

**BALDOR® • RELIANCE** 

**Product Information Packet**

**CEM3709T-G**

**7.5HP,3520RPM,3PH,60HZ,213TC,TEFC,F1**

Part Detail							
Revision:	A	Status:	PRD/A	Change #:		Proprietary:	No
Type:	AC	Elec. Spec:	37WGR224	CD Diagram:	CD0005	Mfg Plant:	
Mech. Spec:		Layout:	37LYJ841	Poles:	02	Created Date:	12-17-2019
Base:		Eff. Date:	11-11-2021	Leads:	9#14		

Specs			
Catalog Number:	CEM3709T-G	Feedback Device:	NO FEEDBACK
Enclosure:	TEFC	Heater Indicator:	No Heater
Frame:	213TC	Insulation Class:	H
Frame Material:	Steel	Inverter Code:	Inverter Ready
Output @ Frequency:	7.500 HP @ 60 HZ	IP Rating:	NONE
Synchronous Speed @ Frequency:	3600 RPM @ 60 HZ	KVA Code:	J
Voltage @ Frequency:	460.0 V @ 60 HZ	Lifting Lugs:	Standard Lifting Lugs
	230.0 V @ 60 HZ	Locked Bearing Indicator:	Locked Bearing
XP Class and Group:	None	Motor Lead Termination:	Flying Leads
XP Division:	Not Applicable	Motor Type:	3728M
Agency Approvals:	CSA	Mounting Arrangement:	F1
	CSA EEV	Power Factor:	84
	UR	Product Family:	General Purpose
Auxillary Box:	No Auxillary Box	Pulley Face Code:	C-Face
Auxillary Box Lead Termination:	None	Rodent Screen:	None
Base Indicator:	Rigid	Shaft Ground Indicator:	Shaft Grounding
Bearing Grease Type:	Polyrex EM (-20F +300F)	Shaft Rotation:	Reversible
Blower:	None	Speed Code:	Single Speed

<b>Current @ Voltage:</b>	18.000 A @ 230.0 V	<b>Motor Standards:</b>	NEMA
	9.000 A @ 460.0 V	<b>Starting Method:</b>	Direct on line
<b>Design Code:</b>	A	<b>Thermal Device - Bearing:</b>	None
<b>Drip Cover:</b>	No Drip Cover	<b>Thermal Device - Winding:</b>	None
<b>Duty Rating:</b>	CONT	<b>Vibration Sensor Indicator:</b>	No Vibration Sensor
<b>Electrically Isolated Bearing:</b>	Not Electrically Isolated	<b>Winding Thermal 1:</b>	None
		<b>Winding Thermal 2:</b>	None

<b>Nameplate NP3441LUA</b>										
<b>CAT.NO.</b>	CEM3709T-G									
<b>SPEC</b>	37-0000-0186									
<b>HP</b>	7.5									
<b>VOLTS</b>	230/460									
<b>AMPS</b>	18/9									
<b>RPM</b>	3520									
<b>FRAME</b>	213TC				<b>HZ</b>	60			<b>PH</b>	3
<b>SF</b>	1.15		<b>CODE</b>	J	<b>DES</b>	A		<b>CLASS</b>	H	
<b>NEMA NOM. EFF</b>	89.5		<b>PF</b>	84						
<b>RATING</b>	40C AMB-CONT									
<b>CC</b>	010A			<b>USABLE AT 208V</b>						19
<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 7.5HP 190/380V 21.2/10.6A									
	SF1.0									

Parts List		
Part Number	Description	Quantity
SA377279	SA 37-0000-0186	1.000 EA
RA367194	RA 37-0000-0186	1.000 EA
LB1115N	LABEL,LIFTING DEVICE (ON ROLLS)	1.000 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
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	2.000 EA
MN416A01	TAG-INSTAL-MAINT no wire (2100/bx) 4/22	1.000 EA
HW3200A01	3/8-16X3/4 I-BLT WELDED F/S	1.000 EA
07FH4007SP	PRIMED	1.000 EA
51XW1032A06	10-32 X .38, TAPTITE II, HEX WSHR SLTD S	3.000 EA
37FN3002C01	EXFN, PLASTIC, 6.00 OD, 1.155 ID	1.000 EA
51XB1214A20	12-14X1.25 HXWSSLD SERTYB	1.000 EA
MJ1000A02	GREASE, MOBIL POLYREX EM - 124047	0.050 LB
HA3104A14	THRUBOLT- 5/16-18 X12.125(OHIO)	4.000 EA
LB1459	AEGIS SGR LABEL "AEGISLBL-100"	1.000 EA
XY3118A12	5/16-18 HEX NUT DIRECTIONAL SERRATION	4.000 EA
37EP3101A01SP	FRONT TEFC 206 BRG 37 L&M, W/GREASER	1.000 EA
HW5100A06	W2420-025 WVY WSHR (WB)	1.000 EA
HW4500A01	1641B(ALEMITE)400 UNIV, GREASE FITT	1.000 EA
37EP3300A01	FACE MT ENDPLATE-ENCL-307 BRG-213TC-215T	1.000 EA
10XN2520A28	1/4-20X 1 3/4 HEX HD	4.000 EA
HW1001A25	LOCKWASHER 1/4, ZINC PLT .493 OD, .255 I	4.000 EA
HW4500A01	1641B(ALEMITE)400 UNIV, GREASE FITT	1.000 EA
BP5309A01	AEGIS SH GRD ASSY W/RETAINER RING	1.000 EA

<b>Parts List (continued)</b>		
<b>Part Number</b>	<b>Description</b>	<b>Quantity</b>
FE-0000001	ZRTG FE ASSEMBLY	1.000 EA
PE-0000001	ZRTG PE ASSEMBLY	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
51XW2520A10	.25-20 X .62, TAPTITE II, HEX WSHR SLTD	2.000 EA
11XW1032G06	10-32 X .38, TAPTITE II, HEX WSHR SLTD U	1.000 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
MG1000Y03	MUNSELL 2.53Y 6.70/ 4.60, GLOSS 20,	0.022 GA
G0PA1000	PKG GRP, PRINT PK1026A06	1.000 EA
HW2501F22	KEY, 5/16 SQ X 2.500	1.000 EA
HA7000A02	KEY RETAINER RING, 1 1/8 DIA, 1 3/8 DIA	1.000 EA

**AC Induction Motor Performance Data**

Record # 53379

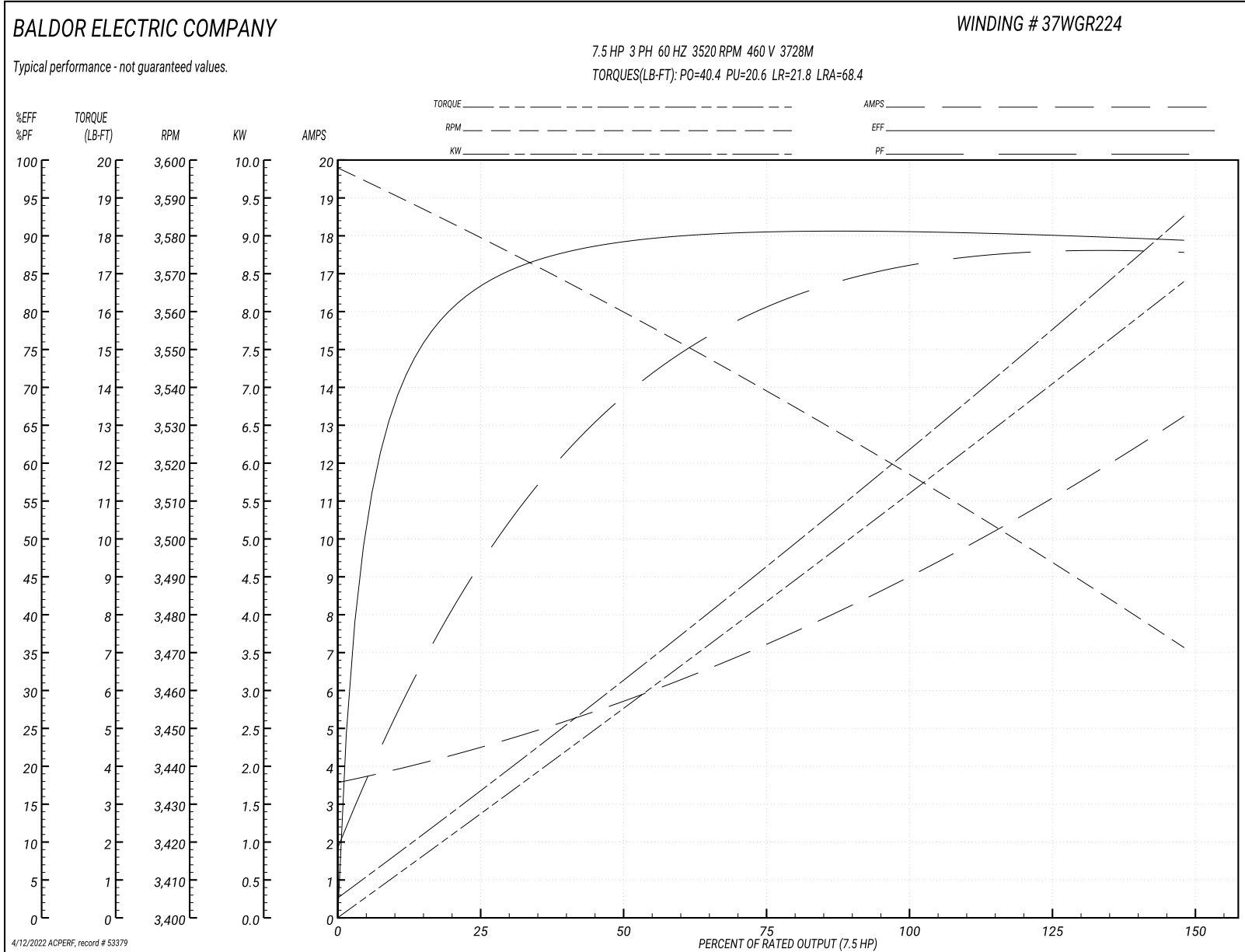
Typical performance - not guaranteed values

<b>Winding:</b> 37WGR224-R034		<b>Type:</b> 3728M		<b>Enclosure:</b> TEFC	
<b>Nameplate Data</b>			<b>460 V, 60 Hz: High Voltage Connection</b>		
<b>Rated Output (HP)</b>	7.5	<b>Full Load Torque</b>	10.9 LB-FT		
<b>Volts</b>	230/460	<b>Start Configuration</b>	direct on line		
<b>Full Load Amps</b>	18/9	<b>Breakdown Torque</b>	40.4 LB-FT		
<b>R.P.M.</b>	3520	<b>Pull-up Torque</b>	20.6 LB-FT		
<b>Hz</b>	60 <b>Phase</b>	3	<b>Locked-rotor Torque</b>	21.8 LB-FT	
<b>NEMA Design Code</b>	A	<b>KVA Code</b>	J	<b>Starting Current</b>	68.4 A
<b>Service Factor (S.F.)</b>	1.15		<b>No-load Current</b>	3.73 A	
<b>NEMA Nom. Eff.</b>	89.5	<b>Power Factor</b>	84	<b>Line-line Res. @ 25°C</b>	1.1531 Ω
<b>Rating - Duty</b>	40C AMB-CONT		<b>Temp. Rise @ Rated Load</b>	45°C	
<b>S.F. Amps</b>			<b>Temp. Rise @ S.F. Load</b>	54°C	
			<b>Locked-rotor Power Factor</b>	33	
			<b>Rotor inertia</b>	0.255 LB-FT <sup>2</sup>	

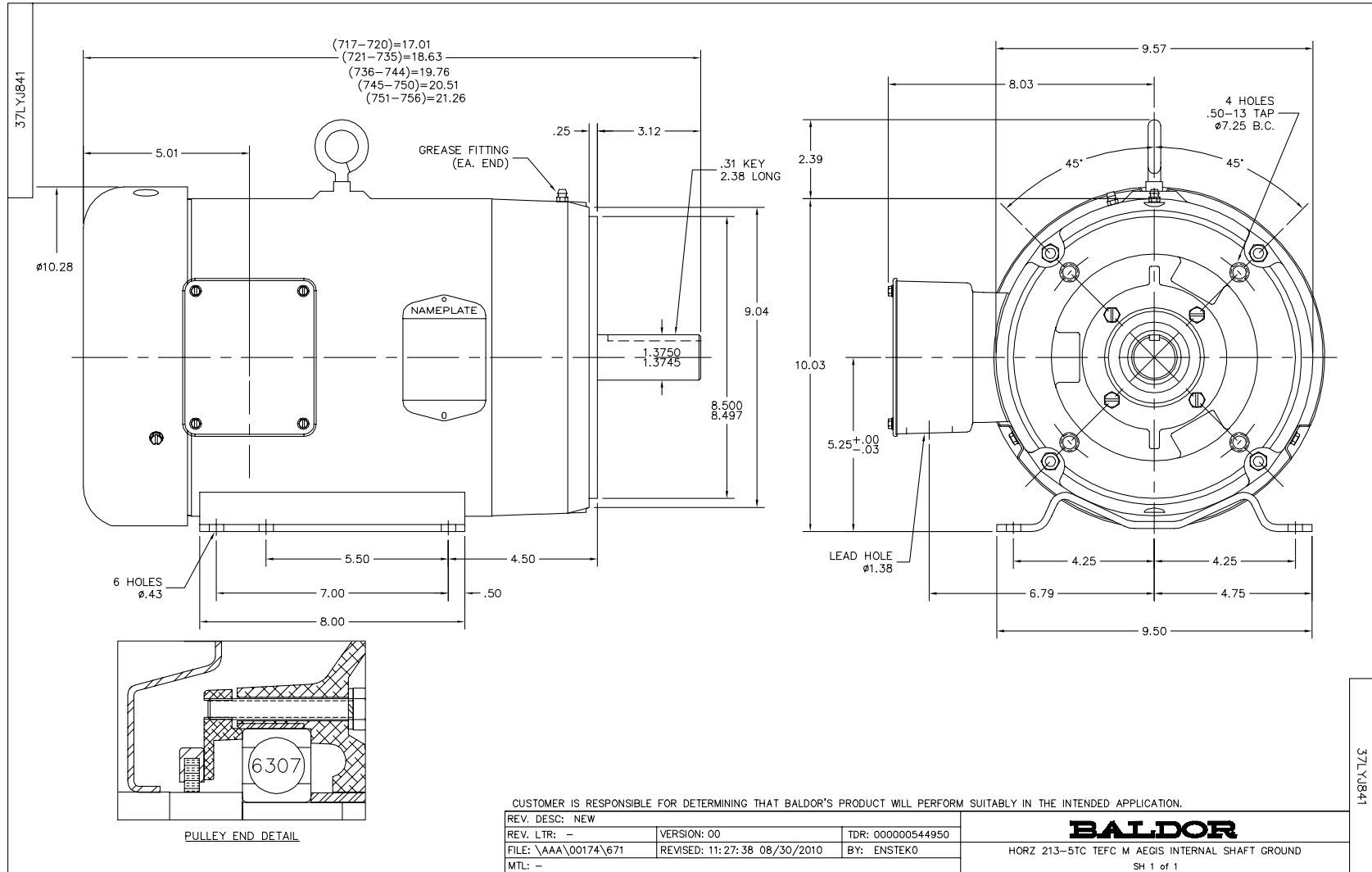
**Load Characteristics 460 V, 60 Hz, 7.5 HP**

<b>% of Rated Load</b>	<b>25</b>	<b>50</b>	<b>75</b>	<b>100</b>	<b>125</b>	<b>150</b>	<b>S.F.</b>
<b>Power Factor</b>	45	69	79	84	87	89	86
<b>Efficiency</b>	81.5	88.8	90.5	90.6	90.1	89.2	90.3
<b>Speed</b>	3580.5	3562.7	3541.6	3520.3	3496.3	3470.9	3506
<b>Line amperes</b>	4.22	5.36	7.03	8.94	11	13.1	10.2

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







CD0005

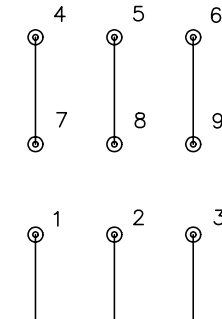


LOW VOLTAGE  
(2Y)



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

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