

BALDOR® • RELIANCE 

Product Information Packet

EFM4104T

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

Part Detail							
Revision:	S	Status:	PRD/A	Change #:		Proprietary:	No
Type:	AC	Elec. Spec:	10WGY758	CD Diagram:	CD0005	Mfg Plant:	
Mech. Spec:	10C156	Layout:	10LYC156	Poles:	04	Created Date:	04-29-2010
Base:	RG	Eff. Date:	09-29-2017	Leads:	9#10		

Specs			
Catalog Number:	EFM4104T	Heater Indicator:	No Heater
Enclosure:	TEFC	Insulation Class:	F
Frame:	286T	Inverter Code:	Inverter Ready
Frame Material:	Iron	KVA Code:	G
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:	1056M
Agency Approvals:	UR	Mounting Arrangement:	F2
	CSA EEV	Power Factor:	83
	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

Current @ Voltage:	36.000 A @ 460.0 V	Shaft Ground Indicator:	No Shaft Grounding
	72.000 A @ 230.0 V	Shaft Rotation:	Reversible
	76.000 A @ 208.0 V	Shaft Slinger Indicator:	Shaft 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 (OLD)
Feedback Device:	NO FEEDBACK	Thermal Device - Winding:	Normally Closed Thermostat
Front Face Code:	Standard	Vibration Sensor Indicator:	No Vibration Sensor
Front Shaft Indicator:	None	Winding Thermal 1:	None
		Winding Thermal 2:	None

Nameplate NP3443L											
CAT.NO.	EFM4104T				CUST. P/N				ENCL	TEFC	
SPEC.	10C156Y758G1		CC	010A		FRAME	286T		SER.NO.		
HP	30		CLASS	F		HZ	60				
R.P.M.	1770		PH	3		DES	A				
VOLTS	230/460		CODE	G		ODE BRG	6309		DE BRG	6311	
AMPS	72/36		USABLE AT 208V	76							
RATING	40C AMB-CONT		NEMA NOM. EFF.	93.6		GREASE	POLYREX EM				
P.F.	83		SER.F.	1.15		VPWM INVERTER READY					
HTR-VOLTS			HTR-AMPS			HTR-WATTS					

Parts List		
Part Number	Description	Quantity
SA194229	SA 10C156Y758G1	1.000 EA
RA181817	RA 10C156Y758G1	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
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	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
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
HW4600B40	V-RING SLINGER 2.000 X 2.680 X .28 VITON	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
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
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) 5/18	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
FE-0000022	ZRTG FE ASSEMBLY	1.000 EA
PE-0000013	ZRTG PE ASSEMBLY	1.000 EA

Accessories		
Part Number	Description	Multiplier
10-1305	C FACE KIT	A8
10EP1502A01SP	D-FLANGE KIT	A8

AC Induction Motor Performance Data

Record # 30986 - Typical performance - not guaranteed values

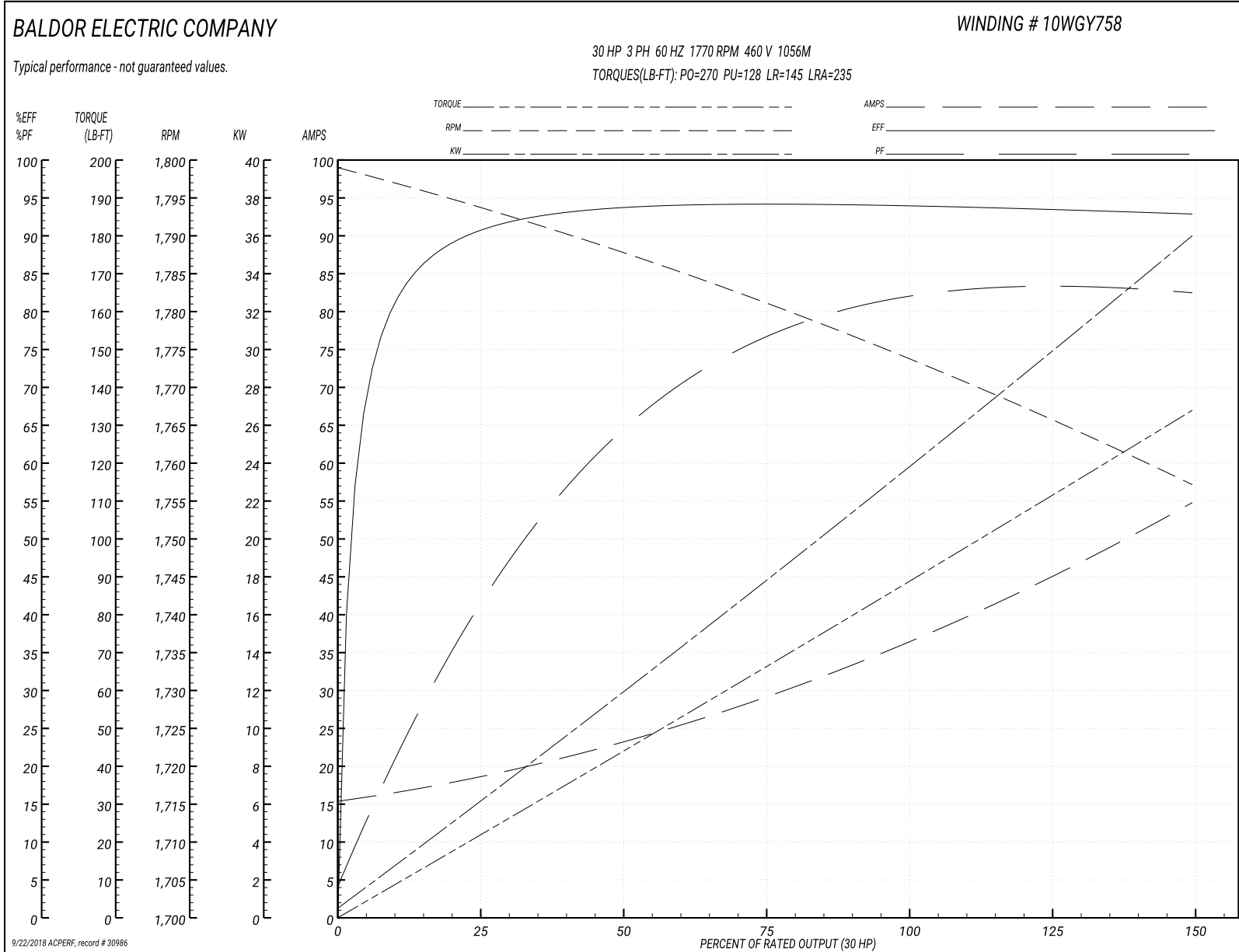
Winding: 10WGY758-R001	Type: 1056M	Enclosure: TEFC
-------------------------------	--------------------	------------------------

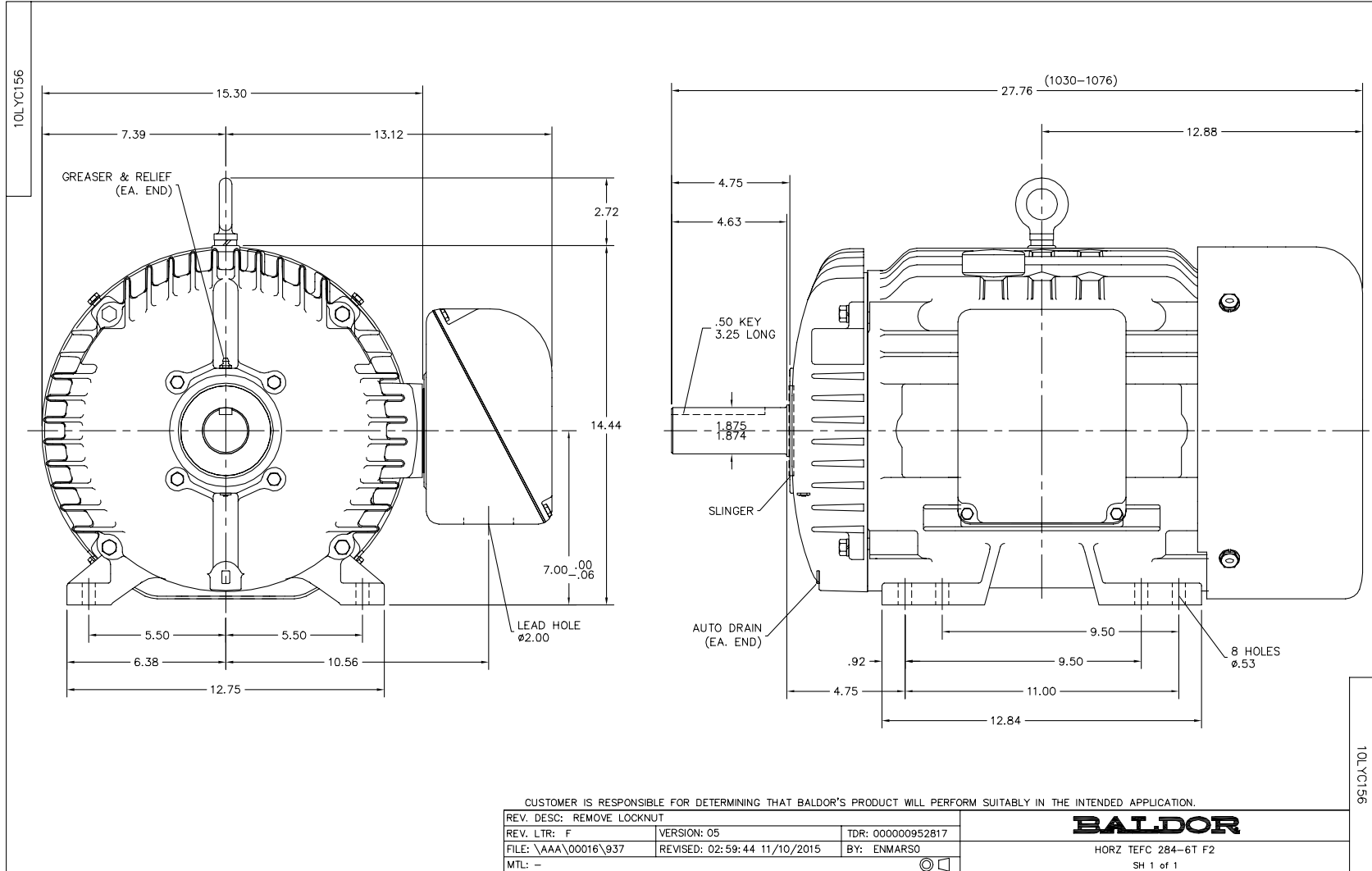
Nameplate Data				460 V, 60 Hz: High Voltage Connection	
Rated Output (HP)	30			Full Load Torque	89.1 LB-FT
Volts	230/460			Start Configuration	direct on line
Full Load Amps	72/36			Breakdown Torque	270 LB-FT
R.P.M.	1770			Pull-up Torque	128 LB-FT
Hz	60	Phase	3	Locked-rotor Torque	145 LB-FT
NEMA Design 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
				Locked-rotor Power Factor	32
				Rotor inertia	4.45 LB-FT ²

Load Characteristics 460 V, 60 Hz, 30 HP

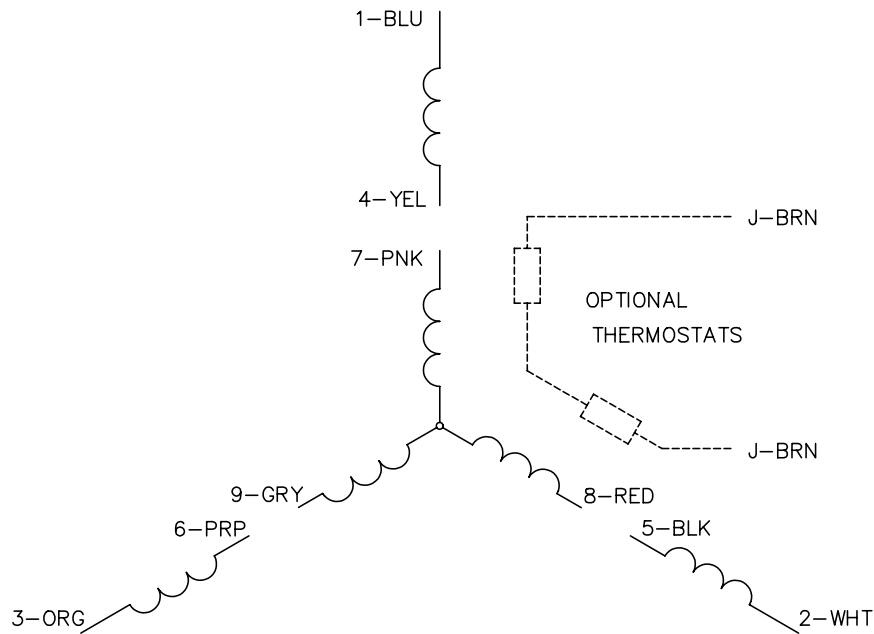
% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	44	66	75	83	83	83	83
Efficiency	90.6	93.7	94.3	94	93.2	93	93.6
Speed	1794	1787	1781	1774	1766	1757	1769
Line amperes	17.9	23	30.1	36.2	45.3	54.5	41.7

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

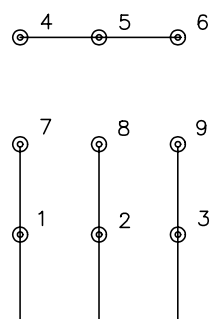




CD0005

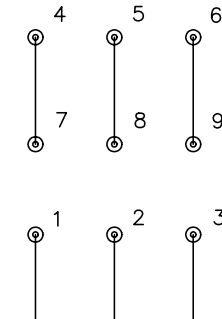


LOW VOLTAGE
(2Y)



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
900000		FILE: AAA00005140	MDL: -
		MTL: -	

BALDOR ELECTRIC Co.

3PH, DV, 9 LEADS

CD0005

Marketing maintained PDF of MN416:

<http://www.baldor.com/support/Literature/Load.ashx/MN416?ManNumber=MN416>