

**BALDOR® • RELIANCE** 

**Product Information Packet**

**CEM4114T**

**50HP,3540RPM,3PH,60HZ,326TSC,1252M,TEFC**

Part Detail							
Revision:	P	Status:	PRD/A	Change #:		Proprietary:	No
Type:	AC	Elec. Spec:	12WGY291	CD Diagram:	CD0180	Mfg Plant:	
Mech. Spec:	12H41	Layout:	12LYH041	Poles:	02	Created Date:	09-15-2010
Base:	RG	Eff. Date:	09-16-2019	Leads:	9#8		

Specs			
Catalog Number:	CEM4114T	Heater Indicator:	No Heater
Enclosure:	TEFC	Insulation Class:	F
Frame:	326TSC	Inverter Code:	Inverter Ready
Frame Material:	Iron	KVA Code:	H
Output @ Frequency:	50.000 HP @ 60 HZ	Lifting Lugs:	Standard Lifting Lugs
Synchronous Speed @ Frequency:	3600 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:	1252M
Agency Approvals:	UR	Mounting Arrangement:	F1
	CSA EEV	Power Factor:	90
	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>	112.000 A @ 230.0 V	<b>Shaft Ground Indicator:</b>	No Shaft Grounding
	122.000 A @ 208.0 V	<b>Shaft Rotation:</b>	Reversible
	56.000 A @ 460.0 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.	CEM4114T				CUST. P/N				ENCL	TEFC
SPEC.	12H041Y291G2		CC	010A	FRAME	326TSC		SER.NO.		
HP	50		CLASS	F	HZ	60				
R.P.M.	3540		PH.	3	DES.	A				
VOLTS	230/460			CODE	H	ODE BRG	6311	DE BRG	6312	
AMPS	112/56			USABLE AT 208V	122					
RATING	40C AMB-CONT			NEMA NOM. EFF.	93		GREASE	POLYREX EM		
P.F.	90	SER.F.	1.15		CT6-60H(10:1)VT3-60H(20:1)					
USABLE AT	50Hz 50HP 190/380V 134/67A				SF1.0					
VOLTS		AMPS		MAX. SPACE HEATER TEMP.						

Parts List		
Part Number	Description	Quantity
SA203006	SA 12H041Y291G2	1.000 EA
RA190268	RA 12H041Y291G2	1.000 EA
37FN3002C04	EXFN, PLASTIC, 6.00 OD, 2.003 ID	1.000 EA
10CB3001	CONDUIT BOX CAST W/2.500 LEAD HOLE	1.000 EA
09GS1000SP	GASKET-CONDUIT BOX, 1/16 THICK LEXIDE	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
WD1000B25	GND LUG, BURNDY L125HP OR T&B L125HP-BB	1.000 EA
19XW3118G08	.31-18X.50,HEX WSHR HD,TAPTITE 2,GREEN	1.000 EA
12EP1107A05	FR ENDPLATE, MACH 324-6T	1.000 EA
HA4051A00	PLASTIC CAP FOR GREASE FITTING	1.000 EA
HA3400A13	STUD, 1/2-13 X 7" WELKER	4.000 EA
HW1001A50	LOCKWASHER 1/2, ZINC PLT.,.879 OD, .509 I	4.000 EA
HW4600B41	V-RING SLINGER 2.125 X 2.880 X 0.280	1.000 EA
HW5100A13	W4627-047 WVY WSHER	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
12EP1105A01	PU ENDPLATE	1.000 EA
HA4051A00	PLASTIC CAP FOR GREASE FITTING	1.000 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	1.000 EA

Parts List (continued)		
Part Number	Description	Quantity
HW1001A50	LOCKWASHER 1/2, ZINC PLT.,.879 OD, .509 I	4.000 EA
XY5013A12	NUT,1/2-13,HEX,STEEL,ZINCPLATED	4.000 EA
10CB3500SP	CONDUIT BOX LID, CAST	1.000 EA
10GS1000SP	GASKET, CONDUIT BOX LID	1.000 EA
51XW2520A12	.25-20 X .75, TAPTITE II, HEX WSHR SLTD	4.000 EA
HW2501H18	KEY, 1/2 SQ X 2.000	1.000 EA
LB1115N	LABEL,LIFTING DEVICE (ON ROLLS)	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
MJ1000A02	GREASE, MOBIL POLYREX EM - 124047	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
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
MN416A01	TAG-INSTAL-MAINT no wire (1200/bx) 3/19	1.000 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

PE-0000013	ZRTG PE ASSEMBLY	1.000 EA
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**AC Induction Motor Performance Data**

Record # 35504 - Typical performance - not guaranteed values

<b>Winding:</b> 12WGY291-R005	<b>Type:</b> 1252M	<b>Enclosure:</b> TEFC
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Nameplate Data				460 V, 60 Hz: High Voltage Connection	
Rated Output (HP)	50			Full Load Torque	74.4 LB-FT
Volts	230/460			Start Configuration	direct on line
Full Load Amps	112/56			Breakdown Torque	292 LB-FT
R.P.M.	3540			Pull-up Torque	112 LB-FT
Hz	60	Phase	3	Locked-rotor Torque	139 LB-FT
NEMA Design Code	A	KVA Code	H	Starting Current	408 A
Service Factor (S.F.)	1.15			No-load Current	14.9 A
NEMA Nom. Eff.	93	Power Factor	90	Line-line Res. @ 25°C	0.11257 Ω
Rating - Duty	40C AMB-CONT			Temp. Rise @ Rated Load	77°C
S.F. Amps				Temp. Rise @ S.F. Load	95°C
				Locked-rotor Power Factor	20.9
				Rotor inertia	4.07 LB-FT <sup>2</sup>

Load Characteristics 460 V, 60 Hz, 50 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	66	82	88	90	91	90	91
Efficiency	91.1	93.8	94.2	93.9	93.2	92.3	93.5
Speed	3584.1	3571.8	3558.2	3544.1	3528.2	3511.2	3535
Line amperes	20.4	30.8	42.9	55.8	69.5	84.6	64

Performance Graph at 460V, 60Hz, 50.0HP Typical performance - Not guaranteed values

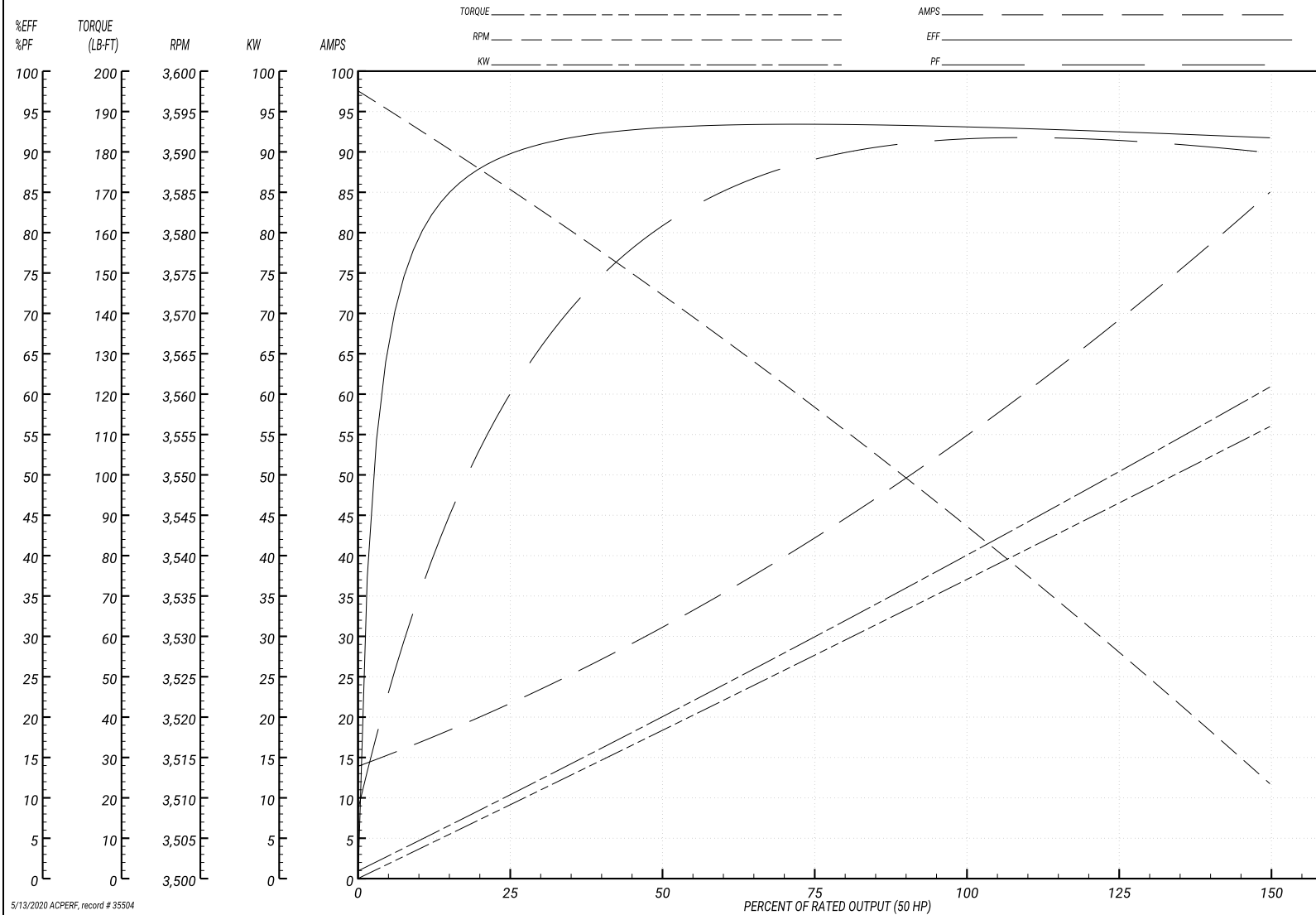
ABB Motors and Mechanical Inc.

WINDING # 12WGY291

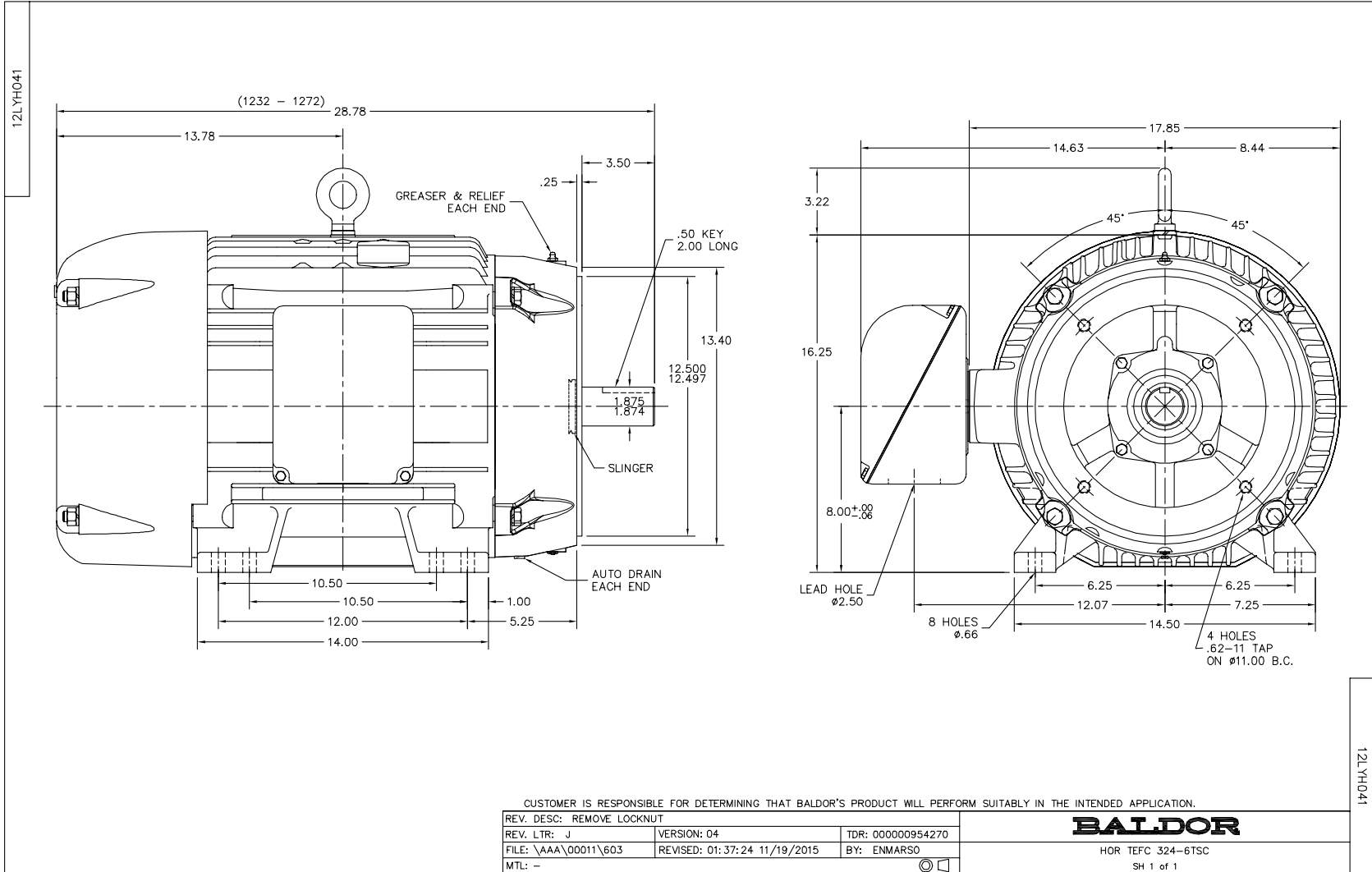
Typical performance - not guaranteed values.

50 HP 3 PH 60 HZ 3540 RPM 460 V 1252M

TORQUES(LB-FT): PO=292 PU=112 LR=139 LRA=408



5/13/2020 ACPERF, record # 35504



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.

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: ENBRIRO
MTL: -	© □	

**BALDOR - RELIANCE**®

3PH, DV, 9 LEADS, DELTA CONNECTION

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