

BALDOR® • RELIANCE 

Product Information Packet

EWCM3709T

7.5HP,3450RPM,3PH,60HZ,213TCZ,3646M,TEFC

Part Detail							
Revision:	C	Status:	PRD/A	Change #:		Proprietary:	No
Type:	AC	Elec. Spec:	36WGR431	CD Diagram:	CD0005	Mfg Plant:	
Mech. Spec:	36N536	Layout:	36LYN536	Poles:	02	Created Date:	05-19-2015
Base:	RG	Eff. Date:	12-16-2016	Leads:	9#16		

Specs			
Catalog Number:	EWCM3709T	Heater Indicator:	No Heater
Enclosure:	TEFC	Insulation Class:	F
Frame:	213TCZ	Inverter Code:	Inverter Ready
Frame Material:	Steel	KVA Code:	S
Output @ Frequency:	7.500 HP @ 60 HZ	Lifting Lugs:	Standard Lifting Lugs
Synchronous Speed @ Frequency:	3600 RPM @ 60 HZ	Locked Bearing Indicator:	Locked Bearing
Voltage @ Frequency:	460.0 V @ 60 HZ	Motor Lead Quantity/Wire Size:	9 @ 16 AWG
	230.0 V @ 60 HZ	Motor Lead Exit:	Ko Box
XP Class and Group:	None	Motor Lead Termination:	Flying Leads
XP Division:	Not Applicable	Motor Type:	3646M
Agency Approvals:	UR	Mounting Arrangement:	F1
	CSA EEV	Power Factor:	79
	CSA	Product Family:	General Purpose
Auxillary Box:	No Auxillary Box	Pulley End Bearing Type:	Ball
Auxillary Box Lead Termination:	None	Pulley Face Code:	C-Face
Base Indicator:	Rigid	Pulley Shaft Indicator:	Tapped & Key
Bearing Grease Type:	Polyrex EM (-20F +300F)	Rodent Screen:	None
Blower:	None	Shaft Extension Location:	Pulley End

Current @ Voltage:	19.400 A @ 208.0 V	Shaft Ground Indicator:	No Shaft Grounding
	19.400 A @ 230.0 V	Shaft Rotation:	Reversible
	9.700 A @ 460.0 V	Shaft Slinger Indicator:	No Slinger
Design Code:	A	Speed Code:	Single Speed
Drip Cover:	No Drip Cover	Motor Standards:	NEMA
Duty Rating:	CONT	Starting Method:	Direct on line
Electrically Isolated Bearing:	Not Electrically Isolated	Thermal Device - Bearing:	None
Feedback Device:	NO FEEDBACK	Thermal Device - Winding:	None
Front Face Code:	Standard	Vibration Sensor Indicator:	No Vibration Sensor
Front Shaft Indicator:	None	Winding Thermal 1:	None
		Winding Thermal 2:	None

Nameplate NP3441L										
CAT.NO.	EWCM3709T									
SPEC.	36N536R431G1									
HP	7.5									
VOLTS	230/460									
AMP	19.4/9.7									
RPM	3450									
FRAME	213TCZ				HZ	60			PH	3
SER.F.	1.15		CODE	S	DES	A		CL	F	
NEMA-NOM-EFF	89.5		PF	79						
RATING	40C AMB-CONT									
CC	010A				USABLE AT 208V			19.4		
DE	6307				ODE	6205				
ENCL	TEFC		SN							
VPWM INVERTER READY CT6-60H(10:1)VT3-60H(20:1)										

Parts List		
Part Number	Description	Quantity
SA301063	SA 36N536R431G1	1.000 EA
RA288134	RA 36N536R431G1	1.000 EA
HW3200A01	3/8-16X3/4 I-BLT WELDED F/S	1.000 EA
36CB3004	36 CB CASTING W/1.09 DIA LEAD HOLE @ 6:0	1.000 EA
36GS1000SP	GASKET-CONDUIT BOX, .06 THICK #SV-330 LE	1.000 EA
51XB1016A08	10-16X 1/2HXWSSLD SERTYB	2.000 EA
11XW1032G06	10-32 X .38, TAPTITE II, HEX WSHR SLTD U	1.000 EA
HW3001B01	BRASS CUP WASHER, FOR #10 SCREW	1.000 EA
36FE3104A04	FR ENDPLATE, FOR ROUTING	1.000 EA
HW4500A01	1641B(ALEMITE)400 UNIV, GREASE FITT	1.000 EA
HW4500A17	317400 ALEMITE GREASE RELIEF	1.000 EA
HW5100A05	WVY WSHR F/205 & 304 BRGS	1.000 EA
36EP3305A25	PUEP 182-4TC ENCL, 307 BRG, GREASER, REL	1.000 EA
HW4500A01	1641B(ALEMITE)400 UNIV, GREASE FITT	1.000 EA
HW4500A17	317400 ALEMITE GREASE RELIEF	1.000 EA
10XN2520A36	1/4-20X 2 1/4 HEX HD X	4.000 EA
HW1001A25	LOCKWASHER 1/4, ZINC PLT .493 OD, .255 I	4.000 EA
HA3101A28	THRUBOLT 1/4-20 X 12.500 OHIO ROD	4.000 EA
51XB1214A16	12-14X1.00 HXWSSLD SERTYB	1.000 EA
36FH4009A102	IEC FH GREASER PRIMED	1.000 EA
51XW1032A06	10-32 X .38, TAPTITE II, HEX WSHR SLTD S	3.000 EA
36CB4516	36 LIPPED CB LID - GALVANNEAL	1.000 EA
37GS1001SP	GASKET, CONDUIT BOX LID, .06 THICK LEXID	1.000 EA
51XW0832A07	8-32 X .44, TAPTITE II, HEX WSHR SLTD SE	4.000 EA

Parts List (continued)		
Part Number	Description	Quantity
HA2009A01	36-4613 SL ANOD. ALUM (STER	1.000 EA
HW2501D13	KEY, 3/16 SQ X 1.375	1.000 EA
HA7000A01	KEY RETAINER 7/8" DIA SHAFT	1.000 EA
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	2.000 EA
LB1115N	LABEL,LIFTING DEVICE (ON ROLLS)	1.000 EA
MJ1000A02	GREASE, POLYREX EM EXXON (USe 4824-15A)	0.050 LB
36FN3000C01SP	EXFN, PLASTIC, 5.25 OD, .912 ID	1.000 EA
MG1000Y03	MUNSELL 2.53Y 6.70/ 4.60, GLOSS 20,	0.022 GA
LC0005E01	CONN.DIA./WARNING LABEL (LC0005/LB1119N)	1.000 EA
NP3441L	ALUM SUPER-E VPWM INVERTER READY UL	1.000 EA
07PA1007	PKG GRP, PRINT PK1156A06	1.000 EA
PK3085X	FOAM SHAFT SUPPORT PRECUT 4-1/4 X 6-3/4	1.000 EA
MN416A01	TAG-INSTAL-MAINT no wire (1200/bx) 5/18	1.000 EA

AC Induction Motor Performance Data

Record # 65929 - Typical performance - not guaranteed values

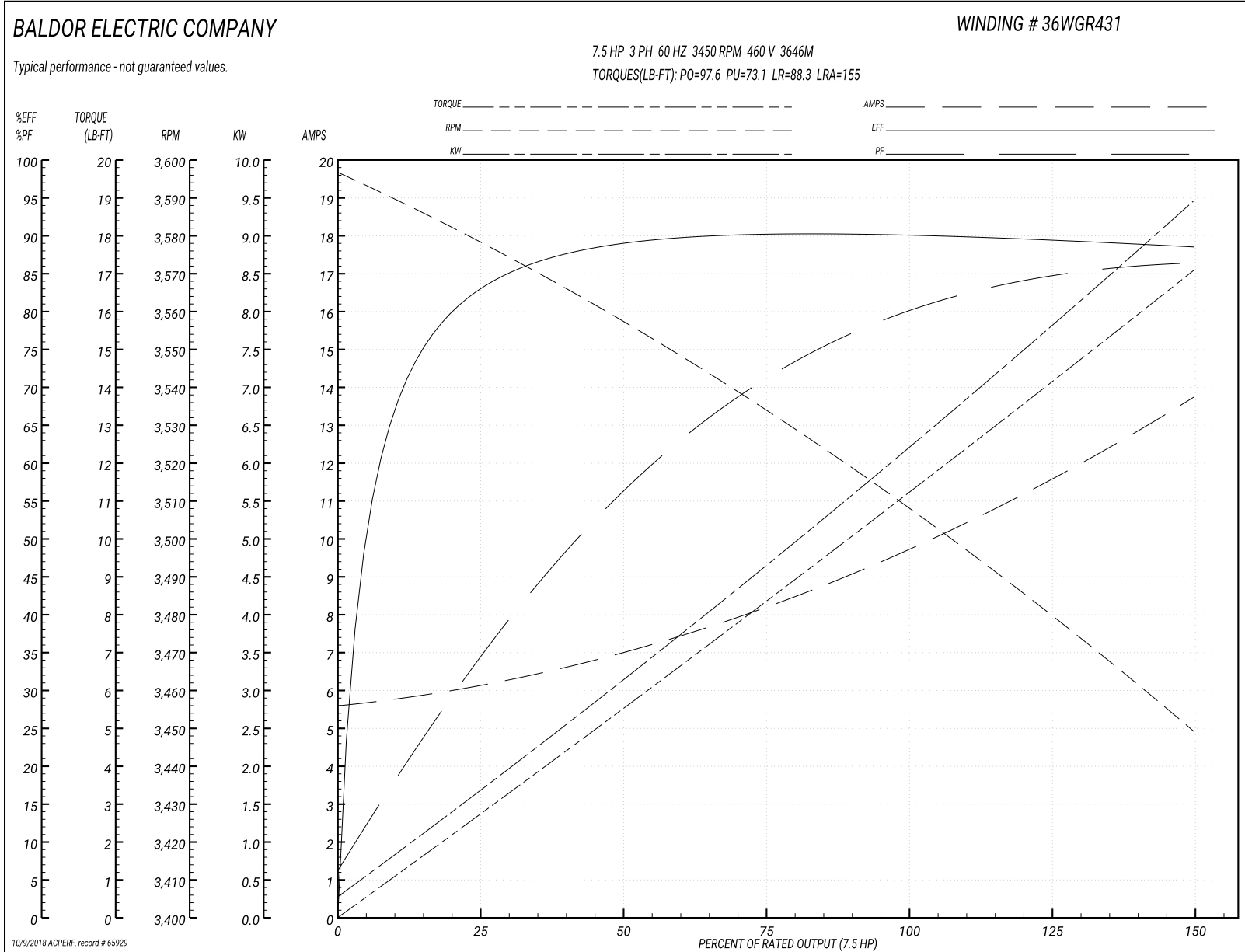
Winding: 36WGR431-R004	Type: 3646M	Enclosure: TEFC
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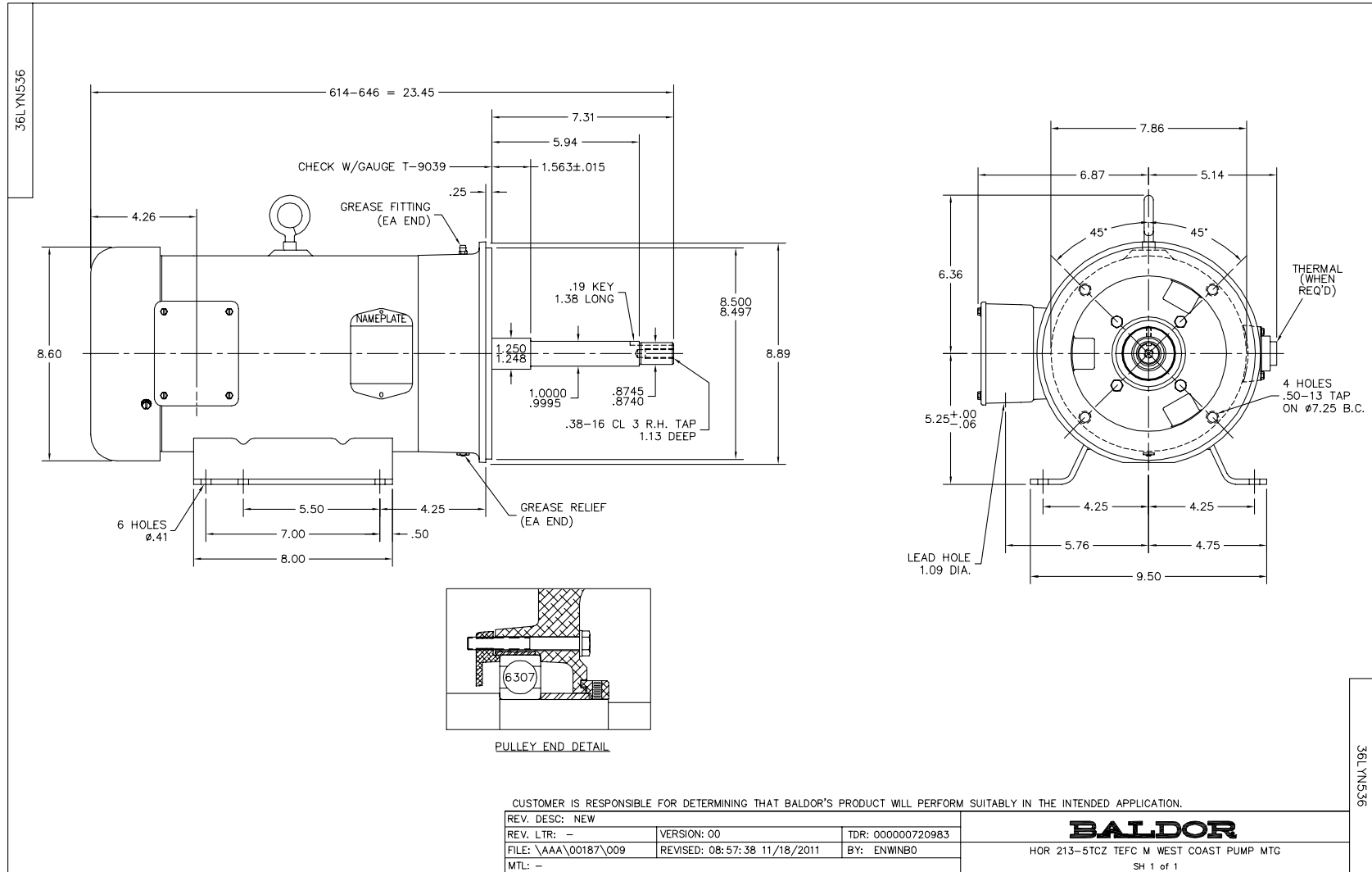
Nameplate Data				460 V, 60 Hz: High Voltage Connection	
Rated Output (HP)	7.5			Full Load Torque	11.3 LB-FT
Volts	230/460			Start Configuration	direct on line
Full Load Amps	19.4/9.7			Breakdown Torque	97.6 LB-FT
R.P.M.	3450			Pull-up Torque	73.1 LB-FT
Hz	60	Phase	3	Locked-rotor Torque	88.3 LB-FT
NEMA Design Code	A	KVA Code	S	Starting Current	155 A
Service Factor (S.F.)	1.15			No-load Current	5.69 A
NEMA Nom. Eff.	89.5	Power Factor	79	Line-line Res. @ 25°C	0.936 Ω
Rating - Duty	40C AMB-CONT			Temp. Rise @ Rated Load	72°C
S.F. Amps				Temp. Rise @ S.F. Load	84°C
				Locked-rotor Power Factor	48.4
				Rotor inertia	0.205 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	35	58	71	79	85	87	83
Efficiency	82	88.4	90.2	90.3	89.7	88.3	89.9
Speed	3580	3557	3533	3507	3480	3449	3491
Line amperes	6.03	6.89	8.27	9.9	11.6	13.7	10.9

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





CD0005

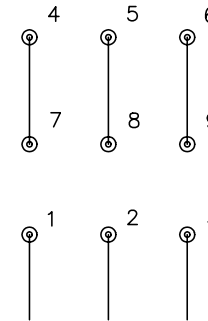


LOW VOLTAGE
(2Y)



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