

# **BALDOR® • RELIANCE**

## **Product Information Packet**

# **EFM4104T**

**30HP, 1770RPM, 3PH, 60HZ, 286T, 1056M, TEFC, F2**

Part Detail							
Revision:	J	Status:	PRD/A	Change #:		Proprietary:	No
Type:	AC	Prod. Type:	1056M	Elec. Spec:	10WGY758	CD Diagram:	CD0005
Enclosure:	TEFC	Mfg Plant:		Mech. Spec:	10C156	Layout:	10LYC156
Frame:	286T	Mounting:	F2	Poles:	04	Created Date:	04-29-2010
Base:	RG	Rotation:	R	Insulation:	F	Eff. Date:	10-16-2015
Leads:	9#10					Replaced By:	
Literature:		Elec. Diagram:					

Nameplate NP3443L							
CAT.NO.	EFM4104T	P/N		ENCLOSURE	TEFC		
SPEC.	10C156Y758G1	CC	010A	FRAME	286T	S/N	
HP	30	CLASS	F	HZ	60		
RPM	1770	PH	3	DES	B		
VOLT	230/460	KVA-CODE	G	ODE BRG	6309	DE BRG	6311
AMP	72/36	USABLE AT 208V	76				
RATING	40C AMB-CONT	NEMA-NOM-EFF	93.6	GREASE	POLYREX EM		
PF	83	SER.F.	1.15				
HTR-VOLTS		HTR-AMPS		MAX. SPACE HEATER TEMP.			

Parts List		
Part Number	Description	Quantity
SA194229	SA 10C156Y758G1	1.000 EA
RA181817	RA 10C156Y758G1	1.000 EA
09FN5001C02SP	EXTERNAL FAN, PLASTIC	1.000 EA
S/P107-000-004	SUPER-E(284 FR. & UP)-CL PLANT,POLYREX E	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
WD1000B16	T&B CX70TN TERMINAL	1.000 EA
51XF2520A08	SCREW, HEX SER SLT HD, ZN 1/4-20 X .50 L	1.000 EA
10EP1106A01	FR ENDPLATE, MACH	1.000 EA
HA4051A00	PLASTIC CAP FOR GREASE FITTING	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
10XN2520K36	1/4-20 X 2.25" HX HD SCRWGRADE 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
10EP1105A01	PU ENDPLATE, MACH 284-6T	1.000 EA
HA4051A00	PLASTIC CAP FOR GREASE FITTING	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
10FH4000SP	310 FAN HOUSING STAMPED	1.000 EA

Parts List (continued)		
Part Number	Description	Quantity
51XF2520A08	SCREW, HEX SER SLT HD, ZN 1/4-20 X .50 L	4.000 EA
10CB3500	CONDUIT BOX LID, CAST	1.000 EA
10GS1000	GASKET, CONDUIT BOX LID	1.000 EA
51XW2520A12	.25-20 X .75, TAPTITE II, HEX WSHR SLTD	4.000 EA
HW4600B40	V-RING SLINGER 2.000 X 2.680 X 0.280	1.000 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
MJ1000A75	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
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
MN416A01	TAG-INSTAL-MAINT no wire (1200/bx) 11/14	1.000 EA
LC0005E02	SPL CONN.DIA./WARN.LABEL(LC0005/LB1119)	1.000 EA
NP3443L	SS SUPER-E UL CSA-EEV PREM CC	1.000 EA
10PA1000	PACKAGING GROUP COMBINED PRINT PK1023A06	1.000 EA

<b>Accessories</b>		
<b>Part Number</b>	<b>Description</b>	<b>Multiplier</b>
10-1305	C FACE KIT	A8
10EP1502A01SP	D-FLANGE KIT	A8

**AC Induction Motor Performance Data**

Record # 30986 - Typical performance - not guaranteed values

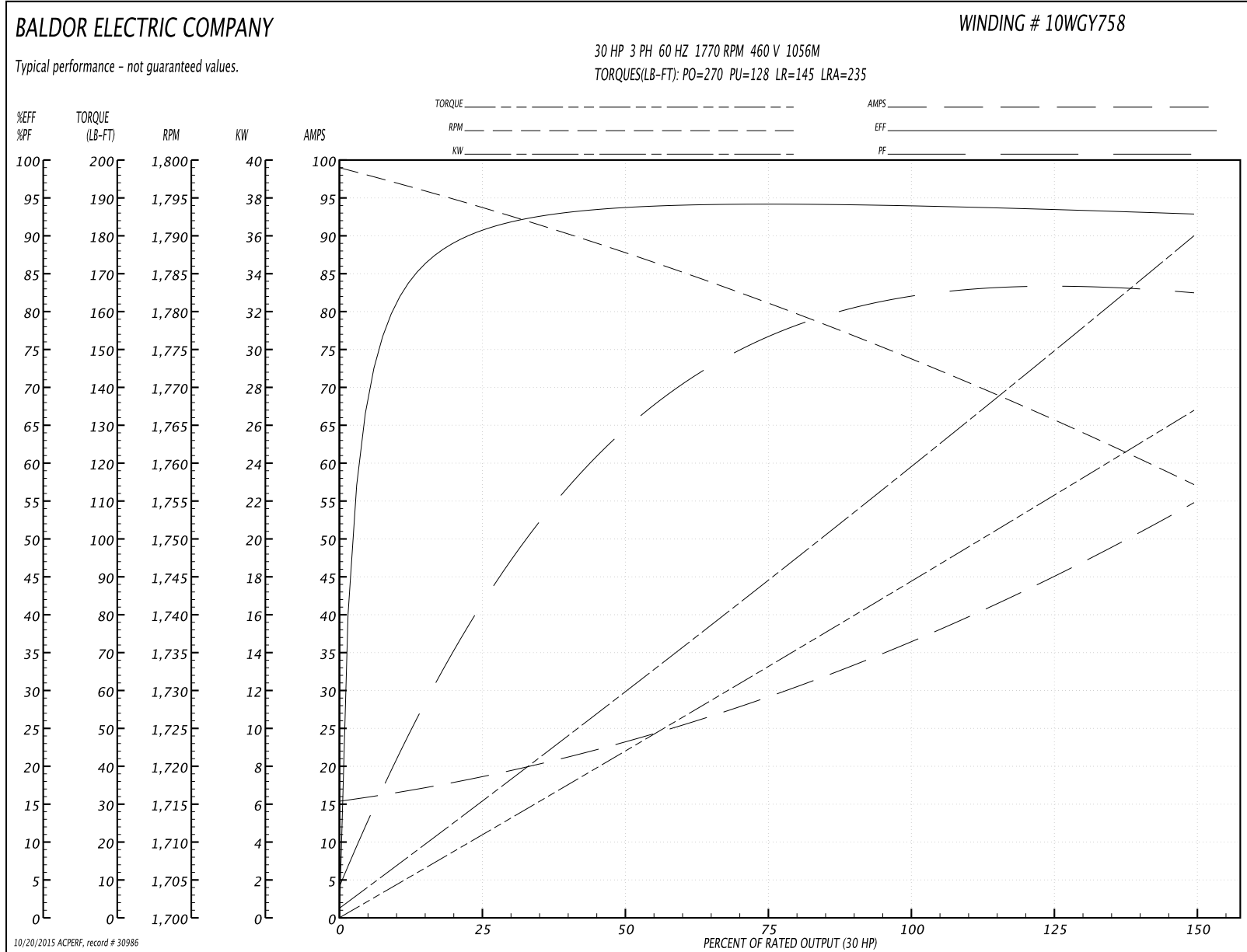
<b>Winding:</b> 10WGY758-R001	<b>Type:</b> 1056M	<b>Enclosure:</b> TEFC
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Nameplate Data				460 V, 60 Hz: High Voltage Connection	
Rated Output (HP)	30			Full Load Torque	89.1 LB-FT
Volts	230/460			Start Configuration	direct on line
Full Load Amps	72/36			Breakdown Torque	270 LB-FT
R.P.M.	1770			Pull-up Torque	128 LB-FT
Hz	60	Phase	3	Locked-rotor Torque	145 LB-FT
NEMA Design Code	B	KVA Code	G	Starting Current	235 A
Service Factor (S.F.)	1.15			No-load Current	15.9 A
NEMA Nom. Eff.	93.6	Power Factor	83	Line-line Res. @ 25°C	0.226 Ω
Rating - Duty	40C AMB-CONT			Temp. Rise @ Rated Load	57°C
S.F. Amps				Temp. Rise @ S.F. Load	70°C
				Rotor inertia	4.45 LB-FT <sup>2</sup>

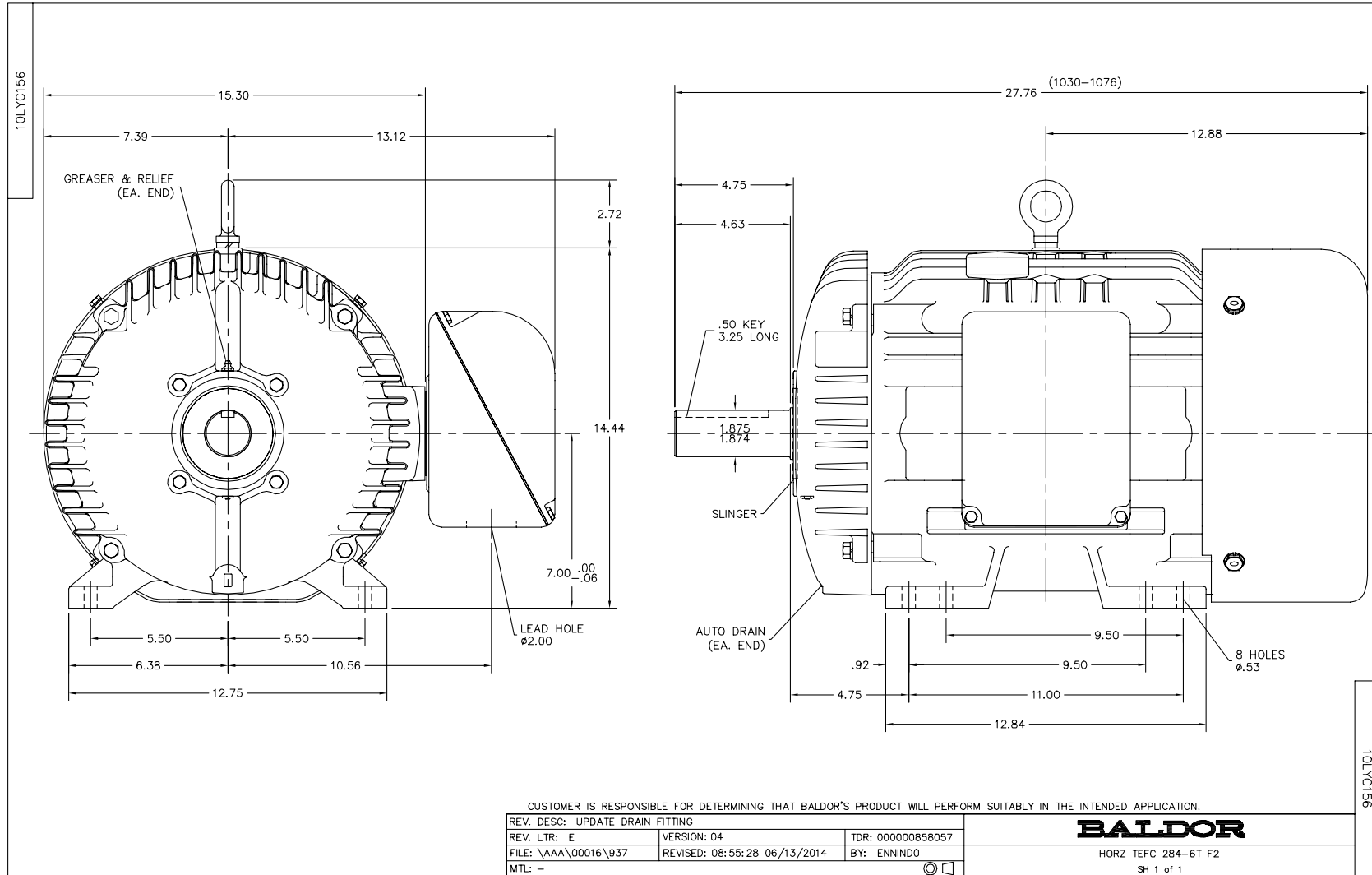
**Load Characteristics 460 V, 60 Hz, 30 HP**

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	44	66	75	83	83	83	83
Efficiency	90.6	93.7	94.3	94	93.2	93	93.6
Speed	1794	1787	1781	1774	1766	1757	1769
Line amperes	17.9	23	30.1	36.2	45.3	54.5	41.7

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
90000		FILE: AAA00005140	MDL: -
		MTL: -	

**BALDOR ELECTRIC Co.**

3PH, DV, 9 LEADS

CD0005