

ABB BALDOR RELIANCE III

Customer information packet

EM4110T-8

40HP, 1775RPM, 3PH, 60HZ, 326T, 1254M, TEFC, N

Class - None

Division - Not Applicable

Specifications

Enclosure	TEFC
Frame	326T
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	40.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	200.0 V @ 60 HZ
Agency Approvals	CURUSEEV NEMA PREMIUM NEMA PREMIUM (OLD LOGO)
Ambient Temperature	40 °C
Auxiliary Box	NO AUXILLARY BOX
Auxiliary Box Lead Termination	None
Base Indicator	Rigid
Bearing Grease Type	Polyrex EM (-20F +300F)
Blower	None
Current @ Voltage	111.000 A @ 200.0 V
Design Code	A
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	94.1 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	111.0 a
Insulation Class	F
Inverter Code	Inverter Ready

Part Detail

Revision	C
Type	AC
Mech. spec.	12H13
Base	
Status	PRD/A
Elec. spec.	12WGZ281
Layout	12LYH013
Eff. date	06-27-2024
CD Diagram	CD0695
Poles	04
Leads	6#4
Proprietary	False
Created date	07-07-2021

KVA Code	H
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Motor Lead Quantity/Wire Size	6 @ 4 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	1254M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	30.28 IN
Power Factor	82
Product Family	General Purpose
Pulley End Bearing Type	Ball
Pulley Face Code	Standard
Pulley Shaft Indicator	Standard
Rodent Screen	None
RoHS Status	ROHS NON-COMPLIANT
Service Factor	1.15
Shaft Diameter	2.125 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	Shaft Slinger
Speed	1775 rpm
Speed Code	Single Speed
Starting Method	Part Winding
Thermal Device - Bearing	None
Thermal Device - Winding	Normally Closed Thermostat
Vibration Sensor Indicator	No Vibration Sensor
Winding Thermal 1	None
Winding Thermal 2	None

Nameplate

NP3443L													
CAT.NO.	EM4110T-8				CUST. P/N				ENCL				TEFC
SPEC.	12H013Z281	CC	010A	FRAME	326T	SER.NO.							
HP	40		CLASS	F	HZ	60							
R.P.M.	1775		PH	3	DES	A							
VOLTS	200			CODE	H	ODE BRG	6311	DE BRG	6312				
AMPS	111												
RATING	40C AMB-CONT			NEMA NOM. EFF.			94.1	GREASE	POLYREX EM				
P.F.	82	SER.F.	1.15	VPWM INVERTER READY									
HTR-VOLTS	HTR-AMPS		HTR-WATTS										

Parts List

Part number	Description	Quantity
SA395205	SA 12H013Z281	1.000 ea
RA385933	RA 12H013Z281	1.000 ea
09FN3001B03SP	EXTERNAL FAN, PLASTIC (COMES W/SCREW FRO	1.000 ea
10CB3001	CONDUIT BOX CAST W/2.500 LEAD HOLE	1.000 ea
09GS1000	GASKET-CONDUIT BOX, 1/16 THICK LEXIDE	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
12EP1107A05	FR ENDPLATE, MACH	1.000 ea
HA3400A13	STUD, 1/2-13 X 7" WELKER	4.000 ea
HW1001A50	LOCKWASHER 1/2, ZINC PLT,.879 OD, .509 I	4.000 ea
HW5100A13	W4627-047 WVY WSHR	1.000 ea
12EP1106A01	PU ENDPLATE, MACH	1.000 ea
10XN3118K40	5/16-18 X 2.25" HEX HD, GRADE 5	2.000 ea
HW1001A31	LOCKWASHER 5/16, ZINC PLT.591 OD, .319 I	2.000 ea
10XN3118K40	5/16-18 X 2.50" HEX HD, GRADE 5	4.000 ea
HW1001A31	LOCKWASHER 5/16, ZINC PLT.591 OD, .319 I	4.000 ea
10XN5013K28	1/2-13 X 1.75 HEX HEAD MACH SCREW,GRAD	4.000 ea
HW1001A50	LOCKWASHER 1/2, ZINC PLT,.879 OD, .509 I	4.000 ea
12FH1002SP	FAN COVER, CAST	1.000 ea
XY5013A12	NUT,1/2-13,HEX,STEEL,ZINCPLATED	4.000 ea
HW1001A50	LOCKWASHER 1/2, ZINC PLT,.879 OD, .509 I	4.000 ea
HW4600B41	V-RING SLINGER 2.125 X 2.880 X 0.280	1.000 ea
10CB3500SP	CONDUIT BOX LID, CAST	1.000 ea
10GS1000	GASKET, CONDUIT BOX LID	1.000 ea
51XW2520A12	.25-20 X .75, TAPTITE II, HEX WSHR SLTD	4.000 ea
HW2501H33	KEY, 1/2 SQ X 3.875	1.000 ea
HW4500A21	1618BALEMITE FITTING 825 UNIVERSAL	1.000 ea
HA4017A01	1/8 X 4 GREASE EXT (F/S)	1.000 ea
HW4500A17	317400 ALEMITE GREASE RELIEF	1.000 ea

HA4054	SHORT T-DRAIN FITTING, .125" N.P.T.	1.000 ea
HA4051A00	PLASTIC CAP FOR GREASE FITTING	1.000 ea
MJ1000A02	GREASE, POLYREX EM EXXON	0.200 lb
HW4500A03	GREASE FITTING, .125 NPT 1610(ALEMITE) 8	1.000 ea
HW4500A17	317400 ALEMITE GREASE RELIEF	1.000 ea
HA4054	SHORT T-DRAIN FITTING, .125" N.P.T.	1.000 ea
HA4051A00	PLASTIC CAP FOR GREASE FITTING	1.000 ea
HW2500A25	WOODRUFF KEY USA #1008 #BLOW CARBON STEE	1.000 ea
51XB1214A20	12-14X1.25 HXWSSL D SERTYB	1.000 ea
MG1050Y01	CELEROL BALDOR GOLD *5 GALLON BUCKET*	0.080 ga
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	4.000 ea
LB1624	COMBINED WARNING LABEL, ISO/ANSI PICTOGR	1.000 ea
LC0695	CONNECTION LABEL	1.000 ea
NP3443L	SS SUPER-E,INV RED,CURUS EEV,NEMA PREM,C	1.000 ea
12PA1000	PACKAGING GROUP PRINT PK1024A07	1.000 ea
MN416A01	TAG-INSTAL-MAINT no wire (2500 bx)11/25	1.000 ea
PE-0000013	ZRTG PE ASSEMBLY	1.000 ea
FE-0000022	ZRTG FE ASSEMBLY	1.000 ea

Accessories

Part number	Description	Multiplier
12-1105	C FACE KIT	A8
12EP1501A03SP	D-FLANGE KIT	A8

AC Induction Motor Performance Data

Record # 89139

Typical performance - not guaranteed values

Winding: 12WGZ281-R001			Type: 1254M		Enclosure: TEFC		
Nameplate Data				200 V, 60 Hz: Single Voltage Motor			
Rated Output (HP)		40		Full Load Torque		118 LB-FT	
Volts		200		Start Configuration		direct on line	
Full Load Amps		111		Breakdown Torque		364 LB-FT	
R.P.M.		1775		Pull-up Torque		172 LB-FT	
Hz	60	Phase	3	Locked-rotor Torque		183 LB-FT	
NEMA Design Code		A	KVA Code	H		Starting Current	758 A
Service Factor (S.F.)		1.15		No-load Current		43.8 A	
NEMA Nom. Eff.		94.1	Power Factor	82		Line-line Res. @ 25°C	0.027 Ω
Rating - Duty		40C AMB-CONT		Temp. Rise @ Rated Load		53°C	
S.F. Amps				Temp. Rise @ S.F. Load		64°C	
				Locked-rotor Power Factor		27.0508	
				Rotor inertia		7.19 lb-ft²	

Load Characteristics 200 V, 60 Hz, 40 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	47	68	77	82	84	85	83
Efficiency	90.1	93.6	94.4	94.4	94.2	93.3	94.3
Speed	1795	1790	1785	1780	1774	1767	1776
Line amperes	51.7	68.4	88.8	111	136	162	126

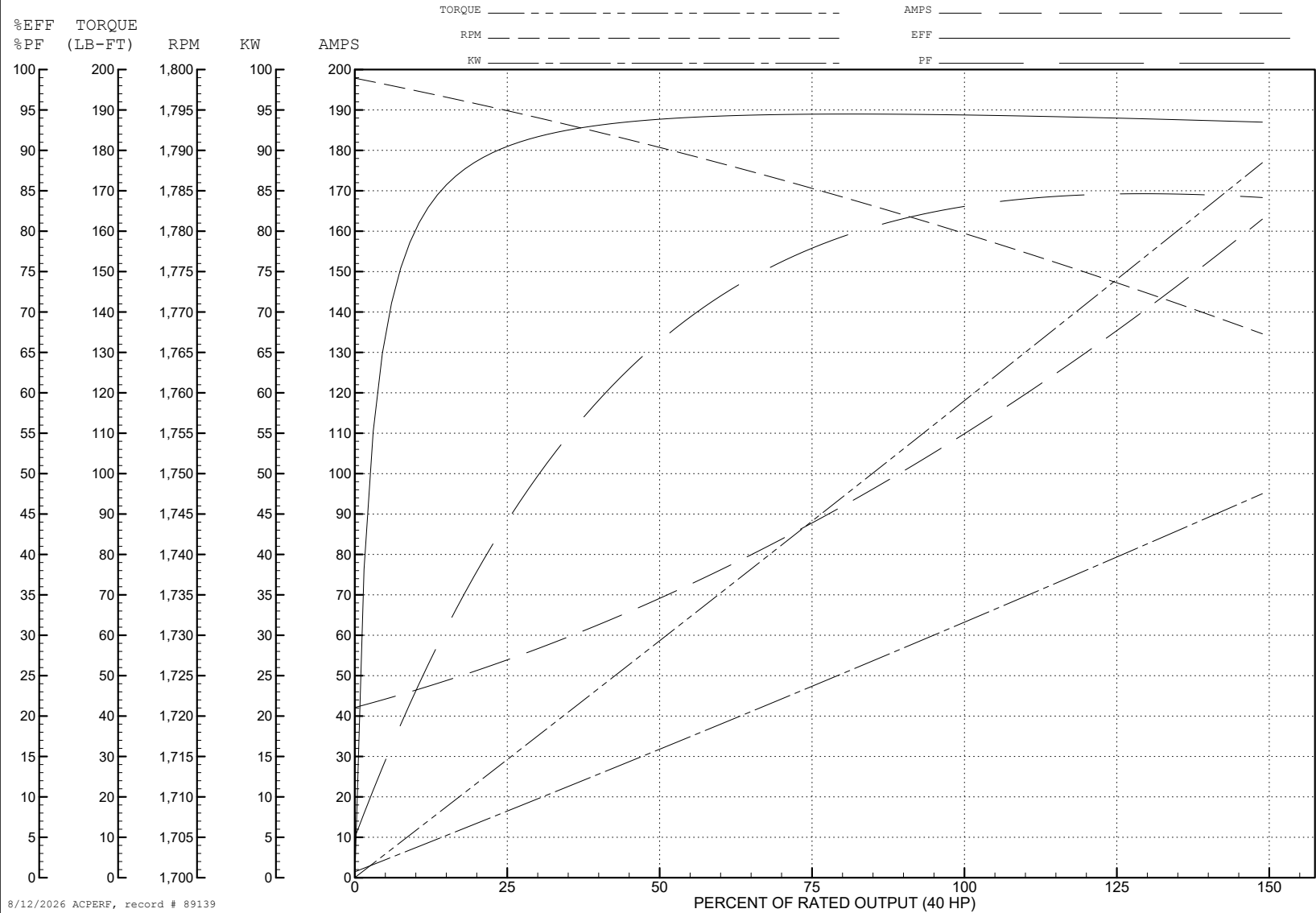
ABB Motors and Mechanical Inc.

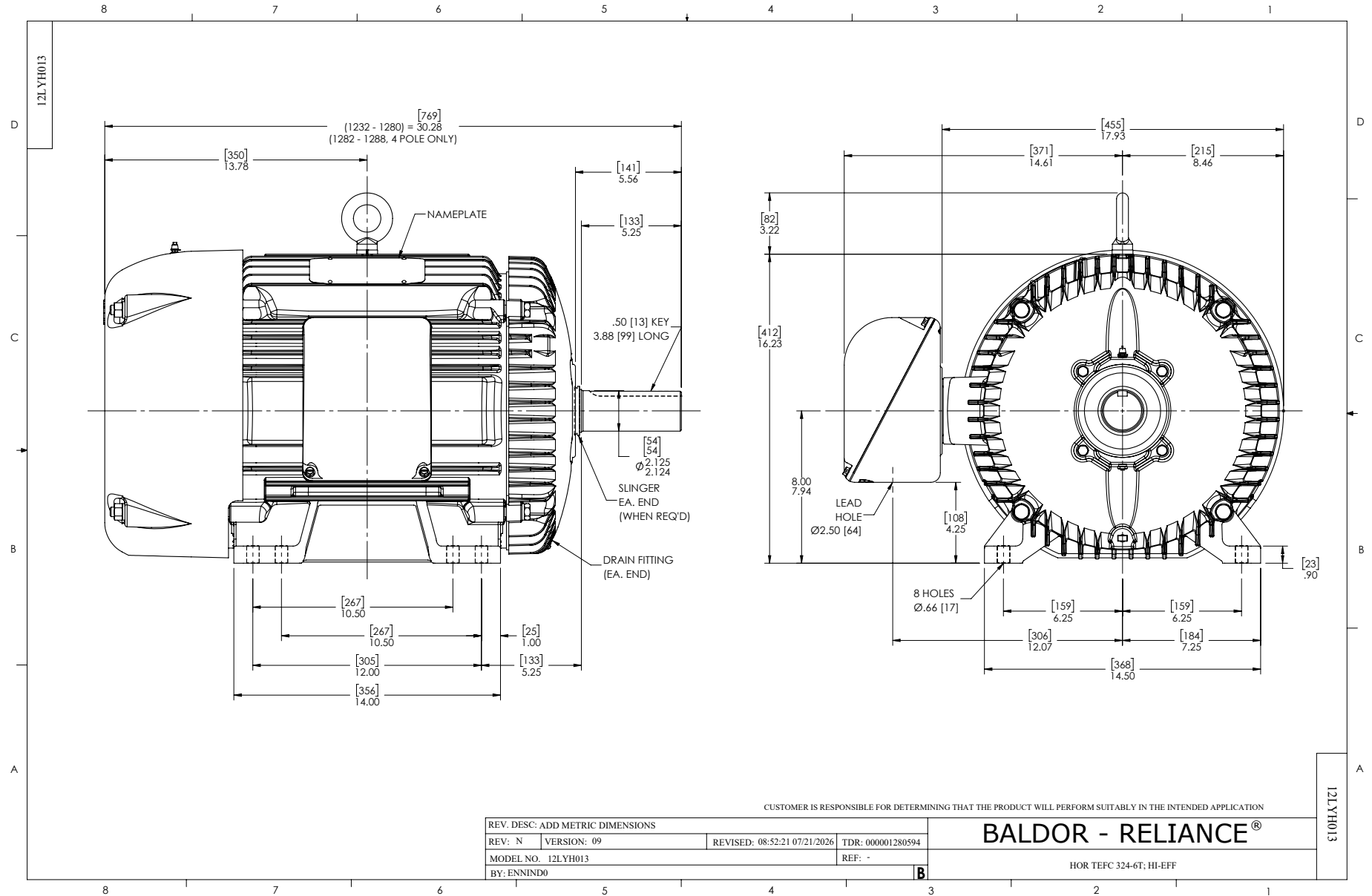
WINDING # 12WGZ281

Typical performance - not guaranteed values.

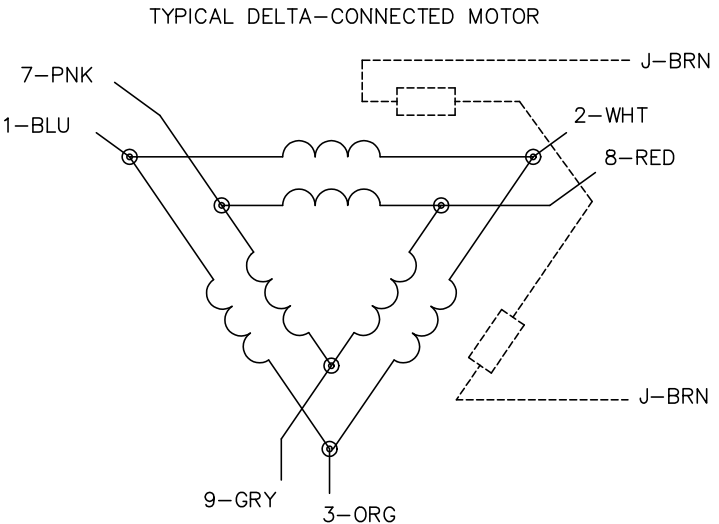
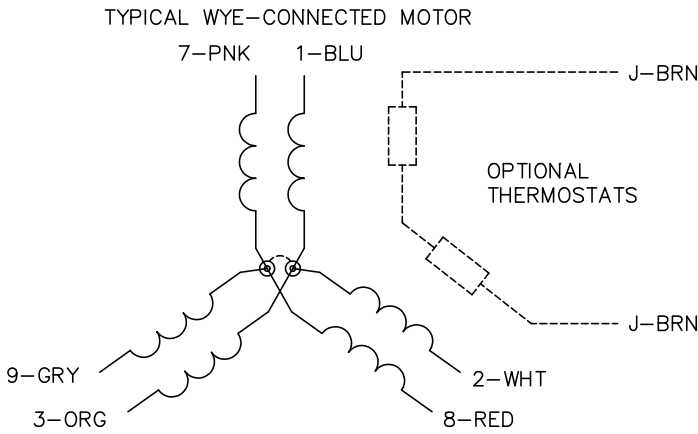
40 HP 3 PH 60 HZ 1775 RPM 200 V 1254M

TORQUES (LB-FT): PO=364 PU=172 LR=183 LRA=758

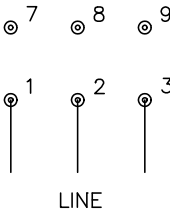




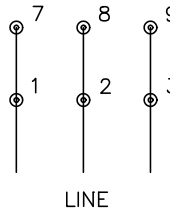
CD0695



START CONNECTION



RUN CONNECTION



- NOTES:
- 1. MOTOR MAY BE WYE CONNECTED OR DELTA CONNECTED.
 - 2. INTERCHANGE ANY TWO LINE LEADS TO REVERSE ROTATION.
 - 3. OPTIONAL THERMOSTATS ARE PROVIDED WHEN SPECIFIED.
 - 4. ACTUAL NUMBER OF INTERNAL PARALLEL CIRCUITS MAY VARY.
 - 5. 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 3:19	TDR: 0171435
S69000		FILE: AAA00005151	MDL: -
		MTL: -	

BALDOR ELECTRIC Co.

3PH, SV, 6 LEADS, PART WINDING START

CD0695