

**BALDOR® • RELIANCE** 

**Product Information Packet**

**EHM4104T**

**30HP,1770RPM,3PH,60HZ,286T,1060M,TEFC,F1**

Part Detail							
Revision:	Q	Status:	PRD/A	Change #:		Proprietary:	No
Type:	AC	Elec. Spec:	10WGY648	CD Diagram:	CD0005	Mfg Plant:	
Mech. Spec:	10H756	Layout:	10LYH756	Poles:	04	Created Date:	12-12-2011
Base:	RG	Eff. Date:	08-21-2018	Leads:	9#10		

Specs			
Catalog Number:	EHM4104T	Heater Indicator:	No Heater
Enclosure:	TEFC	Insulation Class:	F
Frame:	286T	Inverter Code:	Inverter Ready
Frame Material:	Iron	KVA Code:	J
Output @ Frequency:	30.000 HP @ 60 HZ	Lifting Lugs:	Standard Lifting Lugs
Synchronous Speed @ Frequency:	1800 RPM @ 60 HZ	Locked Bearing Indicator:	Locked Bearing
Voltage @ Frequency:	460.0 V @ 60 HZ	Motor Lead Quantity/Wire Size:	9 @ 10 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:	1060M
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:	Standard
Base Indicator:	Rigid	Pulley Shaft Indicator:	Standard
Bearing Grease Type:	Polyrex EM (-20F +300F)	Rodent Screen:	None
Blower:	None	Shaft Extension Location:	Pulley End

<b>Current @ Voltage:</b>	38.000 A @ 460.0 V	<b>Shaft Ground Indicator:</b>	Mounting Provisions Only
	76.000 A @ 230.0 V	<b>Shaft Rotation:</b>	Reversible
	78.000 A @ 208.0 V	<b>Shaft Slinger Indicator:</b>	No Slinger
<b>Design Code:</b>	A	<b>Speed Code:</b>	Single Speed
<b>Drip Cover:</b>	No Drip Cover	<b>Motor Standards:</b>	NEMA
<b>Duty Rating:</b>	CONT	<b>Starting Method:</b>	Direct on line
<b>Electrically Isolated Bearing:</b>	Not Electrically Isolated	<b>Thermal Device - Bearing:</b>	NONE (OLD)
<b>Feedback Device:</b>	NO FEEDBACK	<b>Thermal Device - Winding:</b>	None
<b>Front Face Code:</b>	Standard	<b>Vibration Sensor Indicator:</b>	No Vibration Sensor
<b>Front Shaft Indicator:</b>	None	<b>Winding Thermal 1:</b>	None
		<b>Winding Thermal 2:</b>	None

Nameplate NP2138L											
CAT.NO.	EHM4104T			P/N				ENCLOSURE	TEFC		
SPEC.	10H756Y648G1		CC	010A	FRAME	286T		S/N			
HP	30			CLASS	F	HZ	60				
RPM	1770			PH	3	DES	A				
VOLT	230/460				KVA-CODE	J		ODE BRG	6309	DE BRG	6311
AMP	76/38			USABLE AT 208V	78						
RATING	40C AMB-CONT			GREASE	POLYREX EM						
NEMA-NOM-EFF	93.6	PF	79	SER.F.	1.15						
HTR-VOLTS				HTR-AMPS							

Parts List		
Part Number	Description	Quantity
SA235708	SA 10H756Y648G1	1.000 EA
RA222667	RA 10H756Y648G1	1.000 EA
09FN3001C02	EXTERNAL FAN, PLASTIC	1.000 EA
10CB3000SP	STD KO BOX MODEL 310,312,314 MTRS W/2.00	1.000 EA
12GS1000SP	GASKET	1.000 EA
10XN3118K12	5/16-18 X .75 GRADE 5, ZINC PLATED	4.000 EA
HW1001A31	LOCKWASHER 5/16, ZINC PLT.591 OD, .319 I	4.000 EA
WD1000B25	GND LUG, BURNDY L125HP OR T&B L125HP-BB	1.000 EA
19XW3118G08	.31-18X.50,HEX WSHR HD,TAPTITE 2,GREEN	1.000 EA
10EP1106A01	FR ENDPLATE, MACH	1.000 EA
10XN3816K32	BOLT, 3/8-16X2 HH YZ(5)	4.000 EA
HW1001A38	LOCKWASHER 3/8, ZINC PLT .688 OD, .382 I	4.000 EA
HA4017A01	1/8 X 4 GREASE EXT (F/S)	1.000 EA
HW5100A11	W3917-042 WVY WSHR (WB)	1.000 EA
10XN2520K32	1/4-20 X 2.00 HX HD SCRW GRADE 5, ZINC P	2.000 EA
HW1001A25	LOCKWASHER 1/4, ZINC PLT .493 OD, .255 I	2.000 EA
10XN3118K40	5/16-18 X 2.50" HEX HD, GRADE 5	4.000 EA
HW1001A31	LOCKWASHER 5/16, ZINC PLT.591 OD, .319 I	4.000 EA
10EP1105A106	PU ENDPLATE, MACH W/1/2 SH GND MTG	1.000 EA
84XN0540J08	5-40 X 1/2" SHCS, BLACK OXIDE	2.000 EA
10XN3816K28	3/8-16 X 1.75 HEX HD CAP SCREW, GRADE 5	4.000 EA
HW1001A38	LOCKWASHER 3/8, ZINC PLT .688 OD, .382 I	4.000 EA
10FH4000	310 FAN HOUSING STAMPED	1.000 EA
51XF2520A08	SCREW, HEX SER SLT HD, ZN 1/4-20 X .50 L	4.000 EA

Parts List (continued)		
Part Number	Description	Quantity
10CB3500SP	CONDUIT BOX LID, CAST	1.000 EA
10GS1000SP	GASKET, CONDUIT BOX LID	1.000 EA
51XW2520A12	.25-20 X .75, TAPTITE II, HEX WSHR SLTD	4.000 EA
HW2501H28	KEY, 1/2 SQ X 3.250	1.000 EA
LB1115N	LABEL,LIFTING DEVICE (ON ROLLS)	1.000 EA
MN416A01	TAG-INSTAL-MAINT no wire (1200/bx) 5/18	1.000 EA
HW4500A35	1/8 NPT STEEL .50 HEX CAP	1.000 EA
HW4500A20	1/8NPT SL PIPE PLUG	1.000 EA
HA4054	SHORT T-DRAIN FITTING, .125" N.P.T.	1.000 EA
MJ1000A02	GREASE, POLYREX EM EXXON (USe 4824-15A)	0.130 LB
HW4500A20	1/8NPT SL PIPE PLUG	2.000 EA
HA4054	SHORT T-DRAIN FITTING, .125" N.P.T.	1.000 EA
HW2500A25	WOODRUFF KEY USA #1008 #BLOW CARBON STEE	1.000 EA
51XB1214A20	12-14X1.25 HXWSSLD SERTYB	1.000 EA
MG1000G27	MED CHARCOAL METALLIC GREY 400-0096	0.070 GA
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	4.000 EA
LB1119N	WARNING LABEL	1.000 EA
LC0005	CONN.DIA.,TY M,9-LD,DUAL VOLT,REVERSING	1.000 EA
NP2138L	ALUM SUPER-E UL CSA-EEV PREM CC (300	1.000 EA
10PA1000	PACKAGING GROUP COMBINED PRINT PK1023A06	1.000 EA
LB1350	BAR CODE LABEL FOR YORK	1.000 EA
FE-0000022	ZRTG FE ASSEMBLY	1.000 EA

**AC Induction Motor Performance Data**

Record # 53027 - Typical performance - not guaranteed values

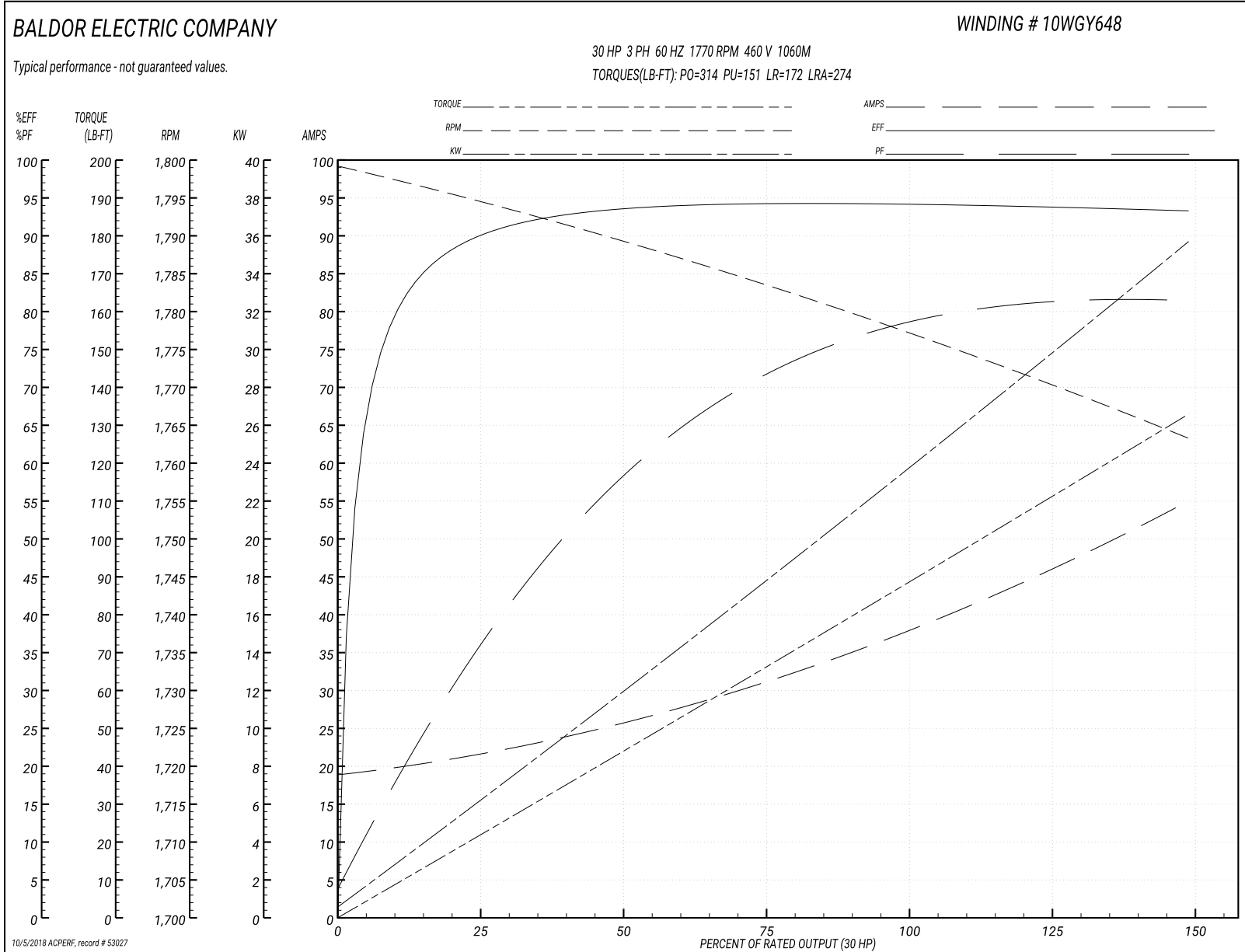
<b>Winding:</b> 10WGY648-R002	<b>Type:</b> 1060M	<b>Enclosure:</b> TEFC
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Nameplate Data				460 V, 60 Hz: High Voltage Connection	
Rated Output (HP)	30			Full Load Torque	88.9 LB-FT
Volts	230/460			Start Configuration	direct on line
Full Load Amps	76/38			Breakdown Torque	314 LB-FT
R.P.M.	1770			Pull-up Torque	151 LB-FT
Hz	60	Phase	3	Locked-rotor Torque	172 LB-FT
NEMA Design Code	A	KVA Code	J	Starting Current	274 A
Service Factor (S.F.)	1.15			No-load Current	19.3 A
NEMA Nom. Eff.	93.6	Power Factor	79	Line-line Res. @ 25°C	0.182 Ω
Rating - Duty	40C AMB-CONT			Temp. Rise @ Rated Load	55°C
S.F. Amps				Temp. Rise @ S.F. Load	66°C
				Locked-rotor Power Factor	32
				Rotor inertia	4.77 LB-FT <sup>2</sup>

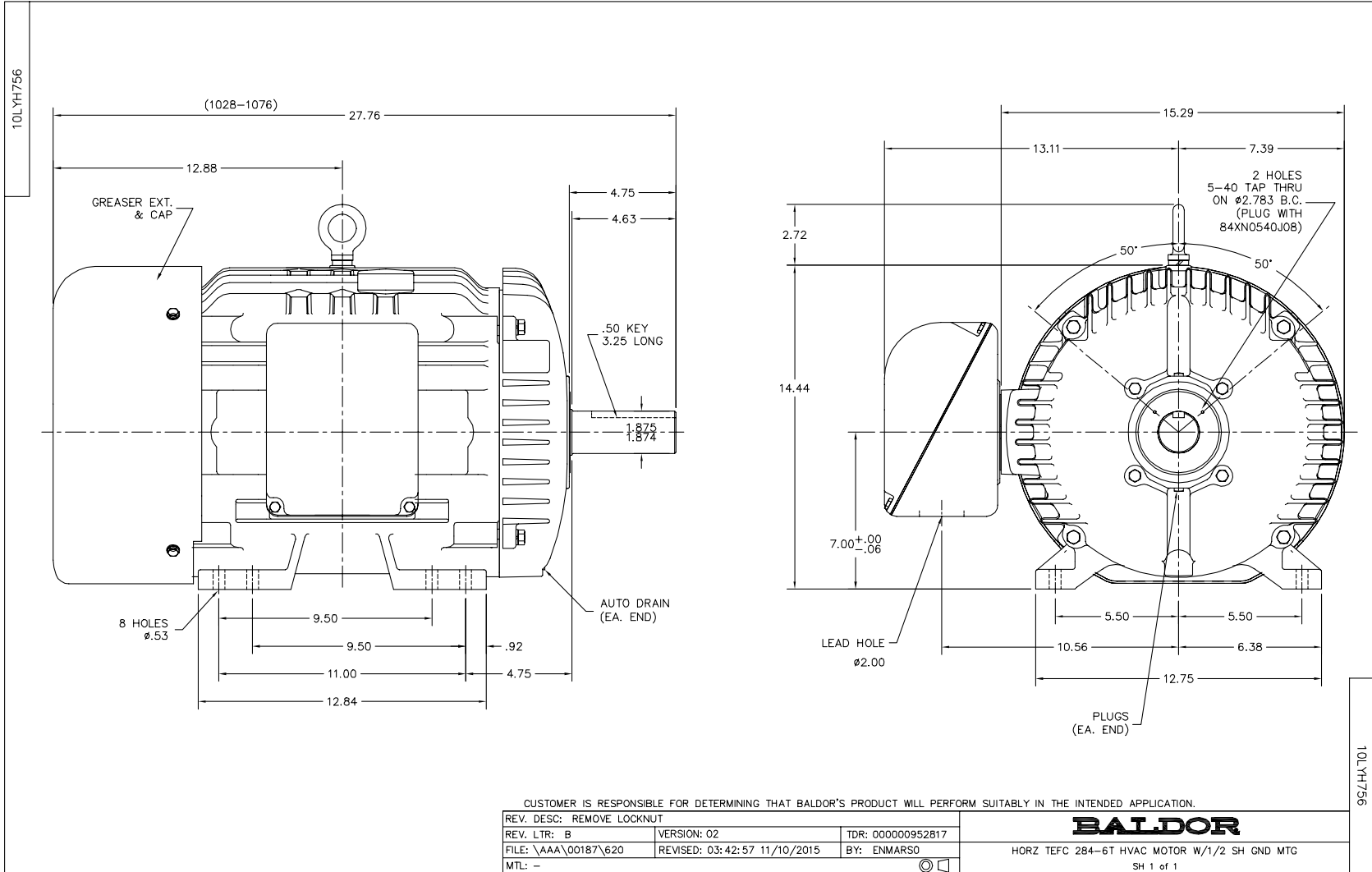
Load Characteristics 460 V, 60 Hz, 30 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	38	60	70	79	81	82	80
Efficiency	90	93.4	94.2	94.3	93.8	93.2	94
Speed	1795	1789	1783	1777	1771	1763	1773
Line amperes	21	25.5	32.1	37.6	46.3	54.8	42.8

Performance Graph at 460V, 60Hz, 30.0HP 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
900000		FILE: AAA00005140	MDL: -
		MTL: -	

**BALDOR ELECTRIC Co.**

3PH, DV, 9 LEADS

CD0005

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