

ABB BALDOR RELIANCE III

Customer information packet

SUM71004-4

10HP, 1765RPM, 3PH, 60HZ, 210TY, XPNV, V1

Class - CLI GP C,D

Division - Not Applicable

Specifications

Enclosure	XPNV
Frame	210TY
Frame Material	Iron
Frequency	60.00 Hz
Haz Area Class and Group	CLI GP C,D
Haz Area Division	Not Applicable
Motor Letter Type	Three Phase
Phase	3
Agency Approvals	CCSA US
Base Indicator	Rigid
Bearing Grease Type	Polyrex EM (-20F +300F)
Cable Length	NO CABLE
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Haz Area Temp Code	T3C
Heater Indicator	No Heater
Insulation Class	F
Inverter Code	Not Inverter
IP Rating	IP68
KVA Code	H
Lifting Lugs	Standard Lifting Lugs
Motor Standards	NEMA
Motor Type	M
Mounting Arrangement	V1
Number of Poles	4
Product Family	Pump - Centrifugal
Pulley End Bearing Type	Ball
Pulley Face Code	Standard
Service Factor	1.15
Shaft Diameter	1.437 IN
Shaft Rotation	Reversible

Part Detail

Revision	C
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	86077
Layout	619738-003
Eff. date	12-10-2024
CD Diagram	416820-001
Poles	///
Leads	
Proprietary	False
Created date	08-10-2021

Shaft Slinger Indicator	No Slinger
Speed Code	Single Speed
Starting Method	Direct on line
Thermal Device - Winding	Normally Closed Thermostat

Nameplate

000613007MS										
CAT.NO.	SUM71004-4			SPEC NO.	S21-CWS0-0009					
SER.NO.				FRAME SIZE	210TY					
CONSTANT HP RPM	HP	RPM	VOLTS	AMPS	HZ	S.F.				
	10	1765	230/460	25/12.5	6-60	1.00				
	10	1765	230/460	25/12.5	60	1.15				
		@		HZ	CODE	H				
	TYPE	P	INSUL.CLASS	F	TORQUE	10:1_VT	DESIGN			
D.E. BRG.	60BC02JPP30A			ENCL	TENV	DUTY	15MIN	PH	3	
O.D.E. BRG.	30BC02JPG30A			MOTOR WEIGHT			AMB	40		
	FINAL CONN VOLTAGE = 460 *15									
	MIN IN AIR ;SUB. IN WATER									
	ONLY									

000613007RC			
CLASS I GROUP	C D X	NO.	
CLASS II GROUP	X X X		
OPERATING TEMP CODE	T3C		

000692000MB	
SUITABLE FOR OPERATION ON PWM	
INVERTER EQUIPPED WITH IGBT	
DEVICES AND CAPABLE OF	
CARRIER	
FREQUENCY OF 2 KHZ MINIMUM	

000613007MS

CAT.NO.	SUM71004-4		SPEC NO.		S21-CWS0-0009				
	SER.NO.			FRAME SIZE		210TY			
	HP	RPM	VOLTS	AMPS	HZ	S.F.			
	10	1765	230/460	25/12.5	6-60	1.00			
	10	1765	230/460	25/12.5	60	1.15			
	CONSTANT HP RPM		@	HZ	CODE	H			
	TYPE	P	INSUL.CLASS	F	TORQUE	10:1_VT	DESIGN	B	
	D.E. BRG.	60BC02JPP30A		ENCL	TENV	DUTY	15MIN	PH	3
	O.D.E. BRG.	30BC02JPG30A		MOTOR WEIGHT			AMB	40	
	FINAL CONN VOLTAGE = 460 *15								
MIN IN AIR ;SUB. IN WATER									
ONLY									

Parts List

Part number	Description	Quantity
SA396217	SA S21-CWS0-0009	1.000 ea
RA387024	RA S21-CWS0-0009	1.000 ea
001575000A	WIRING DIAGRAM	1.000 ea
424476003WB	WIRING DIAGRAM MEDIUMA	1.000 ea
424476003WB	WIRING DIAGRAM MEDIUMA	1.000 ea
000901001AA	LABEL WARNING	1.000 ea
000692000EJ	NAME PLATE	1.000 ea
000692000WC	WARNING FLAMMABLE VAPORS MAY BE PRESENT	2.000 ea
000613007MS	NP, MEDIUM AC,INVERTER DUTY CSA,STD INDU	1.000 ea
000901001AA	LABEL WARNING	1.000 ea
000613007RC	C UL US NAMEPLATE FOR HAZARDOUS LOC	1.000 ea
000692000MB	BALDOR RELIANCE MOTOR DATA NAMEPLATE	1.000 ea
000613007MS	NP, MEDIUM AC,INVERTER DUTY CSA,STD INDU	1.000 ea
034692002AE	HCSP 1/4" 304 S.S.	1.000 ea
088206510A	BRKT,ODE,210SUB 88206-1WB	1.000 ea
004824015A	GREASE POLYREX EM	0.100 lb
032018012DG	HHCS 1/2-13X1-1/2 316S.S	4.000 ea
421900144FU	406673000BF	1.000 ea
004824018AF	SHELL ROTELLA OIL 10W	4.569 lb
603761001AA	LABYRINTH	1.000 ea
413480001R	RESISTOR ASSEMBLY-BLANKET	1.000 ea
413412006S	LEAD WIRE ASSY	1.000 ea
413412004A	SUBM MOISTURE PROBE	2.000 ea
421900144FU	406673000BF	1.000 ea
088208001AA	MTG PLATE EX210Y SUBMERSIBLE 088208001WB	1.000 ea
032130010DC	HSNCS 1/2-13X1-1/4 304SS	4.000 ea
032620020JD	HSSS 10-24X5/8L 304S.S.	1.000 ea
421900144FU	406673000BF	1.000 ea
088207510A	BRKT,DE,210SUB 88207-1WA	1.000 ea
032018012DG	HHCS 1/2-13X1-1/2 316S.S	4.000 ea
032018008BG	HHCS 5/16-18X1 316 SS	3.000 ea

064262012C	SEAL	1.000 ea
047174005D	SNAP RING	1.000 ea
034692003AE	PPLG 3/8" 304 S.S.	2.000 ea
047174005C	SNAP RING	1.000 ea
064262012D	SEAL - Mech Ceramic Seal	1.000 ea
032080003JB	HWHMS 10-24X3/8L PLTED	4.000 ea
032080003LB	HWHMS 1/4-20X3/8L PLTED	6.000 ea
415031017B	NUT W/WASHER1/4-20 C.P	6.000 ea
415031017A	NUT W/WASHER 10-24 C.PLT	4.000 ea
032677003BG	5/16-18 X 3/8 DHFHBHCS	2.000 ea
047024003B	T/LUG AMP 33218	9.000 ea
603767501A	LCSTG LEAD CONDUIT	1.000 ea
421900092FU	ORING	1.000 ea
032018010CG	HHCS 3/8-16X1-1/4L 316SS	4.000 ea
032018006BM	HHCS 5/16-18X3/4 PLTGRN.	1.000 ea
032018006BM	HHCS 5/16-18X3/4 PLTGRN.	1.000 ea
034036013AB	LCKW 5/16 EXT.TOOTH LCKW	1.000 ea
034017013AC	LCKW 5/16" 316 S.S.	2.000 ea
047024003AH	T/LUG AMP 34112	4.000 ea
609181014D	HEAT SHRINK TUBING 3/4	10.000 ea
802386001R	PAIGE INTERNAL MOTOR POWER PLUG	1.000 ea
802386002R	PAIGE INTERNAL MOTOR CONTROL PLUG	1.000 ea
613425013E	12" SAFETY CABLE	2.000 ea
613425013S	FERRULE, SAFETY CABLE	2.000 ea
004824007K	SPECIAL PAINT	0.100 ea
033775004EA	DRSCR #6-1/4 304 S.S.	8.000 ea
034180009FD	KEY 3/8X3/8X1-1/8 303 SS	1.000 ea
B3630-9	SUBM THERMOSTAT TAG	1.000 ea
B-3664002	TAG, (NON REGREASABLE)	1.000 ea

Record #86077 - Typical performance - not guaranteed values

Winding	07WGA0017
Type	0738M
Enclosure	TENV

Nameplate data

Rated Output	10		
Volts	230/460		
Full Load Amps	25/12.5		
R.P.M.	1765		
Hz	60	Phase	3
KVA Code	H		
S.F.	1.15		
NEMA Nom. Eff.	90.2	Power Factor	82
Duty	15 MIN		
S.F. Amps			

460 V, 60 Hz:

High Voltage Connection

Full Load Torque	29.74 LB-FT
Start Configuration	direct on line
Breakdown Torque	83.88 LB-FT
Pull-up Torque	29.9 LB-FT
Locked-rotor Torque	45.11 LB-FT
Starting Current	87.77 A
No-load Current	4.92
Line-line Res. @ 25°C	1.25 Ω
Temp. Rise @ Rated Load	15°C
Temp. Rise @ S.F. Load	18°C
Locked-rotor Power Factor	37.1
Rotor inertia	0.934 lb-ft ²

Load Characteristics 460 V, 60 Hz, 10 HP

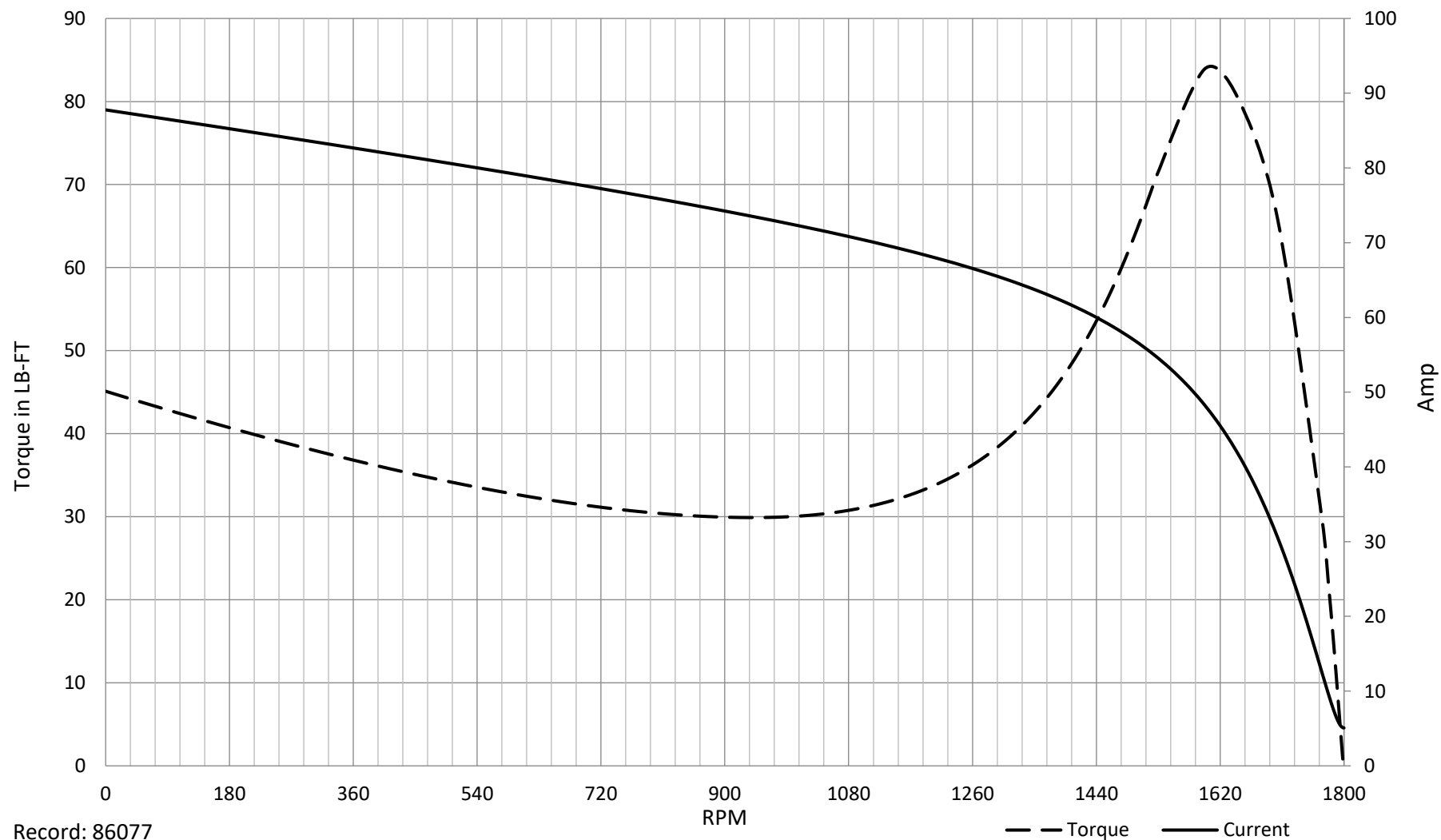
% of Rated Load	NL	25	50	75	100	125	150	SF
Power Factor	6	47	68	78	82	84	84	83
Efficiency	0	88.1	90.8	91.9	90.9	90	88.6	90.4
Speed	1799	1792	1785	1777	1768	1758	1747	1762
Line amperes	4.92	5.73	7.53	9.86	12.49	15.44	18.79	14.3

SPEED TORQUE / SPEED CURRENT CURVES

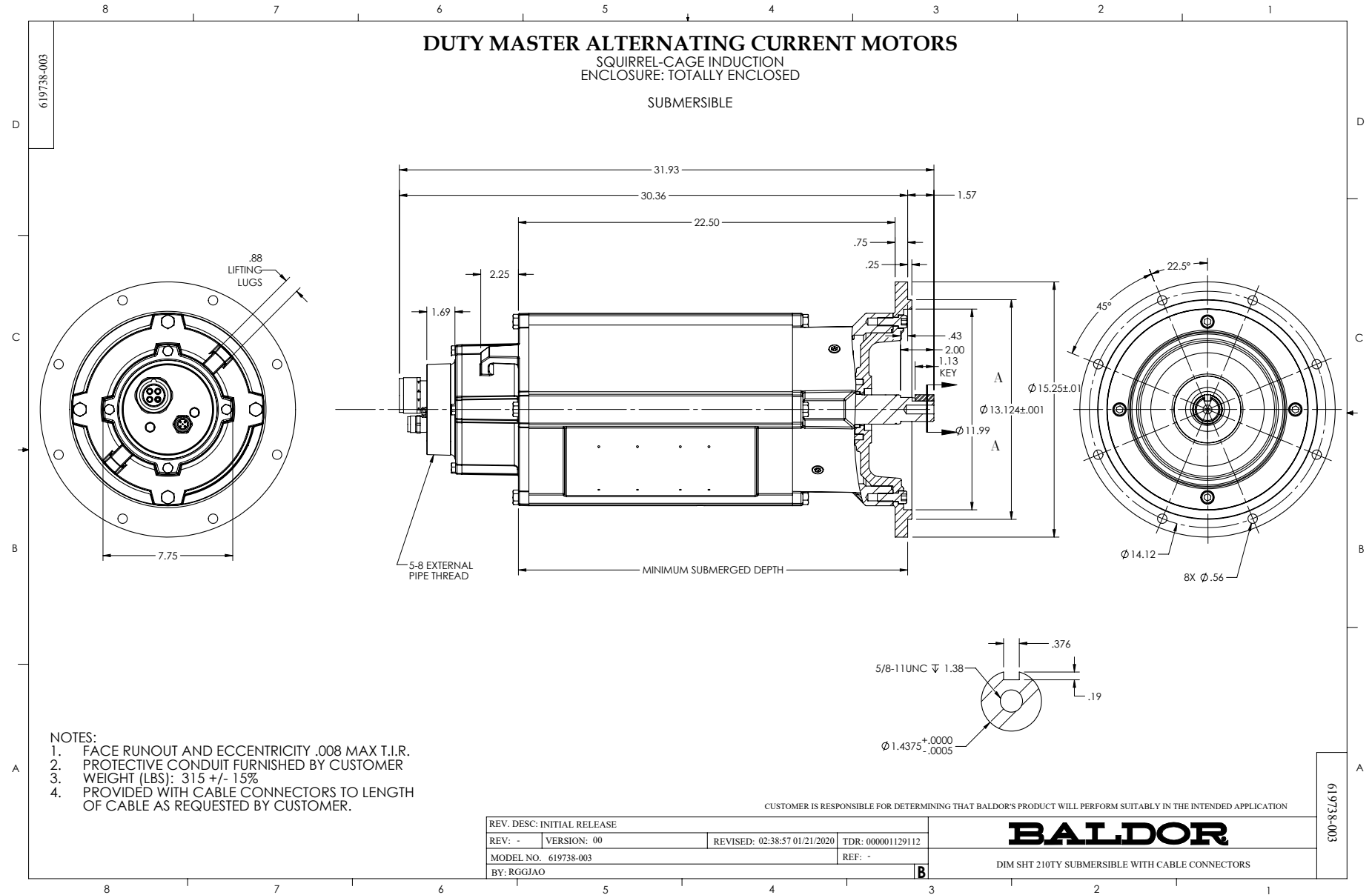


07WGA0017

10HP 460V 60HZ

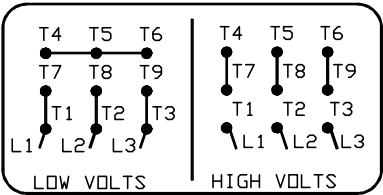
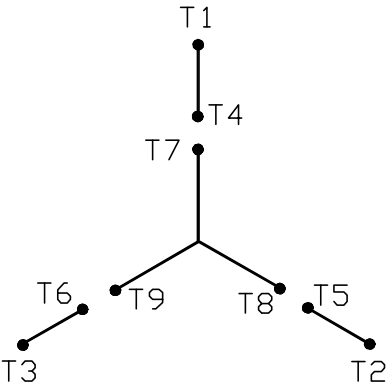


Record: 86077



416820-001

A-C MOTOR
CONNECTION DIAGRAM
STANDARD 9 LEAD Y CONNECTED



(N. P. 1575-A)

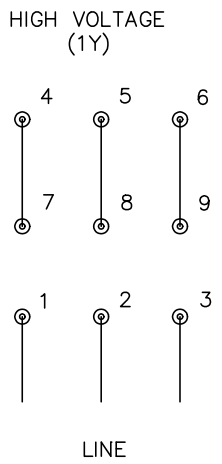
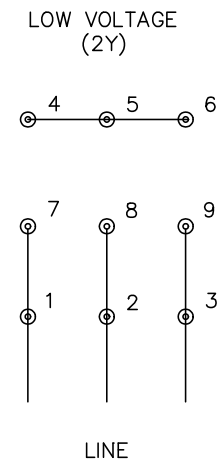
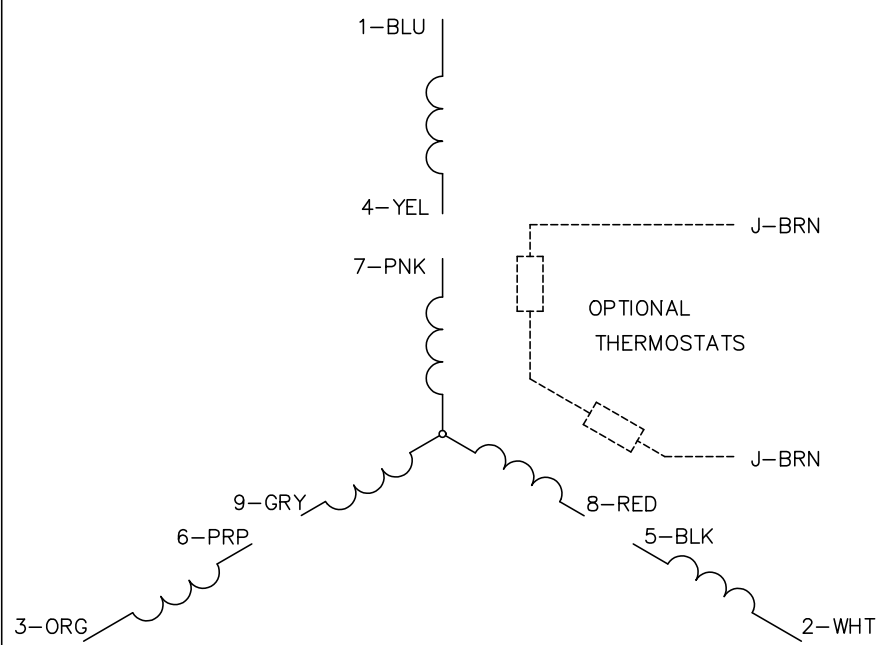
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BALDOR

CONN DIAG — STANDARD 9 LEAD, Y CONNECTED
SH 1 of 1

416820-001

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			
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BALDOR ELECTRIC Co.

3PH, DV, 9 LEADS

CD0005