

# **BALDOR® • RELIANCE**

## **Product Information Packet**

### **EM7082T-I**

**25//20HP, 1180//985RPM, 3PH, 60//50HZ, 324T**

Part Detail							
Revision:	S	Status:	PRD/A	Change #:		Proprietary:	No
Type:	AC	Prod. Type:	1260M	Elec. Spec:	12WGY116	CD Diagram:	CD0180
Enclosure:	XPFC	Mfg Plant:		Mech. Spec:	12S077	Layout:	12LYS077
Frame:	324T	Mounting:	F1	Poles:	06	Created Date:	06-08-2011
Base:	RG	Rotation:	R	Insulation:	F	Eff. Date:	01-04-2017
Leads:	9#8					Replaced By:	
Literature:		Elec. Diagram:					

Nameplate NP0977XPSLEV										
NO.							CC	010A		
SER.								TEMP CODE	T3C	
SPEC.	12S077Y116G1									
CAT.NO.	EM7082T-I									
HP	25//20 NEMA MG-1 PT.5,IP55									
VOLTS	230/460//190/380									
AMPS	63/32//62/31									
RPM	1180//985						MOTOR WEIGHT	741		
HERTZ	60//50			PH	3	CL	F	DE BRG	6312	
SER.F.	1.15			DES	A	CODE	H	ODE BRG	6311	
FRAME	324T			GREASE	POLYREX EM					
RATING	40C AMB-CONT									
USABLE AT 208V	69			NEMA-NOM-EFF	93			PF	79	
	55C AMB @ 1.0 SF 60C RISE									

Parts List		
Part Number	Description	Quantity
SA225056	SA 12S077Y116G1	1.000 EA
RA212154	RA 12S077Y116G1	1.000 EA
09FN3001B03SP	EXTERNAL FAN, PLASTIC	1.000 EA
12CB1003A01	CONDUIT BOX MACH. GROUP C MTRS	1.000 EA
10XN3118K24	5/16-18 X 1.50" HEX HD, GRADE 5	4.000 EA
HW1001A31	LOCKWASHER 5/16, ZINC PLT.591 OD, .319 I	4.000 EA
WD1000B19	TERMINAL BURNDY L250HP	1.000 EA
10XN3816K12	3/8-16 X 3/4 HEX HD CAP GRADE 5	1.000 EA
HW1001A38	LOCKWASHER 3/8, ZINC PLT .688 OD, .382 I	1.000 EA
12EP1705A12P	EP, MACH. XPFC, 311 BRG. GRP C, HW4505A0	1.000 EA
HW4505A02	BREATHER/DRAIN-EXP PROOF-.250-18 PTF AIS	1.000 EA
HW3023E06	.125 X .625 SPIRAL SPRING PIN	1.000 EA
HA3051A03	1/2-13X2.75 BLT GR8 1.75 TO E NC F/S	4.000 EA
HW1001A50	LOCKWASHER 1/2, ZINC PLT.,.879 OD, .509 I	4.000 EA
HW5100A13	W4627-047 WVY WSHER	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
12EP1706A08P	EP, MACH. XPFC 312 BRG. W/DRAIN HW4505A0	1.000 EA
HW4505A02	BREATHER/DRAIN-EXP PROOF-.250-18 PTF AIS	1.000 EA
HW3023E06	.125 X .625 SPIRAL SPRING PIN	1.000 EA
HA3051A03	1/2-13X2.75 BLT GR8 1.75 TO E NC F/S	4.000 EA
HW1001A50	LOCKWASHER 1/2, ZINC PLT.,.879 OD, .509 I	4.000 EA
HA2067A02	SLINGER ALUM (AUTO)	1.000 EA
80XN1032A07	SET SCREW, HEX XOCK, ZN	2.000 EA

<b>Parts List (continued)</b>		
<b>Part Number</b>	<b>Description</b>	<b>Quantity</b>
12FH1001A06	FAN HOUSING 312 EXPLOSION PROOF MOTORS	1.000 EA
10XN3118J12	5/16-18 X 3/4 HEX HEAD CAP, GRADE 8	3.000 EA
HW1001A31	LOCKWASHER 5/16, ZINC PLT.591 OD, .319 I	3.000 EA
12CB1502A01	CONDUIT BOX LID MACH. GROUP C MTRS	1.000 EA
84XN5013J32	SOCKET HD.CAP SCR,1/2-13 X 2"LG,ALLOY ST	10.000 EA
HW1001A50	LOCKWASHER 1/2, ZINC PLT.,.879 OD, .509 I	10.000 EA
HW2501H33	KEY, 1/2 SQ X 3.875	1.000 EA
LB1115N	LABEL,LIFTING DEVICE (ON ROLLS)	1.000 EA
LB1081C	ALUM XP CAUTION LABEL (COL PLANT ONLY-	1.000 EA
HW4500A20	1/8NPT SL PIPE PLUG	2.000 EA
MJ1000A02	GREASE, POLYREX EM EXXON (USe 4824-15A)	0.200 LB
HW4500A20	1/8NPT SL PIPE PLUG	2.000 EA
HW2500A25	WOODRUFF KEY USA #1008 #BLOW CARBON STEE	1.000 EA
51XB1214A20	12-14X1.25 HXWSSLD SERTYB	1.000 EA
MG1025G05	WILKOFASST, 789.227, MED. GRAY CHAR. MET.	0.080 GA
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	6.000 EA
MN416A01	TAG-INSTAL-MAINT no wire (1000/bx) 11/14	1.000 EA
LB1119N	WARNING LABEL	1.000 EA
LC0181	CONNECTION LABEL	1.000 EA
NP0977XPSLEV	SS XP UL CSA-EEV CC CL-I GP-C&D	1.000 EA
12PA1020	PKGP CRATE 312 EXPORT 36 X 30-1/2 X 22-	1.000 EA

**AC Induction Motor Performance Data**

Record # 34367 - Typical performance - not guaranteed values

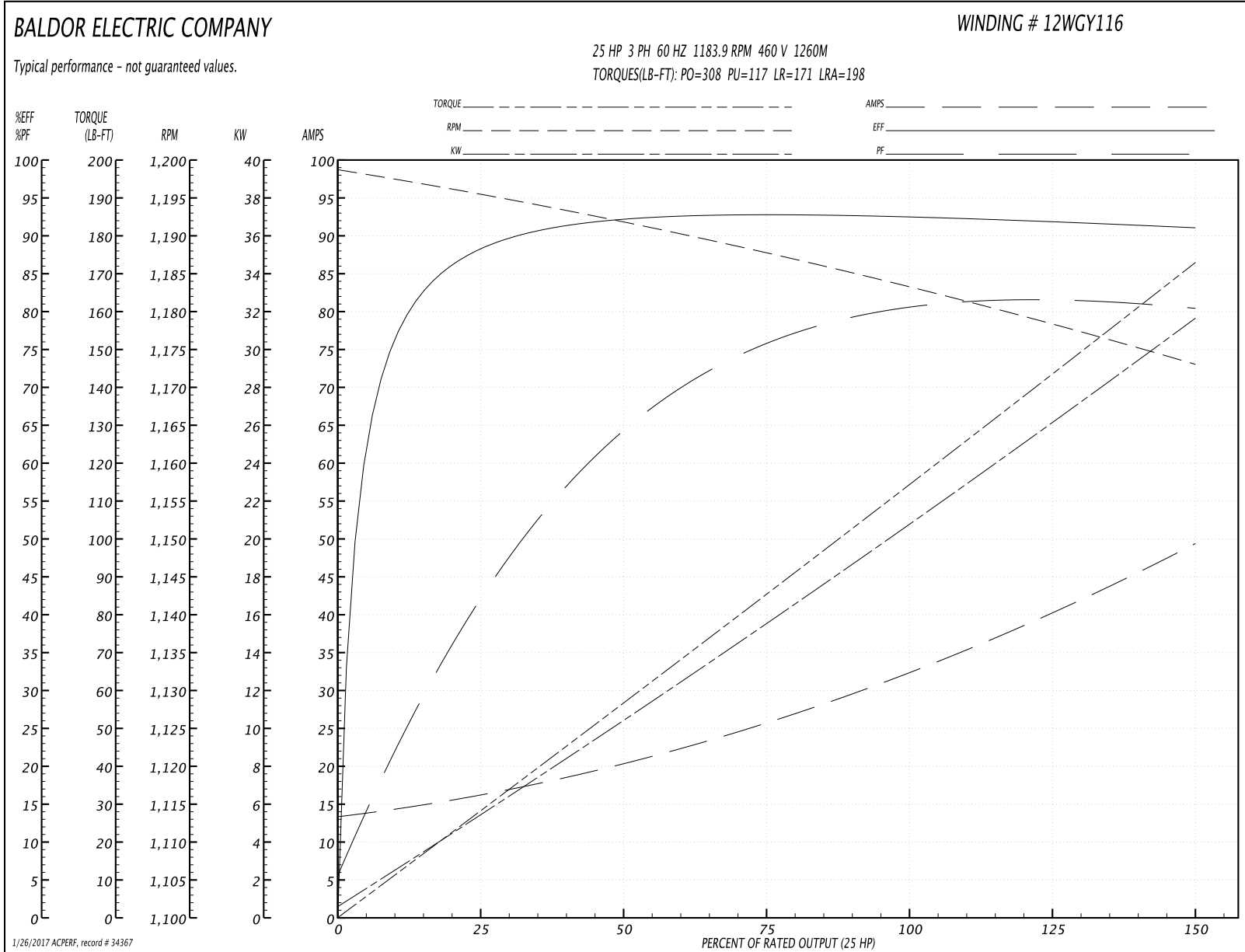
<b>Winding:</b> 12WGY116-R004	<b>Type:</b> 1260M	<b>Enclosure:</b> XPFC
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Nameplate Data				460 V, 60 Hz: High Voltage Connection	
Rated Output (HP)	25//20			Full Load Torque	111 LB-FT
Volts	230/460//190/380			Start Configuration	direct on line
Full Load Amps	63/32//62/31			Breakdown Torque	308 LB-FT
R.P.M.	1180//985			Pull-up Torque	117 LB-FT
Hz	60//50	Phase	3	Locked-rotor Torque	171 LB-FT
NEMA Design Code	A	KVA Code	H	Starting Current	198 A
Service Factor (S.F.)	1.15			No-load Current	13.8 A
NEMA Nom. Eff.	93	Power Factor	79	Line-line Res. @ 25°C	0.27033 Ω
Rating - Duty	40C AMB-CONT			Temp. Rise @ Rated Load	46°C
S.F. Amps				Temp. Rise @ S.F. Load	56°C
				Locked-rotor Power Factor	28
				Rotor inertia	11.5 LB-FT <sup>2</sup>

Load Characteristics 460 V, 60 Hz, 25 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	43	65	75	79	81	81	80
Efficiency	89.1	92.8	93.5	93.2	92.6	91.5	92.8
Speed	1195.4	1191.8	1188.2	1183.9	1179.3	1172.9	1181
Line amperes	15.6	19.7	25.4	31.9	39.2	49.1	36.3

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



**AC Induction Motor Performance Data**

Record # 34368 - Typical performance - not guaranteed values

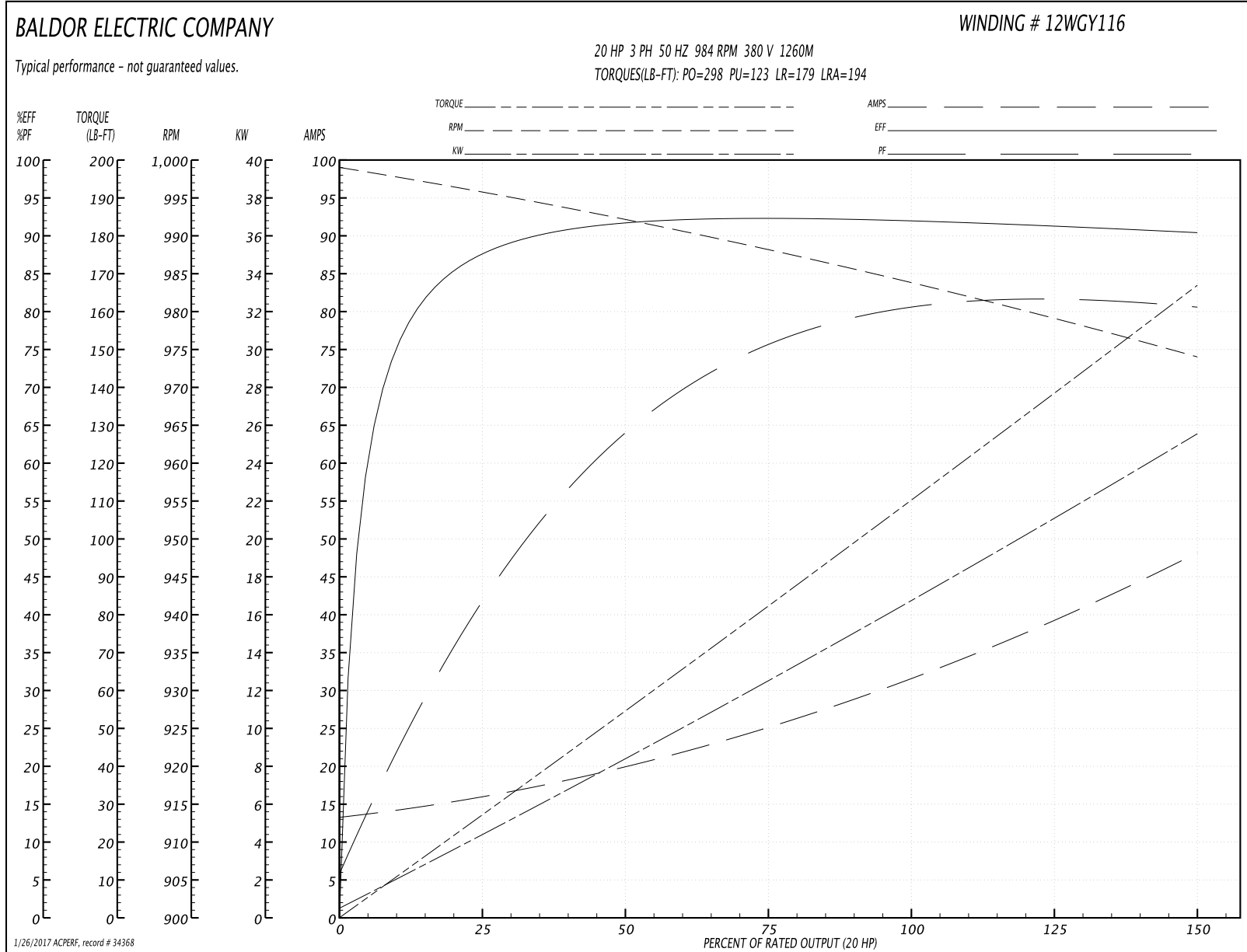
<b>Winding:</b> 12WGY116-R004	<b>Type:</b> 1260M	<b>Enclosure:</b> XPFC
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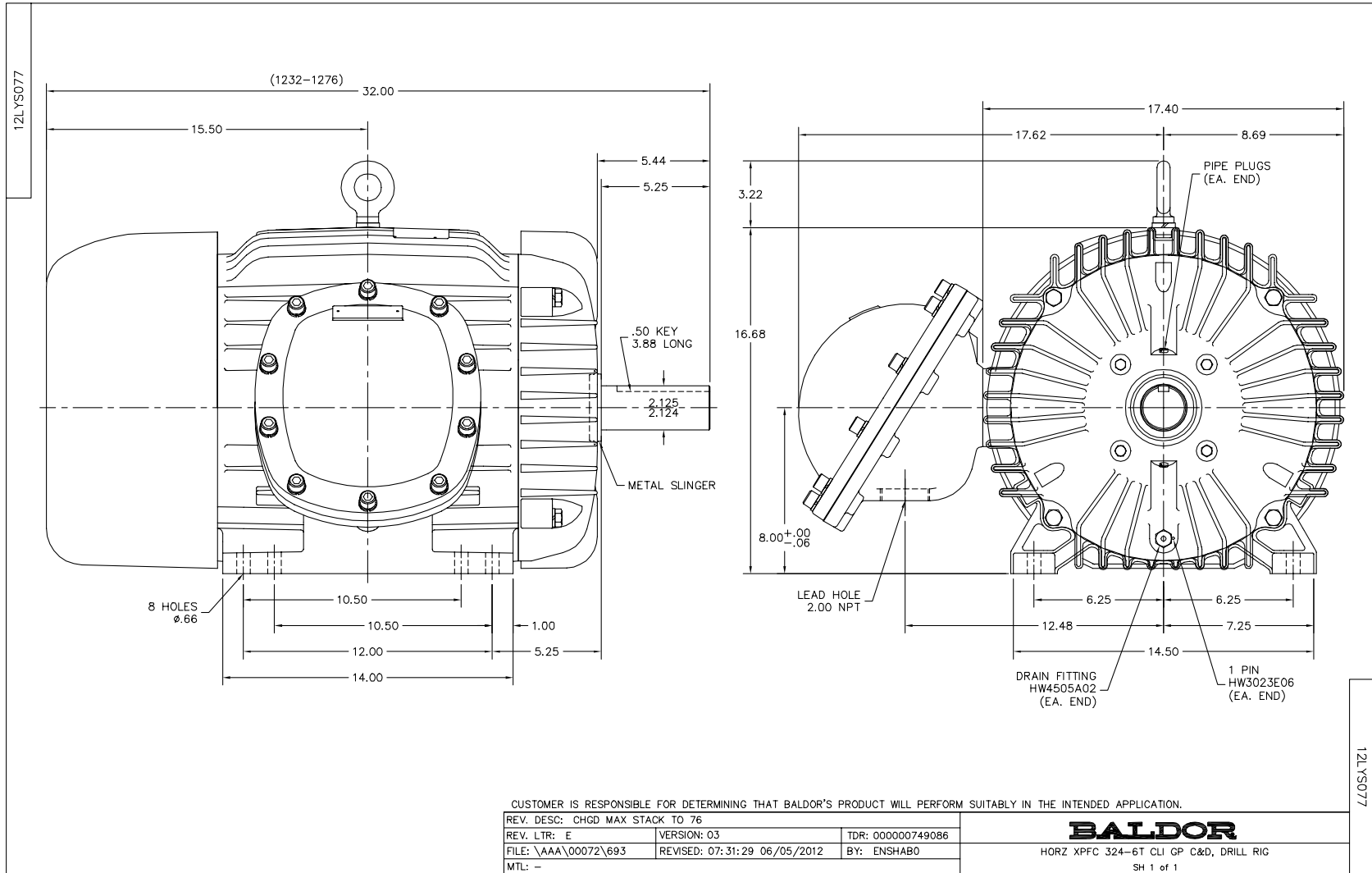
Nameplate Data				380 V, 50 Hz: High Voltage Connection	
Rated Output (HP)	25//20			Full Load Torque	107 LB-FT
Volts	230/460//190/380			Start Configuration	direct on line
Full Load Amps	63/32//62/31			Breakdown Torque	298 LB-FT
R.P.M.	1180//985			Pull-up Torque	123 LB-FT
Hz	60//50	Phase	3	Locked-rotor Torque	179 LB-FT
NEMA Design Code	A	KVA Code	H	Starting Current	194 A
Service Factor (S.F.)	1.15			No-load Current	13.7 A
NEMA Nom. Eff.	93	Power Factor	79	Line-line Res. @ 25°C	0.274 Ω
Rating - Duty	40C AMB-CONT			Temp. Rise @ Rated Load	44°C
S.F. Amps				Temp. Rise @ S.F. Load	53°C
				Locked-rotor Power Factor	32
				Rotor inertia	11.5 LB-FT <sup>2</sup>

Load Characteristics 380 V, 50 Hz, 20 HP

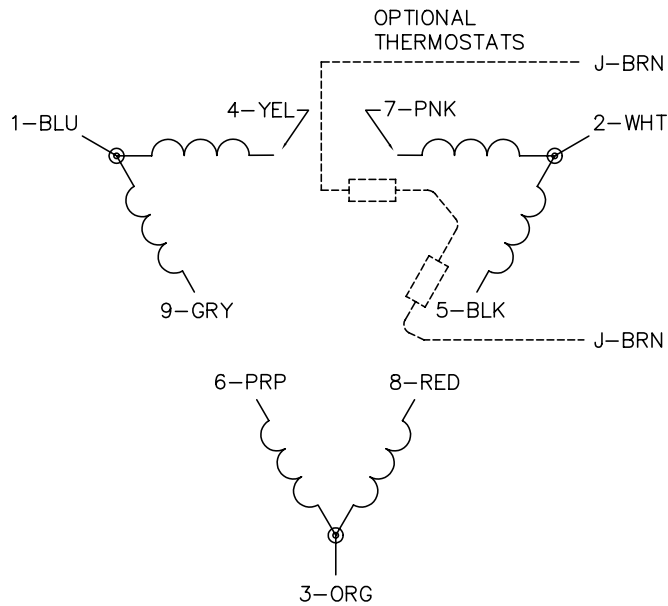
% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	43	65	75	79	81	81	80
Efficiency	86.4	91.2	92.2	92.3	91.6	90.3	91.9
Speed	996	992	989	984	980	974	982
Line amperes	15.4	19.3	24.8	31.1	38.2	47.9	35.4

Performance Graph at 380V, 50Hz, 20.0HP Typical performance - Not guaranteed values

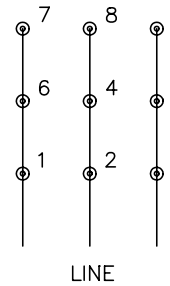




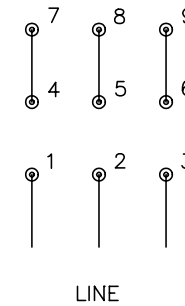
CD0180



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
0810D0		FILE: AAA00005148	MDL: -
		MTL: -	

**BALDOR ELECTRIC Co.**

3PH, DV, 9 LEADS, DELTA CONNECTION

CD0180