

# **BALDOR® • RELIANCE**

## **Product Information Packet**

# **CEM4110T**

**40HP, 1775RPM, 3PH, 60HZ, 324TC, 1254M, TEFC, F**

Part Detail							
Revision:	N	Status:	PRD/A	Change #:		Proprietary:	No
Type:	AC	Elec. Spec:	12WGY276	CD Diagram:	CD0180	Mfg Plant:	
Mech. Spec:	12C52	Layout:	12LYC052	Poles:	04	Created Date:	06-25-2010
Base:	RG	Eff. Date:	09-06-2017	Leads:	9#8		

Specs			
Catalog Number:	CEM4110T	Heater Indicator:	No Heater
Enclosure:	TEFC	Insulation Class:	F
Frame:	324TC	Inverter Code:	Inverter Ready
Frame Material:	Iron	KVA Code:	H
Output @ Frequency:	40.000 HP @ 60 HZ	Lifting Lugs:	Standard Lifting Lugs
Synchronous Speed @ Frequency:	1800 RPM @ 60 HZ	Locked Bearing Indicator:	Locked Bearing
Voltage @ Frequency:	460.0 V @ 60 HZ	Motor Lead Quantity/Wire Size:	9 @ 8 AWG
	230.0 V @ 60 HZ	Motor Lead Exit:	Ko Box
XP Class and Group:	None	Motor Lead Termination:	Flying Leads
XP Division:	Not Applicable	Motor Type:	1254M
Agency Approvals:	UR	Mounting Arrangement:	F1
	CSA EEV	Power Factor:	82
	CSA	Product Family:	General Purpose
Auxillary Box:	No Auxillary Box	Pulley End Bearing Type:	Ball
Auxillary Box Lead Termination:	None	Pulley Face Code:	C-Face
Base Indicator:	Rigid	Pulley Shaft Indicator:	Standard
Bearing Grease Type:	Polyrex EM (-20F +300F)	Rodent Screen:	None
Blower:	None	Shaft Extension Location:	Pulley End

<b>Current @ Voltage:</b>	102.000 A @ 208.0 V	<b>Shaft Ground Indicator:</b>	No Shaft Grounding
	48.000 A @ 460.0 V	<b>Shaft Rotation:</b>	Reversible
	96.000 A @ 230.0 V	<b>Shaft Slinger Indicator:</b>	Shaft Slinger
<b>Design Code:</b>	A	<b>Speed Code:</b>	Single Speed
<b>Drip Cover:</b>	No Drip Cover	<b>Motor Standards:</b>	NEMA
<b>Duty Rating:</b>	CONT	<b>Starting Method:</b>	Direct on line
<b>Electrically Isolated Bearing:</b>	Not Electrically Isolated	<b>Thermal Device - Bearing:</b>	None
<b>Feedback Device:</b>	NO FEEDBACK	<b>Thermal Device - Winding:</b>	None
<b>Front Face Code:</b>	Standard	<b>Vibration Sensor Indicator:</b>	No Vibration Sensor
<b>Front Shaft Indicator:</b>	None	<b>Winding Thermal 1:</b>	None
		<b>Winding Thermal 2:</b>	None

<b>Nameplate NP3443LUA</b>										
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			USABLE AT 208V	102					
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

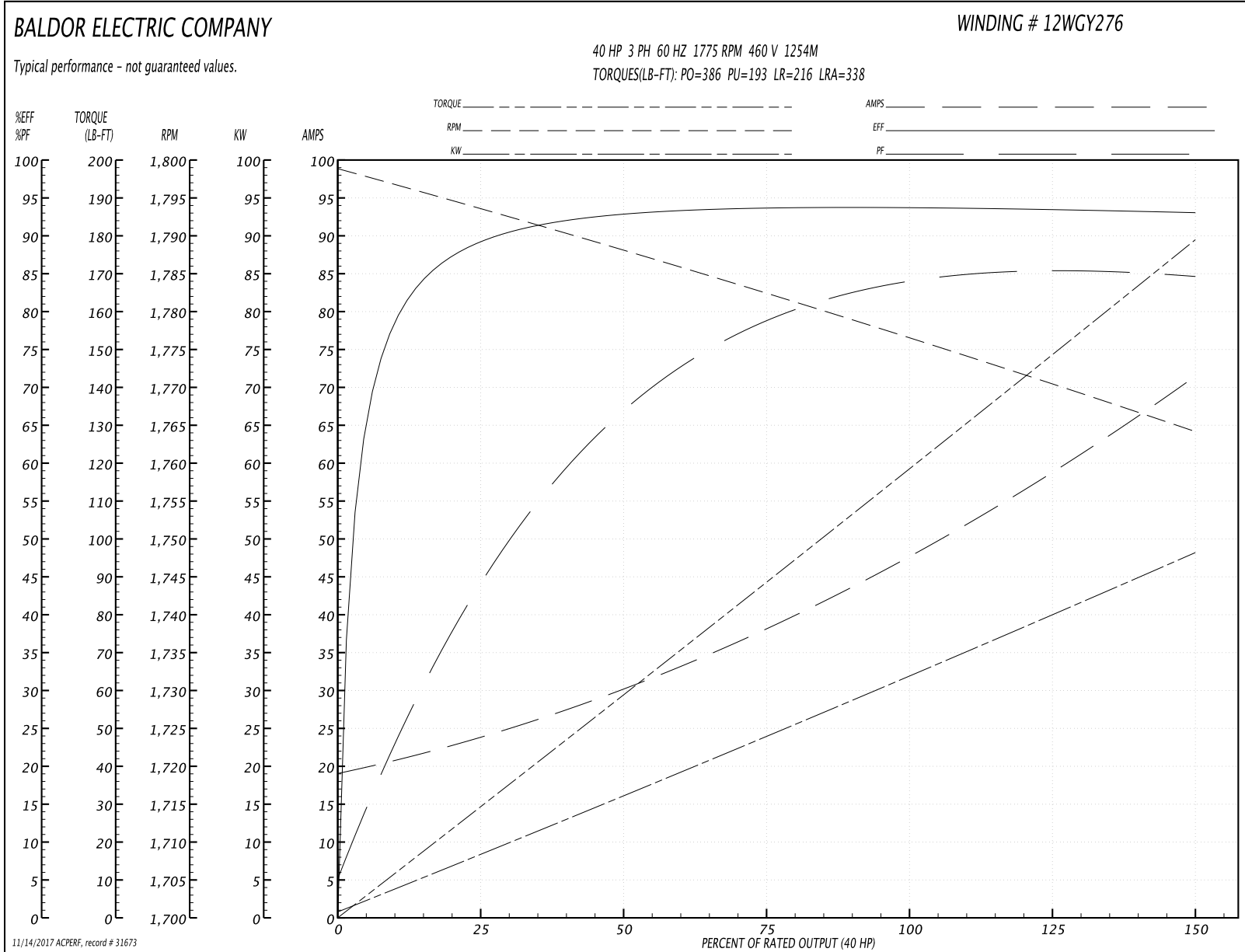
<b>Winding:</b> 12WGY276-R001	<b>Type:</b> 1254M	<b>Enclosure:</b> TEFC
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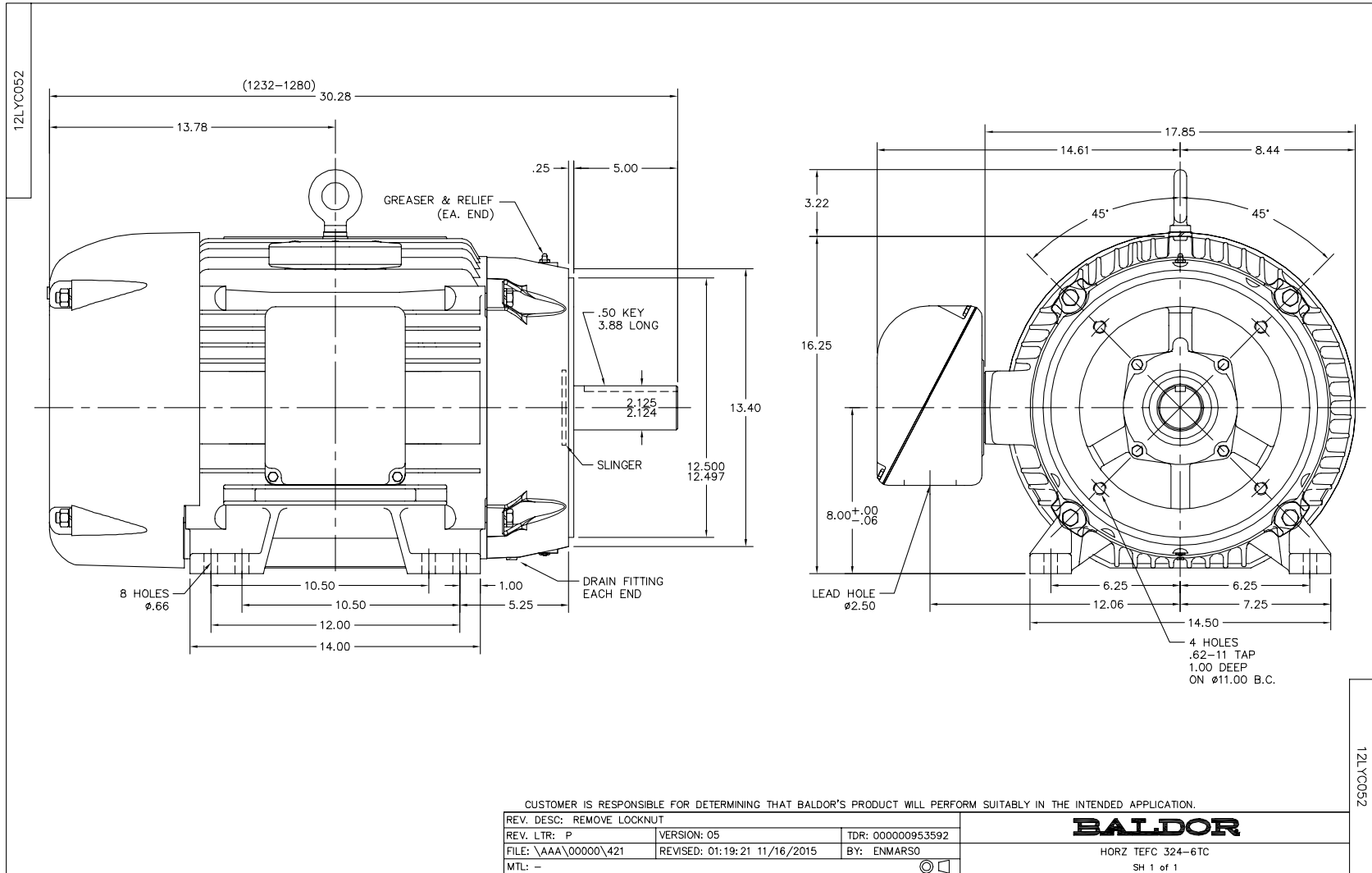
Nameplate Data				460 V, 60 Hz: High Voltage Connection	
Rated Output (HP)	40			Full Load Torque	118 LB-FT
Volts	230/460			Start Configuration	direct on line
Full Load Amps	96/48			Breakdown Torque	386 LB-FT
R.P.M.	1775			Pull-up Torque	193 LB-FT
Hz	60	Phase	3	Locked-rotor Torque	216 LB-FT
NEMA Design Code	A	KVA Code	H	Starting Current	338 A
Service Factor (S.F.)	1.15			No-load Current	19.9 A
NEMA Nom. Eff.	94.1	Power Factor	82	Line-line Res. @ 25°C	0.14898 Ω
Rating - Duty	40C AMB-CONT			Temp. Rise @ Rated Load	54°C
S.F. Amps				Temp. Rise @ S.F. Load	64°C
				Locked-rotor Power Factor	27.3
				Rotor inertia	7.19 LB-FT <sup>2</sup>

Load Characteristics 460 V, 60 Hz, 40 HP

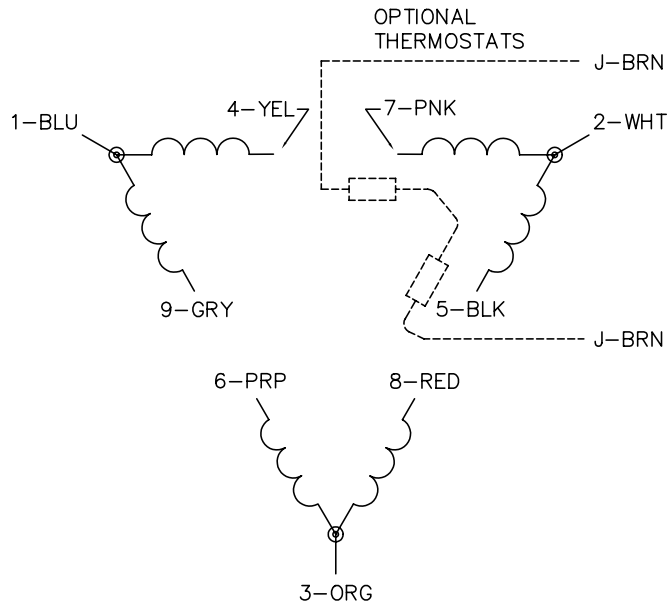
% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	47	69	78	83	85	85	84
Efficiency	90.1	93.5	94.2	94.2	93.8	93.1	94
Speed	1793.5	1788	1782.5	1776.6	1770.7	1764.1	1773
Line amperes	22.9	29.5	38.4	48.1	59.2	70.8	54.8

Performance Graph at 460V, 60Hz, 40.0HP Typical performance - Not guaranteed values

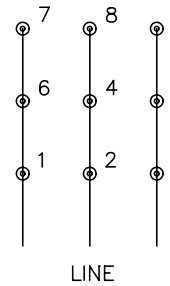




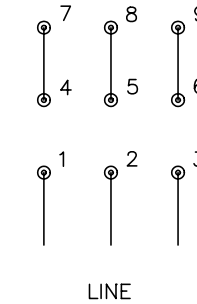
CD0180



LOW VOLTAGE  
(2D)



HIGH VOLTAGE  
(1D)



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: C	BY: JLP	REVISED: 01/21/99 2:28	TDR: 0171435
0810D0		FILE: AAA00005148	MDL: -
		MTL: -	

**BALDOR ELECTRIC Co.**

3PH, DV, 9 LEADS, DELTA CONNECTION

CD0180