

BALDOR® • RELIANCE

Product Information Packet

EM4102T

20HP, 1180RPM, 3PH, 60HZ, 286T, 1054M, TEFC, F1

Part Detail									
Revision:	D	Status:	PRD/A	Change #:		Proprietary:	No		
Type:	AC	Prod. Type:	1054M	Elec. Spec:	10WGY730	CD Diagram:			
Enclosure:	TEFC	Mfg Plant:		Mech. Spec:	10C151	Layout:			
Frame:	286T	Mounting:	F1	Poles:	06	Created Date:	05-06-2010		
Base:	RG	Rotation:	R	Insulation:	F	Eff. Date:	07-25-2013		
Leads:	9#10	Literature:		Elec. Diagram:		Replaced By:			
Nameplate NP2138L									
CAT.NO.	EM4102T	P/N		ENCLOSURE			TEFC		
SPEC.	10C151Y730G1	CC	010A	FRAME			286T	S/N	
HP	20	CLASS	F	HZ			60		
RPM	1180	PH	3	DES			A		
VOLT	208-230/460	KVA-CODE	H	ODE BRG			6309	DE BRG	6311
AMP	56-54/27	USABLE AT 208V							
RATING	40C AMB-CONT	GREASE	POLYREX EM						
NEMA-NOM-EFF	91.7	PF	77	SER.F.			1.15		
HTR-VOLTS		HTR-AMPS		MAX. SPACE HEATER TEMP.					

Parts List		
Part Number	Description	Quantity
SA194429	SA 10C151Y730G1	1.000 EA
RA182016	RA 10C151Y730G1	1.000 EA
09FN3001C02	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
10XN3816K32	BOLT, 3/8-16X2 HH YZ(5)	4.000 EA
HA4017A01	1/8 X 4 GREASE EXT (F/S)	1.000 EA
HW1001A38	LOCKWASHER 3/8, ZINC PLT .688 OD, .382 I	4.000 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
10EP1105A01	PU ENDPLATE, MACH 284-6T	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
10XN2520K08	1/4-20 X .50 GRADE #5, STL, ZINC PLATE	4.000 EA

Parts List (continued)

Part Number	Description	Quantity
HW1001A25	LOCKWASHER 1/4, ZINC PLT .493 OD, .255 I	4.000 EA
10CB3500SP	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
LB5040	INSTRUCTION TAG, AC & DC	1.000 EA
LB1115	LABEL,LIFTING DEVICE	1.000 EA
HA4051A00	PLASTIC CAP FOR GREASE FITTING	1.000 EA
HW4500A21	1618BALEMITE FITTING 825 UNIVERSAL	1.000 EA
HW4500A17	317400 ALEMITE GREASE RELIEF	1.000 EA
HA4001A01SP	DRAIN PLUG, PLASTIC (MICRO PLAS)	1.000 EA
MJ1000A75	GREASE, POLYREX EM EXXON	0.130 LB
HA4051A00	PLASTIC CAP FOR GREASE FITTING	1.000 EA
HW4500A03	GREASE FITTING, .125 NPT 1610(ALEMITE) 8	1.000 EA
HW4500A17	317400 ALEMITE GREASE RELIEF	1.000 EA
HA4001A01SP	DRAIN PLUG, PLASTIC (MICRO PLAS)	1.000 EA
HW2500A25	WOODRUFF KEY USA #1008 #BLOW CARBON STEE	1.000 EA
51XB1214A20	12-14X1.25 HXWSSLD SERTYB	1.000 EA
MG1000Y03	WILKO 689.710 GOLD PAINT SUPER E	0.070 GA
85XU0407A04	#4-7 X 1/4 DRIVE PIN	4.000 EA
LB1119	WARNING LABEL	1.000 EA
LB1125C02	SUPER-E (STOCK CTN LABEL SUPER-E WITH FL	4.000 EA
LC0181	CONNECTION LABEL	1.000 EA

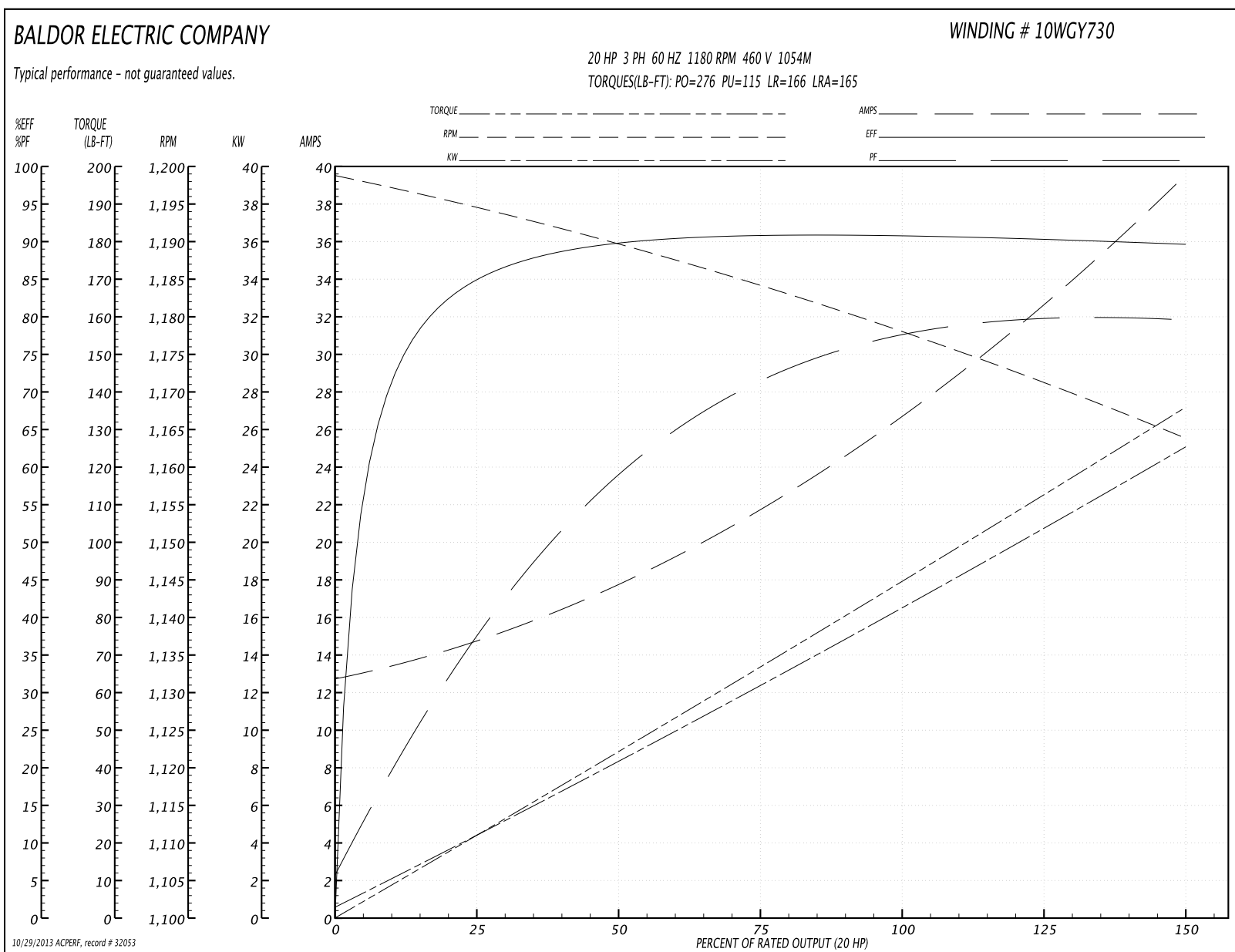
Parts List (continued)		
Part Number	Description	Quantity
NP2138L	ALUM SUPER-E UL CSA-EEV PREM CC (300	1.000 EA
10PA1000	PACKAGING GROUP COMBINED PRINT PK1023A06	1.000 EA
LB1506	LABEL "AMERICAN MADE" 1.50 X 1.00	1.000 EA

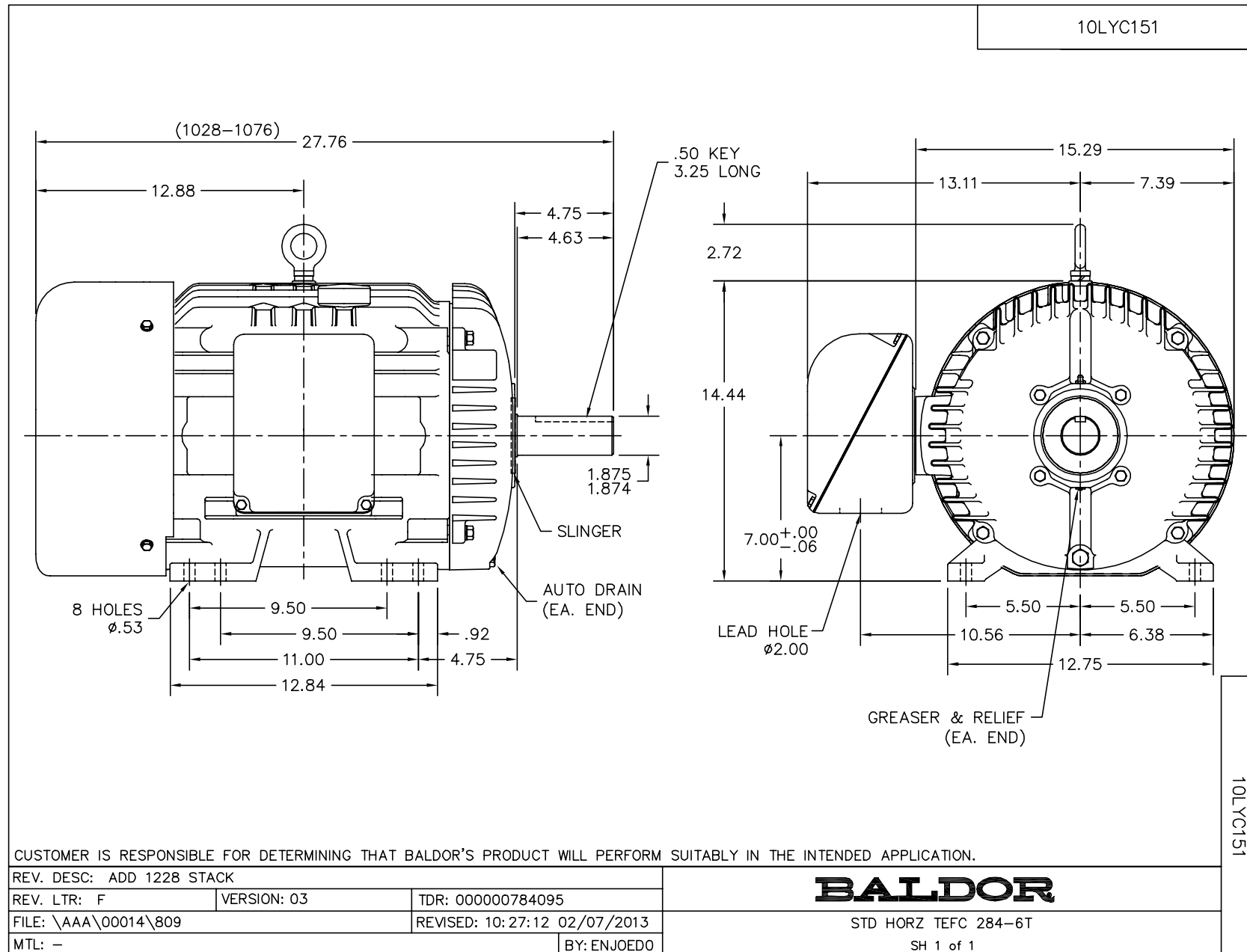
Accessories		
Part Number	Description	Multiplier
10-1305	C FACE KIT	A8
10EP1502A01SP	D-FLANGE KIT	A8

Performance Data at 460V, 60Hz, 20.0HP (Typical performance - Not guaranteed values)

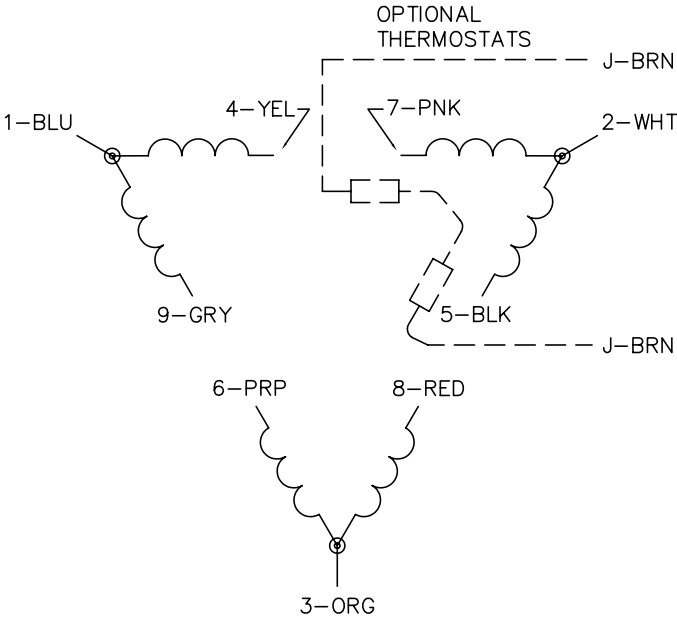
General Characteristics							
Full Load Torque:		89.4 LB-FT		Start Configuration:		DOL	
No-Load Current:		13.1 Amps		Break-Down Torque:		276.0 LB-FT	
Line-line Res. @ 25°C.:		0.425 Ohms A Ph / 0.0 Ohms B Ph		Pull-Up Torque:		115.0 LB-FT	
Temp. Rise @ Rated Load:		65 C		Locked-Rotor Torque:		166.0 LB-FT	
Temp. Rise @ S.F. Load:		79 C		Starting Current:		165.0 Amps	
Load Characteristics							
% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor:	39.0	60.0	71.0	77.0	79.0	80.0	78.0
Efficiency:	86.6	91.1	91.9	91.7	90.9	89.8	91.2
Speed:	1194.6	1189.5	1184.1	1178.3	1171.4	1163.8	1174.0
Line Amperes:	14.3	17.5	21.9	26.9	32.7	39.3	30.4

Performance Graph at 460V, 60Hz, 20.0HP Typical performance - Not guaranteed values

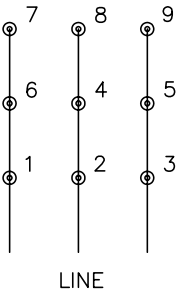




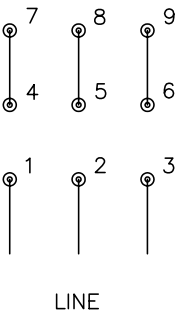
CD0180



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
081000		FILE: AAA00005148	MDL: -
		MTL: -	

BALDOR ELECTRIC Co.

3PH, DV, 9 LEADS, DELTA CONNECTION

CD0180