

# **BALDOR**® • **RELIANCE**

## **Product Information Packet**

# **EBM4104TY**

**30HP,1760RPM,3PH,60HZ,286T,1056M,TEFC,F1**

Part Detail							
Revision:	C	Status:	PRD/A	Change #:		Proprietary:	No
Type:	AC	Prod. Type:	1056M	Elec. Spec:	10WGY538	CD Diagram:	CD0180
Enclosure:	TEFC	Mfg Plant:		Mech. Spec:	10E507	Layout:	10LYE507
Frame:	286T	Mounting:	F1	Poles:	04	Created Date:	03-09-2015
Base:	RG	Rotation:	R	Insulation:	F	Eff. Date:	03-16-2016
Leads:	9#8					Replaced By:	
Literature:		Elec. Diagram:					

Nameplate NP2138L										
CAT.NO.	EBM4104TY		P/N				ENCLOSURE	TEFC		
SPEC.	10E507Y538G1		CC	010A	FRAME	286T	S/N			
HP	30		CLASS	F	HZ	60				
RPM	1760		PH	3	DES	A				
VOLT	230/460		KVA-CODE	J		ODE BRG	6211	DE BRG	6312	
AMP	76/38		USABLE AT 208V	78						
RATING	40C AMB-CONT		GREASE	POLYREX EM						
NEMA-NOM-EFF	93.6	PF	80	SER.F.	1.15					
HTR-VOLTS			HTR-AMPS			MAX. SPACE HEATER TEMP.				

Parts List		
Part Number	Description	Quantity
SA295069	SA 10E507Y538G1	1.000 EA
RA281141	RA 10E507Y538G1	1.000 EA
S/P107-000-004	SUPER-E(284 FR. & UP)-CL PLANT,POLYREX E	1.000 EA
10CB3000	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
WD1000B16	T&B CX70TN TERMINAL	1.000 EA
51XF2520A08	SCREW, HEX SER SLT HD, ZN 1/4-20 X .50 L	1.000 EA
10EP1106A11	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
HW5100A11	W3917-042 WVY WSHR (WB)	1.000 EA
10XN3118K44	5/16-18 X 2.75" HEX HD, GRADE 5	4.000 EA
HW1001A31	LOCKWASHER 5/16, ZINC PLT.591 OD, .319 I	4.000 EA
10EP1304A01	PU ENDPLATE, MACH	1.000 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
84XN6311J16	5/8 11X1 HEX SOCK, BK OX	4.000 EA
HW2501G15	KEY 3/8 X 1.625 LONG	1.000 EA
10FH4000A01	FAN HSG STAMPED, DBL SH	1.000 EA
51XF2520A08	SCREW, HEX SER SLT HD, ZN 1/4-20 X .50 L	4.000 EA
10CB3500	CONDUIT BOX LID, CAST	1.000 EA
10GS1000SP	GASKET, CONDUIT BOX LID	1.000 EA

Parts List (continued)		
Part Number	Description	Quantity
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
HW4500A21	1618BALEMITE FITTING 825 UNIVERSAL	1.000 EA
HA4017A01	1/8 X 4 GREASE EXT (F/S)	1.000 EA
HW4500A17	317400 ALEMITE GREASE RELIEF	1.000 EA
HA4054	SHORT T-DRAIN FITTING, .125" N.P.T.	1.000 EA
HA4051A00	PLASTIC CAP FOR GREASE FITTING	1.000 EA
MJ1000A02	GREASE, POLYREX EM EXXON (USe 4824-15A)	0.130 LB
HW4500A03	GREASE FITTING, .125 NPT 1610(ALEMITE) 8	1.000 EA
HW4500A17	317400 ALEMITE GREASE RELIEF	1.000 EA
HA4054	SHORT T-DRAIN FITTING, .125" N.P.T.	1.000 EA
HA4051A00	PLASTIC CAP FOR GREASE FITTING	1.000 EA
09FN3001C03	EXTERNAL FAN, PLASTIC	1.000 EA
HW2500A25	WOODRUFF KEY USA #1008 #BLOW CARBON STEE	1.000 EA
51XB1214A20	12-14X1.25 HXWSSLD SERTYB	1.000 EA
MG1000Y03	MUNSELL 2.53Y 6.70/ 4.60, GLOSS 20,	0.125 GA
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	4.000 EA
81BK1100FQF	1-081-011-00-FQF BRAKE	1.000 EA
LB1119N	WARNING LABEL	1.000 EA
LC0181	CONNECTION LABEL	1.000 EA
NP2138L	ALUM SUPER-E UL CSA-EEV PREM CC (300	1.000 EA
10PA1010	PACKAGING GROUP, PRINT PK1151A06	1.000 EA
MN416A01	TAG-INSTAL-MAINT no wire (1200/bx) 11/14	1.000 EA

**AC Induction Motor Performance Data**

Record # 32189 - Typical performance - not guaranteed values

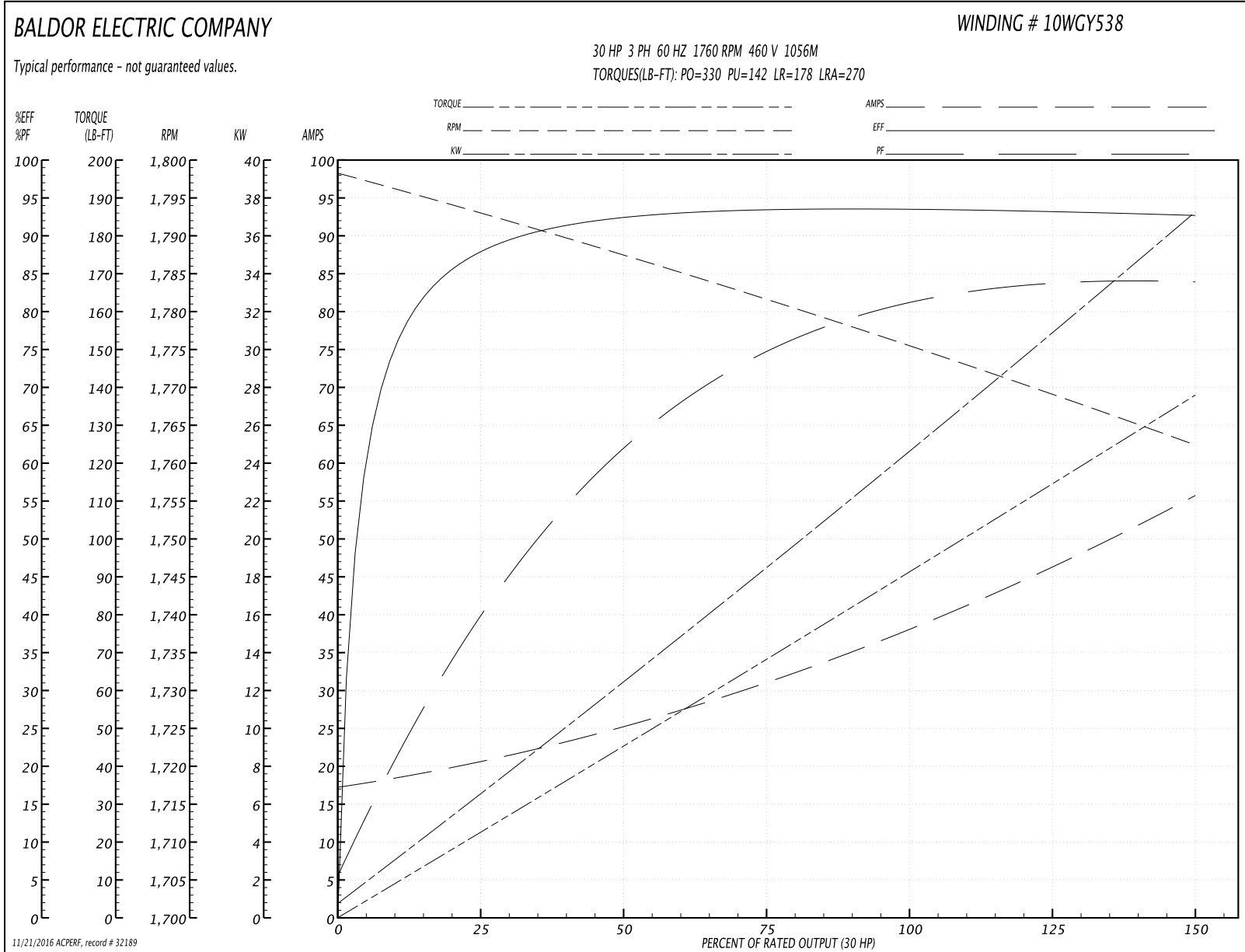
<b>Winding:</b> 10WGY538-R004	<b>Type:</b> 1056M	<b>Enclosure:</b> TEFC
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Nameplate Data				460 V, 60 Hz: High Voltage Connection	
Rated Output (HP)	30			Full Load Torque	88.7 LB-FT
Volts	230/460			Start Configuration	direct on line
Full Load Amps	76/38			Breakdown Torque	330 LB-FT
R.P.M.	1760			Pull-up Torque	142 LB-FT
Hz	60	Phase	3	Locked-rotor Torque	178 LB-FT
NEMA Design Code	A	KVA Code	J	Starting Current	270 A
Service Factor (S.F.)	1.15			No-load Current	17.9 A
NEMA Nom. Eff.	93.6	Power Factor	80	Line-line Res. @ 25°C	0.19377 Ω
Rating - Duty	40C AMB-CONT			Temp. Rise @ Rated Load	64°C
S.F. Amps				Temp. Rise @ S.F. Load	76°C
				Locked-rotor Power Factor	31
				Rotor inertia	4.47 LB-FT <sup>2</sup>

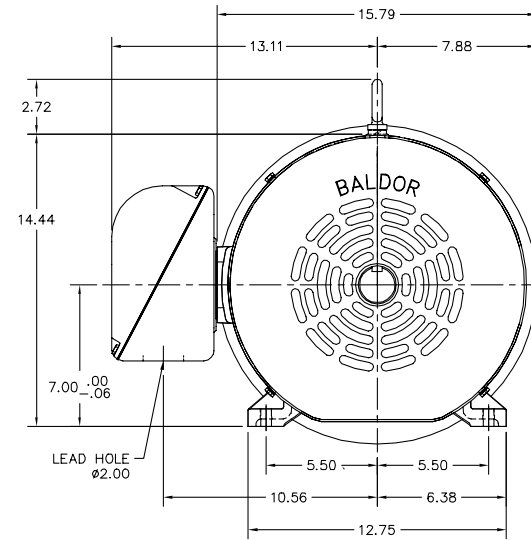
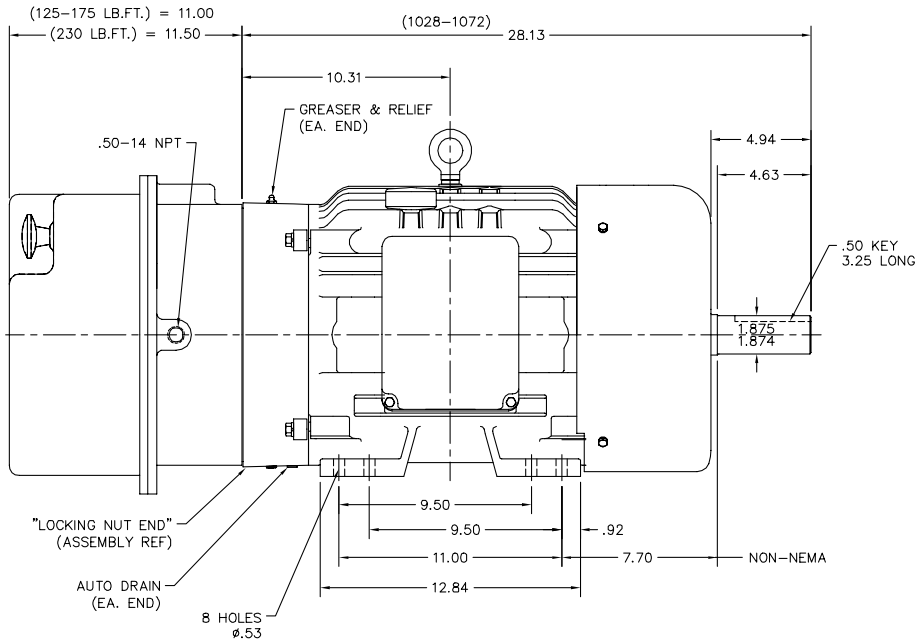
Load Characteristics 460 V, 60 Hz, 30 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	41	63	73	80	82	85	81
Efficiency	87.6	92.3	93.5	93.7	93.4	92.9	93.5
Speed	1792.2	1787.6	1782.4	1776.5	1770.3	1762.1	1773
Line amperes	19.8	24.3	30.7	37.6	45.6	55.2	42.4

Performance Graph at 460V, 60Hz, 30.0HP Typical performance - Not guaranteed values



10LYE507



10LYE507

CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT BALDOR'S PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION.

REV. DESC: INCREASED STACK TO 1072		
REV. LTR: E	VERSION: 05	TDR: 000000970180
FILE: \AAA\00053\823	REVISED: 10:21:03 03/10/2016	BY: ENSHABO
MTL: -		

**BALDOR**  
HORZ TEFC 284-6T W/81 BRAKE  
SH 1 of 1

CD0180



LOW VOLTAGE  
(2D)



HIGH VOLTAGE  
(1D)



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: C	BY: JLP	REVISED: 01/21/99 2:28	TDR: 0171435
0810D0		FILE: AAA00005148	MDL: -
		MTL: -	

**BALDOR ELECTRIC Co.**

3PH, DV, 9 LEADS, DELTA CONNECTION

CD0180