BALDOR • RELIANCE

Customer information packet

EM4110T-58

40HP, 1470RPM, 3PH, 50HZ, 324T, 1272M, TEFC, F1
Class - None
Division - Not Applicable

6/9/2025 4:11:43 AM

Specifications

Enclosure	TEFC
Frame	324T
Frame Material	Iron
Frequency	50.00 Hz
Haz Area Class and Group	None
Haz Area Division	Not Applicable
Motor Letter Type	Three Phase
Output @ Frequency	40.000 HP @ 50 HZ
Phase	3
Synchronous Speed @ Frequency	1500 RPM @ 50 HZ
Voltage @ Frequency	400.0 V @ 50 HZ
Agency Approvals	CE
	CSA
	CURUS
	IE3
	UKCA
	UR
	WEEE
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	52.000 A @ 400.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	93.6 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Face Code	Standard

Part detail

Revision	N
Type	AC
Mech. spec.	12C51
Base	
Status	PRD/A
Elec. spec.	12WGY897
Layout	12LYC051
Eff. date	01-14-2025
CD Diagram	CD0382
Poles	04
Leads	6#8
Proprietary	False
Created date	04-03-2015

Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	52.0 a
Insulation Class	F
Inverter Code	Not Inverter
IP Rating	NONE
KVA Code	F
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	6 @ 8 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	1272M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	30.28 IN
Power Factor	86
Product Family	General Purpose
Pulley End Bearing Type	Ball
Pulley Face Code	Standard
Pulley Shaft Indicator	Standard
Rodent Screen	None
RoHS Status	ROHS COMPLIANT
Service Factor	1.15
Shaft Diameter	2.125 IN
Shaft Extension Location	Pulley End
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	Shaft Slinger
Speed	1470 rpm
Speed Code	Single Speed
Starting Method	Wye Start - Delta Run
Thermal Device - Bearing	None

Thermal Device - Winding	None
Vibration Sensor Indicator	No Vibration Sensor
Winding Thermal 1	None
Winding Thermal 2	None

Nameplate

NP3444L									
CAT NO	EM4110T-58								
SPEC.	12C051Y897G1								
HP	40/30KW IC411				**PH**	3			
VOLTS	400								
AMP	52								
RPM	1470 1/MIN 318KG								
FRAME	324T	**HZ**	50			**I.P.**	44		
SER.F.	1.15	**CODE**	F	**DES**	B	**CL**	F		
NOM.EFF.	93.6								
PF	86			**USABLE AT 208V**		N/A			
RATING	40C AMB-CONT				**CC**				
DE BRG	6312		**ODE**	6311					
ENCL	TEFC	**SN**							
VPWM INVERTER READY									
CT5-50(10:1)VT2.5-50(20:1									
BLANK	IE3-94.5(75%)93.8(50%)								

AC Induction Motor Performance Data
Record # 49470
Typical performance - not guaranteed values

Winding: 12WGY897-R001	**Type:** 1272M	**Enclosure:** TEFC

Nameplate Data				**400 V, 50 Hz: Single Voltage Motor**	
Rated Output (HP)			40	**Full Load Torque**	142 LB-FT
Volts			400	**Start Configuration**	direct on line
Full Load Amps			52	**Breakdown Torque**	399 LB-FT
R.P.M.			1470	**Pull-up Torque**	177 LB-FT
Hz	50	**Phase**	3	**Locked-rotor Torque**	246 LB-FT
NEMA Design Code	B	**KVA Code**	F	**Starting Current**	295 A
Service Factor (S.F.)			1.15	**No-load Current**	15.6 A
NEMA Nom. Eff.	93.6	**Power Factor**	86	**Line-line Res. @ 25ºC**	0.141 Ω
Rating - Duty			40C AMB-CONT	**Temp. Rise @ Rated Load**	60°C
S.F. Amps				**Temp. Rise @ S.F. Load**	75°C
				Locked-rotor Power Factor	27.1
				Rotor inertia	9.59 LB-FT2

Load Characteristics 400 V, 50 Hz, 40 HP

% of Rated Load	**25**	**50**	**75**	**100**	**125**	**150**	**S.F.**
Power Factor	60	80	86	88	88	87	88
Efficiency	92.9	93.8	94.5	93.8	93	91.8	93.3
Speed	1491	1485	1479	1472	1464	1455	1467
Line amperes	19.5	28.6	39.5	52.2	65.9	81.1	60.4

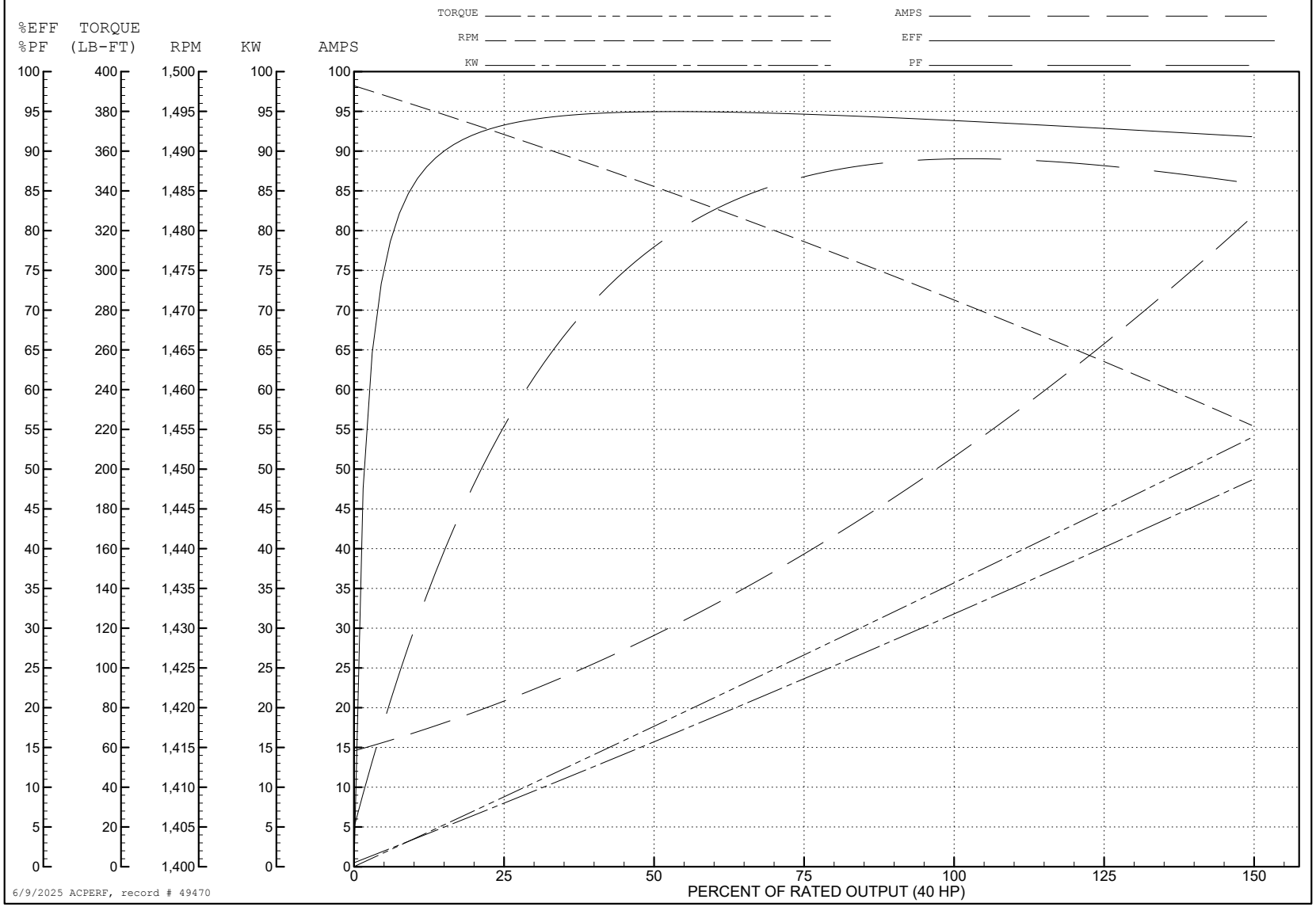
ABB Motors and Mechanical Inc.

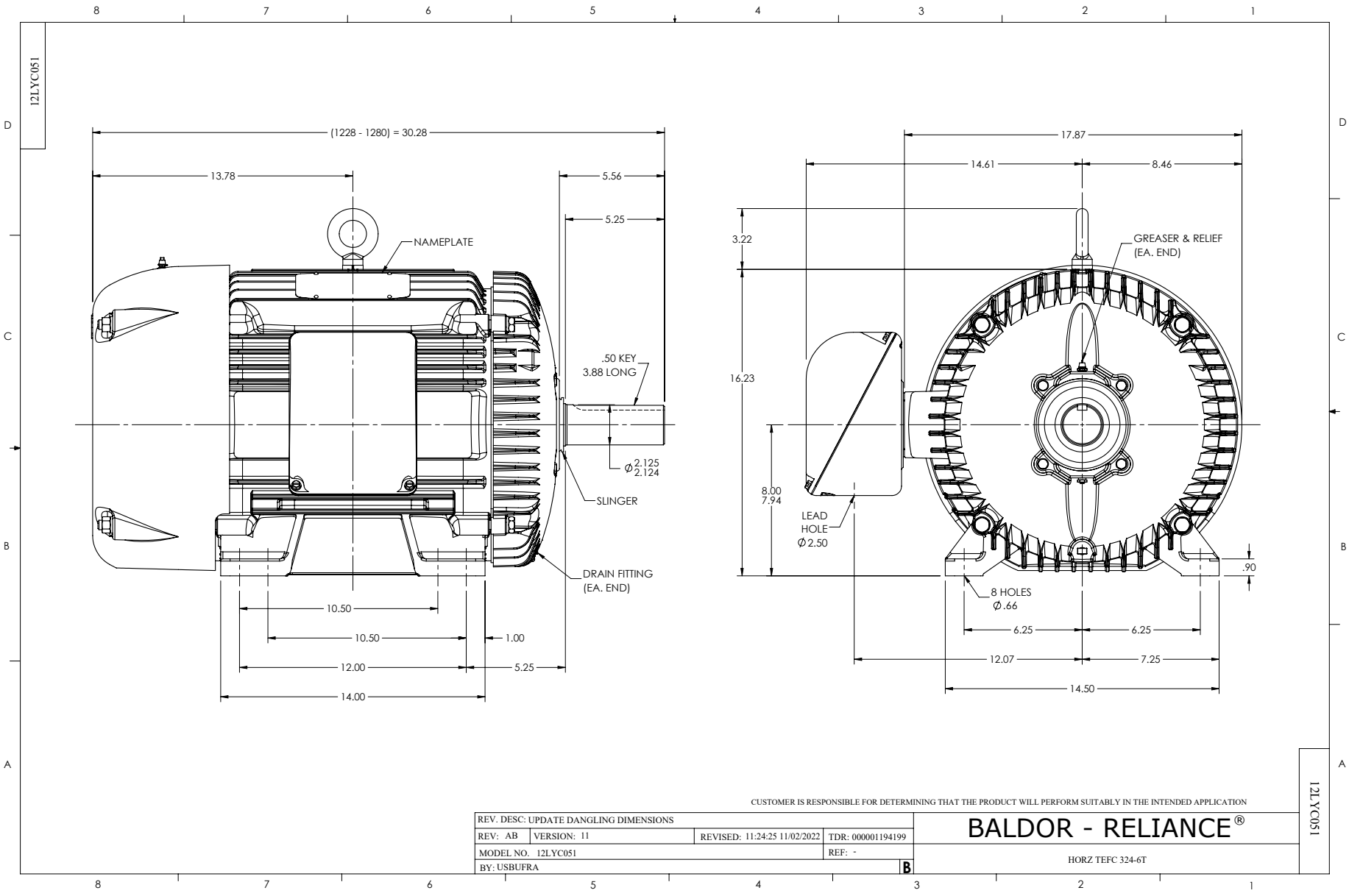
WINDING # 12WGY897

40 HP 3 PH 50 HZ 1470 RPM 400 V 1272M

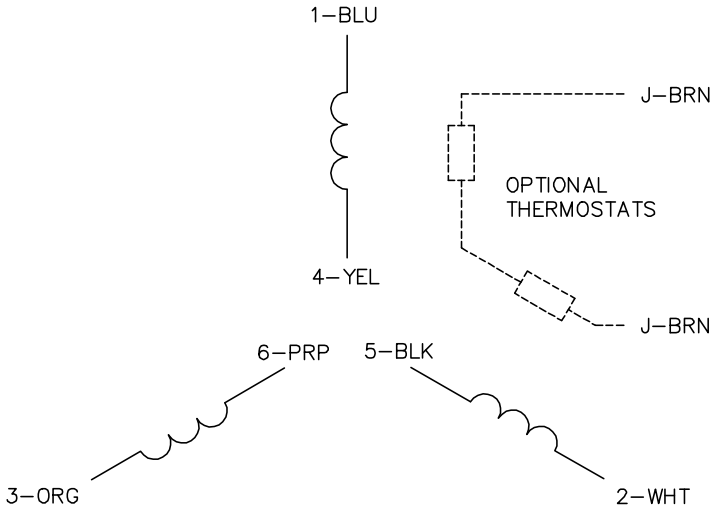
Typical performance - not guaranteed values.

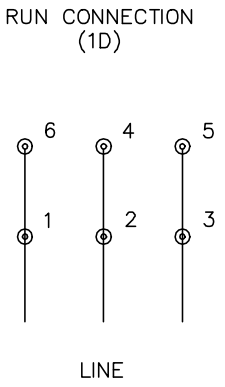
TORQUES(LB-FT): PO=399 PU=177 LR=246 LRA=295

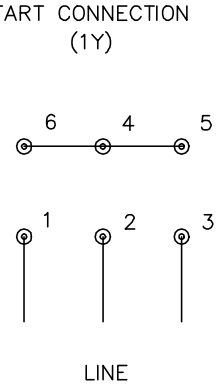



12LYC051
(1228 - 1280) = 30.28
13.78
5.56
5.25
NAMEPLATE
.50 KEY
3.88 LONG
Ø 2.125
2.124
SLINGER
DRAIN FITTING
(EA. END)
10.50
10.50
1.00
12.00
5.25
14.00
17.87
14.61
8.46
3.22
GREASER & RELIEF
(EA. END)
16.23
8.00
7.94
LEAD
HOLE
Ø 2.50
.90
8 HOLES
Ø .66
6.25
6.25
12.07
7.25
14.50
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT THE PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION
REV. DESC: UPDATE DANGLING DIMENSIONS
REV: AB
VERSION: 11
REVISED: 11:24:25 11/02/2022
TDR: 000001194199
MODEL NO. 12LYC051
REF: -
BY: USBUFRA
B
BALDOR - RELIANCE®
HORZ TEFC 324-6T
12LYC051

CD0382







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.
5. FOR ACROSS–THE–LINE STARTING, USE 'RUN' CONNECTION.

CD0382

REV. DESC: ADD CLASS CONN00000007		
REV. LTR: F	VERSION: 01	TDR: 000001099922
FILE: \AAA\00005\243	REVISED: 09:05:32 02/19/2019	BY: ENBRIR0
MTL: –		

BALDOR - RELIANCE®

3PH, SV, 6 LEADS, Y START/D RUN

SH 1 of 1