

BALDOR • RELIANCE

Customer information packet

77H147W121G1

5.6KW IP55HP, 700RPM, 3PH, 60HZ, 215T, 7766M

Class - None

Division - Not Applicable

Specifications

Enclosure	TEAO
Frame	215T
Frame Material	Aluminum
Frequency	60.00 Hz
Motor Letter Type	Three Phase
Output @ Frequency	7.500 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	900 RPM @ 60 HZ
Voltage @ Frequency	230.0 V @ 60 HZ 460.0 V @ 60 HZ
XP Class and Group	None
XP Division	Not Applicable
Agency Approvals	CE CSA UR WEEE
Ambient Temperature	50 °C
Base Indicator	Rigid
Bearing Grease Type	Polyrex EM (-20F +300F)
Blower	None
Current @ Voltage	12.200 A @ 460.0 V 24.400 A @ 230.0 V
Design Code	B
Duty Rating	CONT
Efficiency @ 100% Load	81.5 %
Feedback Device	NO FEEDBACK
Heater Indicator	No Heater
High Voltage Full Load Amps	12.2 a
Insulation Class	H
Inverter Code	Inverter Ready
KVA Code	G
Motor Lead Quantity/Wire Size	9 @ 14 AWG

Part detail

Revision	B
Type	AC
Mech. spec.	77H147
Base	
Status	NLA/A
Elec. spec.	77WGW121
Layout	77LYH147
Eff. date	10-17-2022
CD Diagram	CD0005
Poles	08
Leads	9#14 ringterminals Y
Proprietary	False
Created date	01-22-2018

Motor Standards	NEMA
Motor Type	7766M
Mounting Arrangement	W12
Number of Poles	8
Overall Length	20.44 IN
Power Factor	71
Product Family	General Purpose
Rodent Screen	None
RoHS Status	ROHS COMPLIANT
Service Factor	1.15
Shaft Diameter	1.375 IN
Shaft Extension Location	Pulley End
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	850 rpm
Speed Code	Single Speed
Starting Method	Direct on line
Thermal Device - Winding	None
Winding Thermal 1	None
Winding Thermal 2	None

Nameplate

NP3215L							
CAT.NO.	SFA 27.2/13.6						
SPEC.	77H147W121G1						
HP	7.5						
VOLTS	230/460						
AMP	24.4/12.2						
RPM	850						
FRAME	215T	HZ	60	PH	3		
SER.F.	1.15	CODE	G	DES	B	CL	H
NEMA-NOM-EFF	81.5	PF	71				
RATING	50C AMB-CONT						
CC							
DE	6307	ODE	6307				
ENCL	TEAO	SN					
	NP 1 OF 3						

NP3216L

CAT.NO.	SFA 26.6-27.4/13.3-13.7							
SPEC.	77H147W121G1							
HP	4.5KW							
VOLTS	190-208/380-415							
AMP	23.8-25.4/11.9-12.7							
RPM	715							
FRAME	215T	HZ	50	PH	3			
SER.F.	1.15	CODE	J	DES	A	CL	H	
NEMA-NOM-EFF	81.5	PF	62					
RATING	50C AMB-CONT							
CC								
DE	6307	ODE	6307					
ENCL	TEAO	SN						
	NP 2 OF 3							

NP3215L

CAT.NO.	SFA 32.9-33.4/16.4-16.7							
SPEC.	77H147W121G1							
HP	5.6KW IP55							
VOLTS	190-208/380-415							
AMP	28.6-29/14.3-14.5							
RPM	700							
FRAME	215T	HZ	50	PH	3			
SER.F.	1.15	CODE	G	DES	B	CL	H	
NEMA-NOM-EFF	80.0	PF	68					
RATING	40C AMB-CONT							
CC								
DE	6307	ODE	6307					
ENCL	TEAO	SN						
	NP 3 OF 3							

AC Induction Motor Performance Data

Record # 46884

Typical performance - not guaranteed values

Winding: 77WGW121-R001		Type: 7766M		Enclosure: TEAO			
Nameplate Data			460 V, 60 Hz: Single Voltage Motor				
Rated Output (HP)	7.5	Full Load Torque	46.5 LB-FT				
Volts	230/460	Start Configuration	direct on line				
Full Load Amps	24.4/12.2	Breakdown Torque	113 LB-FT				
R.P.M.	850	Pull-up Torque	54.8 LB-FT				
Hz	60 Phase	3	Locked-rotor Torque	82.6 LB-FT			
NEMA Design Code	B	KVA Code	G	Starting Current	54.2 A		
Service Factor (S.F.)	1.15		No-load Current	5.97 A			
NEMA Nom. Eff.	81.5	Power Factor	71	Line-line Res. @ 25°C	1.65 Ω		
Rating - Duty	50C AMB-CONT		Temp. Rise @ Rated Load				
S.F. Amps	27.2/13.6		Temp. Rise @ S.F. Load				
			Locked-rotor Power Factor	31.4			
			Rotor inertia	1.64 LB-FT ²			

Load Characteristics 460 V, 60 Hz, 7.5 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	35	54	65	71	74	73	73
Efficiency	77.9	82.9	83.8	82.6	80.4	77.2	81.4
Speed	890	880	869	856	841	821	847
Line amperes	6.73	8.09	9.93	12.1	14.7	18.1	13.7

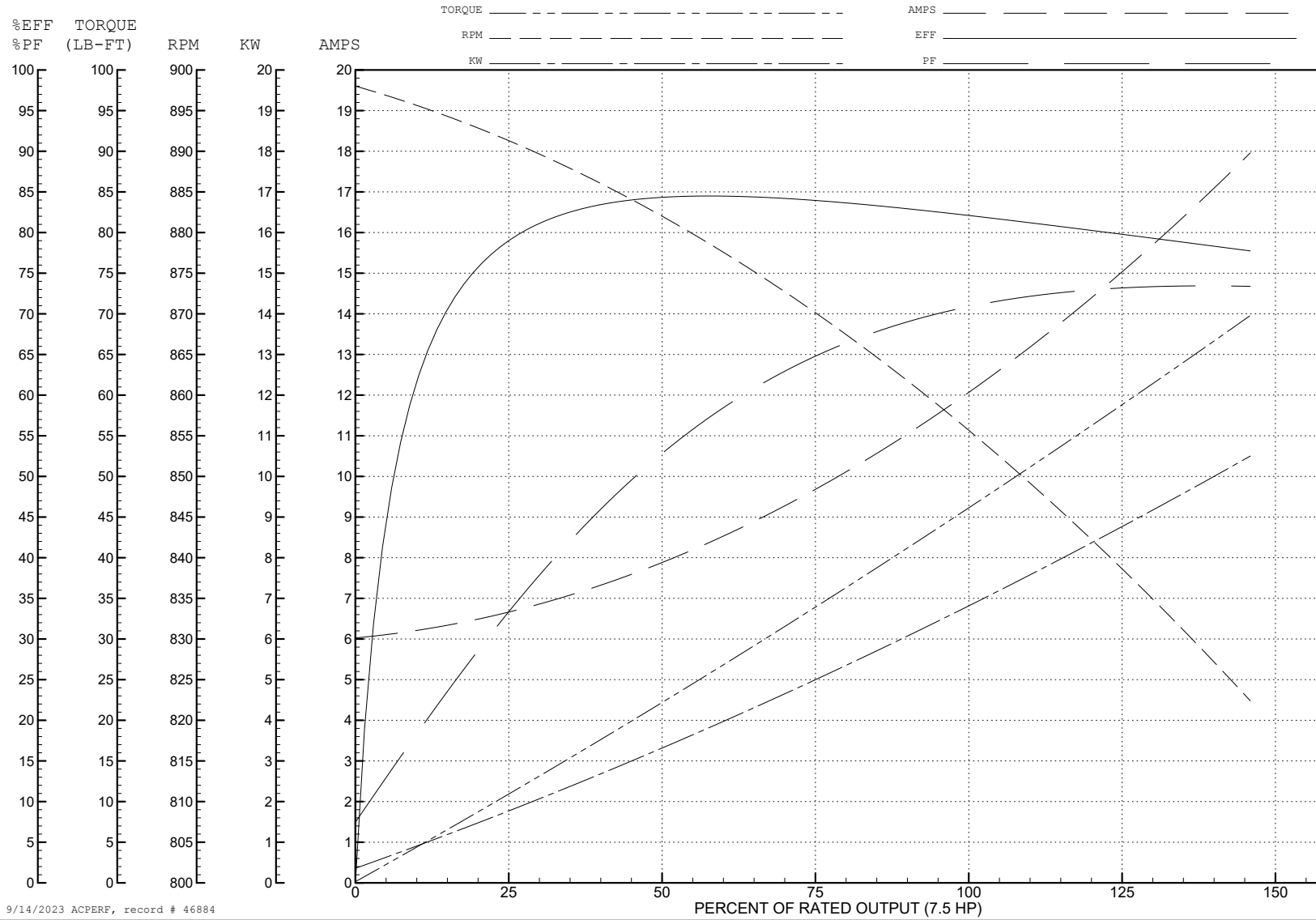
ABB Motors and Mechanical Inc.

WINDING # 77WGW121

7.5 HP 3 PH 60 HZ 850 RPM 460 V 7766M

Typical performance - not guaranteed values.

TORQUES (LB-FT): PO=113 PU=54.8 LR=82.6 LRA=54.2



9/14/2023 ACPERF, record # 46884

AC Induction Motor Performance Data

Record # 52208

Typical performance - not guaranteed values

Winding: 77WGW121-R002		Type: 7766M		Enclosure: TEAO	
Nameplate Data			415 V, 50 Hz: High Voltage Connection		
Rated Output (KW)	4.5	Full Load Torque	44.9 LB-FT		
Volts	190-208/380-415	Start Configuration	direct on line		
Full Load Amps	23.8-25.4/11.9-12.7	Breakdown Torque	131 LB-FT		
R.P.M.	715	Pull-up Torque	74.4 LB-FT		
Hz	50 Phase	Locked-rotor Torque	112 LB-FT		
NEMA Design Code	A KVA Code	Starting Current	59.8 A		
Service Factor (S.F.)	1.15	No-load Current	7.59 A		
NEMA Nom. Eff.	81.5 Power Factor	Line-line Res. @ 25°C	1.65 Ω		
Rating - Duty	50C AMB-CONT	Temp. Rise @ Rated Load			
S.F. Amps	26.6-27.4/13.3-13.7	Temp. Rise @ S.F. Load			
		Locked-rotor Power Factor	36.9		
		Rotor inertia	1.64 lb-ft ²		

Load Characteristics 415 V, 50 Hz, 4.5 KW

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	27	43	54	62	67	69	65
Efficiency	72.3	79.5	81.5	81.5	79.4	77	80.1
Speed	742	733	724	714	702	688	707
Line amperes	8.35	9.5	11	12.6	14.6	17.2	13.8

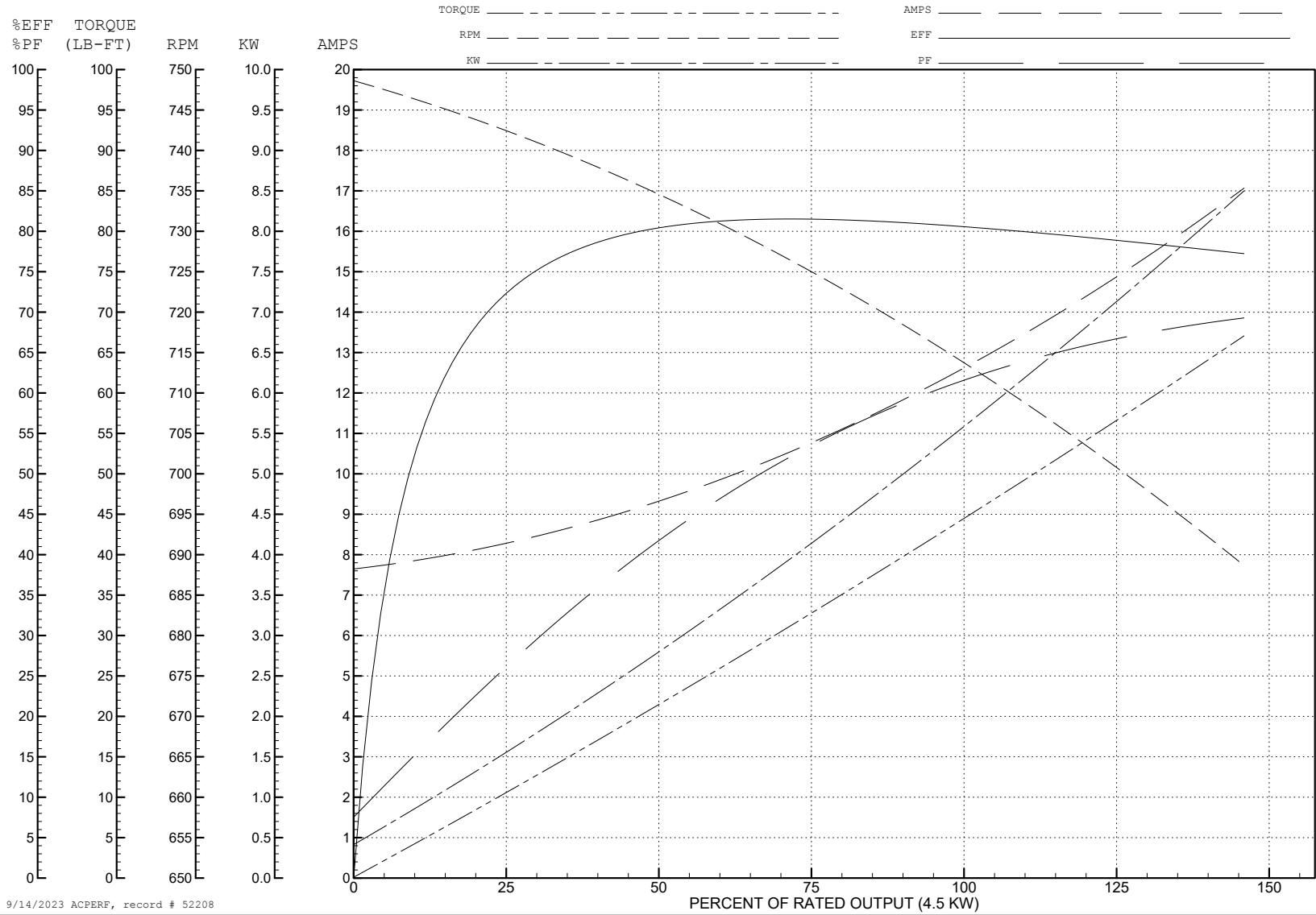
ABB Motors and Mechanical Inc.

WINDING # 77WGW121

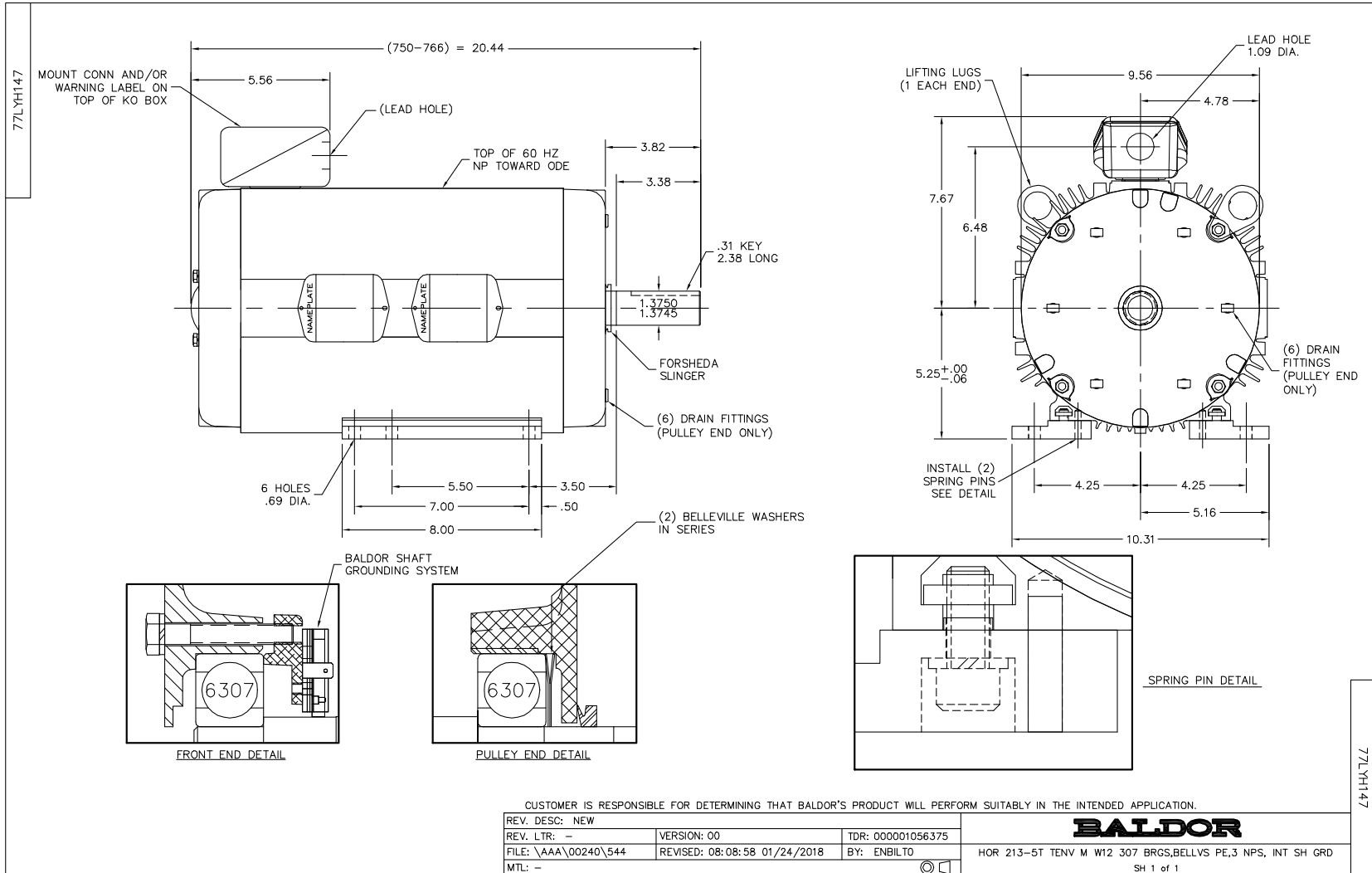
4.5 KW 3 PH 50 HZ 715 RPM 415 V 7766M

Typical performance - not guaranteed values.

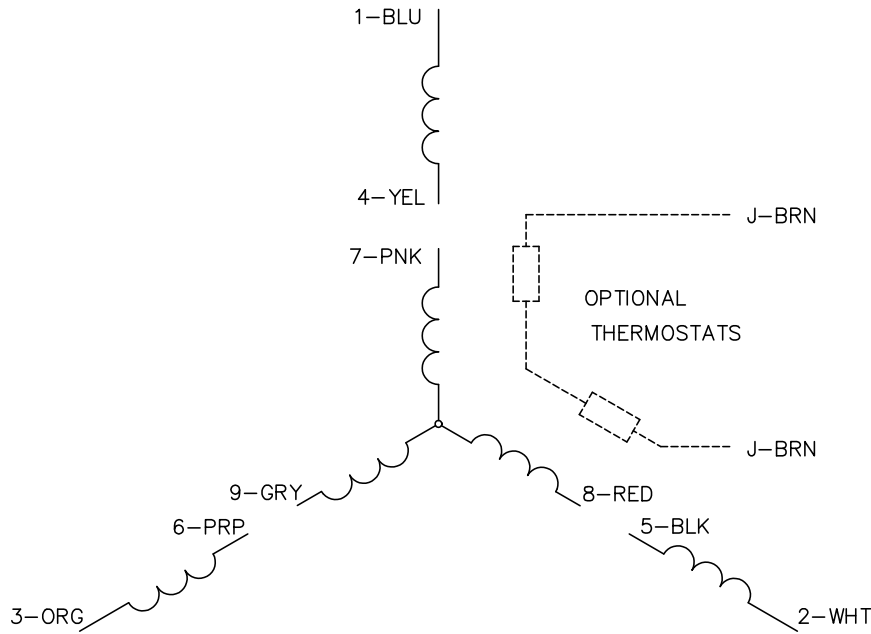
TORQUES (LB-FT): PO=131 PU=74.4 LR=112 LRA=59.8



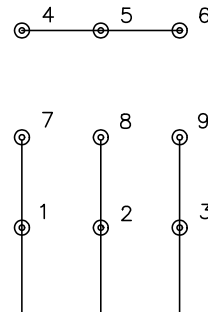
9/14/2023 ACPERF, record # 52208



CD0005

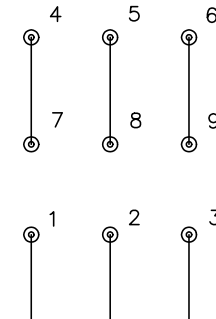


LOW VOLTAGE
(2Y)



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.

CD0005

REV. DESC: REVISE TO SHOW OPTIONAL COLORS			
REV. LTR: E	BY: JLP	REVISED: 01/19/99 10:15	TDR: 0171435
S00000		FILE: AAA00005140	MDL: -
		MTL: -	

BALDOR ELECTRIC Co.

3PH, DV, 9 LEADS