



Customer information packet

SPM4104T

30HP, 1780RPM, 3PH, 60HZ, 286T, 1072M, TEFC, F1

Class - None

Division - Not Applicable

Specifications

Enclosure	TEFC
Frame	286T
Frame Material	Iron
Frequency	60.00 Hz
Haz Area Class and Group	None
Haz Area Division	Not Applicable
Motor Letter Type	Three Phase
Output @ Frequency	30.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	230.0 V @ 60 HZ 460.0 V @ 60 HZ
Agency Approvals	CSA CURUSEEV NEMA PREMIUM NEMA_PREMIUM WEEE
Ambient Temperature	40 °C
Auxillary Box	No Auxillary Box
Auxillary Box Lead Termination	None
Base Indicator	Rigid
Bearing Grease Type	Polyrex EM (-20F +300F)
Blower	None
Current @ Voltage	70.000 A @ 230.0 V 35.000 A @ 460.0 V
Design Code	A
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	94.5 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Shaft Indicator	None

Part detail

Revision	A
Type	AC
Mech. spec.	10T012
Base	
Status	PRD/A
Elec. spec.	10WGZ886
Layout	10LYT012
Eff. date	07-18-2024
CD Diagram	CD0005
Poles	04
Leads	9#10
Proprietary	False
Created date	03-25-2024

Haz Area Temp Code	T3A
Heater Indicator	No Heater
High Voltage Full Load Amps	35.0 a
Insulation Class	F
Inverter Code	Inverter Duty
KVA Code	H
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Max Speed	2700 rpm
Motor Lead Quantity/Wire Size	9 @ 10 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	1072M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	28.00 IN
Power Factor	85
Product Family	Chemical Processing (Not DC)
Pulley End Bearing Type	Ball
Pulley Face Code	Standard
Pulley Shaft Indicator	Standard
Rodent Screen	None
Service Factor	1.15
Shaft Diameter	1.875 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	1780 rpm
Speed Code	Single Speed
Starting Method	Direct on line
Thermal Device - Bearing	None
Thermal Device - Winding	None
Vibration Sensor Indicator	No Vibration Sensor
Winding Thermal 1	None

Winding Thermal 2

None

Nameplate

NP4439B01C23L																																			
CAT #		SPM4104T								SER #										CC	010A		WGT	465		LBS									
SPEC		10T012Z886								FRAME		286T								ENCL	TEFC		IP	55											
RATING		40C AMB-CONT										NEMA NOM. EFF										94.5													
HP		30								VOLTS		230/460																							
AMPS		70/35								RPM		1780								HZ		60													
PH	3	CL	F	CODE		H	DES	A	PF	85	%	SER.F.		1.15	SF AMP		80/40																		
DE BRG		6311						ODE BRG		6311						LUBE		POLYREX EM																	
INV TYPE:		VPWM		SL HZ		0.7		CHP		60		TO		90		1.5:1																			
WK2		6.6		LBFT2		MAX RPM		2700		CT		6		TO		60		10:1																	
MAG CUR		24/12								VT		3		TO		60		20:1																	
										MEETS INTENT OF IEEE-45										FOR WEATHER PROTECTION															
CL I DIV 2 GRPS A,B,C,D										TEMP CODE		T3C		CL I INV TEMP CODE										T3A		TEMP=		180		°C					
CL I ZONE 2 GRPS										IIA,IIB,IIC		TEMP =		160		°C		CL II INV TEMP CODE										t3a		TEMP =		180		°C	
CL II DIV 2 GRPS F&G										TEMP CODE		T3A		1.0 SF ON PWM INVERTER										POWER											
CL II ZONE 22 GRPS IIIB										TEMP=		180		°C																					
YR																																			

Parts list

Part number	Description	Quantity
SA423934	SA 10T012Z886	1.000 ea
RA415989	RA 10T012Z886	1.000 ea
09FN3001C02	EXTERNAL FAN, PLASTIC (COMES W/SCREW FRO	1.000 ea
10CB1000A352P	CONDUIT BOX, MACH W/EPOXY PRIMER	1.000 ea
09GS1010	GASKET, DWG, LEADWIRE SEPERATOR	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
10EP1110A142LP5	FREP, MACH W/PRIMER & PAINT	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
80XN1032J06	10-32 X 3/8 SET SCREW, HEX SOC, CUP PT	2.000 ea
HA2009A33	SLINGER, FOR GROUP E MOTORS - 311 BRG.	1.000 ea
HW4500A20	1/8NPT SL PIPE PLUG	1.000 ea
HA4017A11	1/8 X 2.75 GREASE EXT (F/S)	1.000 ea
HW4019A01	PIPE COUPLING 1/8 NPT,STEEL,ZINC COATING	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
HA4017A03	.125 X 1.75 GREASE EXT (F/S)	1.000 ea
HW5100A13	W4627-047 WVY WSHR	1.000 ea
10XN2520K36	1/4-20 X 2.00 HX HD SCRW GRADE 5, ZINC P	2.000 ea
10XN3118K40	5/16-18 X 2.50" HEX HD, GRADE 5	4.000 ea
10EP1110A216P	PU ENDPLATE, MACH W/PRIMER	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
HW4505A02	BREATHER/DRAIN-EXP PROOF-.250-18 PTF AIS	1.000 ea
HW3023E06	.125 X .625 SPIRAL SPRING PIN	1.000 ea
80XN1032J06	10-32 X 3/8 SET SCREW, HEX SOC, CUP PT	2.000 ea
HA2009A33	SLINGER, FOR GROUP E MOTORS - 311 BRG.	1.000 ea
HW4500A20	1/8NPT SL PIPE PLUG	1.000 ea

10FH1007LP5	FAN COVER, W/MG1025L14, PRIMED CASTING	1.000 ea
10XN3118K20	5/16-18 X 1 1/4 GRADE 5 STEEL ZC PLATED	3.000 ea
HW1001A31	LOCKWASHER 5/16, ZINC PLT.591 OD, .319 I	3.000 ea
10CB1503A01P	CONDUIT BOX LIPPED LID, MACH W/EPXY PRMR	1.000 ea
14GS1003	GASKET CONDUIT BOX LID, NEOP	1.000 ea
10XN2520K16	1/4-20 X 1" HX HD SCRW GRADE 5, ZINC P	4.000 ea
HW1001A25	LOCKWASHER 1/4, ZINC PLT .493 OD, .255 I	4.000 ea
HW2501H28	KEY, 1/2 SQ X 3.250	1.000 ea
MG1500Y02	WILKOPON PRIMER YELLOW	0.010 ga
MJ5001A27	32220KN GRAY SEALER *MIN BUY 4 QTS=1GAL	0.031 qt
MJ5002A01	SILICON RUBBER SEALANT, 732CL 10.3 OZ TU	0.033 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
MJ1000A02	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
HW2500A25	WOODRUFF KEY USA #1008 #BLOW CARBON STEE	1.000 ea
HA6390A01	HOSE CLAMP FOR 3.12 DIA S.S. OR PLATED	1.000 ea
MG1050Y01	CELEROL BALDOR GOLD *** NLA IN 5 GALLON	0.070 ga
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	2.000 ea
NP4439B01C23L	SS SUPER PREM,CONN 01(CD0005),AGENCY C,	1.000 ea
10PA1000	PACKAGING GROUP COMBINED PRINT PK1023A06	1.000 ea
MN416A01	TAG-INSTAL-MAINT no wire (2500bx)4/22	1.000 ea
LB1636	LABEL, SUPER PREMIUM SP4, 1.75 X 1.75	1.000 ea

AC Induction Motor Performance Data

Record # 104508

Typical performance - not guaranteed values

Winding: 10WGZ886-R001			Type: 1072M		Enclosure: TEFC		
Nameplate Data			460 V, 60 Hz: High Voltage Connection				
Rated Output (HP)		30	Full Load Torque		88.58 LB-FT		
Volts		230/460	Start Configuration		direct on line		
Full Load Amps		70/35	Breakdown Torque		276 LB-FT		
R.P.M.		1780	Pull-up Torque		144 LB-FT		
Hz	60	Phase	3	Locked-rotor Torque		171 LB-FT	
NEMA Design Code		A	KVA Code	H	Starting Current		255 A
Service Factor (S.F.)		1.15	No-load Current		12 A		
NEMA Nom. Eff.		94.5	Power Factor	85	Line-line Res. @ 25°C		0.25051 Ω
Rating - Duty		40C	AMB-CONT		Temp. Rise @ Rated Load		48°C
S.F. Amps		80/40	Temp. Rise @ S.F. Load		60°C		
			Locked-rotor Power Factor		30.5		
			Rotor inertia		6.6 lb-ft²		

Load Characteristics 460 V, 60 Hz, 30 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	52	74	82	85	86	86	86
Efficiency	92.7	95	95.3	94.9	94.3	93.4	94.5
Speed	1794.6	1789.8	1785.5	1780.2	1774.4	1768.7	1777
Line amperes	14.5	20.1	27.1	34.9	43.3	52.4	39.9

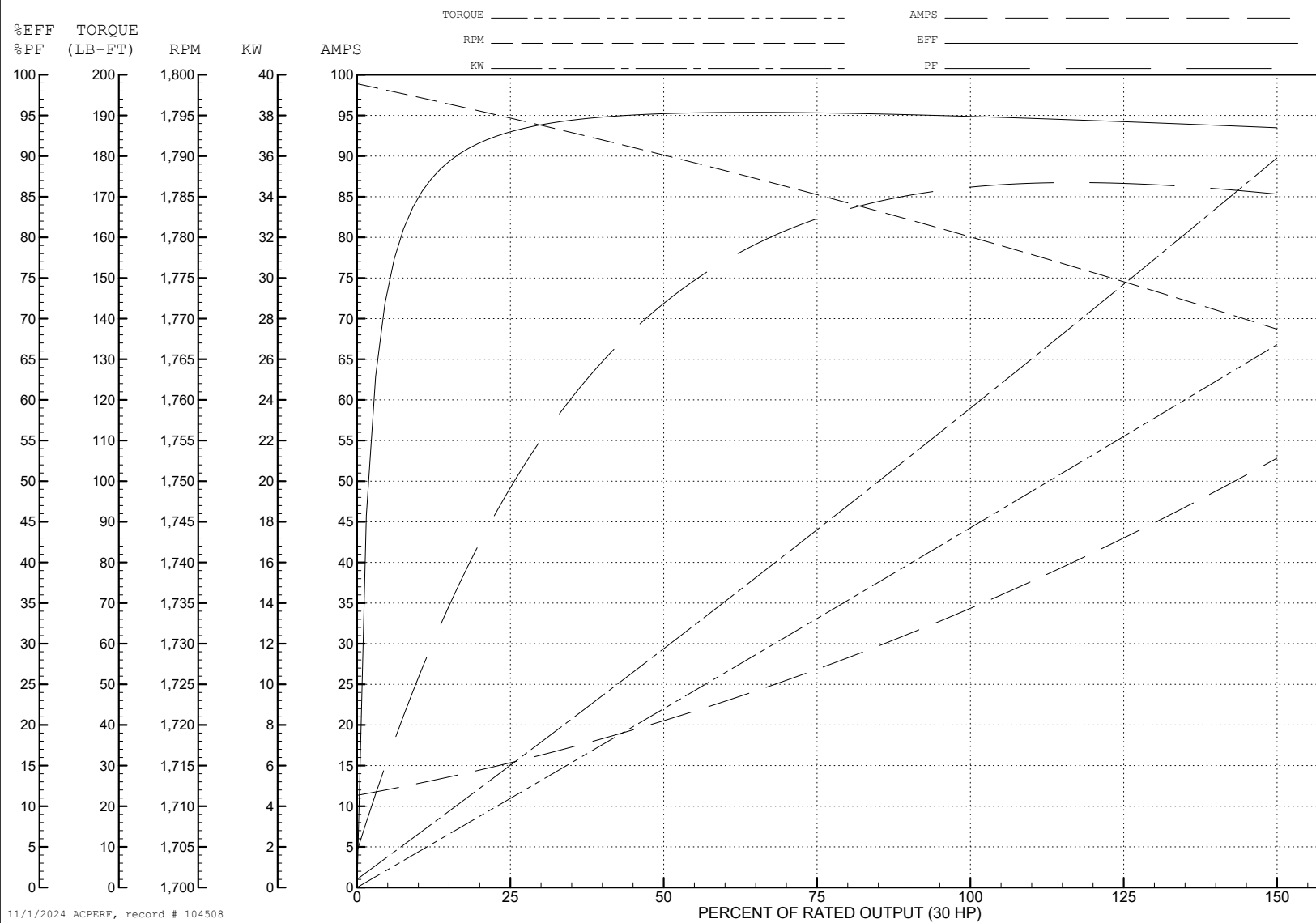
ABB Motors and Mechanical Inc.

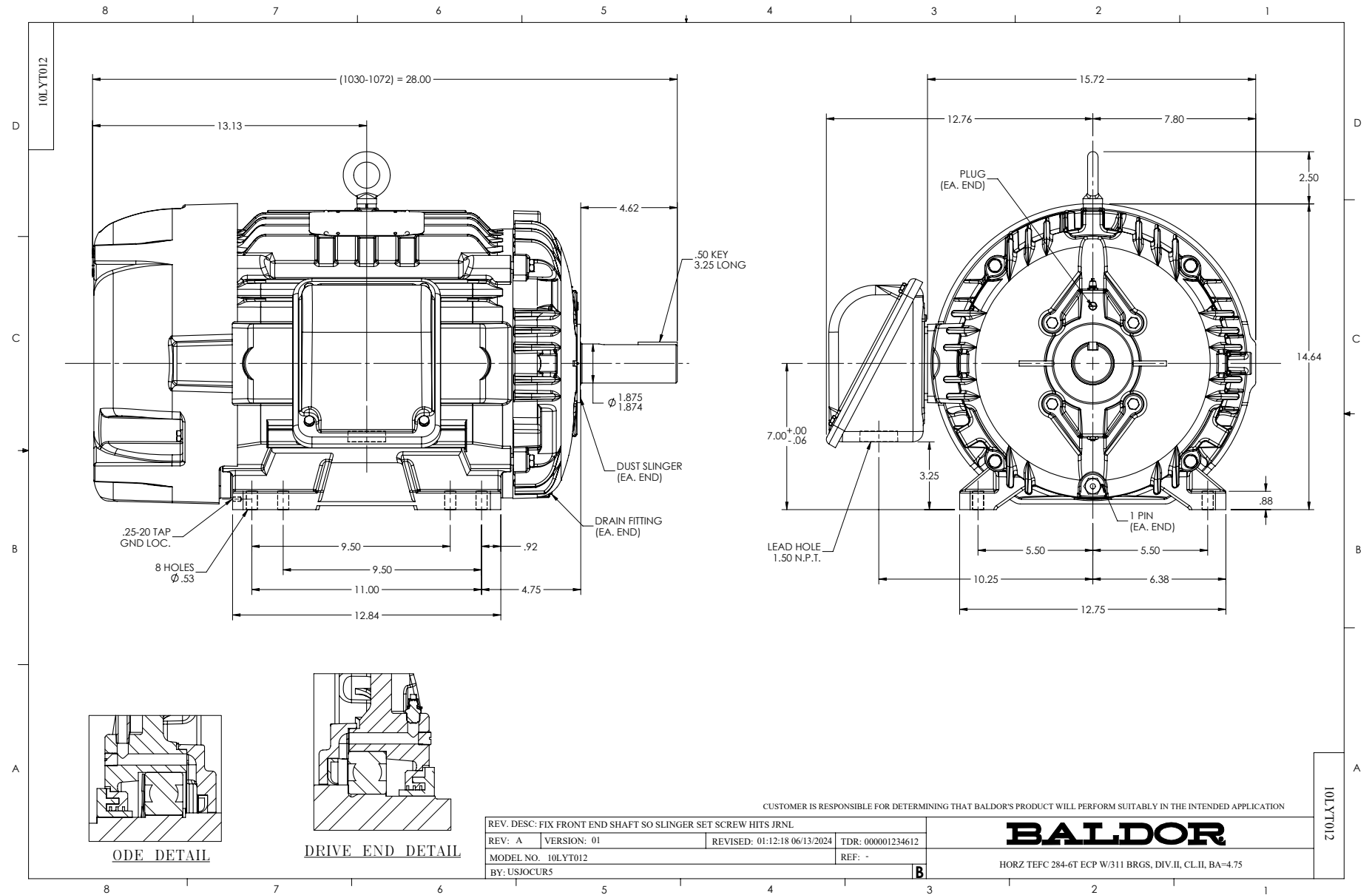
WINDING # 10WGZ886

Typical performance - not guaranteed values.

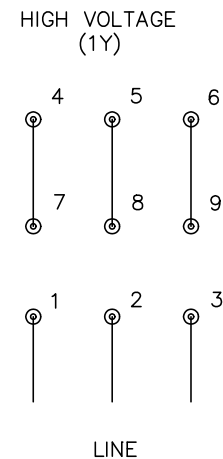
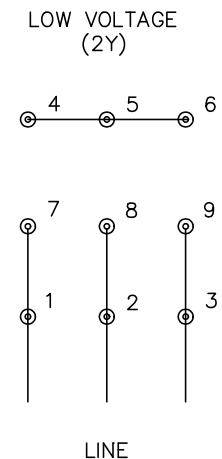
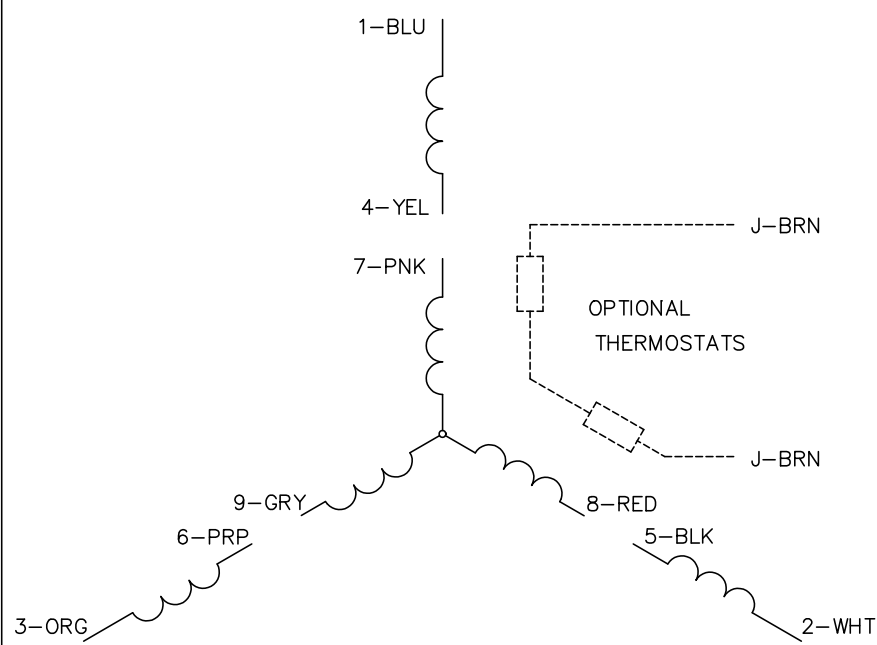
30 HP 3 PH 60 HZ 1780 RPM 460 V 1072M

TORQUES (LB-FT): PO=276 PU=144 LR=171 LRA=255





CD0005



- 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