

**BALDOR® • RELIANCE** 

**Product Information Packet**

**CEM4109T**

**40HP,3530RPM,3PH,60HZ,324TSC,1058M,TEFC**

Part Detail							
Revision:	A	Status:	PRD/A	Change #:		Proprietary:	No
Type:	AC	Elec. Spec:	10WGY652	CD Diagram:	CD0180	Mfg Plant:	
Mech. Spec:	10F423	Layout:	10LYF423	Poles:	02	Created Date:	05-25-2018
Base:	RG	Eff. Date:	09-11-2019	Leads:	9#8		

Specs			
Catalog Number:	CEM4109T	Heater Indicator:	No Heater
Enclosure:	TEFC	Insulation Class:	F
Frame:	324TSC	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:	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:	1058M
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>	100.000 A @ 208.0 V	<b>Shaft Ground Indicator:</b>	No Shaft Grounding
	45.000 A @ 460.0 V	<b>Shaft Rotation:</b>	Reversible
	90.000 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.	CEM4109T				CUST. P/N				ENCL	TEFC
SPEC.	10F423Y652G1		CC	010A	FRAME	324TSC		SER.NO.		
HP	40		CLASS	F	HZ	60				
R.P.M.	3530		PH.	3	DES.	A				
VOLTS	230/460		CODE	H	ODE BRG	6309		DE BRG	6312	
AMPS	90/45		USABLE AT 208V	100						
RATING	40C AMB-CONT		NEMA NOM. EFF.	92.4		GREASE	POLYREX EM			
P.F.	90	SER.F.	1.15		CT6-60H(10:1)VT3-60H(20:1)					
USABLE AT	50Hz 40HP 190/380V 110/55A				SF1.0					
VOLTS		AMPS		MAX. SPACE HEATER TEMP.						

Parts List		
Part Number	Description	Quantity
SA356352	SA 10F423Y652G1	1.000 EA
RA345298	RA 10F423Y652G1	1.000 EA
37FN3002C03	EXFN, PLASTIC, 6.00 OD, 1.690 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
WD1000B16	T&B CX70TN OR L70P TERMINAL LUG	1.000 EA
51XF2520A08	SCREW, HEX SER SLT HD, ZN 1/4-20 X .50 L	1.000 EA
10EP1106A01	FR ENDPLATE, MACH	1.000 EA
XY3816A12	3/8-16 FINISHED NUT	4.000 EA
HW1001A38	LOCKWASHER 3/8, ZINC PLT .688 OD, .382 I	4.000 EA
HW5100A11	W3917-042 WVY WSHR (WB)	1.000 EA
10XN2520K36	1/4-20 X 2.25" HX HD SCRWGRADE 5, ZINC P	2.000 EA
HW1001A25	LOCKWASHER 1/4, ZINC PLT .493 OD, .255 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
10EP1304A01	PU ENDPLATE, MACH	1.000 EA
HA3113A15	THRUBOLT 3/8-16 X 18.875 W/3.50 THD LENG	4.000 EA
HW1001A38	LOCKWASHER 3/8, ZINC PLT .688 OD, .382 I	4.000 EA
10FH4000	310 FAN HOUSING STAMPED	1.000 EA
51XF2520A08	SCREW, HEX SER SLT HD, ZN 1/4-20 X .50 L	4.000 EA
10CB3500SP	CONDUIT BOX LID, CAST	1.000 EA
10GS1000SP	GASKET, CONDUIT BOX LID	1.000 EA

Parts List (continued)		
Part Number	Description	Quantity
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
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
HA4001A01SP	DRAIN PLUG, PLASTIC (MICRO PLAS)	1.000 EA
HA4051A00	PLASTIC CAP FOR GREASE FITTING	1.000 EA
MJ1000A02	GREASE, MOBIL POLYREX EM - 124047	0.130 LB
HW4500A03	GREASE FITTING, .125 NPT 1610(ALEMITE) 8	1.000 EA
HW4500A17	317400 ALEMITE GREASE RELIEF	1.000 EA
HA4001A01SP	DRAIN PLUG, PLASTIC (MICRO PLAS)	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,	0.125 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
MN416A01	TAG-INSTAL-MAINT no wire (1200/bx) 3/19	1.000 EA
FE-0000022	ZRTG FE ASSEMBLY	1.000 EA

**AC Induction Motor Performance Data**

Record # 30898 - Typical performance - not guaranteed values

<b>Winding:</b> 10WGY652-R001	<b>Type:</b> 1058M	<b>Enclosure:</b> TEFC
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Nameplate Data				460 V, 60 Hz: High Voltage Connection	
Rated Output (HP)	40			Full Load Torque	59.5 LB-FT
Volts	230/460			Start Configuration	direct on line
Full Load Amps	90/45			Breakdown Torque	197 LB-FT
R.P.M.	3525			Pull-up Torque	85.4 LB-FT
Hz	60	Phase	3	Locked-rotor Torque	125 LB-FT
NEMA Design Code	B	KVA Code	H	Starting Current	324 A
Service Factor (S.F.)	1.15			No-load Current	12 A
NEMA Nom. Eff.	92.4	Power Factor	90	Line-line Res. @ 25°C	0.14992 Ω
Rating - Duty	40C AMB-CONT			Temp. Rise @ Rated Load	78°C
S.F. Amps				Temp. Rise @ S.F. Load	97°C
				Locked-rotor Power Factor	23
				Rotor inertia	2.49 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	65	82	88	90	90	91	90
Efficiency	90.7	93.4	93.7	93.2	92.4	91.1	92.7
Speed	3583.2	3567.3	3549.7	3530.6	3511.2	3484.5	3519
Line amperes	16.3	24.7	34.3	45.1	56.3	70.6	51.8

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

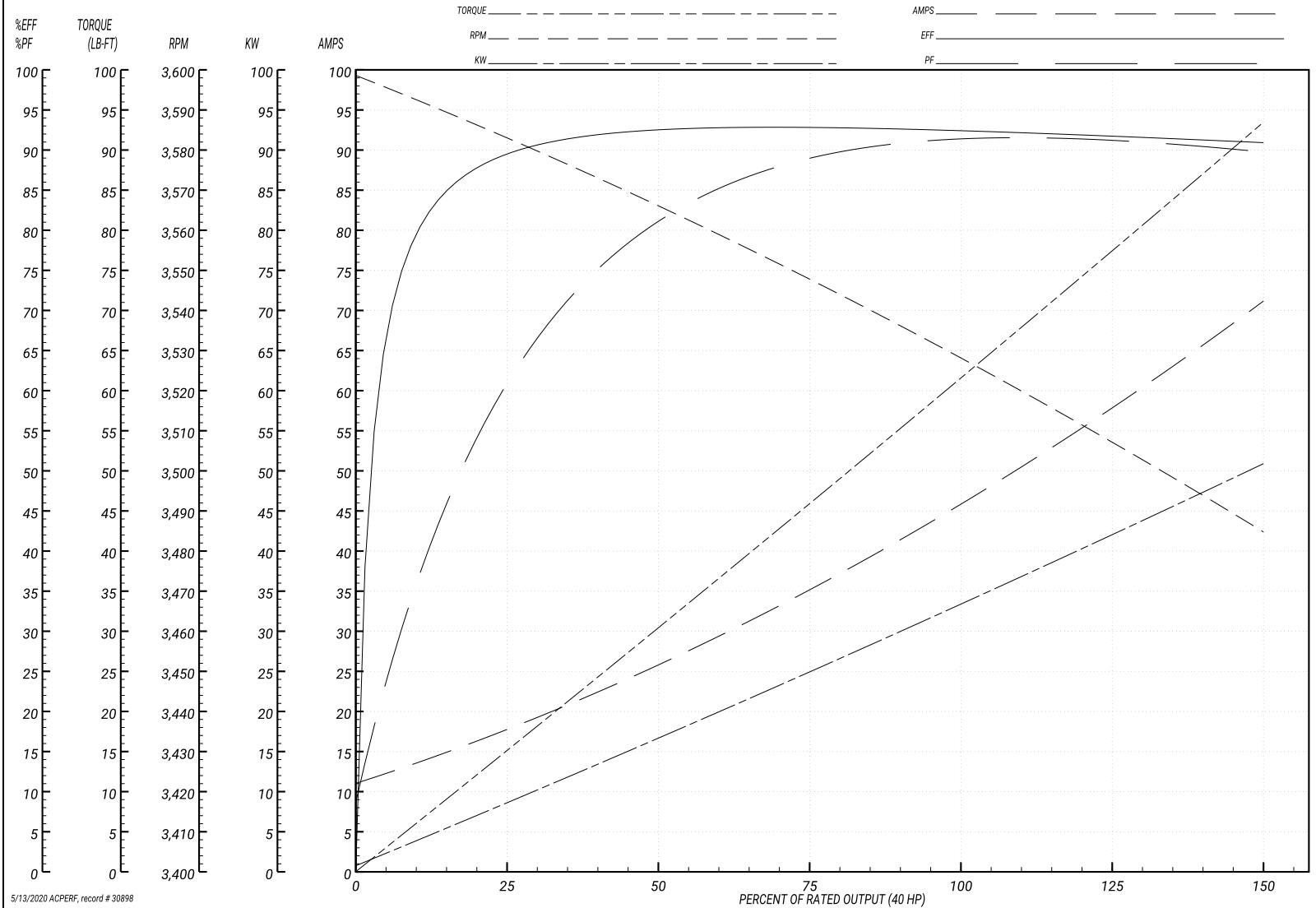
ABB Motors and Mechanical Inc.

WINDING # 10WGY652

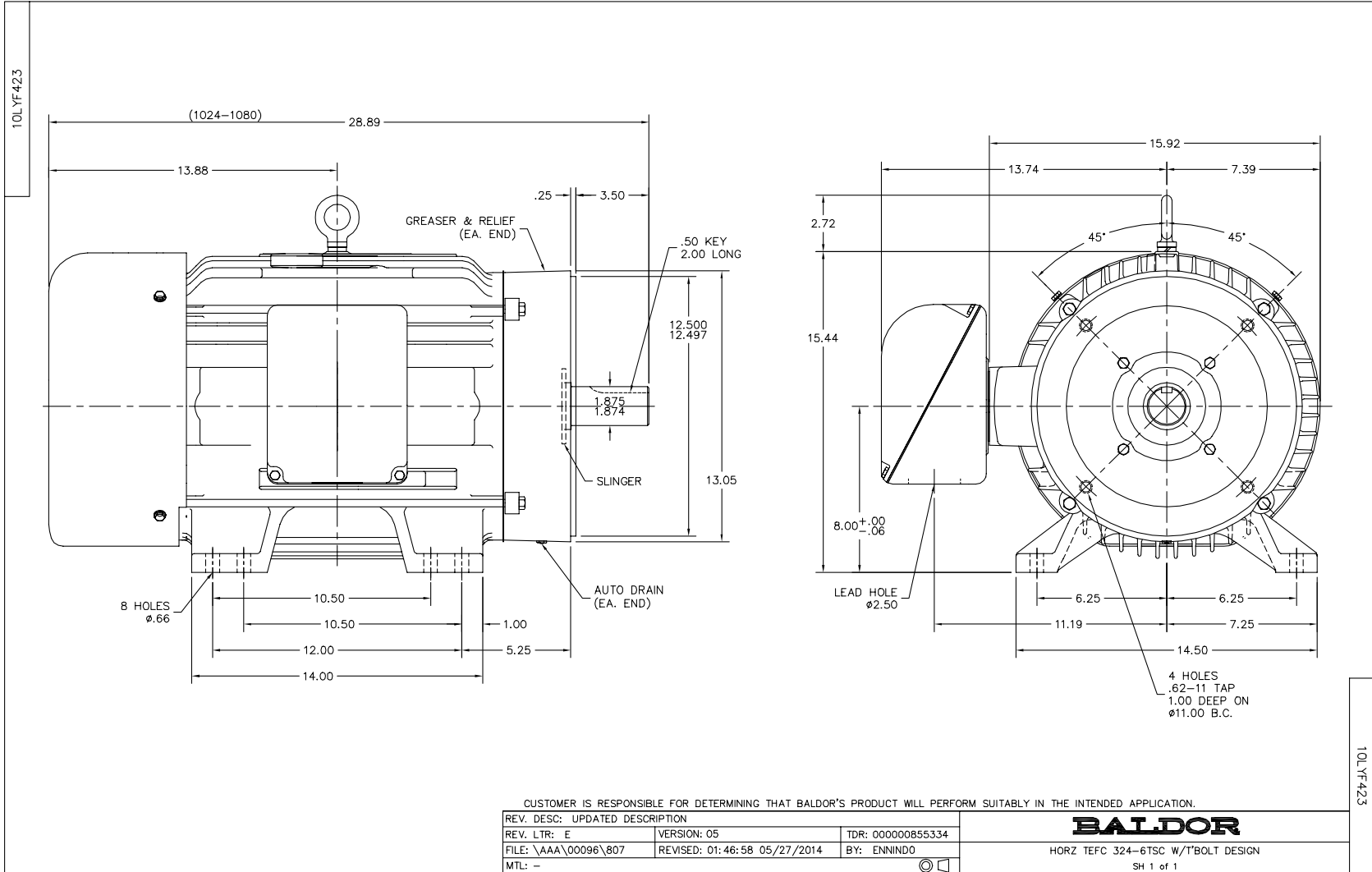
Typical performance - not guaranteed values.

40 HP 3 PH 60 HZ 3525 RPM 460 V 1058M

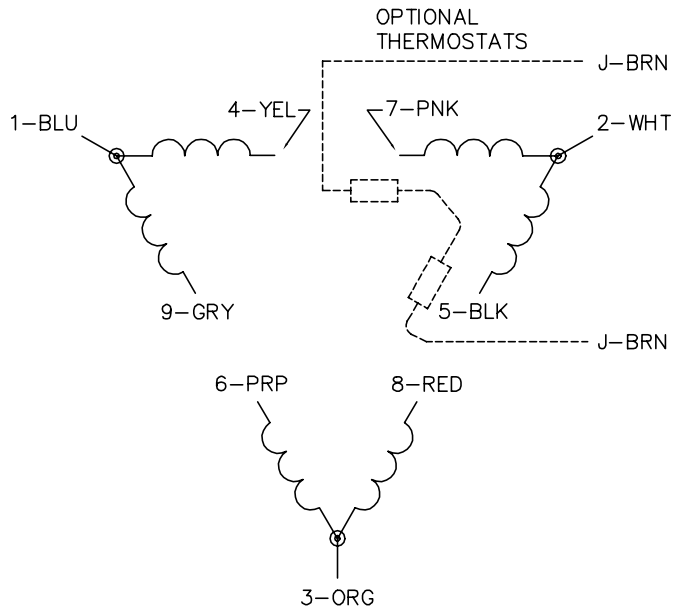
TORQUES(LB-FT): PO=197 PU=85.4 LR=125 LRA=324



5/13/2020 ACPERF, record # 30898



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

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MTL: -	© □	

**BALDOR - RELIANCE®**

3PH, DV, 9 LEADS, DELTA CONNECTION

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