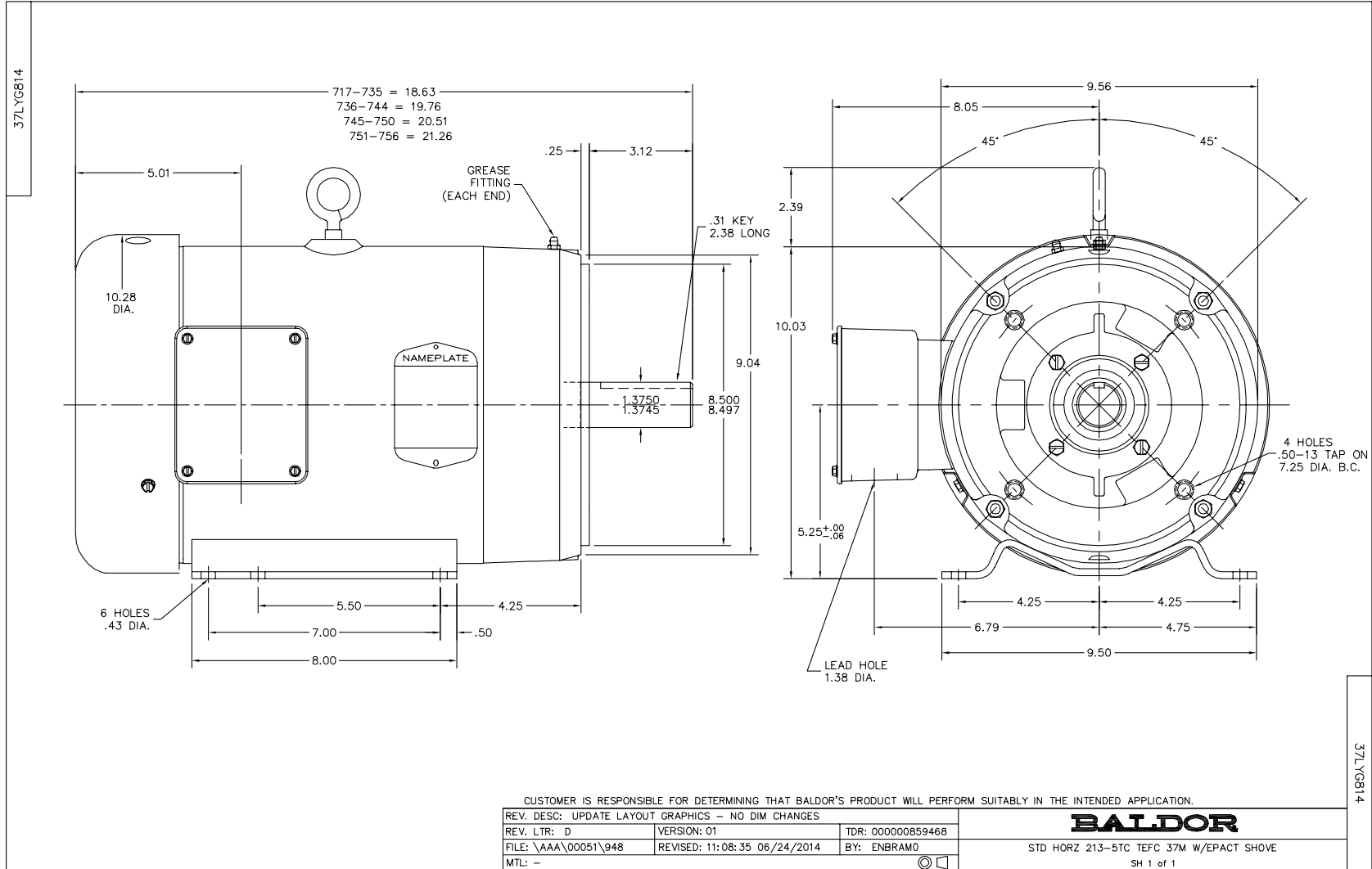
Load Characteristics 230 V, 60 Hz, 10 HP

% 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

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



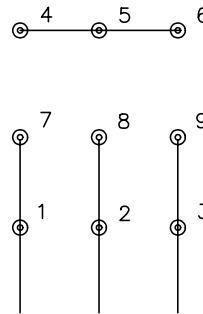




CD0005

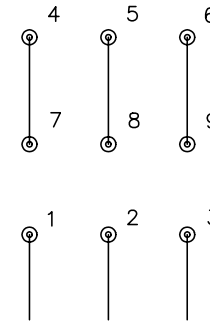


LOW VOLTAGE  
(2Y)



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
900000		FILE: AAA00005140	MDL: -
		MTL: -	

**BALDOR ELECTRIC Co.**

3PH, DV, 9 LEADS

CD0005