

BALDOR® • RELIANCE

Product Information Packet

EBM4103TY

25HP,1770RPM,3PH,60HZ,284T,1046M,TEFC,F1

Part Detail							
Revision:	B	Status:	PRD/A	Change #:		Proprietary:	No
Type:	AC	Prod. Type:	1046M	Elec. Spec:	10WGX209	CD Diagram:	CD0005
Enclosure:	TEFC	Mfg Plant:		Mech. Spec:	10E491	Layout:	10LYE491
Frame:	284T	Mounting:	F1	Poles:	04	Created Date:	03-09-2015
Base:	RG	Rotation:	R	Insulation:	F	Eff. Date:	12-15-2015
Leads:	9#10					Replaced By:	
Literature:		Elec. Diagram:					

Nameplate NP2138L

CAT.NO.	EBM4103TY		P/N			ENCLOSURE	TEFC	
SPEC.	10E491X209G3	CC	010A	FRAME	284T	S/N		
HP	25		CLASS	F	HZ	60		
RPM	1770		PH	3	DES	A		
VOLT	230/460				KVA-CODE	G	ODE BRG	6211
AMP	60/30		USABLE AT 208V		63.3	DE BRG		
RATING	40C AMB-CONT		GREASE		POLYREX EM			
NEMA-NOM-EFF	93.6	PF	84	SER.F.	1.15			
HTR-VOLTS			HTR-AMPS			MAX. SPACE HEATER TEMP.		

Parts List		
Part Number	Description	Quantity
SA295068	SA 10E491X209G3	1.000 EA
RA281140	RA 10E491X209G3	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
HA4017A01	1/8 X 4 GREASE EXT (F/S)	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	4.000 EA
HW1001A25	LOCKWASHER 1/4, ZINC PLT .493 OD, .255 I	4.000 EA
10EP1301A10	SPL FACE MTD E.P. 310 NEMA 256UC FOR NEW	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
84XN5013L16	1/2-13X1 NYLOK TYP HX SOCHD CAP SCREW TD	4.000 EA
HW2501G17	KEY, 3/8 SQ X 1.875	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

Parts List (continued)		
Part Number	Description	Quantity
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
HW4500A21	1618BALEMITE FITTING 825 UNIVERSAL	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
09FN3001B03SP	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
87BK8100MQF	1-087-081-00-MQF BRAKE	1.000 EA
LC0005E02	SPL CONN.DIA./WARN.LABEL(LC0005/LB1119)	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 # 2546 - Typical performance - not guaranteed values

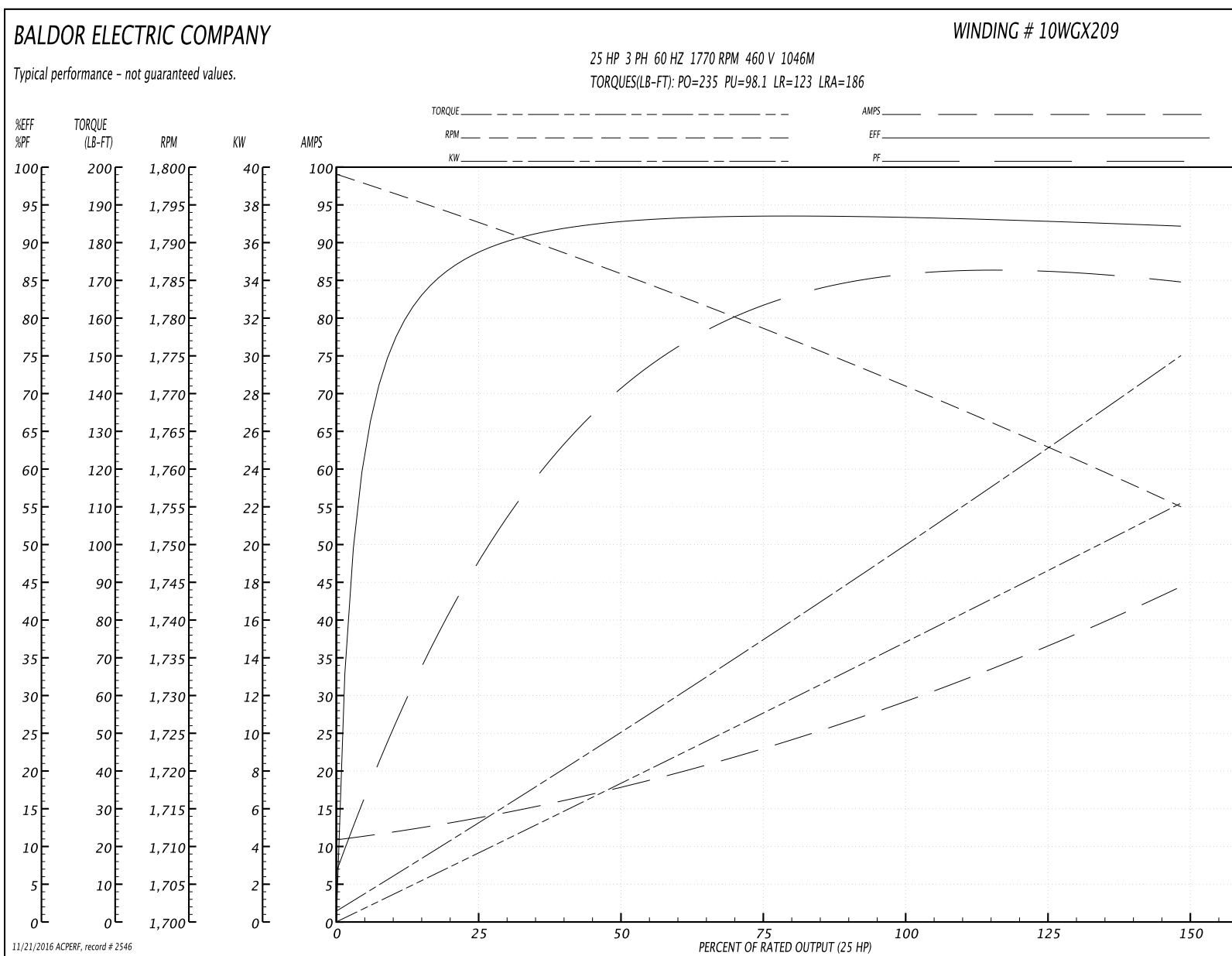
Winding: 10WGX209-R001	Type: 1046M	Enclosure: TEFC
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Nameplate Data				460 V, 60 Hz: High Voltage Connection	
Rated Output (HP)	25			Full Load Torque	74.2 LB-FT
Volts	230/460			Start Configuration	direct on line
Full Load Amps	60/30			Breakdown Torque	235 LB-FT
R.P.M.	1770			Pull-up Torque	98.1 LB-FT
Hz	60	Phase	3	Locked-rotor Torque	123 LB-FT
NEMA Design Code	A	KVA Code	G	Starting Current	186 A
Service Factor (S.F.)	1.15			No-load Current	11.3 A
NEMA Nom. Eff.	93.6	Power Factor	84	Line-line Res. @ 25°C	0.307 Ω
Rating - Duty	40C AMB-CONT			Temp. Rise @ Rated Load	52°C
S.F. Amps				Temp. Rise @ S.F. Load	63°C
				Locked-rotor Power Factor	32.6
				Rotor inertia	3.66 LB-FT ²

Load Characteristics 460 V, 60 Hz, 25 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	50	73	81	85	86	85	86
Efficiency	88.7	92.3	93.5	93.6	93.1	92	93.3
Speed	1793	1785	1779	1771	1763	1755	1766
Line amperes	13.3	17.6	23.3	29.6	36.5	44.2	33.7

Performance Graph at 460V, 60Hz, 25.0HP Typical performance - Not guaranteed values



AC Induction Motor Performance Data

Record # 36426 - Typical performance - not guaranteed values

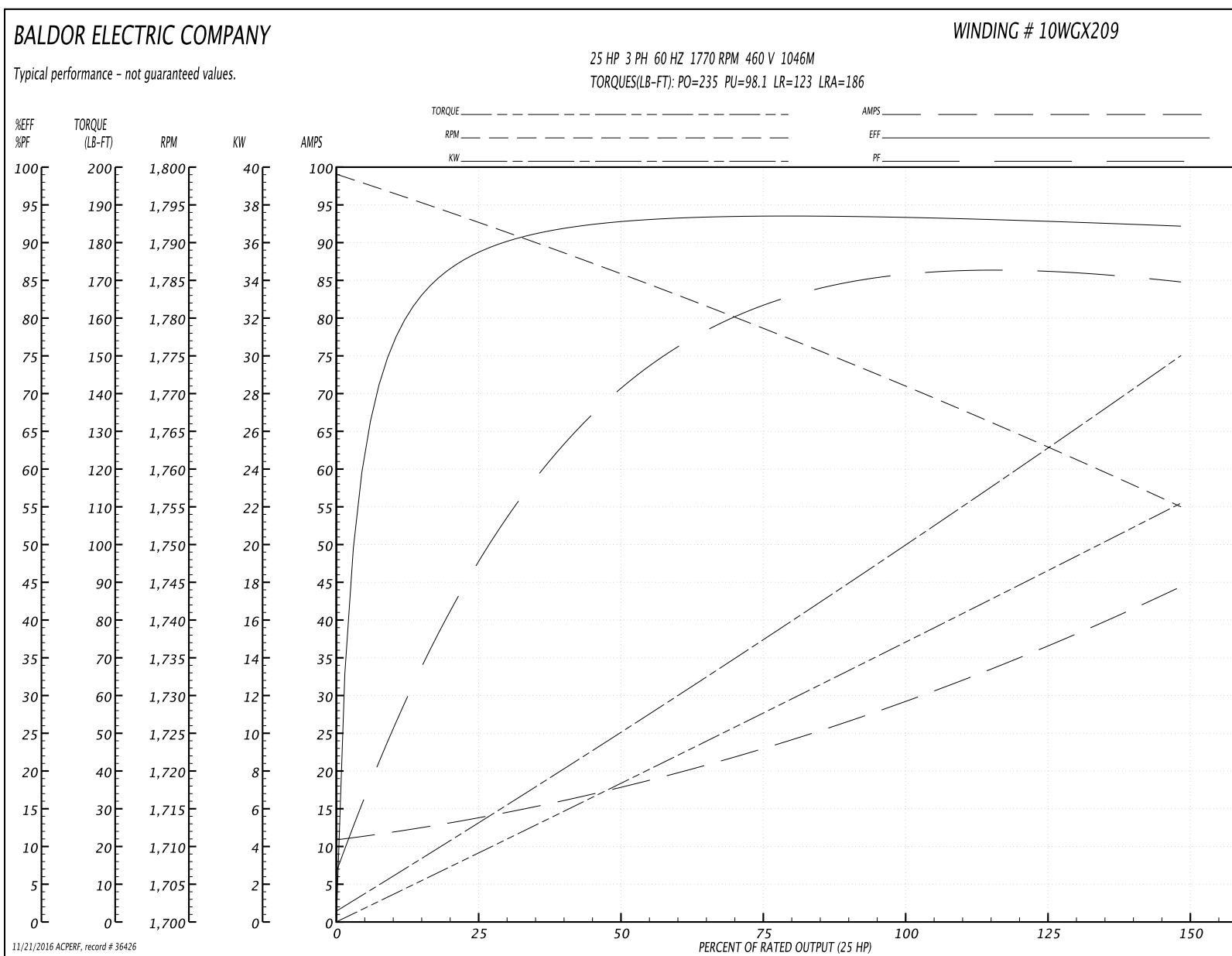
Winding: 10WGX209-R017	Type: 1046M	Enclosure: TEFC
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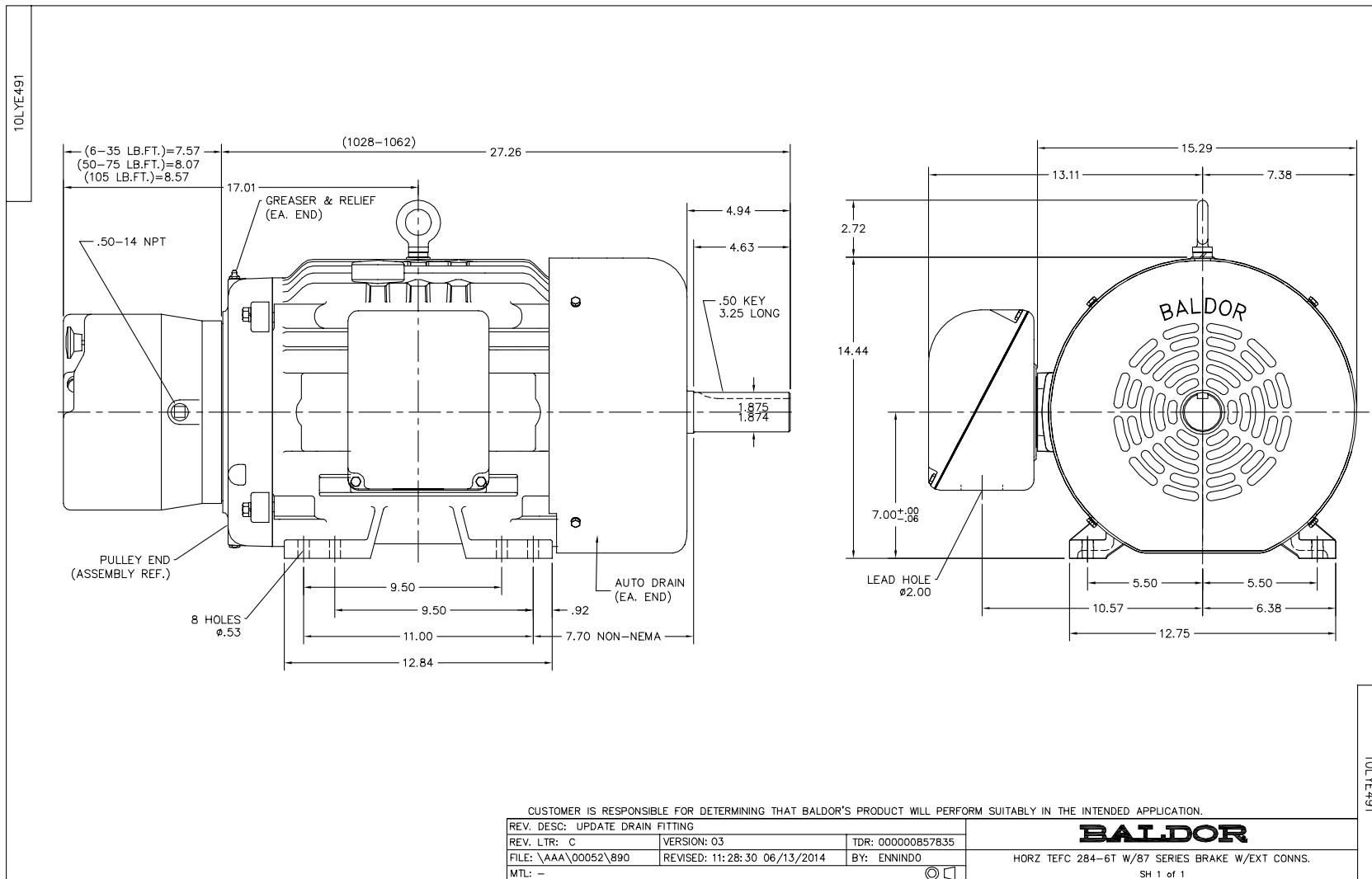
Nameplate Data				460 V, 60 Hz: High Voltage Connection	
Rated Output (HP)	25			Full Load Torque	74.2 LB-FT
Volts	230/460			Start Configuration	direct on line
Full Load Amps	60/30			Breakdown Torque	235 LB-FT
R.P.M.	1770			Pull-up Torque	98.1 LB-FT
Hz	60	Phase	3	Locked-rotor Torque	123 LB-FT
NEMA Design Code	A	KVA Code	G	Starting Current	186 A
Service Factor (S.F.)	1.15			No-load Current	11.3 A
NEMA Nom. Eff.	93.6	Power Factor	84	Line-line Res. @ 25°C	0.307 Ω
Rating - Duty	40C AMB-CONT			Temp. Rise @ Rated Load	52°C
S.F. Amps				Temp. Rise @ S.F. Load	63°C
				Locked-rotor Power Factor	33
				Rotor inertia	3.66 LB-FT ²

Load Characteristics 460 V, 60 Hz, 25 HP

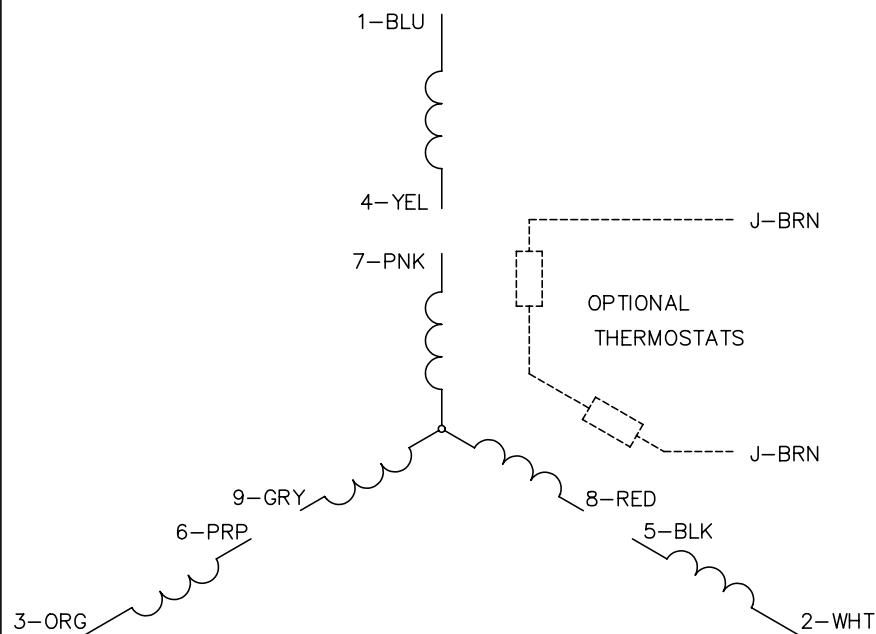
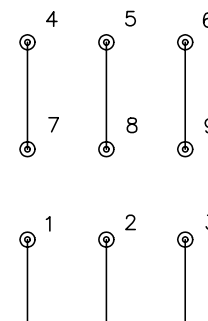
% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	50	73	81	85	86	85	86
Efficiency	88.7	92.3	93.5	93.6	93.1	92	93.3
Speed	1793	1785	1779	1771	1763	1755	1766
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Performance Graph at 460V, 60Hz, 25.0HP Typical performance - Not guaranteed values





CD0005

LOW VOLTAGE
(2Y)HIGH VOLTAGE
(1Y)

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