

BALDOR® • RELIANCE 

Product Information Packet

EM3709T

7.5HP,3520RPM,3PH,60HZ,213T,3728M,TEFC,F

Part Detail							
Revision:	D	Status:	PRD/A	Change #:		Proprietary:	No
Type:	AC	Elec. Spec:	37WGL869	CD Diagram:	CD0005	Mfg Plant:	
Mech. Spec:	37H244	Layout:	37LYH244	Poles:	02	Created Date:	11-18-2020
Base:	RG	Eff. Date:	05-02-2024	Leads:	9#14		

Specs			
Catalog Number:	EM3709T	Heater Indicator:	No Heater
Enclosure:	TEFC	Insulation Class:	F
Frame:	213T	Inverter Code:	Inverter Ready
Frame Material:	Steel	KVA Code:	J
Motor Letter Type:	Three Phase	Lifting Lugs:	Standard Lifting Lugs
Output @ Frequency:	7.500 HP @ 60 HZ	Locked Bearing Indicator:	No 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
Haz Area Class and Group:	None	Motor Type:	3728M
Haz Area Division:	Not Applicable	Mounting Arrangement:	F1
Agency Approvals:	NEMA_PREMIUM	Power Factor:	84
	UR	Product Family:	General Purpose
	NEMA PREMIUM	Pulley End Bearing Type:	Ball
	CSA EEV	Pulley Face Code:	Standard
Auxillary Box:	No Auxillary Box	Pulley Shaft Indicator:	Standard
Auxillary Box Lead Termination:	None	Rodent Screen:	None
Base Indicator:	Rigid	RoHS Status:	ROHS COMPLIANT

Bearing Grease Type:	Polyrex EM (-20F +300F)	Shaft Extension Location:	Pulley End
Blower:	None	Shaft Ground Indicator:	No Shaft Grounding
Current @ Voltage:	19.000 A @ 208.0 V	Shaft Rotation:	Reversible
	9.000 A @ 460.0 V	Shaft Slinger Indicator:	No Slinger
	18.000 A @ 230.0 V	Speed Code:	Single Speed
Design Code:	A	Motor Standards:	NEMA
Drip Cover:	No Drip Cover	Starting Method:	Direct on line
Duty Rating:	CONT	Thermal Device - Bearing:	None
Electrically Isolated Bearing:	Not Electrically Isolated	Thermal Device - Winding:	None
Feedback Device:	NO FEEDBACK	Vibration Sensor Indicator:	No Vibration Sensor
Front Face Code:	Standard	Winding Thermal 1:	None
Front Shaft Indicator:	None	Winding Thermal 2:	None

Nameplate NP3441LUA										
CAT.NO.	EM3709T									
SPEC	37H244L869G1									
HP	7.5									
VOLTS	230/460									
AMPS	18/9									
RPM	3520									
FRAME	213T				HZ	60			PH	3
SF	1.15		CODE	J	DES	A		CLASS	F	
NEMA NOM. EFF	89.5		PF	84						
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 7.5HP 190/380V 22/11.0A									
										SF1.0

AC Induction Motor Performance Data

Record # 86805

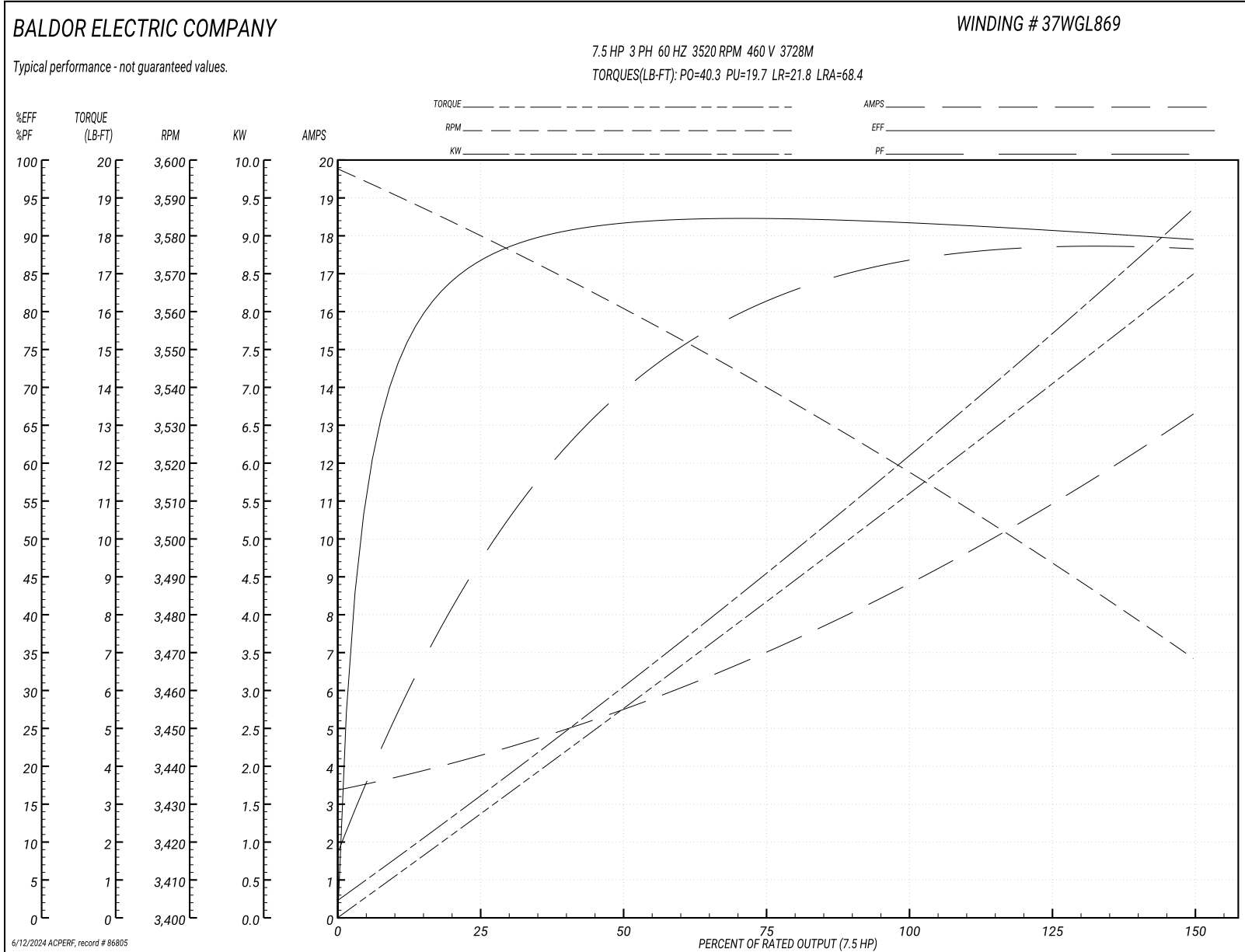
Preliminary Data Sheet

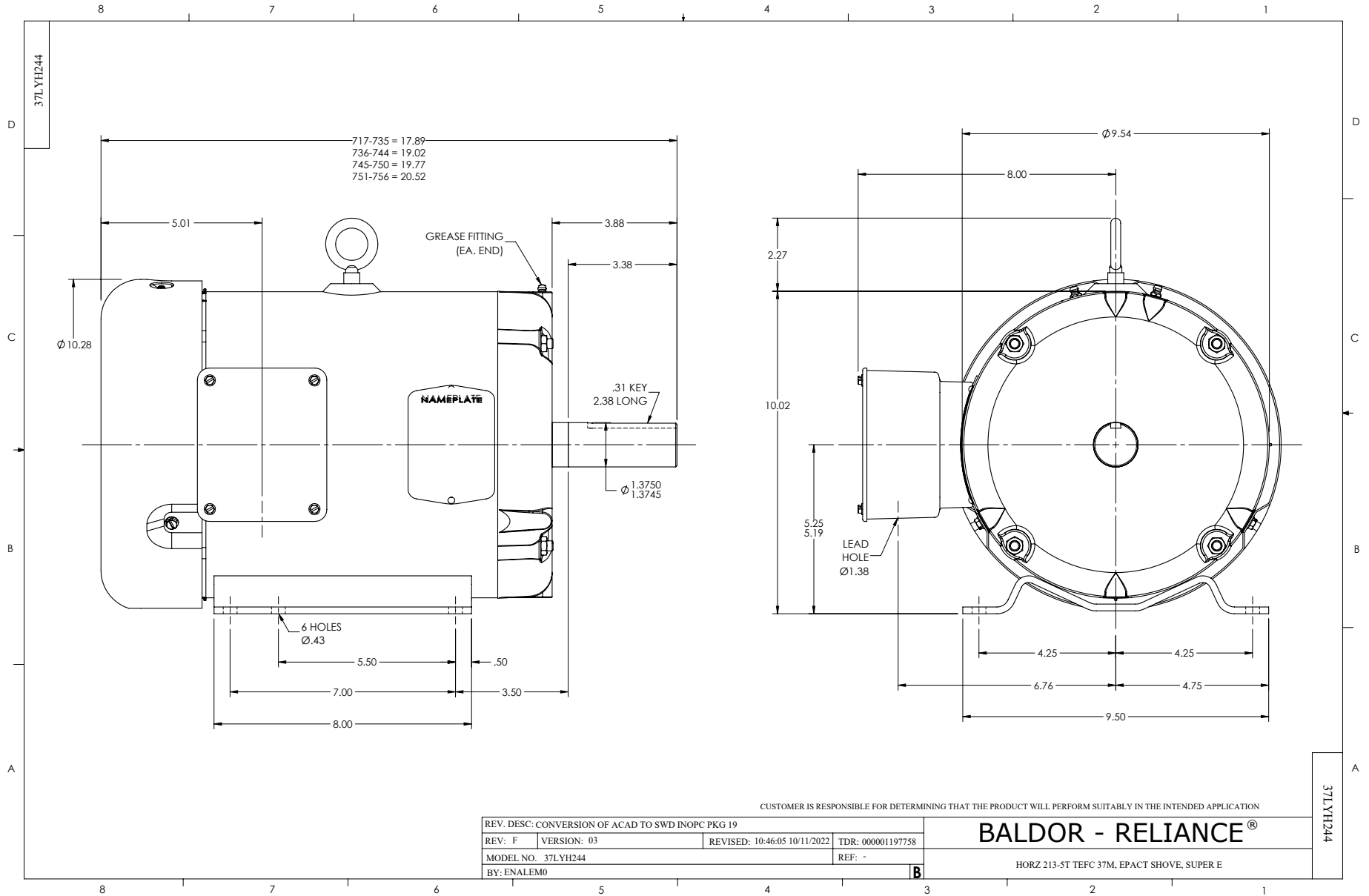
Winding: 37WGL869-R002		Type: 3728M		Enclosure: TEFC	
Nameplate Data			460 V, 60 Hz: High Voltage Connection		
Rated Output (HP)	7.5	Full Load Torque		11.2 LB-FT	
Volts	230/460	Start Configuration		direct on line	
Full Load Amps	18/9	Breakdown Torque		40.3 LB-FT	
R.P.M.	3520	Pull-up Torque		19.7 LB-FT	
Hz	60 Phase	3	Locked-rotor Torque		21.8 LB-FT
NEMA Design Code	A KVA Code	J	Starting Current		68.4 A
Service Factor (S.F.)	1.15	No-load Current		3.52 A	
NEMA Nom. Eff.	89.5 Power Factor	84	Line-line Res. @ 25°C		1.19 Ω
Rating - Duty	40C AMB-CONT	Temp. Rise @ Rated Load		50°C	
S.F. Amps	20/10	Temp. Rise @ S.F. Load		63°C	
			Locked-rotor Power Factor		38.1
			Rotor inertia		0.255 lb-ft ²

Load Characteristics 460 V, 60 Hz, 7.5 HP

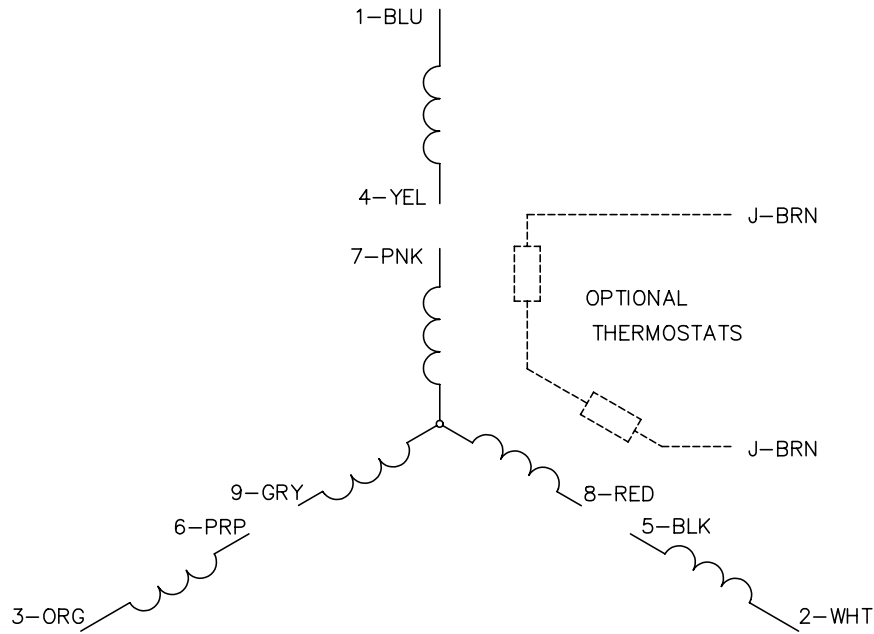
% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	49	71	81	86	88	89	87
Efficiency	83.9	89.7	91	90.9	90.2	89.2	90.3
Speed	3580	3560	3540	3518	3494	3468	3500
Line amperes	4.1	5.4	7.06	8.96	11	13.2	10.2

Performance Graph at 460V, 60Hz, 7.5HP Typical performance - Not guaranteed values





CD0005

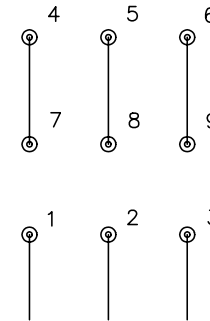


LOW VOLTAGE
(2Y)



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
90000		FILE: AAA00005140	MDL: -
		MTL: -	

BALDOR ELECTRIC Co.

3PH, DV, 9 LEADS

CD0005