



Customer information packet

EM4112T

20HP, 880RPM, 3PH, 60HZ, 324T, 1256M, TEFC, F1

Class - None

Division - Not Applicable

Specifications

Enclosure	TEFC
Frame	324T
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	20.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	900 RPM @ 60 HZ
Voltage @ Frequency	230.0 V @ 60 HZ 460.0 V @ 60 HZ
Agency Approvals	CSA EEV NEMA PREMIUM NEMA_PREMIUM UR
Ambient Temperature	40 °C
Auxillary Box	No Auxillary Box
Auxillary Box Lead Termination	None
Base Indicator	Rigid
Bearing Grease Type	Polyrex EM (-20F +300F)
Blower	None
Current @ Voltage	62.000 A @ 208.0 V 60.000 A @ 230.0 V 30.000 A @ 460.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	90.2 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Shaft Indicator	None

Part detail

Revision	D
Type	AC
Mech. spec.	12C51
Base	
Status	PRD/A
Elec. spec.	12WGZ306
Layout	12LYC051
Eff. date	01-14-2025
CD Diagram	CD0005
Poles	08
Leads	9#10
Proprietary	False
Created date	04-18-2023

Heater Indicator	No Heater
High Voltage Full Load Amps	30.0 a
Insulation Class	F
Inverter Code	Inverter Ready
KVA Code	G
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Motor Lead Quantity/Wire Size	9 @ 10 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	1256M
Mounting Arrangement	F1
Number of Poles	8
Overall Length	30.28 IN
Power Factor	68
Product Family	General Purpose
Pulley End Bearing Type	Ball
Pulley Face Code	Standard
Pulley Shaft Indicator	Standard
Rodent Screen	None
Service Factor	1.15
Shaft Diameter	2.125 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	Shaft Slinger
Speed	880 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

NP2138L

CAT.NO.	EM4112T	P/N		ENCLOSURE	TEFC		
SPEC.	12C051Z306	CC	010A	FRAME	324T	S/N	
HP	20	CLASS	F	HZ	60		
RPM	880	PH	3	DES	B		
VOLT	230/460	KVA-CODE	G	ODE BRG	6311	DE BRG	6312
AMP	60/30						
RATING	40C AMB-CONT	GREASE	POLYREX EM				
NEMA-NOM-EFF	90.2	PF	68	SER.F.	1.15		
HTR-VOLTS		HTR-AMPS					

AC Induction Motor Performance Data

Record # 92443

Typical performance - not guaranteed values

Winding: 12WGZ306-R001		Type: 1256M		Enclosure: TEFC	
Nameplate Data			460 V, 60 Hz: High Voltage Connection		
Rated Output (HP)	20	Full Load Torque	119 LB-FT		
Volts	230/460	Start Configuration	direct on line		
Full Load Amps	60/30	Breakdown Torque	278 LB-FT		
R.P.M.	880	Pull-up Torque	156 LB-FT		
Hz	60 Phase	3	Locked-rotor Torque	164 LB-FT	
NEMA Design Code	B KVA Code	G	Starting Current	141 A	
Service Factor (S.F.)	1.15	No-load Current	17.47 A		
NEMA Nom. Eff.	90.2 Power Factor	68	Line-line Res. @ 25°C	0.37 Ω	
Rating - Duty	40C AMB-CONT		Temp. Rise @ Rated Load	56°C	
S.F. Amps			Temp. Rise @ S.F. Load	68°C	
			Locked-rotor Power Factor	34	
			Rotor inertia	7.46 lb-ft ²	

Load Characteristics 460 V, 60 Hz, 20 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	30	49	61	68	72	73	68
Efficiency	85	90.1	91	90.7	89.9	88.5	90.4
Speed	894	890	885	881	875	868	878
Line amperes	18.32	20.94	25.08	30.17	36.38	43.47	34.9

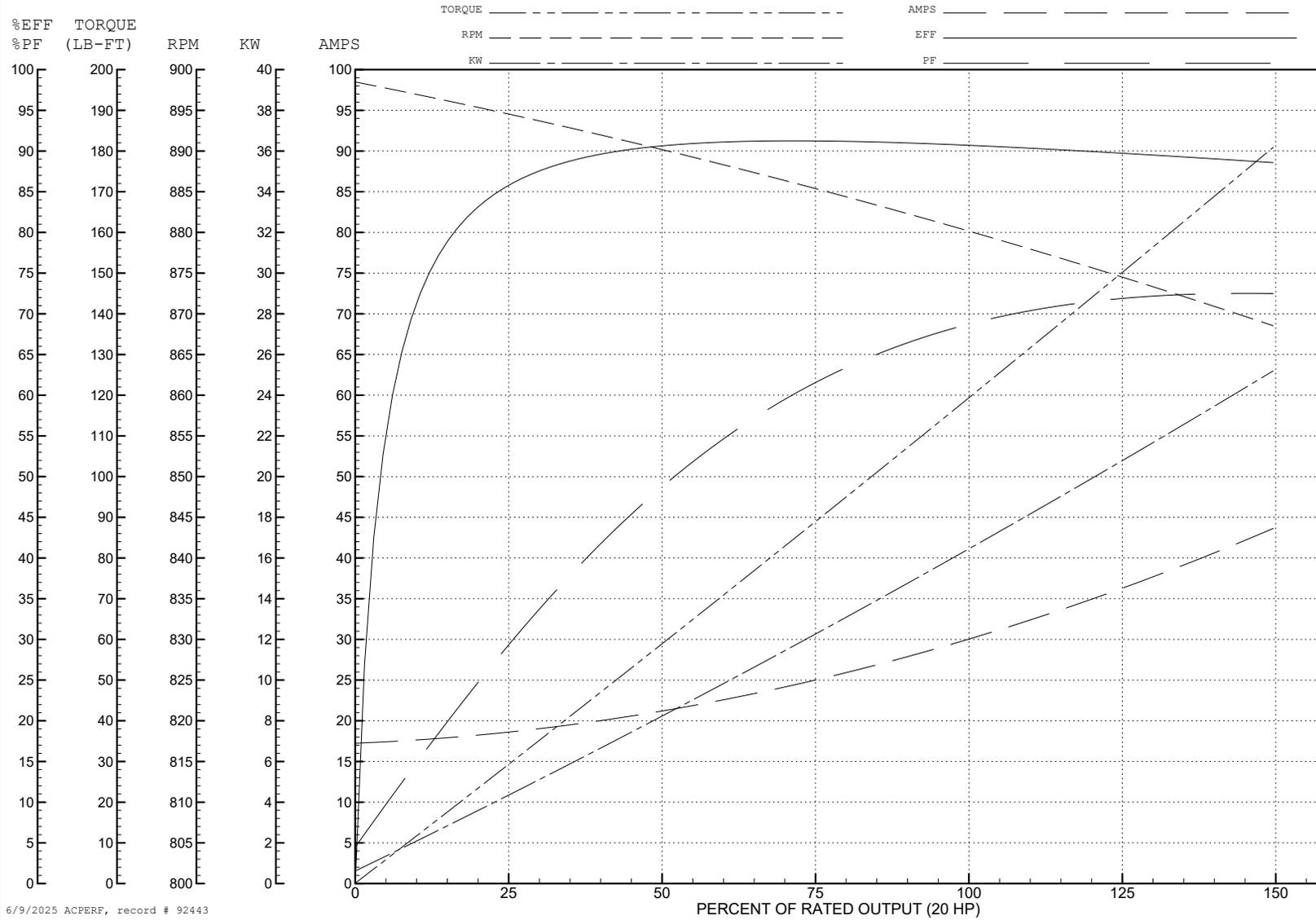
ABB Motors and Mechanical Inc.

WINDING # 12WGZ306

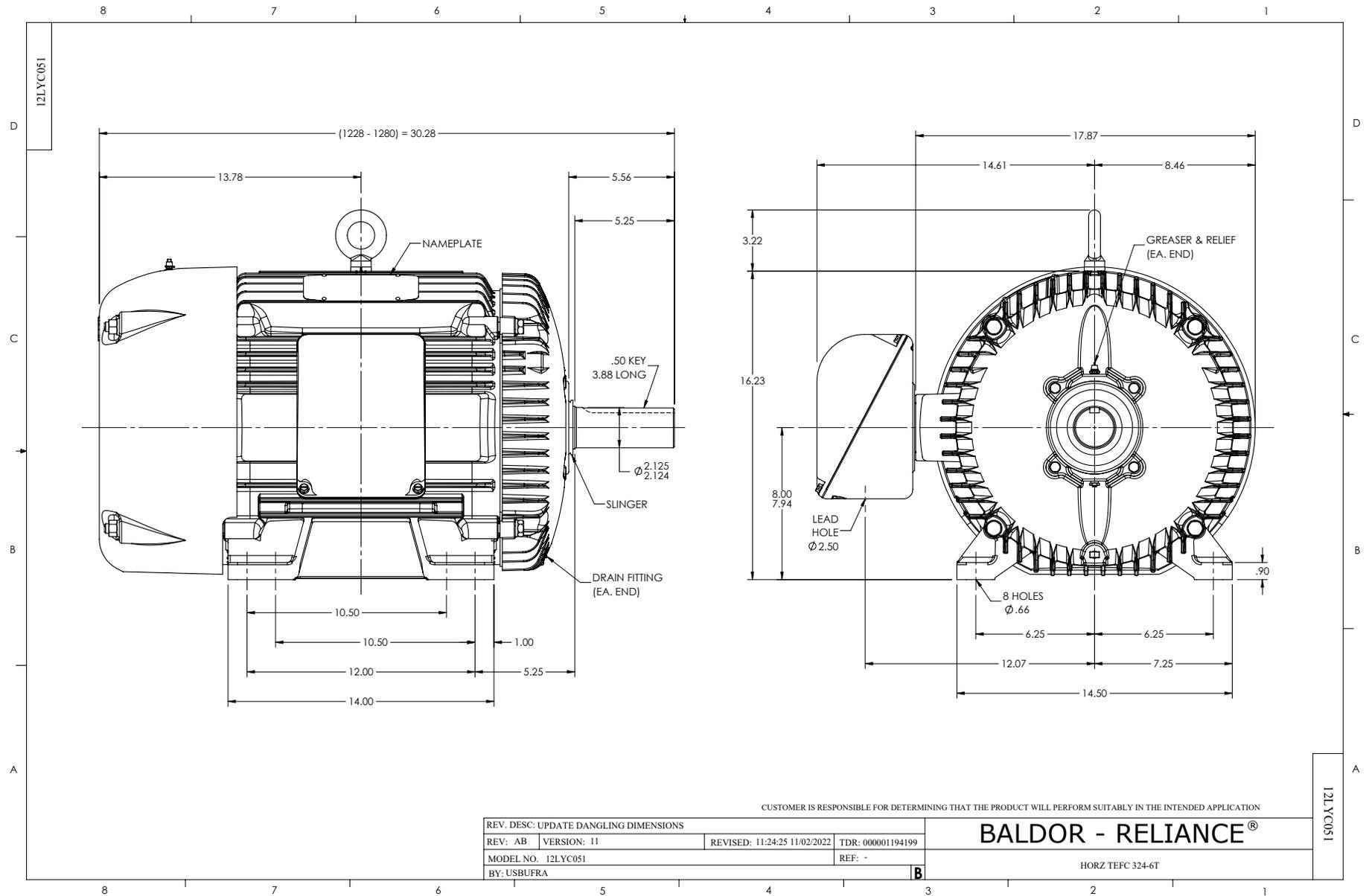
Typical performance - not guaranteed values.

20 HP 3 PH 60 HZ 880 RPM 460 V 1256M

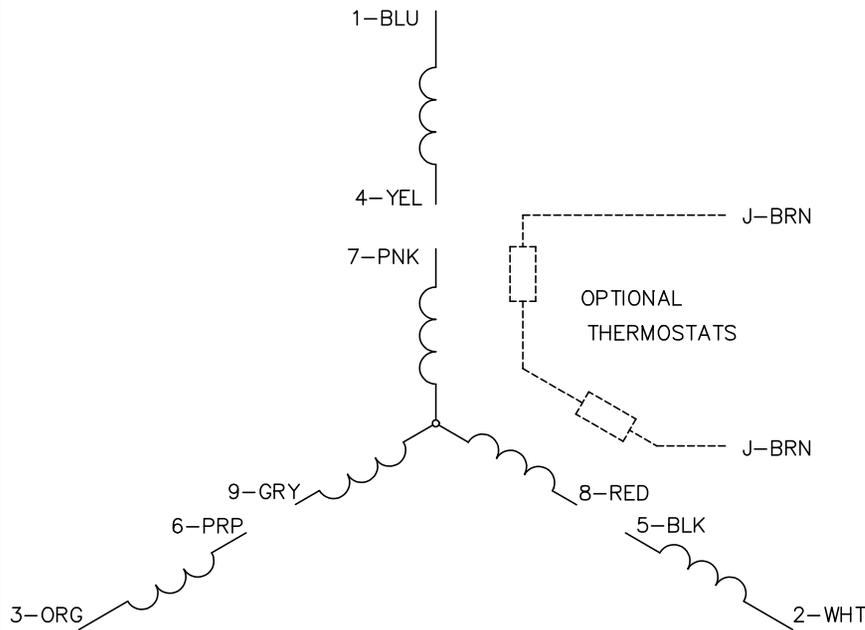
TORQUES (LB-FT): PO=278 PU=156 LR=164 LRA=141



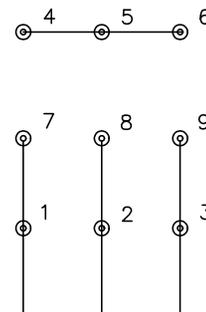
6/9/2025 ACPERF, record # 92443



CD0005

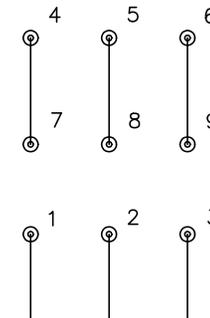


LOW VOLTAGE
(2Y)



LINE

HIGH VOLTAGE
(1Y)



LINE

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