

**BALDOR® • RELIANCE** 

**Product Information Packet**

**CEM3546**

**1HP,1770RPM,3PH,60HZ,56C,3520M,TEFC,F1,N**

Part Detail							
Revision:	C	Status:	PRD/A	Change #:		Proprietary:	No
Type:	AC	Elec. Spec:	35WGG004	CD Diagram:	CD0005	Mfg Plant:	
Mech. Spec:	35A012	Layout:	35LYA012	Poles:	04	Created Date:	07-16-2021
Base:	RG	Eff. Date:	05-10-2022	Leads:	9#18		Y

Specs			
Catalog Number:	CEM3546	Heater Indicator:	No Heater
Enclosure:	TEFC	Insulation Class:	F
Frame:	56C	Inverter Code:	Inverter Ready
Frame Material:	Steel	KVA Code:	N
Motor Letter Type:	Three Phase	Lifting Lugs:	No Lifting Lugs
Output @ Frequency:	1.000 HP @ 60 HZ	Locked Bearing Indicator:	Locked Bearing
Synchronous Speed @ Frequency:	1800 RPM @ 60 HZ	Motor Lead Quantity/Wire Size:	9 @ 18 AWG
Voltage @ Frequency:	460.0 V @ 60 HZ	Motor Lead Exit:	Ko Box
	230.0 V @ 60 HZ	Motor Lead Termination:	Flying Leads
XP Class and Group:	None	Motor Type:	3520M
XP Division:	Not Applicable	Mounting Arrangement:	F1
Agency Approvals:	NEMA_PREMIUM	Power Factor:	69
	UR	Product Family:	General Purpose
	NEMA PREMIUM	Pulley End Bearing Type:	Ball
	CSA EEV	Pulley Face Code:	C-Face
Auxillary Box:	No Auxillary Box	Pulley Shaft Indicator:	Standard
Auxillary Box Lead Termination:	None	Rodent Screen:	None
Base Indicator:	Rigid	RoHS Status:	ROHS COMPLIANT

<b>Bearing Grease Type:</b>	Polyrex EM (-20F +300F)	<b>Shaft Extension Location:</b>	Pulley End
<b>Blower:</b>	None	<b>Shaft Ground Indicator:</b>	No Shaft Grounding
<b>Current @ Voltage:</b>	3.200 A @ 208.0 V	<b>Shaft Rotation:</b>	Reversible: Connected Standard
	3.200 A @ 230.0 V	<b>Shaft Slinger Indicator:</b>	No Slinger
	1.600 A @ 460.0 V	<b>Speed Code:</b>	Single Speed
<b>Design Code:</b>	B	<b>Motor Standards:</b>	NEMA
<b>Drip Cover:</b>	No Drip Cover	<b>Starting Method:</b>	Direct on line
<b>Duty Rating:</b>	CONT	<b>Thermal Device - Bearing:</b>	None
<b>Electrically Isolated Bearing:</b>	Not Electrically Isolated	<b>Thermal Device - Winding:</b>	None
<b>Feedback Device:</b>	NO FEEDBACK	<b>Vibration Sensor Indicator:</b>	No Vibration Sensor
<b>Front Face Code:</b>	Standard	<b>Winding Thermal 1:</b>	None
<b>Front Shaft Indicator:</b>	None	<b>Winding Thermal 2:</b>	None

<b>Nameplate NP3441LUA</b>										
<b>CAT.NO.</b>	CEM3546									
<b>SPEC</b>	35A012G004G1									
<b>HP</b>	1									
<b>VOLTS</b>	230/460									
<b>AMPS</b>	3.2/1.6									
<b>RPM</b>	1770									
<b>FRAME</b>	56C				<b>HZ</b>	60			<b>PH</b>	3
<b>SF</b>	1.15		<b>CODE</b>	N	<b>DES</b>	B		<b>CLASS</b>	F	
<b>NEMA NOM. EFF</b>	85.5		<b>PF</b>	69						
<b>RATING</b>	40C AMB-CONT									
<b>CC</b>	010A			<b>USABLE AT 208V</b>						N/A
<b>ENCL</b>	TEFC		<b>SER</b>							
<b>DE</b>	6205			<b>ODE</b>	6203					
<b>VPWM INVERTER READY</b>	SFA 3.4/1.7									
<b>CT6-60H(10:1)VT3-60H(20:1</b>										
	50HZ 1HP 190/380V 3.6/1.8A									
	SF1.0									

Parts List		
Part Number	Description	Quantity
SA396262	SA 35A012G004G1	1.000 EA
RA387070	RA 35A012G004G1	1.000 EA
34FN3002B01	EXTERNAL FAN, PLASTIC, .637/.639 HUB W/	1.000 EA
NS2512A01	INSULATOR, CONDUIT BOX X	1.000 EA
35CB3007	35 CB CASTING W/.88 DIA. LEAD HOLE	1.000 EA
36GS1000SP	GASKET-CONDUIT BOX, .06 THICK #SV-330 LE	1.000 EA
51XB1016A07	10-16 X 7/16 HXWSSLD SERTYB	2.000 EA
11XW1032G06	10-32 X .38, TAPTITE II, HEX WSHR SLTD U	1.000 EA
35EP3122K00	MASTER ODE,203 BRG,.683SH,#26 DRN,FH MTG	1.000 EA
HW5100A03	WAVY WASHER (W1543-017)	1.000 EA
35EP3307F00	MASTER DE,205 BRG,.998SH,#26 DRN	1.000 EA
51XN1032A20	10-32 X 1 1/4 HX WS SL SR	2.000 EA
51XB1214A16	12-14X1.00 HXWSSLD SERTYB	1.000 EA
35FH4005A32SP	IEC FH NO GRSR W/3 HOLES - PRIMED	1.000 EA
51XW1032A06	10-32 X .38, TAPTITE II, HEX WSHR SLTD S	3.000 EA
35CB4521GX	CONDUIT BOX LID KIT **ORDER INDIV PARTS	1.000 EA
51XW0832A07	8-32 X .44, TAPTITE II, HEX WSHR SLTD SE	4.000 EA
HW2501D13	KEY, 3/16 SQ X 1.375	1.000 EA
HA7000A04	KEY RETAINER 0.625 DIA SHAFTS	1.000 EA
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	2.000 EA
MJ1000A02	GREASE, POLYREX EM EXXON	0.050 LB
MG1000Y03	MUNSELL 2.53Y 6.70/ 4.60, GLOSS 20,	0.017 GA
HA3100A12	THRUBOLT 10-32 X 7.375	4.000 EA
LC0005E01	CONN.DIA./WARNING LABEL (LC0005/LB1119N)	1.000 EA

<b>Parts List (continued)</b>		
<b>Part Number</b>	<b>Description</b>	<b>Quantity</b>
NP3441LUA	ALUM SUPER-E VPWM INV READY UL CSA-EEV C	1.000 EA
35PA1066	PKG GRP, PRINT PK1008A06	1.000 EA
MN416A01	TAG-INSTAL-MAINT no wire (2100bx)4/22	1.000 EA
FE-0000001	ZRTG FE ASSEMBLY	1.000 EA
PE-0000001	ZRTG PE ASSEMBLY	1.000 EA

**AC Induction Motor Performance Data**

Record # 91625

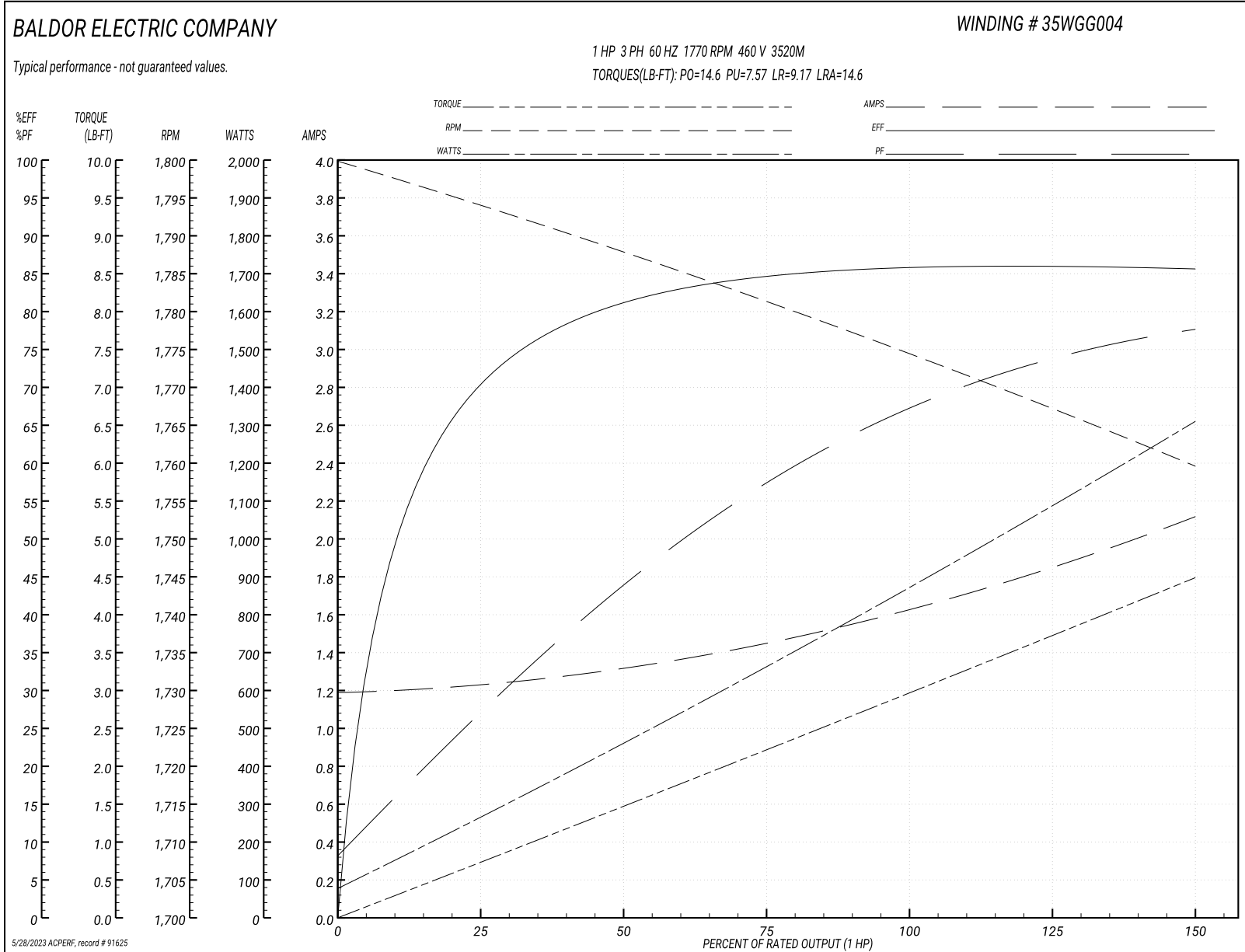
Typical performance - not guaranteed values

<b>Winding: 35WGG004-R001</b>		<b>Type: 3520M</b>		<b>Enclosure: TEFC</b>	
<b>Nameplate Data</b>			<b>460 V, 60 Hz: High Voltage Connection</b>		
<b>Rated Output (HP)</b>	1	<b>Full Load Torque</b>	2.982 LB-FT		
<b>Volts</b>	230/460	<b>Start Configuration</b>	direct on line		
<b>Full Load Amps</b>	3.2/1.6	<b>Breakdown Torque</b>	14.6 LB-FT		
<b>R.P.M.</b>	1770	<b>Pull-up Torque</b>	7.57 LB-FT		
<b>Hz</b>	60 <b>Phase</b>	3	<b>Locked-rotor Torque</b>	9.17 LB-FT	
<b>NEMA Design Code</b>	<b>B KVA Code</b>	N	<b>Starting Current</b>	14.6 A	
<b>Service Factor (S.F.)</b>	1.15	<b>No-load Current</b>	1.2 A		
<b>NEMA Nom. Eff.</b>	85.5	<b>Power Factor</b>	69	<b>Line-line Res. @ 25°C</b>	16.049 Ω
<b>Rating - Duty</b>	40C	<b>AMB-CONT</b>	<b>Temp. Rise @ Rated Load</b>	36°C	
<b>S.F. Amps</b>	3.4/1.7	<b>Temp. Rise @ S.F. Load</b>	41°C		
		<b>Locked-rotor Power Factor</b>	61.549		
		<b>Rotor inertia</b>	0.144 lb-ft <sup>2</sup>		

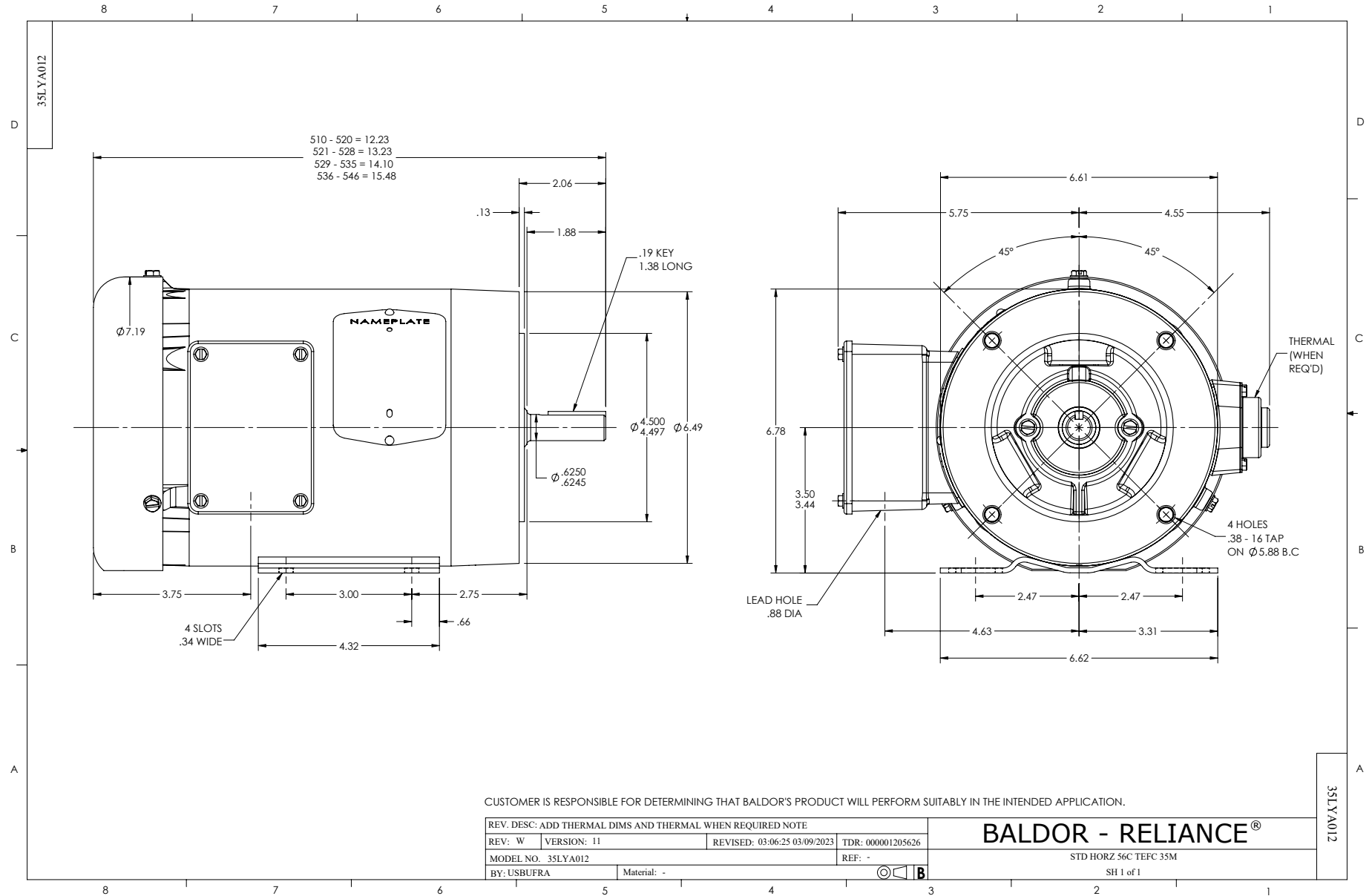
**Load Characteristics 460 V, 60 Hz, 1 HP**

<b>% of Rated Load</b>	<b>25</b>	<b>50</b>	<b>75</b>	<b>100</b>	<b>125</b>	<b>150</b>	<b>S.F.</b>
<b>Power Factor</b>	29	45	58	67	73	78	71
<b>Efficiency</b>	71.1	81.2	84.7	85.8	86	85.6	85.9
<b>Speed</b>	1794	1787.3	1781.1	1774.3	1767.4	1759.4	1770
<b>Line amperes</b>	1.22	1.31	1.46	1.64	1.86	2.11	1.77

Performance Graph at 460V, 60Hz, 1.0HP Typical performance - Not guaranteed values







CD0005

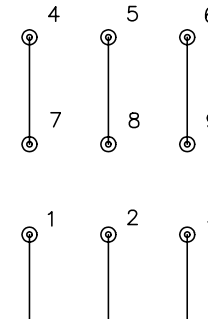


LOW VOLTAGE  
(2Y)



LINE

HIGH VOLTAGE  
(1Y)



LINE

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: E	BY: JLP	REVISED: 01/19/99 10:15	TDR: 0171435
900000		FILE: AAA00005140	MDL: -
		MTL: -	

**BALDOR ELECTRIC Co.**

3PH, DV, 9 LEADS

CD0005