ABB BALDOR RELIANCE

Customer information packet

CEM4110T

40HP, 1775RPM, 3PH, 60HZ, 324TC, 1254M, TEFC, F
Class - None
Division - Not Applicable

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Specifications

Enclosure	TEFC
Frame	324TC
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	460.0 V @ 60 HZ
	230.0 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	48.000 A @ 460.0 V
	96.000 A @ 230.0 V
	102.000 A @ 208.0 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 Face Code	Standard
Front Shaft Indicator	None

Part Detail

Revision	Z
Type	AC
Mech. spec.	12C52
Base	
Status	PRD/A
Elec. spec.	12WGY276
Layout	12LYC052
Eff. date	05-05-2026
CD Diagram	CD0180
Poles	04
Leads	9#8
Proprietary	False
Created date	06-25-2010

Heater Indicator	No Heater
High Voltage Full Load Amps	48.0 a
Insulation Class	F
Inverter Code	Inverter Ready
KVA Code	H
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	9 @ 8 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	1254M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	30.34 IN
Power Factor	82
Product Family	General Purpose
Pulley End Bearing Type	Ball
Pulley Face Code	C-Face
Pulley Shaft Indicator	Standard
Rodent Screen	None
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	1775 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

NP3443LUA												
CAT.NO.	CEM4110T			**CUST. P/N**						**ENCL**	TEFC	
SPEC.	12C052Y276G1	**CC**	010A	**FRAME**	324TC		**SER.NO.**					
HP	40		**CLASS**	F	**HZ**	60						
R.P.M.	1775		**PH.**	3	**DES.**	A						
VOLTS	230/460			**CODE**	H		**ODE BRG**	6311	**DE BRG**	6312		
AMPS	96/48											
RATING	40C AMB-CONT			**NEMA NOM. EFF.**	94.1			**GREASE**	POLYREX EM			
P.F.	82	**SER.F.**	1.15	**CT6-60H(10:1)VT3-60H(20:1**								
USABLE AT	50Hz 40HP 190/380V 114/57A			SF1.0								
VOLTS	**AMPS**			**MAX. SPACE HEATER TEMP.**								

AC Induction Motor Performance Data
Record # 31673
Typical performance - not guaranteed values

Winding: 12WGY276-R001	**Type:** 1254M	**Enclosure:** TEFC

Nameplate Data				**460 V, 60 Hz: High Voltage Connection**	
Rated Output (HP)			40	**Full Load Torque**	119 LB-FT
Volts			230/460	**Start Configuration**	direct on line
Full Load Amps			96/48	**Breakdown Torque**	396 LB-FT
R.P.M.			1775	**Pull-up Torque**	198 LB-FT
Hz	60	**Phase**	3	**Locked-rotor Torque**	222 LB-FT
NEMA Design Code	A	**KVA Code**	H	**Starting Current**	347 A
Service Factor (S.F.)			1.15	**No-load Current**	21.03 A
NEMA Nom. Eff.	94.1	**Power Factor**	82	**Line-line Res. @ 25ºC**	0.15 Ω
Rating - Duty			40C AMB-CONT	**Temp. Rise @ Rated Load**	54°C
S.F. Amps				**Temp. Rise @ S.F. Load**	66°C
				Locked-rotor Power Factor	27.1
				Rotor inertia	7.19 lb-ft²

Load Characteristics 460 V, 60 Hz, 40 HP

% of Rated Load	**25**	**50**	**75**	**100**	**125**	**150**	**S.F.**
Power Factor	45	67	77	82	84	85	83
Efficiency	89.8	93.4	94.1	94.4	93.9	93.1	94.1
Speed	1794	1788	1783	1777	1771	1765	1773
Line amperes	23.93	30.4	39.12	48.68	59.71	71.22	55.3

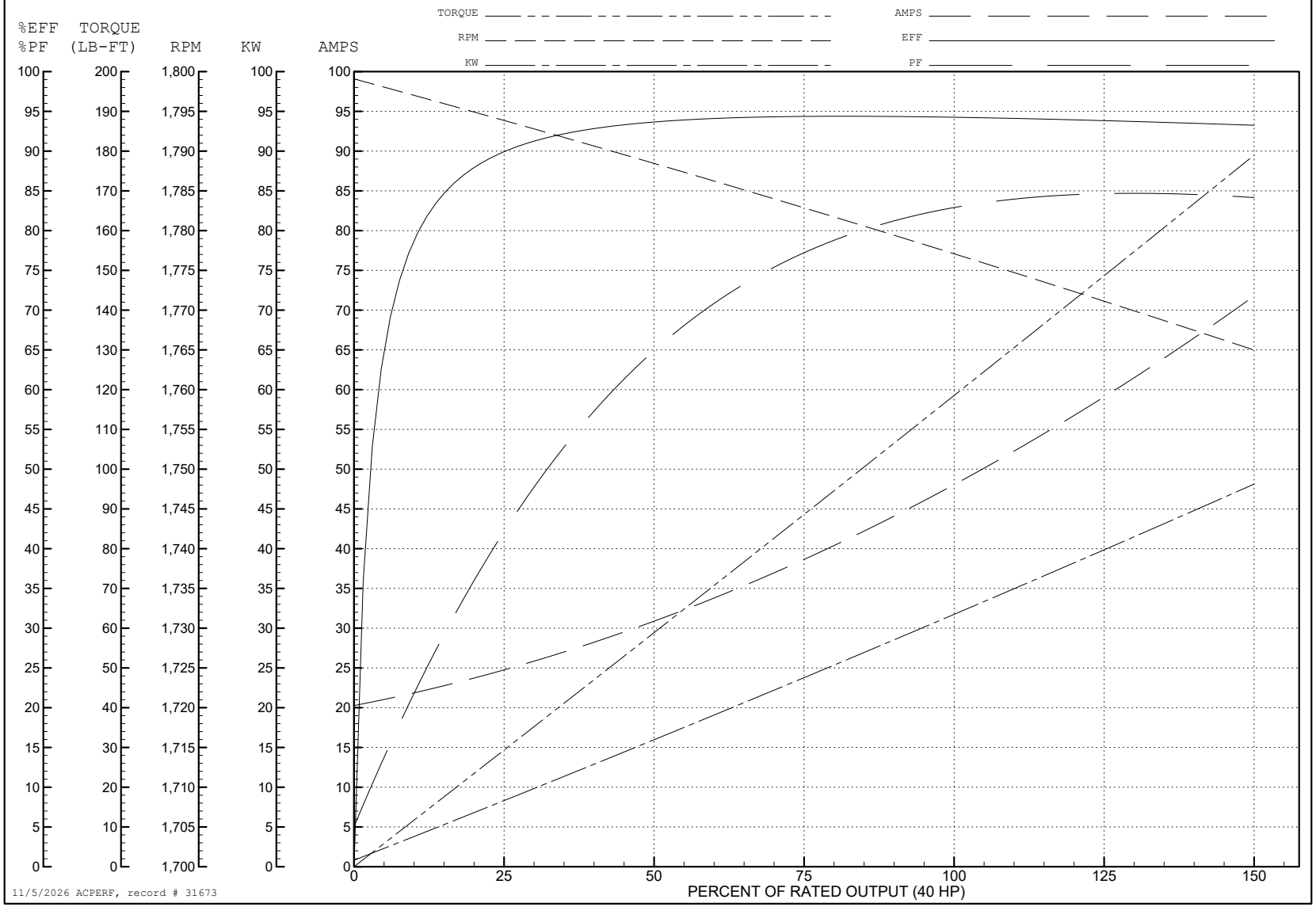
ABB Motors and Mechanical Inc.

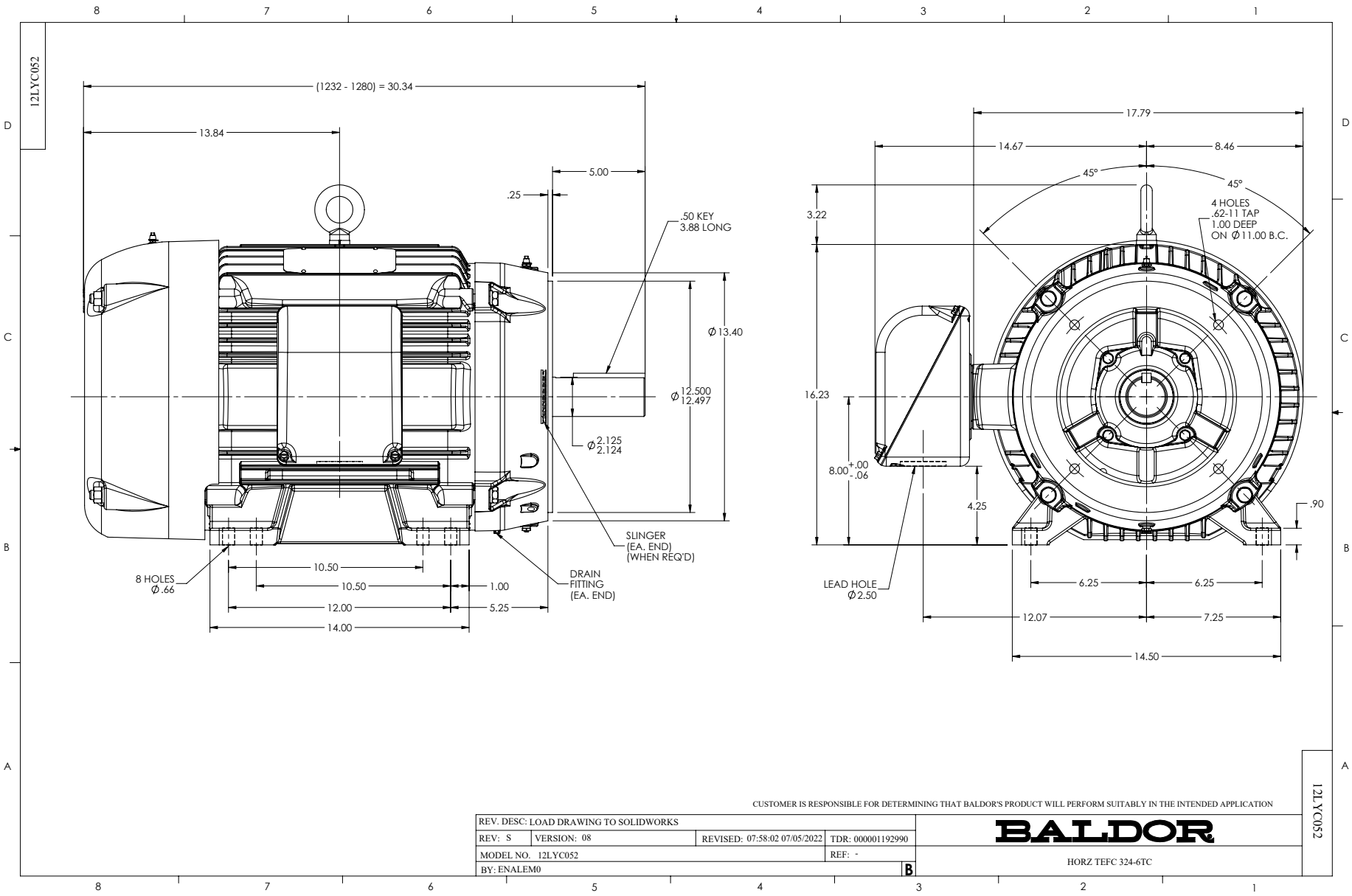
WINDING # 12WGY276

40 HP 3 PH 60 HZ 1775 RPM 460 V 1254M

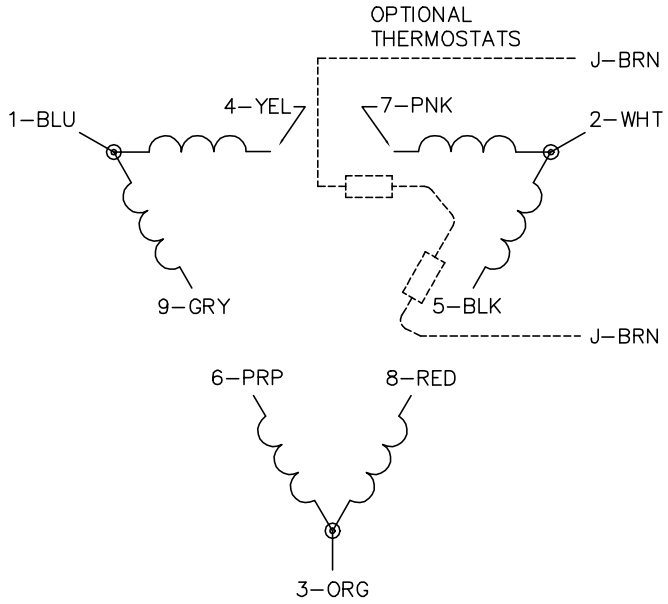
Typical performance - not guaranteed values.

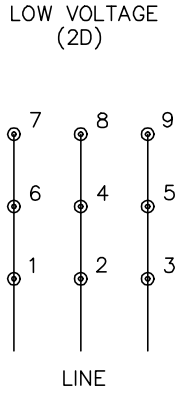
TORQUES(LB-FT): PO=396 PU=198 LR=222 LRA=347

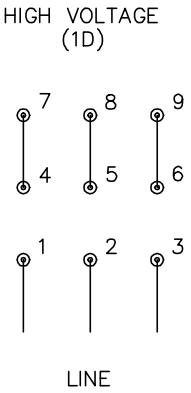



12LYC052
(1232 - 1280) = 30.34
13.84
5.00
.25
.50 KEY
3.88 LONG
Ø13.40
Ø12.500
12.497
Ø2.125
2.124
SLINGER
(EA. END)
(WHEN REQ'D)
8 HOLES
Ø.66
10.50
10.50
1.00
12.00
5.25
14.00
DRAIN
FITTING
(EA. END)
17.79
14.67
8.46
45°
45°
4 HOLES
.62-11 TAP
1.00 DEEP
ON Ø11.00 B.C.
3.22
16.23
8.00 +.00 -.06
4.25
.90
LEAD HOLE
Ø2.50
6.25
6.25
12.07
7.25
14.50
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT BALDOR'S PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION
REV. DESC: LOAD DRAWING TO SOLIDWORKS
REV: S
VERSION: 08
REVISED: 07:58:02 07/05/2022
TDR: 000001192990
MODEL NO. 12LYC052
REF: -
BY: ENALEM0
B
BALDOR
HORZ TEFC 324-6TC
12LYC052

CD0180







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.

CD0180

REV. DESC: ADD CLASS CONN00000007		
REV. LTR: D	VERSION: 01	TDR: 000001099922
FILE: \AAA\00005\148	REVISED: 10:25:29 02/19/2019	BY: ENBRIR0
MTL: –		

BALDOR - RELIANCE®

3PH, DV, 9 LEADS, DELTA CONNECTION

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