

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										

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

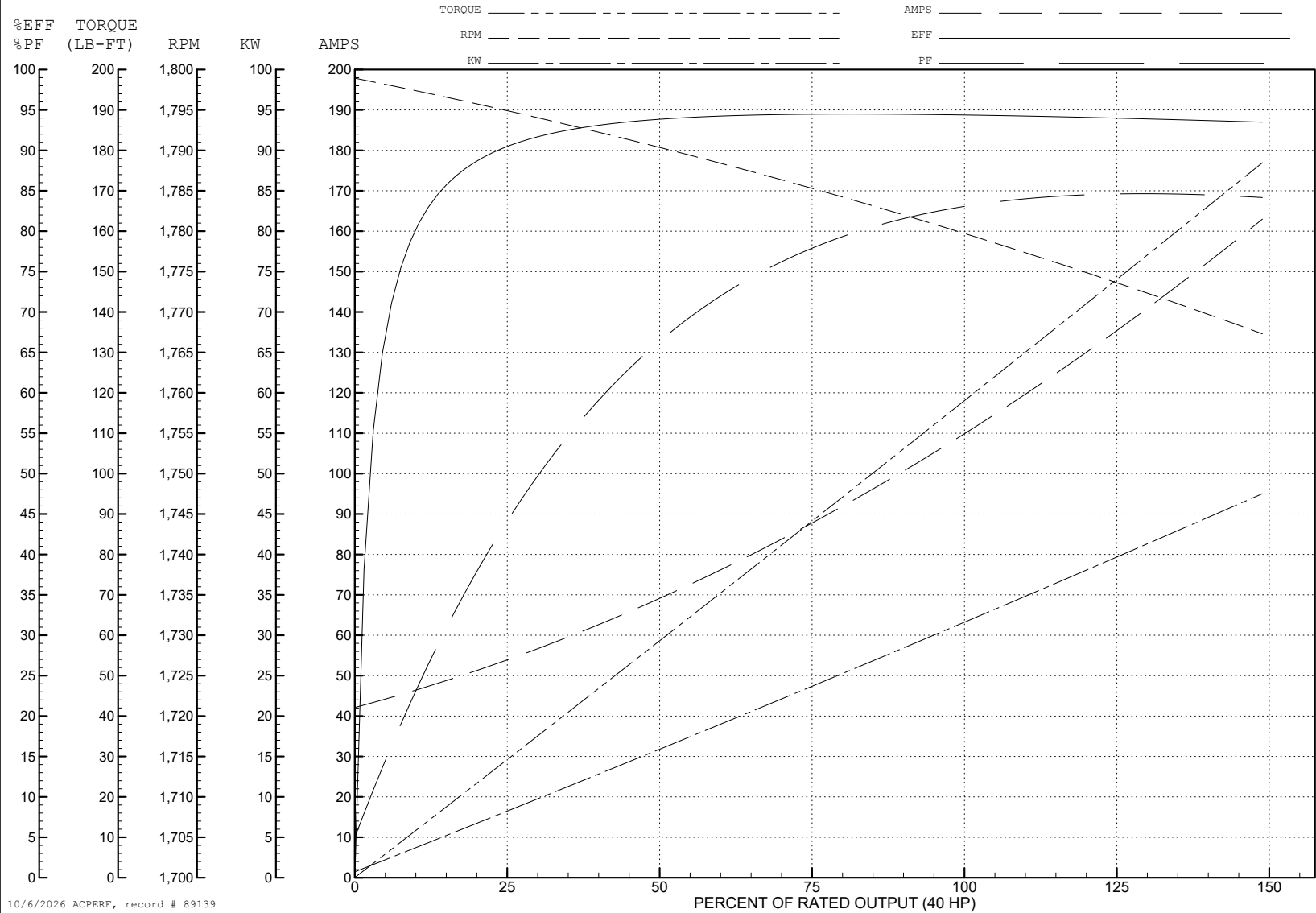
ABB Motors and Mechanical Inc.

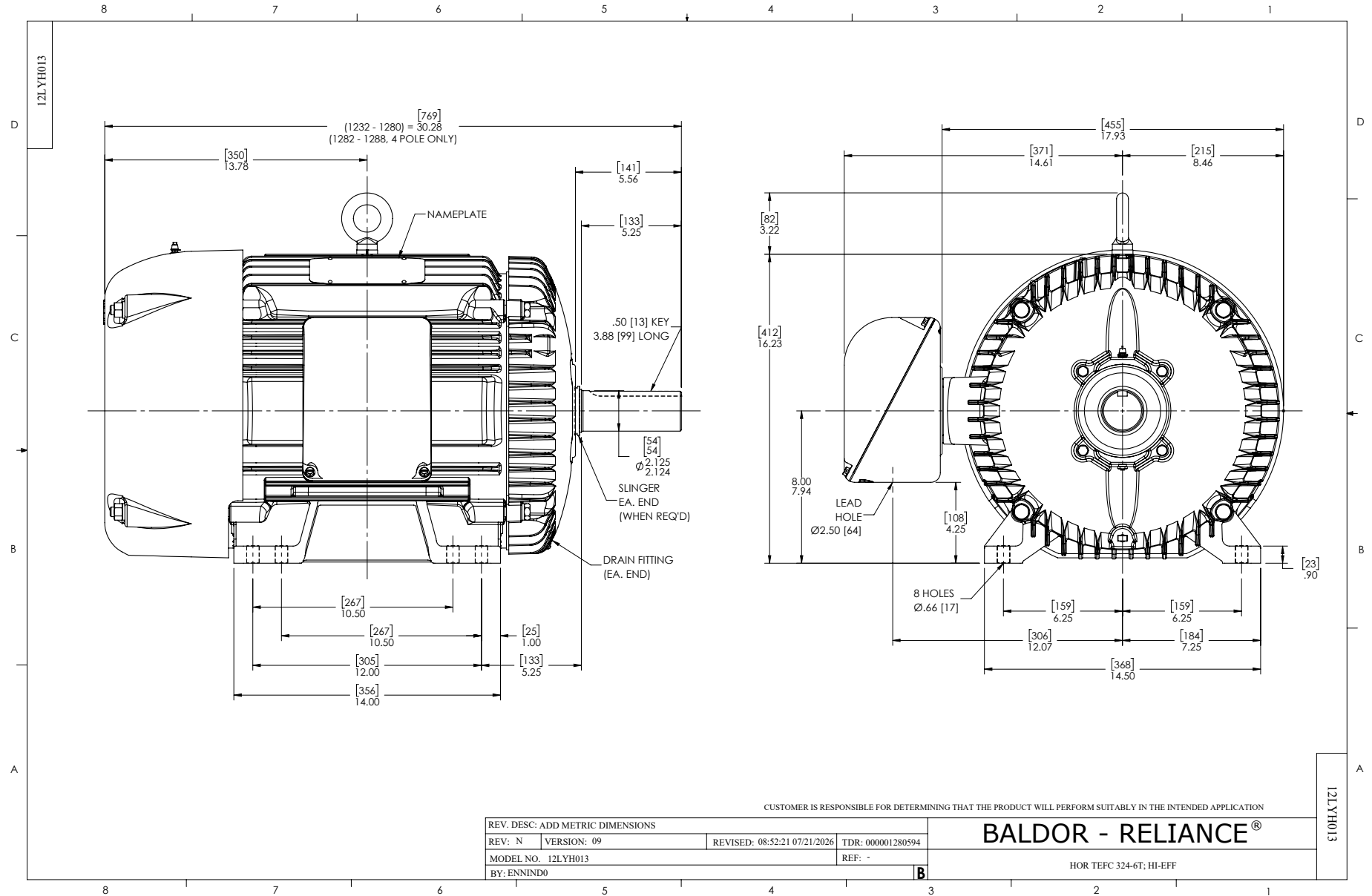
WINDING # 12WGZ281

Typical performance - not guaranteed values.

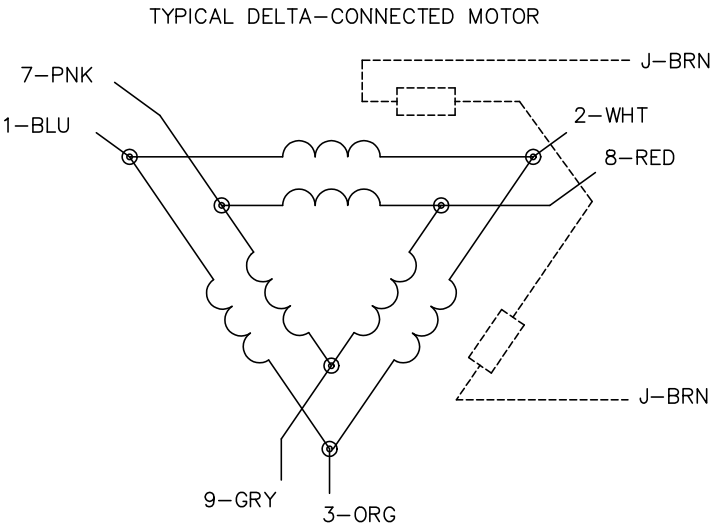
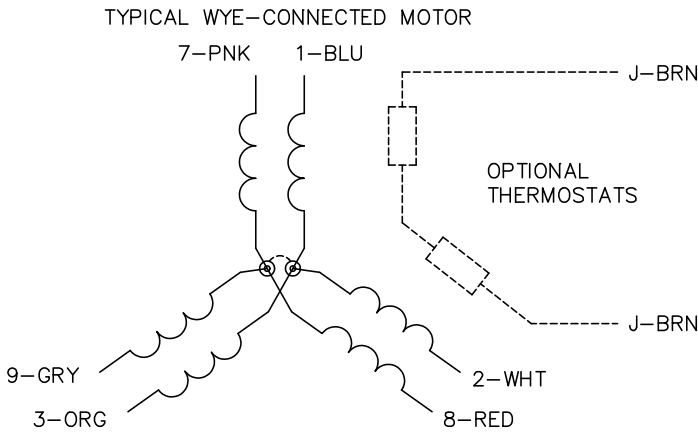
40 HP 3 PH 60 HZ 1775 RPM 200 V 1254M

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

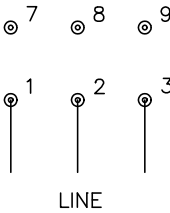




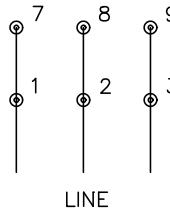
CD0695



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