

**BALDOR® • RELIANCE** 

**Product Information Packet**

**EM4110T-8**

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

Part Detail							
Revision:	-	Status:	PRD/A	Change #:		Proprietary:	No
Type:	AC	Elec. Spec:	12WGZ281	CD Diagram:	CD0695	Mfg Plant:	
Mech. Spec:	12H13	Layout:	12LYH013	Poles:	04	Created Date:	07-07-2021
Base:	RG	Eff. Date:	07-14-2021	Leads:	6#4		

Specs			
Catalog Number:	EM4110T-8	Inverter Code:	Inverter Ready
Enclosure:	TEFC	KVA Code:	H
Frame:	324T	Lifting Lugs:	Standard Lifting Lugs
Frame Material:	Iron	Locked Bearing Indicator:	Locked Bearing
Output @ Frequency:	40.000 HP @ 60 HZ	Motor Lead Quantity/Wire Size:	3 @ 4 AWG
Synchronous Speed @ Frequency:	1800 RPM @ 60 HZ	Motor Lead Exit:	Ko Box
Voltage @ Frequency:	200.0 V @ 60 HZ	Motor Lead Termination:	Flying Leads
XP Class and Group:	None	Motor Type:	1254M
XP Division:	Not Applicable	Mounting Arrangement:	F1
Agency Approvals:	CSA	Power Factor:	82
	CSA EEV	Product Family:	General Purpose
	UR	Pulley End Bearing Type:	Ball
Auxillary Box:	No Auxillary Box	Pulley Face Code:	Standard
Auxillary Box Lead Termination:	None	Pulley Shaft Indicator:	Standard
Base Indicator:	Rigid	Rodent Screen:	None
Bearing Grease Type:	Polyrex EM (-20F +300F)	RoHS Status:	ROHS NON-COMPLIANT
Blower:	None	Shaft Extension Location:	Pulley End
Current @ Voltage:	111.000 A @ 200.0 V	Shaft Ground Indicator:	No Shaft Grounding

<b>Design Code:</b>	A	<b>Shaft Rotation:</b>	Reversible
<b>Drip Cover:</b>	No Drip Cover	<b>Shaft Slinger Indicator:</b>	Shaft Slinger
<b>Duty Rating:</b>	CONT	<b>Speed Code:</b>	Single Speed
<b>Electrically Isolated Bearing:</b>	Not Electrically Isolated	<b>Motor Standards:</b>	NEMA
<b>Feedback Device:</b>	NO FEEDBACK	<b>Starting Method:</b>	Direct on line
<b>Front Face Code:</b>	Standard	<b>Thermal Device - Bearing:</b>	None
<b>Front Shaft Indicator:</b>	None	<b>Thermal Device - Winding:</b>	Normally Closed Thermostat
<b>Heater Indicator:</b>	No Heater	<b>Vibration Sensor Indicator:</b>	No Vibration Sensor
<b>Insulation Class:</b>	F	<b>Winding Thermal 1:</b>	None
		<b>Winding Thermal 2:</b>	None

<b>Nameplate NP3443L</b>										
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		USABLE AT 208V							
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
09GS1000SP	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 WSHER	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

Parts List (continued)		
Part Number	Description	Quantity
10CB3500SP	CONDUIT BOX LID, CAST	1.000 EA
10GS1000SP	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
LB1115N	LABEL,LIFTING DEVICE (ON ROLLS)	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, MOBIL POLYREX EM - 124047	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 HXWSSLD SERTYB	1.000 EA
MG1000Y03	MUNSELL 2.53Y 6.70/ 4.60, GLOSS 20,	0.080 GA
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	4.000 EA
LB1119N	WARNING LABEL	1.000 EA
LC0695	CONNECTION LABEL	1.000 EA
NP3443L	SS SUPER-E UL CSA-EEV PREM CC	1.000 EA
12PA1000	PACKAGING GROUP PRINT PK1024A07	1.000 EA
MN416A01	TAG-INSTAL-MAINT no wire (2100/bx) 4/22	1.000 EA

PE-0000013	ZRTG PE ASSEMBLY	1.000 EA
FE-0000022	ZRTG FE ASSEMBLY	1.000 EA

<b>Accessories</b>		
<b>Part Number</b>	<b>Description</b>	<b>Multiplier</b>
12-1105	C FACE KIT	A8
12EP1501A03SP	D-FLANGE KIT	A8



**AC Induction Motor Performance Data**

Record # 89139

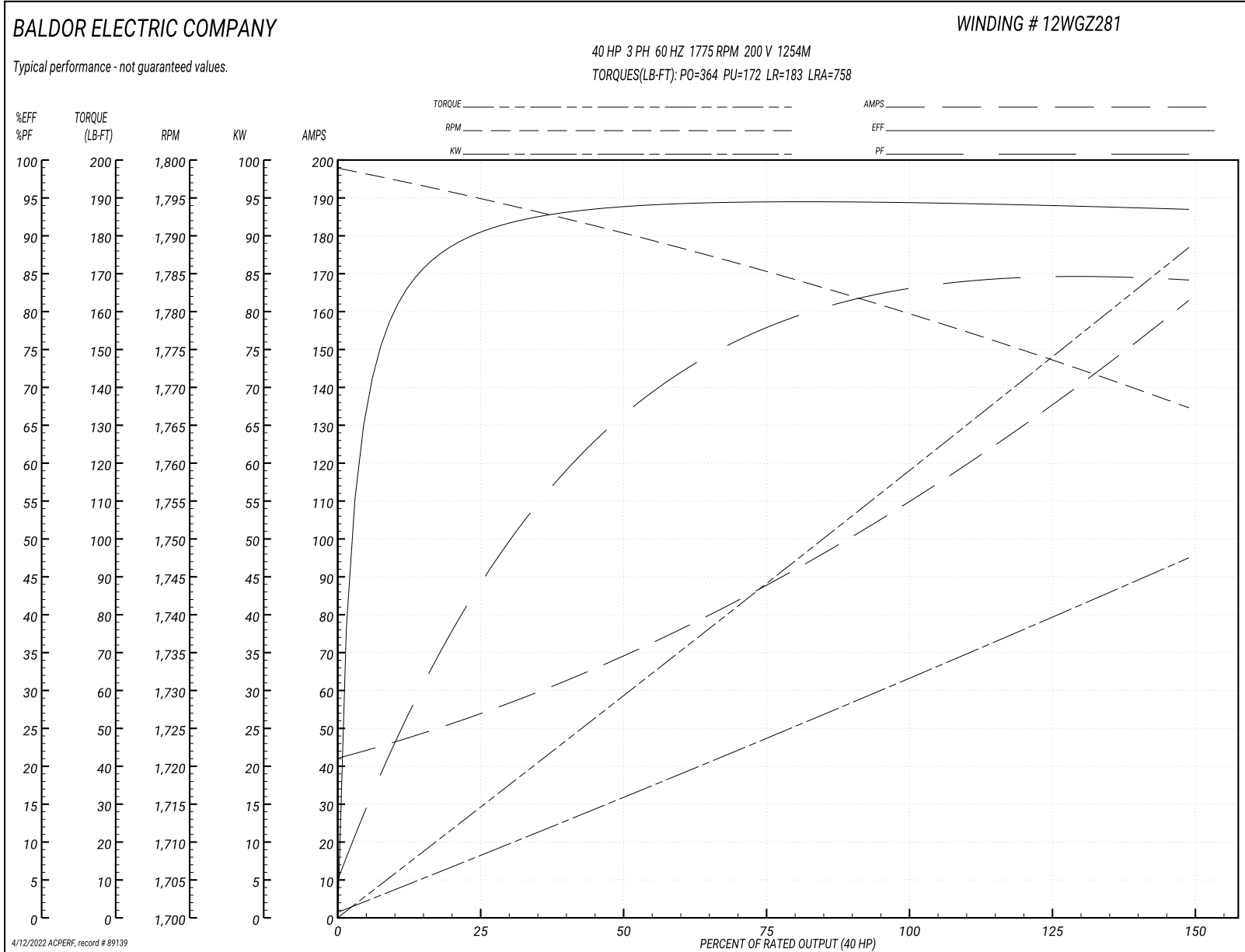
Typical performance - not guaranteed values

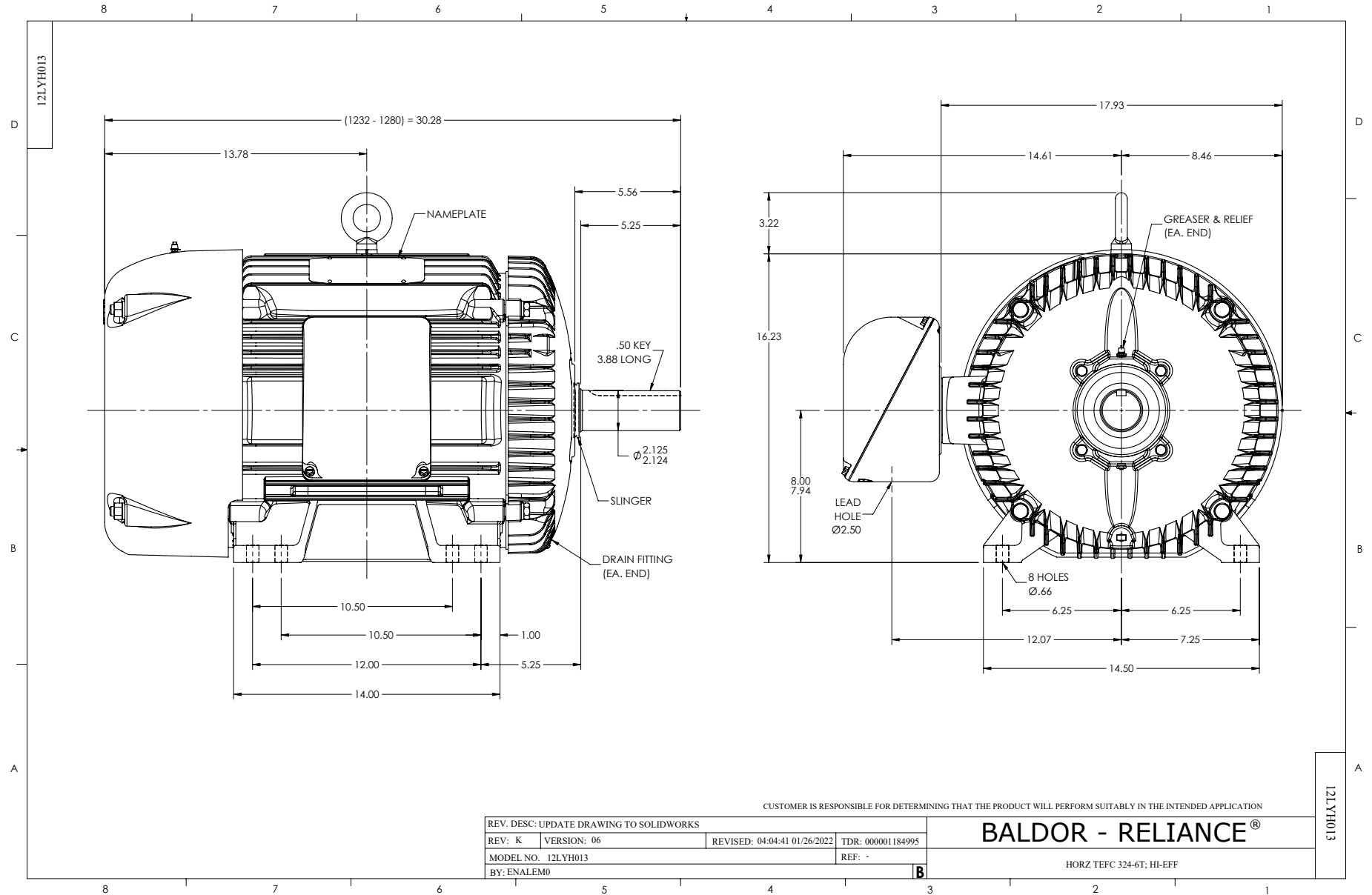
<b>Winding:</b> 12WGZ281-R001		<b>Type:</b> 1254M		<b>Enclosure:</b> TEFC	
<b>Nameplate Data</b>			<b>200 V, 60 Hz: Single Voltage Motor</b>		
<b>Rated Output (HP)</b>	40	<b>Full Load Torque</b>	118 LB-FT		
<b>Volts</b>	200	<b>Start Configuration</b>	direct on line		
<b>Full Load Amps</b>	111	<b>Breakdown Torque</b>	364 LB-FT		
<b>R.P.M.</b>	1775	<b>Pull-up Torque</b>	172 LB-FT		
<b>Hz</b>	60 <b>Phase</b>	3	<b>Locked-rotor Torque</b>	183 LB-FT	
<b>NEMA Design Code</b>	A <b>KVA Code</b>	H	<b>Starting Current</b>	758 A	
<b>Service Factor (S.F.)</b>	1.15	<b>No-load Current</b>	43.8 A		
<b>NEMA Nom. Eff.</b>	94.1 <b>Power Factor</b>	82	<b>Line-line Res. @ 25°C</b>	0.027 Ω	
<b>Rating - Duty</b>	40C AMB-CONT	<b>Temp. Rise @ Rated Load</b>	53°C		
<b>S.F. Amps</b>		<b>Temp. Rise @ S.F. Load</b>	64°C		
		<b>Locked-rotor Power Factor</b>	27.0508		
		<b>Rotor inertia</b>	7.19 lb-ft <sup>2</sup>		

**Load Characteristics 200 V, 60 Hz, 40 HP**

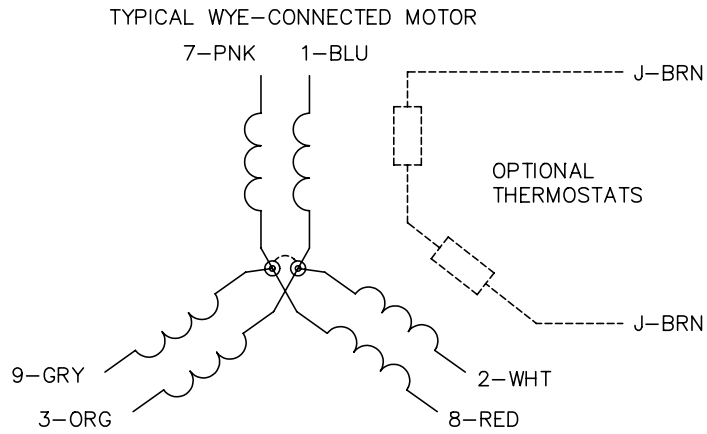
<b>% of Rated Load</b>	<b>25</b>	<b>50</b>	<b>75</b>	<b>100</b>	<b>125</b>	<b>150</b>	<b>S.F.</b>
<b>Power Factor</b>	47	68	77	82	84	85	83
<b>Efficiency</b>	90.1	93.6	94.4	94.4	94.2	93.3	94.3
<b>Speed</b>	1795	1790	1785	1780	1774	1767	1776
<b>Line amperes</b>	51.7	68.4	88.8	111	136	162	126

Performance Graph at 200V, 60Hz, 40.0HP Typical performance - Not guaranteed values

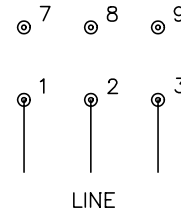




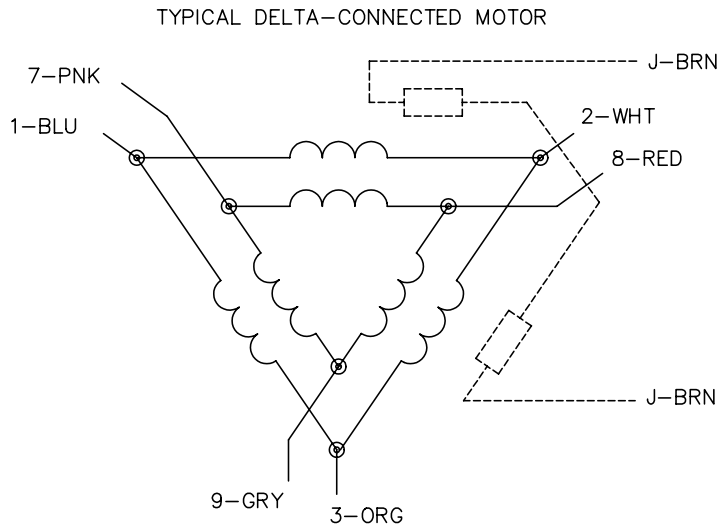
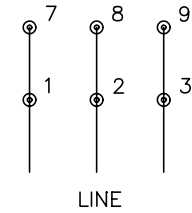
CD0695



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

9690D0

FILE: AAA00005151

MDL: -

MTL: -

**BALDOR ELECTRIC Co.**

3PH, SV, 6 LEADS, PART WINDING START

CD0695

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