

ABB BALDOR RELIANCE III

Customer information packet

VLECP3774T

10HP, 1760RPM, 3PH, 60HZ, 215LP, 0748M, TEFC, F

Class - CLI GP A,B,C,D

Division - Division II

Specifications

Enclosure	TEFC
Frame	215LP
Frame Material	Iron
Frequency	60.00 Hz
Haz Area Class and Group	CLI GP A,B,C,D
Haz Area Division	Division II
Motor Letter Type	Three Phase
Output @ Frequency	10.000 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	CCSA US CSA EEV NEMA PREMIUM UR
Ambient Temperature	40 °C
Auxiliary Box	NO AUXILLARY BOX
Auxiliary Box Lead Termination	None
Base Indicator	No Mounting
Bearing Grease Type	Polyrex EM (-20F +300F)
Blower	None
Constant Torque Speed Range	1.3
Current @ Voltage	25.000 A @ 230.0 V 12.500 A @ 460.0 V
Design Code	A
Drip Cover	Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	92.4 %
Electrically Isolated Bearing	Not Electrically Isolated
Enclosure Modification	841
Feedback Device	NO FEEDBACK

Part Detail

Revision	N
Type	AC
Mech. spec.	07H347
Base	
Status	PRD/A
Elec. spec.	07WGX776
Layout	07LYH347
Eff. date	09-22-2022
CD Diagram	CD0005
Poles	04
Leads	9#14 Y
Proprietary	False
Created date	07-09-2015

Front Face Code	Drip Cover Mounting
Front Shaft Indicator	None
Haz Area Temp Code	T3C
Heater Indicator	No Heater
High Voltage Full Load Amps	12.5 a
Insulation Class	F
Inverter Code	Inverter Ready
KVA Code	H
Lifting Lugs	Vertical Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Max Speed	2700 rpm
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	9 @ 14 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	0748M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	22.51 IN
Power Factor	82
Product Family	Super-E Chemical Processing
Pulley End Bearing Type	Thrust
Pulley Face Code	P-Base
Pulley Shaft Indicator	P-Base Groove & Key
Rodent Screen	None
Service Factor	1.15
Shaft Diameter	1.625 IN
Shaft Extension Location	Pulley End
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	1760 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

NP3258											
CAT.NO.	VLECP3774T										
SPEC.	07H347X776G1										
HP	10 TE										
VOLTS	230/460										
AMP	25/12.5										
RPM	1760										
FRAME	215LP	HZ	60		PH	3					
SER.F.	1.15	CODE	H	DES	A	CL	F				
RATING	40C AMB-CONT										
SN											
DE	QJ211	ODE	6307								
NEMA-NOM-EFF	92.4	PF	82								
G.MIN.EFF	91	CC	010A								
T. CODE	T3C	T=	160								

NP3261			
SPEC.	07H347X776G1		
D.E. BRG.	55BZ02X00X		
O.D.E. BRG.	35BC03X30X		
GREASE	POLYREX EM		
RPM MAX	2700	MAX. KVAR	1.7
BLANK			
INV.TYPE	PWM		
T=	160		
C HP FR	60	C HP TO	90
CT HZ FROM	1.3	CT HZ TO	60
VT HZ FROM	-0	VT HZ TO	60
HTR-VOLTS	N/A	HTR-AMPS	N/A
HTR-WATTS	N/A	MAX. SPACE HEATER TEMP.	N/A

Parts List

Part number	Description	Quantity
SA303672	SA 07H347X776G1	1.000 ea
RA290807	RA 07H347X776G1	1.000 ea
37FN3002C01	EXFN, PLASTIC, 6.00 OD, 1.155 ID	1.000 ea
HA6481	S.S. LIFTING EYE BRACKET FOR 306 & 307 F	2.000 ea
10XN3816S16	3/8-16 X 1 HEX HD CAP SCREW, STAINLE	4.000 ea
HW1001S38	WASHER, 3/8 SPLT LK, STAINLESS STEEL	4.000 ea
10XN2520S06	1/4 20X3/8 HX HD CAP S.S.	2.000 ea
HW1001S25	WASHER, 1/4 SPLT LK, STAINLESS STEEL	2.000 ea
HA3104S13	THRUBOLT- .31-18X11.75 SSTDR#59495	4.000 ea
WD1000B16	T&B CX70TN OR L70P TERMINAL LUG	1.000 ea
09CB1002A08G	CB 309 W/1.50 NPT LEAD HOLE (GRAY EPOXY)	1.000 ea
RM1017	LEAD SEPERATOR GASKET MODEL 307 1/8" THK	1.000 ea
19XW2520A16	SCREW,1/4-20X1 TAPTITE-II OR ROLOC 91	4.000 ea
10XN2520S06	1/4 20X3/8 HX HD CAP S.S.	1.000 ea
HW1001S25	WASHER, 1/4 SPLT LK, STAINLESS STEEL	1.000 ea
WD1000B16	T&B CX70TN OR L70P TERMINAL LUG	1.000 ea
37EP1101A48G	FR EP, MACH, 307 BRG FOR CI FAN COVER W/	1.000 ea
HW4500A31	GREASE FIT/EXT 3014-B .25-28 ALEMITE	1.000 ea
HW4500A17	317400 ALEMITE GREASE RELIEF	1.000 ea
HW5100A08	W3118-035 WVY WSHR (WB)	1.000 ea
37EP1504A02G	SPL PU E.P. MACH, W/GRAY EPOXY QJ211 BRG	1.000 ea
HW4500A01	1641B(ALEMITE)400 UNIV, GREASE FITT	1.000 ea
HW4500A17	317400 ALEMITE GREASE RELIEF	1.000 ea
10XN2520S28	1/4-20X 1 3/4 HEX HD SS X	4.000 ea
HW1001S25	WASHER, 1/4 SPLT LK, STAINLESS STEEL	4.000 ea
10XN2520S52	1/4-20X 3 1/4 HEX HD SS X	2.000 ea
HW1001S25	WASHER, 1/4 SPLT LK, STAINLESS STEEL	2.000 ea
51XB1214A20	12-14X1.25 HXWSSLD SERTYB	1.000 ea
07FH1001A06G	307 FH FOR MTG TO FR E.P. W/GREASER & DR	1.000 ea
10XN2520S28	1/4-20X 1 3/4 HEX HD SS X	3.000 ea
HW1001S25	WASHER, 1/4 SPLT LK, STAINLESS STEEL	3.000 ea

40FH2500A04G	P/L DRIP COVER MODEL 40- OPEN MACH, GRA	1.000 ea
HA2086A03	.375 X 1.0 HVY-FT SPACER SPIRAL # 62434	4.000 ea
10XN3816S32	3/8-16 X 2 HEX HD CAP SCREW, STAINLE	4.000 ea
HW1001S38	WASHER, 3/8 SPLT LK, STAINLESS STEEL	4.000 ea
HW4600B33	V-RING SLINGER 1.375 X 1.890 X .35 VITON	1.000 ea
HW4600B40	V-RING SLINGER 2.000 X 2.680 X .28 VITON	1.000 ea
12CB1503G	CONDUIT BOX CAST. (GRAY)	1.000 ea
12GS1002	GASKET, CONDUIT BOX LID, NEOP	1.000 ea
10XN2520S12	BOLT 1/4 - 20X 3/4 HEX HEAD SS (F/S)	2.000 ea
HW1001S25	WASHER, 1/4 SPLT LK, STAINLESS STEEL	2.000 ea
MJ5001A27	32220KN GRAY SEALER *MIN BUY 4 QTS=1GAL	0.001 qt
MJ5001A14	DYNAPRO SEALANT, CP MTR VC#2508050 (603	0.001 ea
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	4.000 ea
LB1624	COMBINED WARNING LABEL, ISO/ANSI PICTOGR	1.000 ea
LB1002N	LABEL,MARINE DUTY (ON ROLLS)	1.000 ea
MJ1000A02	GREASE, POLYREX EM EXXON	0.050 lb
MG1025N19	WILKOFAS, 778.50, RELIANCE BLUE-GREEN 8	0.036 ga
LC0005	CONN.DIA.,TY M,9-LD,DUAL VOLT,REVERSING	1.000 ea
LB1449	DIV-2/NEC WARNING LABEL	1.000 ea
NP3258	SS CP SUPER-E DIV-2 UL CSA-C US EEV CC	1.000 ea
NP3261	SS CP SUPER-E AUX DATA INFORMATION	1.000 ea
07PA1097	PKG GRP, 07 CAST IRON 2X4 RISERS PK1181	1.000 ea
07PA1095	PKG GRP, VER 07 CAST IRON	1.000 ea
MN416A01	TAG-INSTAL-MAINT no wire (2500 bx)11/25	1.000 ea

AC Induction Motor Performance Data

Record # 25097

Typical performance - not guaranteed values

Winding: 07WGX776-R016				Type: 0748M		Enclosure: TEFC	
Nameplate Data				460 V, 60 Hz: High Voltage Connection			
Rated Output (HP)		10		Full Load Torque		29.8 LB-FT	
Volts		230/460		Start Configuration		direct on line	
Full Load Amps		25/12.5		Breakdown Torque		87 LB-FT	
R.P.M.		1760		Pull-up Torque		51.9 LB-FT	
Hz	60	Phase	3	Locked-rotor Torque		57.5 LB-FT	
NEMA Design Code		A	KVA Code	Starting Current		88.5 A	
Service Factor (S.F.)		1.15		No-load Current		5.12 A	
NEMA Nom. Eff.		92.4	Power Factor	Line-line Res. @ 25°C		0.973 Ω	
Rating - Duty		40C AMB-CONT		Temp. Rise @ Rated Load		60°C	
S.F. Amps				Temp. Rise @ S.F. Load		76°C	
				Locked-rotor Power Factor		35	
				Rotor inertia		1.18 LB-FT2	

Load Characteristics 460 V, 60 Hz, 10 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	44	67	78	82	84	85	83
Efficiency	90	92.9	93.1	92.5	91.4	90.1	91.8
Speed	1790	1781	1771	1762	1750	1739	1755
Line amperes	5.84	7.52	9.75	12.3	15.2	18.3	14

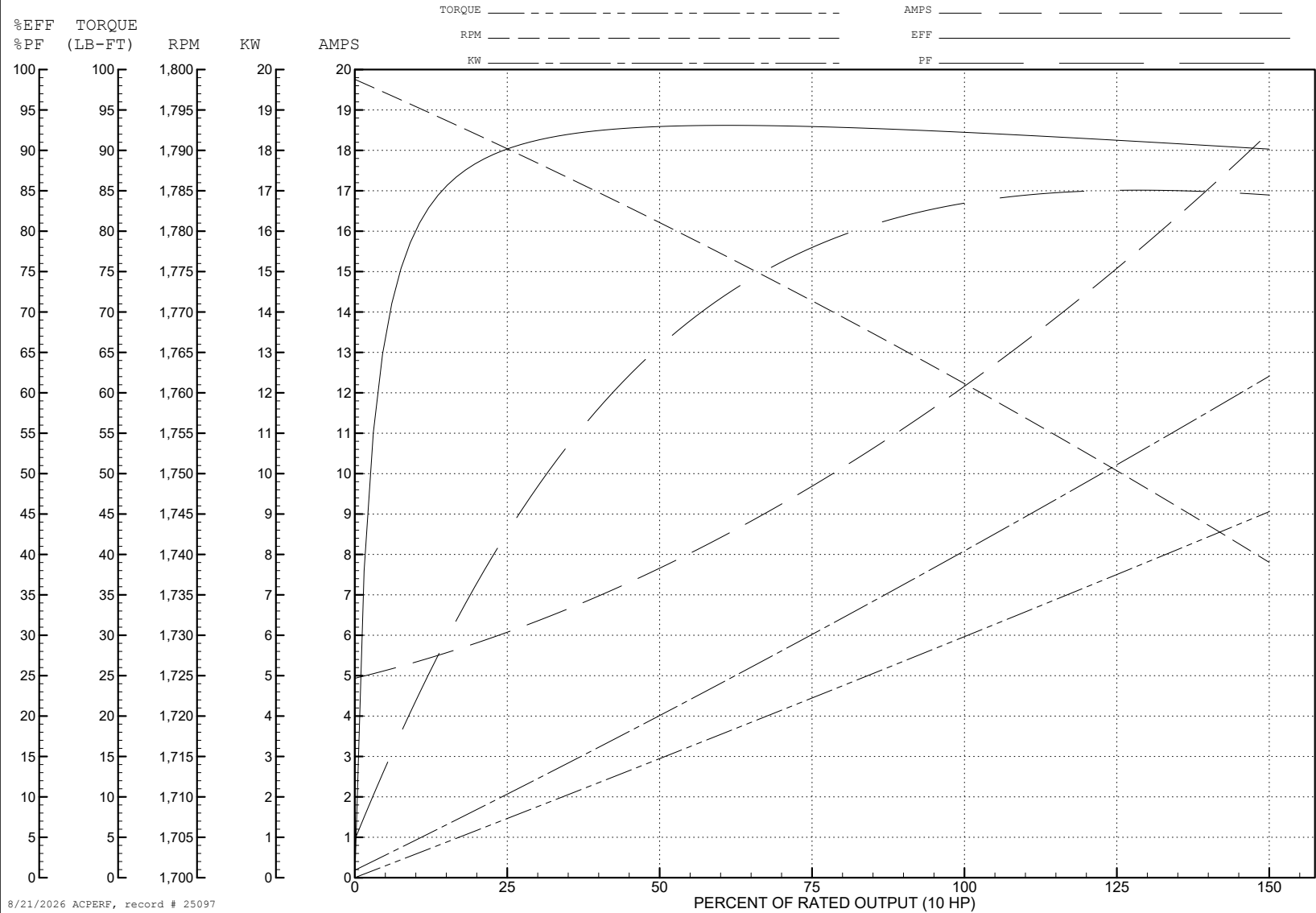
ABB Motors and Mechanical Inc.

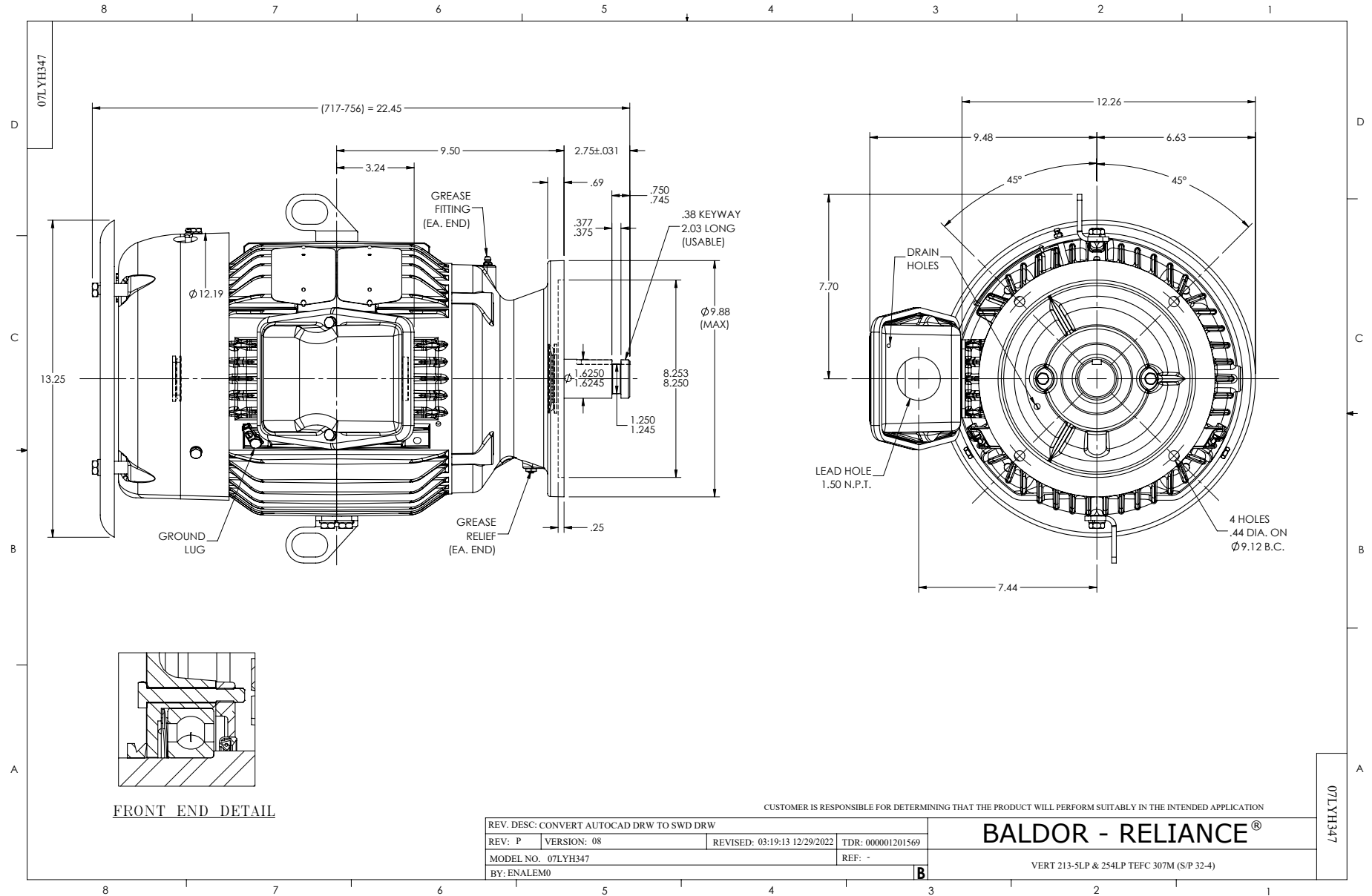
WINDING # 07WGX776

Typical performance - not guaranteed values.

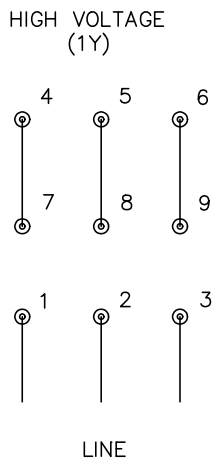
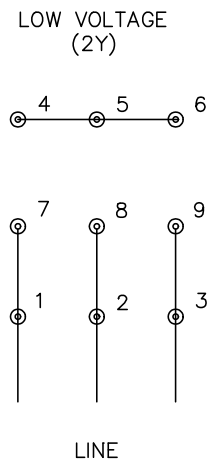
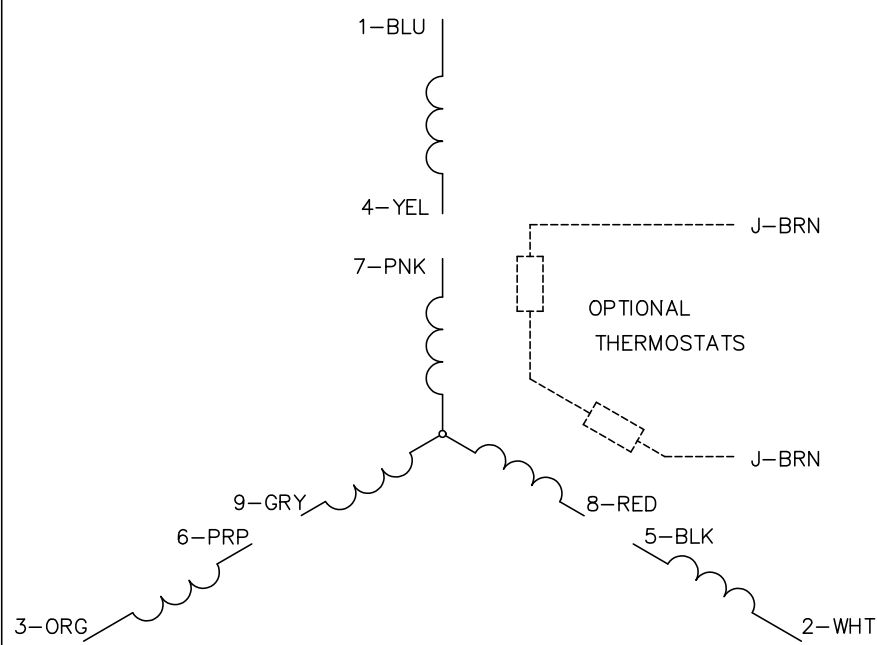
10 HP 3 PH 60 HZ 1760 RPM 460 V 0748M

TORQUES (LB-FT): PO=87 PU=51.9 LR=57.5 LRA=88.5





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
S00000		FILE: AAA00005140	MDL: -
		MTL: -	

BALDOR ELECTRIC Co.

3PH, DV, 9 LEADS

CD0005