

# **BALDOR® • RELIANCE**

## **Product Information Packet**

# **CEM4110T**

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

Part Detail							
Revision:	F	Status:	PRD/A	Change #:		Proprietary:	No
Type:	AC	Prod. Type:	1254M	Elec. Spec:	12WGY276	CD Diagram:	CD0180
Enclosure:	TEFC	Mfg Plant:		Mech. Spec:	12C52	Layout:	12LYC052
Frame:	324TC	Mounting:	F1	Poles:	04	Created Date:	06-25-2010
Base:	RG	Rotation:	R	Insulation:	F	Eff. Date:	10-16-2015
Leads:	9#8					Replaced By:	
Literature:		Elec. Diagram:					

Nameplate NP3443LUA							
CAT.NO.	CEM4110T	P/N		ENCLOSURE	TEFC		
SPEC.	12C052Y276G1	CC	010A	FRAME	324TC	S/N	
HP	40	CLASS	F	HZ	60		
RPM	1775	PH	3	DES	A		
VOLT	230/460	KVA-CODE	H	ODE BRG	6311	DE BRG	6312
AMP	96/48	USABLE AT 208V	102				
RATING	40C AMB-CONT	NEMA-NOM-EFF	94.1	GREASE	POLYREX EM		
PF	82	SER.F.	1.15				
USABLE AT	50Hz 40HP 190/380V 114/	57A SF1.0					
HTR-VOLTS		HTR-AMPS		MAX. SPACE HEATER TEMP.			

Parts List		
Part Number	Description	Quantity
SA198990	SA 12C052Y276G1	1.000 EA
RA186341	RA 12C052Y276G1	1.000 EA
09FN3001B03	EXTERNAL FAN, PLASTIC	1.000 EA
S/P107-000-004	SUPER-E(284 FR. & UP)-CL PLANT,POLYREX E	1.000 EA
10CB3001	CONDUIT BOX CAST W/2.500 LEAD HOLE	1.000 EA
12GS1000SP	GASKET	1.000 EA
10XN3118K12	5/16-18 X .75 GRADE 5, ZINC PLATED	4.000 EA
HW1001A31	LOCKWASHER 5/16, ZINC PLT.591 OD, .319 I	4.000 EA
WD1000B16	T&B CX70TN TERMINAL	1.000 EA
51XF2520A08	SCREW, HEX SER SLT HD, ZN 1/4-20 X .50 L	1.000 EA
12EP1107A05	FR ENDPLATE, MACH 324-6T	1.000 EA
HA3400A13SP	STUD, 1/2-13 X 7" WELKER	4.000 EA
HW1001A50	LOCKWASHER 1/2, ZINC PLT.,.879 OD, .509 I	4.000 EA
HW5100A13	W4627-047 WVY WSHER	1.000 EA
12EP1105A01	1PU ENDPLATE, MACH	1.000 EA
10XN3118K36	5/16-18 X 2.25" HEX HD, GRADE 5	2.000 EA
HW1001A31	LOCKWASHER 5/16, ZINC PLT.591 OD, .319 I	2.000 EA
10XN3118K44	5/16-18 X 2.75" HEX HD, GRADE 5	4.000 EA
HW1001A31	LOCKWASHER 5/16, ZINC PLT.591 OD, .319 I	4.000 EA
10XN5013K28	1/2-13 X 1.75 HEX HEAD MACH SCREW,GRAD	4.000 EA
HW1001A50	LOCKWASHER 1/2, ZINC PLT.,.879 OD, .509 I	4.000 EA
12FH1002SP	FAN COVER, CAST QF,WAUPACA QUALITY	1.000 EA
HW1001A50	LOCKWASHER 1/2, ZINC PLT.,.879 OD, .509 I	4.000 EA
XY5013A12	NUT,1/2-13,HEX,STEEL,ZINCPLATED	4.000 EA

Parts List (continued)		
Part Number	Description	Quantity
10CB3500	CONDUIT BOX LID, CAST	1.000 EA
10GS1000	GASKET, CONDUIT BOX LID	1.000 EA
51XW2520A12	.25-20 X .75, TAPTITE II, HEX WSHR SLTD	4.000 EA
HW4600B41	V-RING SLINGER 2.125 X 2.880 X 0.280	1.000 EA
HW2501H33	KEY, 1/2 SQ X 3.875	1.000 EA
LB1115N	LABEL,LIFTING DEVICE (ON ROLLS)	1.000 EA
MN416A01	TAG-INSTAL-MAINT no wire (1200/bx) 11/14	1.000 EA
HW4500A21	1618BALEMITE FITTING 825 UNIVERSAL	1.000 EA
HA4017A01	1/8 X 4 GREASE EXT (F/S)	1.000 EA
HW4500A17	317400 ALEMITE GREASE RELIEF	1.000 EA
HA4054	SHORT T-DRAIN FITTING, .125" N.P.T.	1.000 EA
HA4051A00	PLASTIC CAP FOR GREASE FITTING	1.000 EA
MJ1000A75	GREASE, POLYREX EM EXXON (USe 4824-15A)	0.200 LB
HW4500A03	GREASE FITTING, .125 NPT 1610(ALEMITE) 8	1.000 EA
HW4500A17	317400 ALEMITE GREASE RELIEF	1.000 EA
HA4054	SHORT T-DRAIN FITTING, .125" N.P.T.	1.000 EA
HA4051A00	PLASTIC CAP FOR GREASE FITTING	1.000 EA
HW2500A25	WOODRUFF KEY USA #1008 #BLOW CARBON STEE	1.000 EA
51XB1214A20	12-14X1.25 HXWSSLD SERTYB	1.000 EA
MG1000Y03	MUNSELL 2.53Y 6.70/ 4.60, GLOSS 20,	0.080 GA
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	4.000 EA
LB1119N	WARNING LABEL	1.000 EA
LC0181	CONNECTION LABEL	1.000 EA
NP3443LUA	SS SUPER-E UL CSA-EEV PREM CC	1.000 EA

12PA1000	PACKAGING GROUP PRINT PK1024A06	1.000 EA
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**AC Induction Motor Performance Data**

Record # 31673 - Typical performance - not guaranteed values

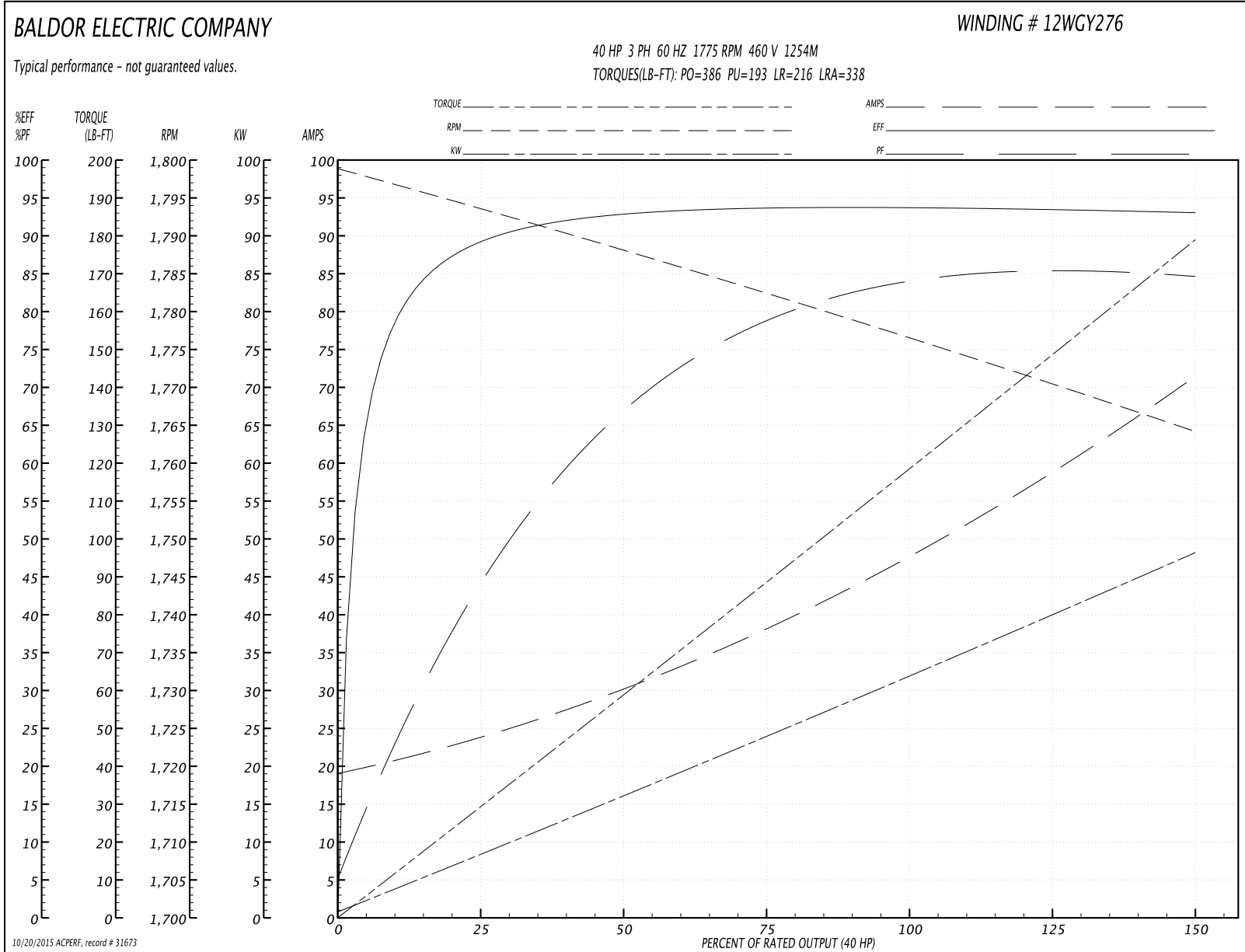
<b>Winding:</b> 12WGY276-R001	<b>Type:</b> 1254M	<b>Enclosure:</b> TEFC
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Nameplate Data				460 V, 60 Hz: High Voltage Connection	
Rated Output (HP)	40			Full Load Torque	118 LB-FT
Volts	230/460			Start Configuration	direct on line
Full Load Amps	96/48			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
				Rotor inertia	7.19 LB-FT <sup>2</sup>

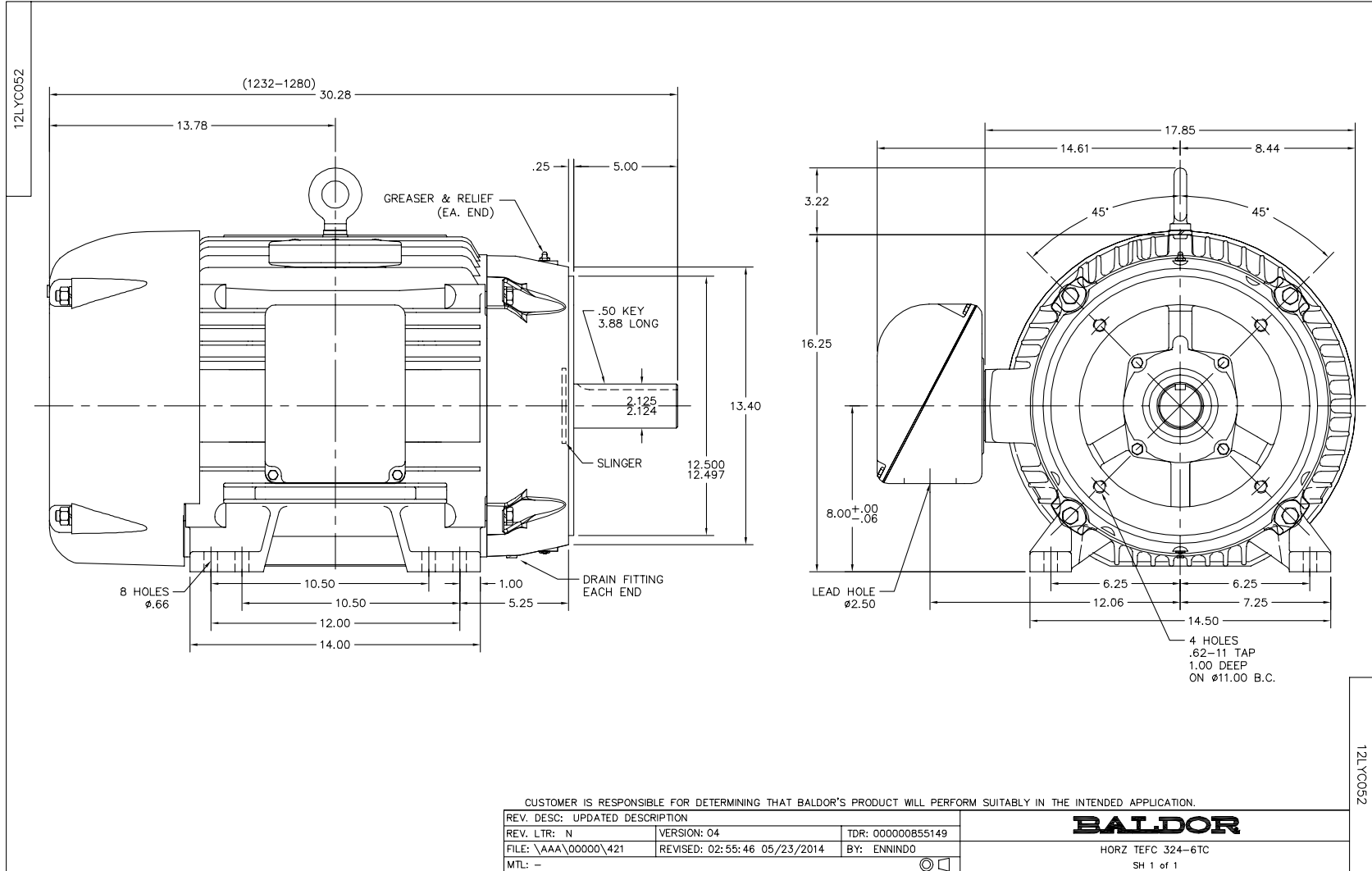
**Load Characteristics 460 V, 60 Hz, 40 HP**

% 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

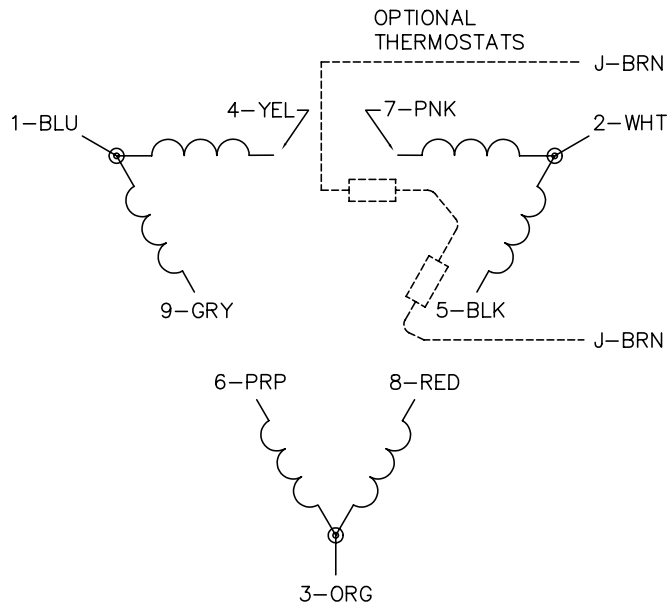
Performance Graph at 460V, 60Hz, 40.0HP Typical performance - Not guaranteed values



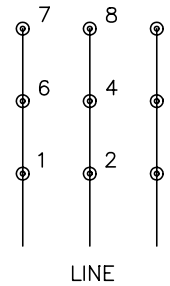




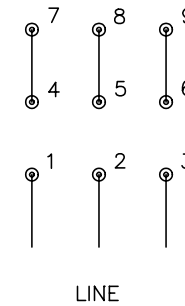
CD0180



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