

BALDOR® • RELIANCE 

Product Information Packet

CEM3709T

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

Part Detail							
Revision:	-	Status:	PRD/A	Change #:		Proprietary:	No
Type:	AC	Elec. Spec:	37WGL869	CD Diagram:	CD0005	Mfg Plant:	
Mech. Spec:	37G814	Layout:	37LYG814	Poles:	02	Created Date:	01-28-2021
Base:	RG	Eff. Date:	02-21-2021	Leads:	9#14		

Specs			
Catalog Number:	CEM3709T	Heater Indicator:	No Heater
Enclosure:	TEFC	Insulation Class:	F
Frame:	213TC	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:	Locked Bearing
Synchronous Speed @ Frequency:	3600 RPM @ 60 HZ	Motor Lead Quantity/Wire Size:	9 @ 14 AWG
Voltage @ Frequency:	230.0 V @ 60 HZ	Motor Lead Exit:	Ko Box
	460.0 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:	84
	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)	Shaft Extension Location:	Pulley End

Blower:	None	Shaft Ground Indicator:	No Shaft Grounding
Current @ Voltage:	18.000 A @ 230.0 V	Shaft Rotation:	Reversible
	19.000 A @ 208.0 V	Shaft Slinger Indicator:	No Slinger
	9.000 A @ 460.0 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.	CEM3709T									
SPEC	37G814L869G1									
HP	7.5									
VOLTS	230/460									
AMPS	18/9									
RPM	3520									
FRAME	213TC				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			USABLE AT 208V						19
ENCL	TEFC		SER							
DE	6307			ODE	6206					
VPWM INVERTER READY										
CT6-60H(10:1)VT3-60H(20:1)	50HZ 7.5HP 190/380V 22/11A									
										SF1.0

Parts List		
Part Number	Description	Quantity
SA390903	SA 37G814L869G1	1.000 EA
RA381372	RA 37G814L869G1	1.000 EA
36FN3000B02	EXFN, PLASTIC, 6.00 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, POLYREX EM EXXON	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 (2200bx) 4/22	1.000 EA

AC Induction Motor Performance Data

Record # 86805

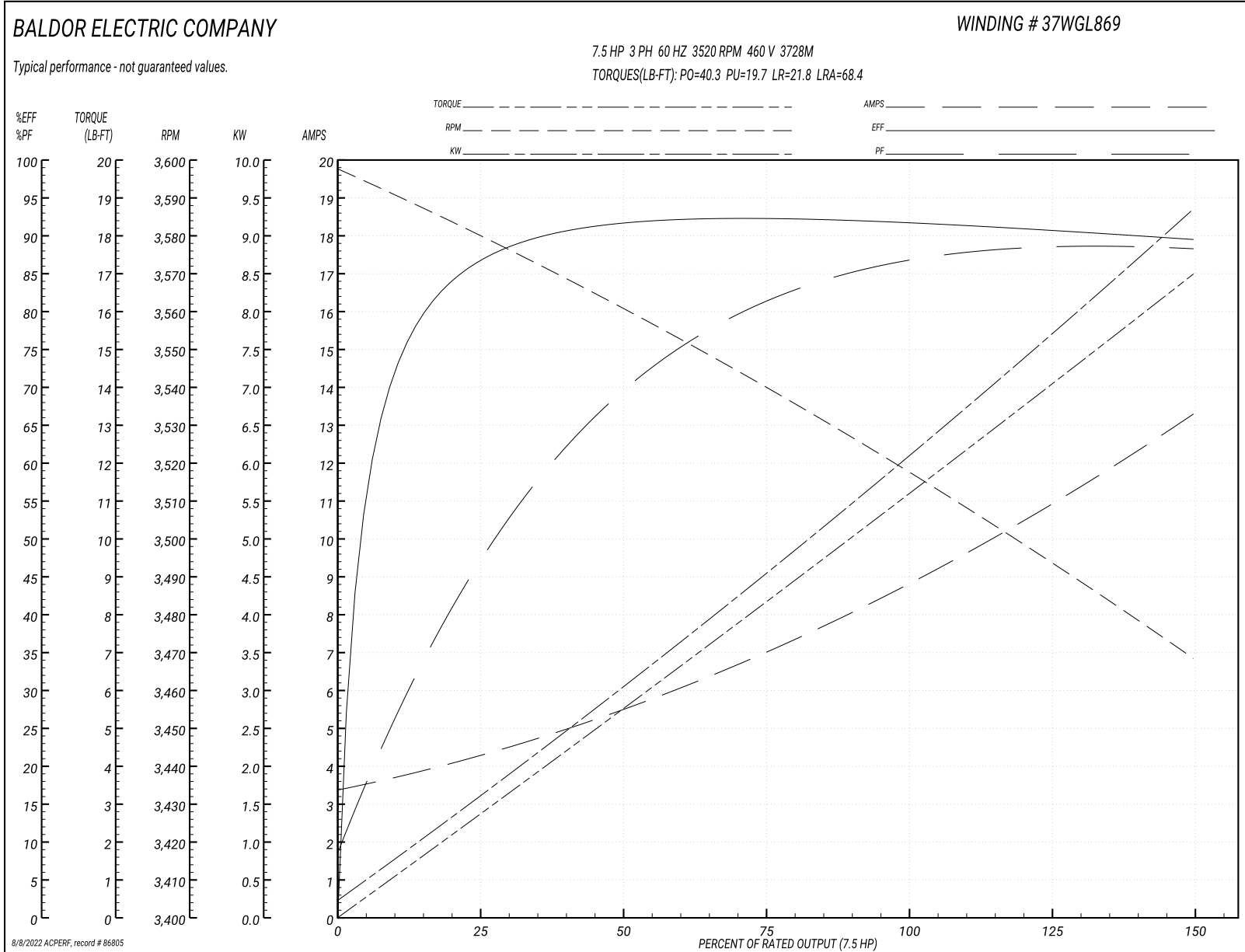
Preliminary Data Sheet

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		

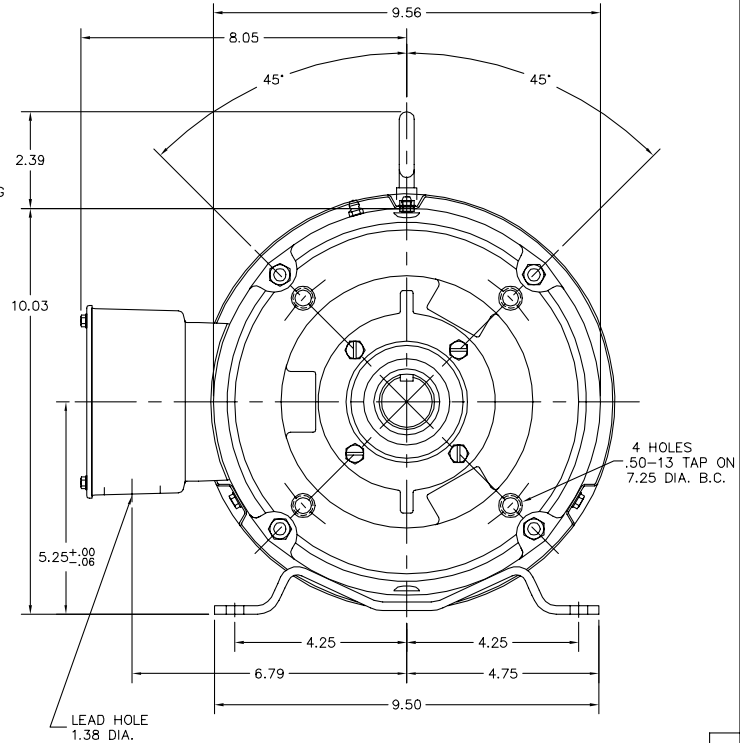
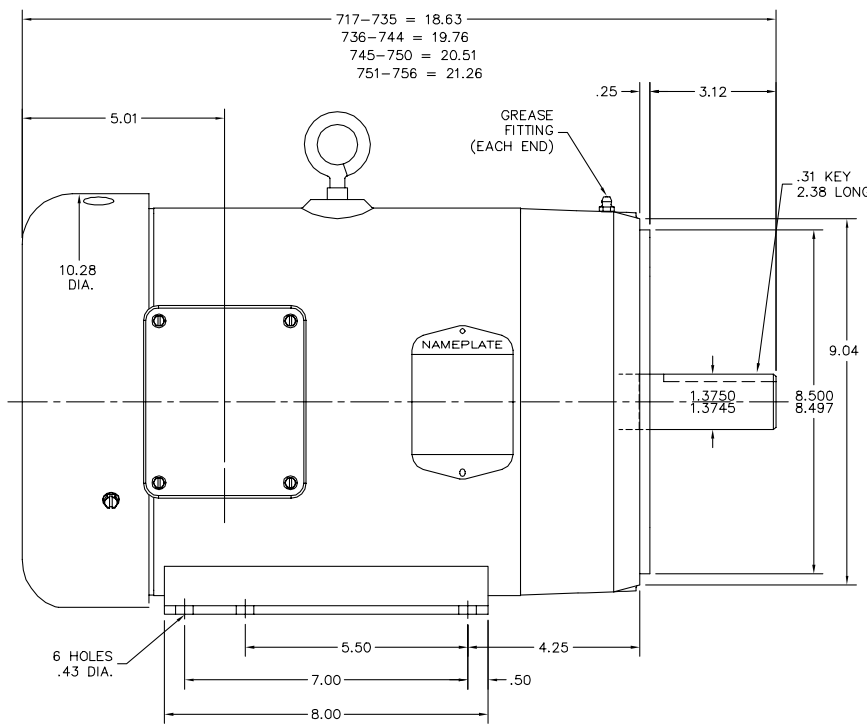
Load Characteristics 460 V, 60 Hz, 7.5 HP

% 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



37LYG814



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: ENBRAMO
MTL: -		

BALDOR

STD HORZ 213-5TC TEFC 37M W/EPACT SHOVE

SH 1 of 1

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