

BALDOR® • RELIANCE 

Product Information Packet

CEM3116T

1HP,1770RPM,3PH,60HZ,143TC,3520M,OPSB,F1

Part Detail							
Revision:	D	Status:	PRD/A	Change #:		Proprietary:	No
Type:	AC	Elec. Spec:	35WGG004	CD Diagram:	CD0005	Mfg Plant:	
Mech. Spec:	35BB102	Layout:	35LYBB102	Poles:	04	Created Date:	01-10-2022
Base:	RG	Eff. Date:	06-11-2024	Leads:	9#18		Y

Specs			
Catalog Number:	CEM3116T	Heater Indicator:	No Heater
Enclosure:	OPSB	Insulation Class:	F
Frame:	143TC	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
Haz Area Class and Group:	None	Motor Type:	3520M
Haz Area 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

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

Nameplate NP3553LUA	
CAT.NO.	CEM3116T
SPEC.	35BB102G004G1
HP	1
VOLTS	230/460
AMPS	3.2/1.6
RPM	1770
FRAME	143TC
	HZ 60
	PH 3
SF	1.15
	CODE N
	DES B
	CLASS F
NEMA NOM. EFF	85.5
	PF 69
RATING	40C AMB-CONT
CC	010A
ENCL	OPSB
	SN
DE	6205
	ODE 6203
VPWM INVERTER READY	SFA 3.4/1.7
CT30-60(2:1) VT3-60(20:1)	
USABLE AT	50HZ 1HP 190/380V 3.6/1.8A
	SF1.0

Parts List		
Part Number	Description	Quantity
SA402601	SA 35BB102G004G1	1.000 EA
RA393878	RA 35BB102G004G1	1.000 EA
34FN3002B01	EXTERNAL FAN, PLASTIC, .637/.639 HUB W/	1.000 EA
NS2512A01	INSULATOR, CONDUIT BOX X	1.000 EA
35CB3009	35 CB W/1.09 DIA. LEAD HOLE @ 6:	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
35EP3209A00	MASTER ODE,203 BRG,GRSR	1.000 EA
HW4500A01	1641B(ALEMITE)400 UNIV, GREASE FITT	1.000 EA
HW5100A03	WAVY WASHER (W1543-017)	1.000 EA
35EP3402B00	MASTER DE,205 BRG,OPEN,W/GREASER	1.000 EA
HW4500A01	1641B(ALEMITE)400 UNIV, GREASE FITT	1.000 EA
51XN1032A20	10-32 X 1 1/4 HX WS SL SR	2.000 EA
35CB4521	35 LIPPED CB LID (GALV & PHOSPH)	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
HA7000A01	KEY RETAINER 7/8" DIA SHAFT	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,GOLD	0.017 GA
35AD2005A01	BAFFLE PLATE,MOD 35-SLTD BAND MTRS TDR	2.000 EA
HA3100A14	THRUBOLT 10-32 X 7.875	4.000 EA
LC0005E01	CONN.DIA./WARNING LABEL (LC0005/LB1119N)	1.000 EA
NP3553LUA	ALUM SUPER-E VPWM INV READY UL CC NEMA P	1.000 EA

Parts List (continued)		
Part Number	Description	Quantity
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

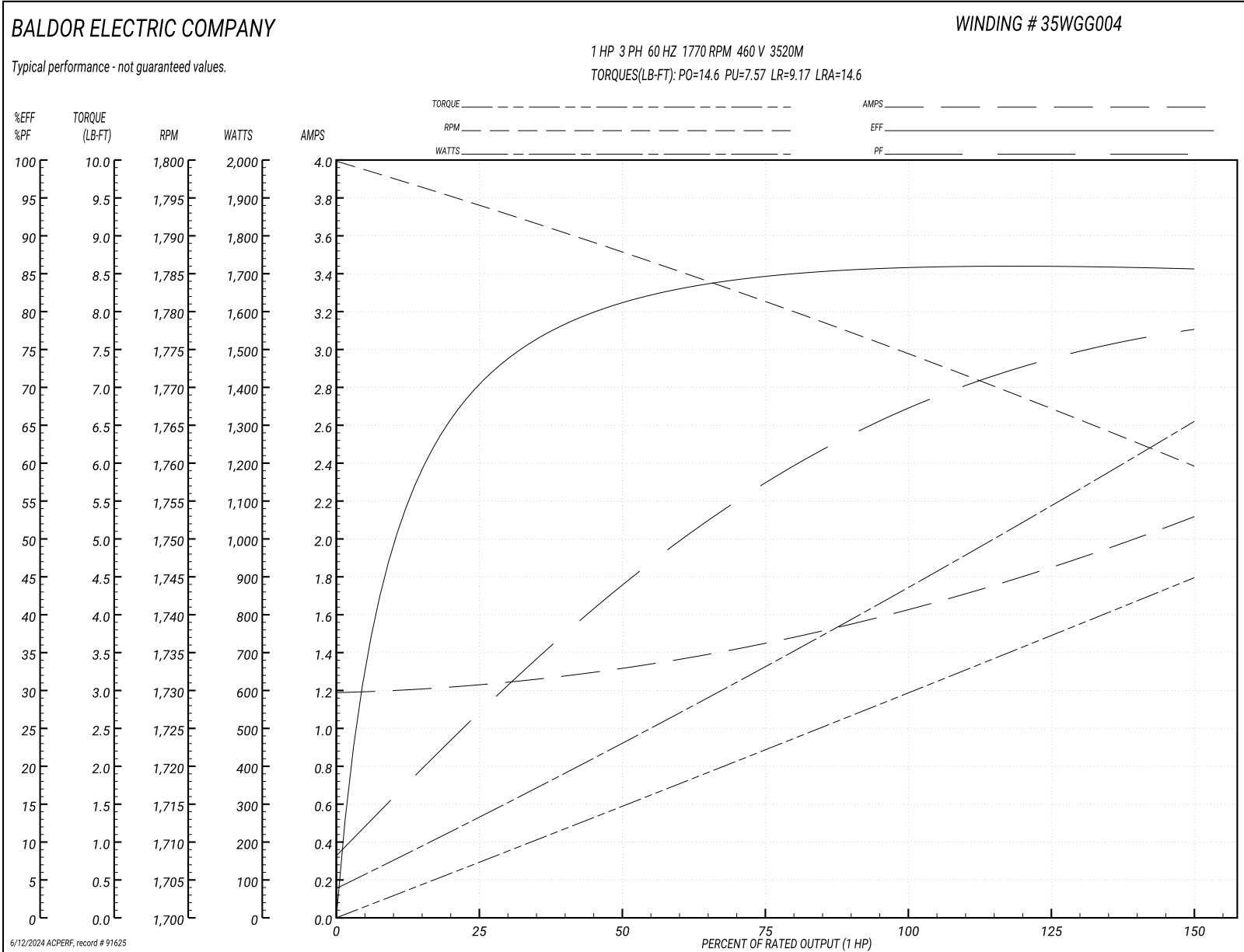
Typical performance - not guaranteed values

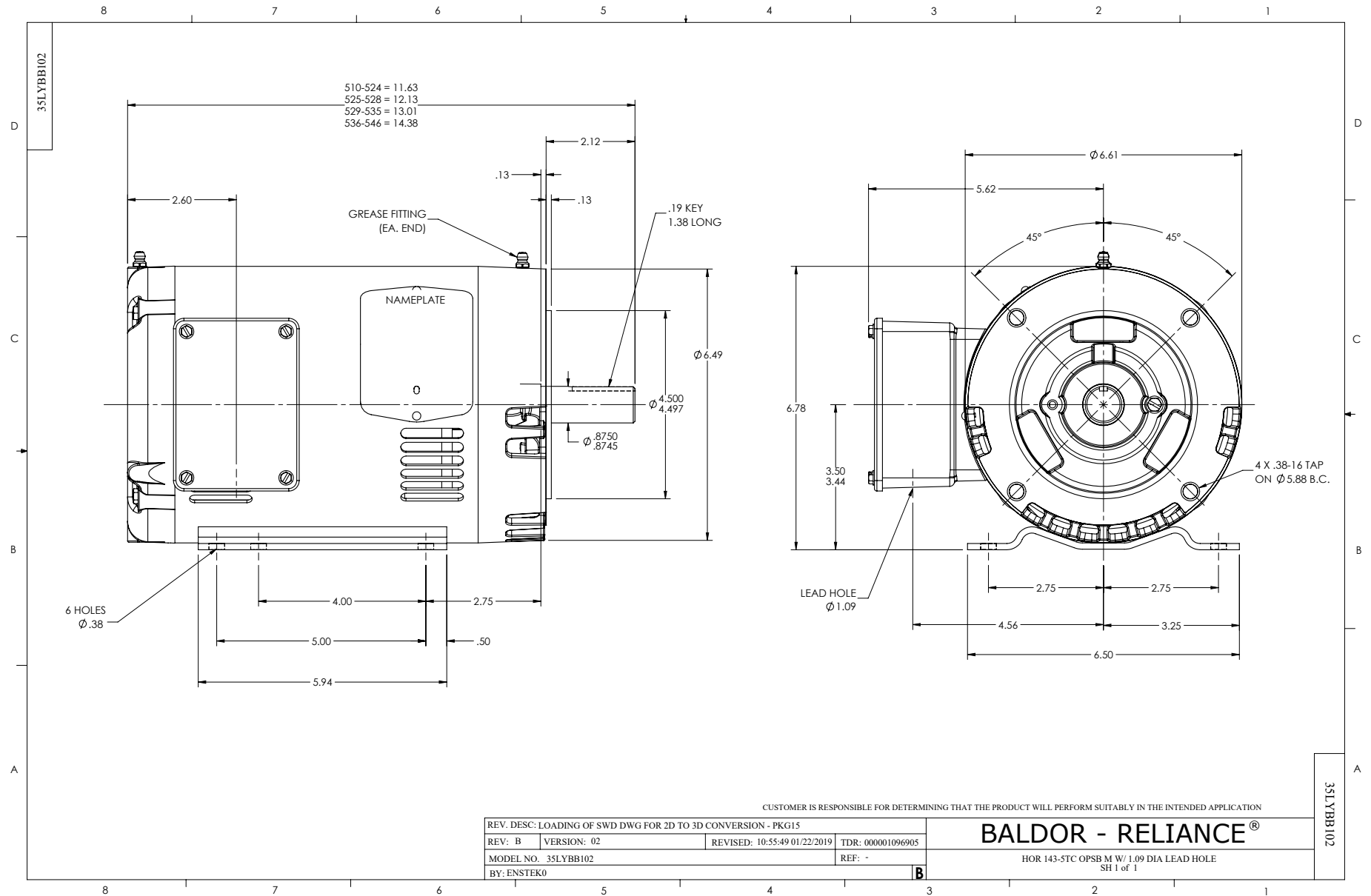
Winding: 35WGG004-R001		Type: 3520M		Enclosure: TEFC	
Nameplate Data			460 V, 60 Hz: High Voltage Connection		
Rated Output (HP)	1	Full Load Torque	2.982 LB-FT		
Volts	230/460	Start Configuration	direct on line		
Full Load Amps	3.2/1.6	Breakdown Torque	14.6 LB-FT		
R.P.M.	1770	Pull-up Torque	7.57 LB-FT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

Load Characteristics 460 V, 60 Hz, 1 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	29	45	58	67	73	78	71
Efficiency	71.1	81.2	84.7	85.8	86	85.6	85.9
Speed	1794	1787.3	1781.1	1774.3	1767.4	1759.4	1770
Line amperes	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