

# **BALDOR**® • **RELIANCE**

## **Product Information Packet**

# **EM3581T**

**1HP,1760RPM,3PH,60HZ,143T,0519M,TEFC,F1**

Part Detail							
Revision:	K	Status:	PRD/A	Change #:		Proprietary:	No
Type:	AC	Prod. Type:	0519M	Elec. Spec:	05WGX122	CD Diagram:	CD0005
Enclosure:	TEFC	Mfg Plant:		Mech. Spec:	05C001	Layout:	05LYC001
Frame:	143T	Mounting:	F1	Poles:	04	Created Date:	08-03-2010
Base:	RG	Rotation:	R	Insulation:	F	Eff. Date:	10-16-2015
Leads:	9#18					Replaced By:	
Literature:		Elec. Diagram:					

Nameplate NP3441LUA							
CAT.NO.	EM3581T						
SPEC.	05C001X122G1						
HP	1						
VOLTS	230/460						
AMP	3/1.5						
RPM	1760						
FRAME	143T	HZ	60	PH	3		
SER.F.	1.15	CODE	L	DES	B	CL	F
NEMA-NOM-EFF	85.5	PF	71				
RATING	40C AMB-CONT						
CC	010A	USABLE AT 208V	3.1				
DE	6205	ODE	6203				
ENCL	TEFC	SN					
VPWM INVERTER READY							
CT6-60H(10:1)VT3-60H(20:1)							
	50Hz 1HP 190/380V 3.6/1.8A sf1.0						

Parts List		
Part Number	Description	Quantity
SA201056	SA 05C001X122G1	1.000 EA
RA188361	RA 05C001X122G1	1.000 EA
34FN3002B01	EXTERNAL FAN, PLASTIC, .637/.639 HUB W/	1.000 EA
S/P107-000-001	SUPER E PROC'S-FS, WS & CK PLTS	1.000 EA
06CB3000	BALDOR CONDUIT BOX CAST	1.000 EA
06GS1000	GASKET,CONDUIT BOX	1.000 EA
51XW2520A12	SCREW, HEX SER SLT HD, ZN, 1/4-20 X .75	2.000 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
HW3001B02	1RASS CUP WASHER W/GROUND SYMBOL TAB,	1.000 EA
35EP1100A02	FR ENDPLATE, TEFC W/GREASER	1.000 EA
HW4500A01	1641B(ALEMITE)400 UNIV, GREASE FITT	1.000 EA
HW5100A03SP	WAVY WASHER (W1543-017)	1.000 EA
35EP1102A02	PU ENDPLATE, MACH	1.000 EA
HW4500A01	1641B(ALEMITE)400 UNIV, GREASE FITT	1.000 EA
HA3100A37	THRUBOLT 10-32 X 8.500	4.000 EA
XY1032A02	10-32 HEX NUT DIRECTIONAL SERRATION	4.000 EA
51XB1214A16	12-14X1.00 HXWSSLD SERTYB	1.000 EA
35FH4005A02SP	IEC FH W/GREASER - W/AUTOPHERETIC PRIMER	1.000 EA
51XW1032A06	10-32 X .38, TAPTITE II, HEX WSHR SLTD S	3.000 EA
06CB3500	BALDOR CONDUIT BOX LID	1.000 EA
06GS1001	BALDOR CONDUIT BOX GASKET	1.000 EA
HW2501D13SP	KEY, 3/16 SQ X 1.375	1.000 EA
HA7000A01	KEY RETAINER 7/8" DIA SHAFT	1.000 EA

<b>Parts List (continued)</b>		
<b>Part Number</b>	<b>Description</b>	<b>Quantity</b>
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	2.000 EA
MJ1000A75	GREASE, POLYREX EM EXXON (USe 4824-15A)	0.050 LB
MG1000Y03	MUNSELL 2.53Y 6.70/ 4.60, GLOSS 20,	0.022 GA
LC0005E01	CONN.DIA./WARNING LABEL (LC0005/LB1119N)	1.000 EA
NP3441LUA	ALUM SUPER-E VPWM INV READY UL	1.000 EA
36PA1000	PKG GRP, PRINT PK1016A06	1.000 EA
MN416A01	TAG-INSTAL-MAINT no wire (1200/bx) 11/14	1.000 EA

<b>Accessories</b>		
<b>Part Number</b>	<b>Description</b>	<b>Multiplier</b>
35-1300	C FACE KIT	A8

**AC Induction Motor Performance Data**

Record # 53381 - Typical performance - not guaranteed values

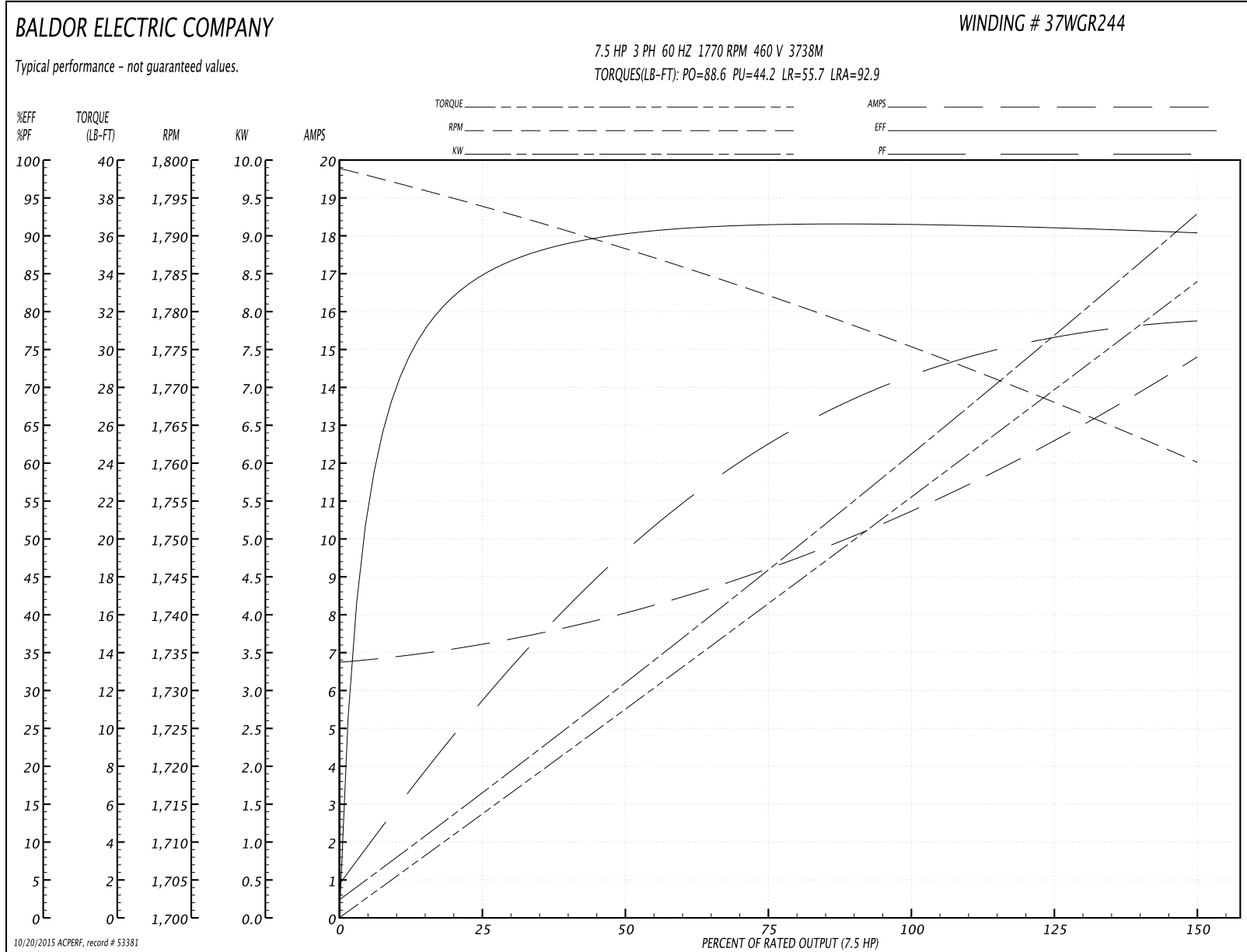
<b>Winding:</b> 37WGR244-R009	<b>Type:</b> 3738M	<b>Enclosure:</b> TEFC
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Nameplate Data				460 V, 60 Hz: High Voltage Connection	
Rated Output (HP)	7.5			Full Load Torque	22.2 LB-FT
Volts	230/460			Start Configuration	direct on line
Full Load Amps	21.4/10.7			Breakdown Torque	88.6 LB-FT
R.P.M.	1770			Pull-up Torque	44.2 LB-FT
Hz	60	Phase	3	Locked-rotor Torque	55.7 LB-FT
NEMA Design Code	A	KVA Code	L	Starting Current	92.9 A
Service Factor (S.F.)	1.15			No-load Current	6.71 A
NEMA Nom. Eff.	91.7	Power Factor	72	Line-line Res. @ 25°C	1.14 Ω
Rating - Duty	40C AMB-CONT			Temp. Rise @ Rated Load	56°C
S.F. Amps				Temp. Rise @ S.F. Load	65°C
				Rotor inertia	0.934 LB-FT <sup>2</sup>

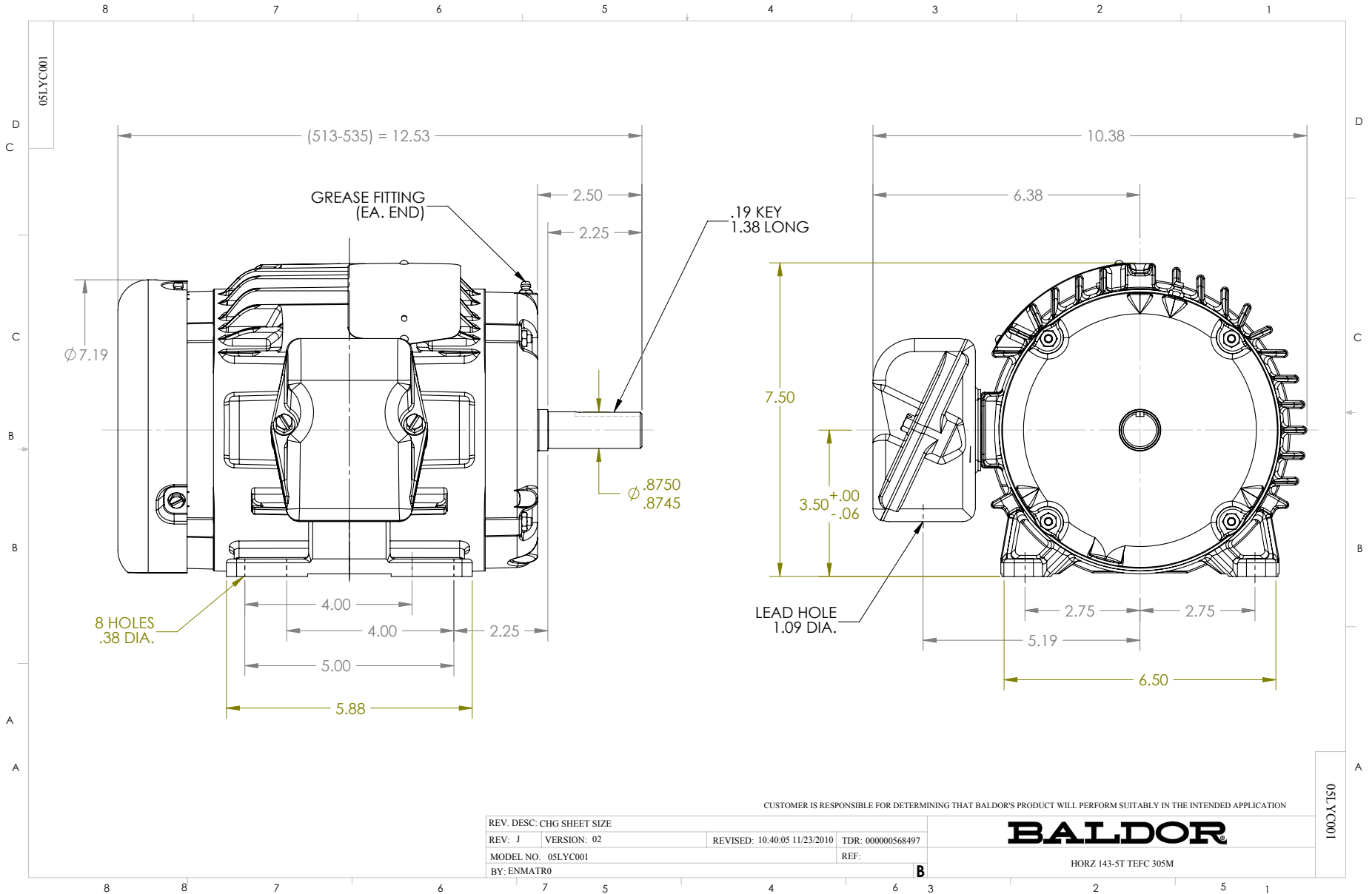
Load Characteristics 460 V, 60 Hz, 7.5 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	28	49	62	72	76	79	74
Efficiency	84.5	90.1	91.3	91.8	91.2	90.4	91.4
Speed	1794	1788	1782	1776	1768	1760	1771
Line amperes	7.29	8.01	9.19	10.7	12.6	14.8	11.8

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