

**BALDOR® • RELIANCE** 

**Product Information Packet**

**CEM3154T**

**1.5HP, 1755RPM, 3PH, 60HZ, 145TC, 3522M, OPSB**

Part Detail							
Revision:	P	Status:	PRD/A	Change #:		Proprietary:	No
Type:	AC	Elec. Spec:	35WGM495	CD Diagram:	CD0005	Mfg Plant:	
Mech. Spec:	35BB102	Layout:	35LYBB102	Poles:	04	Created Date:	10-20-2010
Base:	RG	Eff. Date:	01-03-2019	Leads:	9#18		

Specs			
Catalog Number:	CEM3154T	Heater Indicator:	No Heater
Enclosure:	OPSB	Insulation Class:	F
Frame:	145TC	Inverter Code:	Inverter Ready
Frame Material:	Steel	KVA Code:	L
Output @ Frequency:	1.500 HP @ 60 HZ	Lifting Lugs:	No Lifting Lugs
Synchronous Speed @ Frequency:	1800 RPM @ 60 HZ	Locked Bearing Indicator:	Locked Bearing
Voltage @ Frequency:	460.0 V @ 60 HZ	Motor Lead Quantity/Wire Size:	9 @ 18 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:	3522M
Agency Approvals:	UR	Mounting Arrangement:	F1
	CSA EEV	Power Factor:	72
	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>	2.200 A @ 460.0 V	<b>Shaft Ground Indicator:</b>	No Shaft Grounding
	4.400 A @ 230.0 V	<b>Shaft Rotation:</b>	Reversible
	4.500 A @ 208.0 V	<b>Shaft Slinger Indicator:</b>	No Slinger
<b>Design Code:</b>	B	<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 NP3553LUA</b>									
<b>CAT.NO.</b>	CEM3154T								
<b>SPEC.</b>	35BB102M495G1								
<b>HP</b>	1.5								
<b>VOLTS</b>	230/460								
<b>AMPS</b>	4.4/2.2								
<b>RPM</b>	1755								
<b>FRAME</b>	145TC			<b>HZ</b>	60			<b>PH</b>	3
<b>SF</b>	1.15			<b>CODE</b>	L		<b>DES</b>	B	
<b>NEMA NOM. EFF</b>	86.5			<b>PF</b>	72			<b>CLASS</b>	F
<b>RATING</b>	40C AMB-CONT								
<b>CC</b>	010A						<b>USABLE AT 208V</b>	4.5	
<b>DE</b>	6205			<b>ODE</b>	6203				
<b>ENCL</b>	OPSB			<b>SN</b>					
<b>VPWM INVERTER READY</b>									
<b>CT30-60(2:1) VT3-60(20:1)</b>									
<b>USABLE AT</b>	50HZ 1.5HP 190/380V 5.2/2.6A								SF1.0

Parts List		
Part Number	Description	Quantity
SA204971	SA 35BB102M495G1	1.000 EA
RA192219	RA 35BB102M495G1	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, MOBIL POLYREX EM - 124047	0.050 LB
MG1000Y03	MUNSELL 2.53Y 6.70/ 4.60, GLOSS 20,	0.017 GA
35AD2005A01	BAFFLE PLATE,MOD 35-SLTD BAND MTRS GL.F.	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 INVERTER READY UL	1.000 EA
35PA1066	PKG GRP, PRINT PK1008A06	1.000 EA

<b>Parts List (continued)</b>		
<b>Part Number</b>	<b>Description</b>	<b>Quantity</b>
MN416A01	TAG-INSTAL-MAINT no wire (1200/bx) 3/19	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 # 32593 - Typical performance - not guaranteed values

<b>Winding:</b> 35WGM495-R001	<b>Type:</b> 3522M	<b>Enclosure:</b> OPSB
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Nameplate Data				460 V, 60 Hz: High Voltage Connection	
Rated Output (HP)	1.5			Full Load Torque	4.46 LB-FT
Volts	230/460			Start Configuration	direct on line
Full Load Amps	4.50/2.25			Breakdown Torque	17.7 LB-FT
R.P.M.	1755			Pull-up Torque	10.8 LB-FT
Hz	60	Phase	3	Locked-rotor Torque	12.6 LB-FT
NEMA Design Code	B	KVA Code	L	Starting Current	17.5 A
Service Factor (S.F.)	1.15			No-load Current	1.43 A
NEMA Nom. Eff.	86.5	Power Factor	72	Line-line Res. @ 25°C	10.73 Ω
Rating - Duty	40C AMB-CONT			Temp. Rise @ Rated Load	34°C
S.F. Amps				Temp. Rise @ S.F. Load	40°C

Load Characteristics 460 V, 60 Hz, 1.5 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	32	50	63	72	78	81	76
Efficiency	74.7	83.5	86	86.6	86.3	85.3	86.4
Speed	1789.9	1780.2	1769.2	1758.4	1746.3	1732.6	1751
Line amperes	1.5	1.67	1.93	2.24	2.61	3.05	2.46

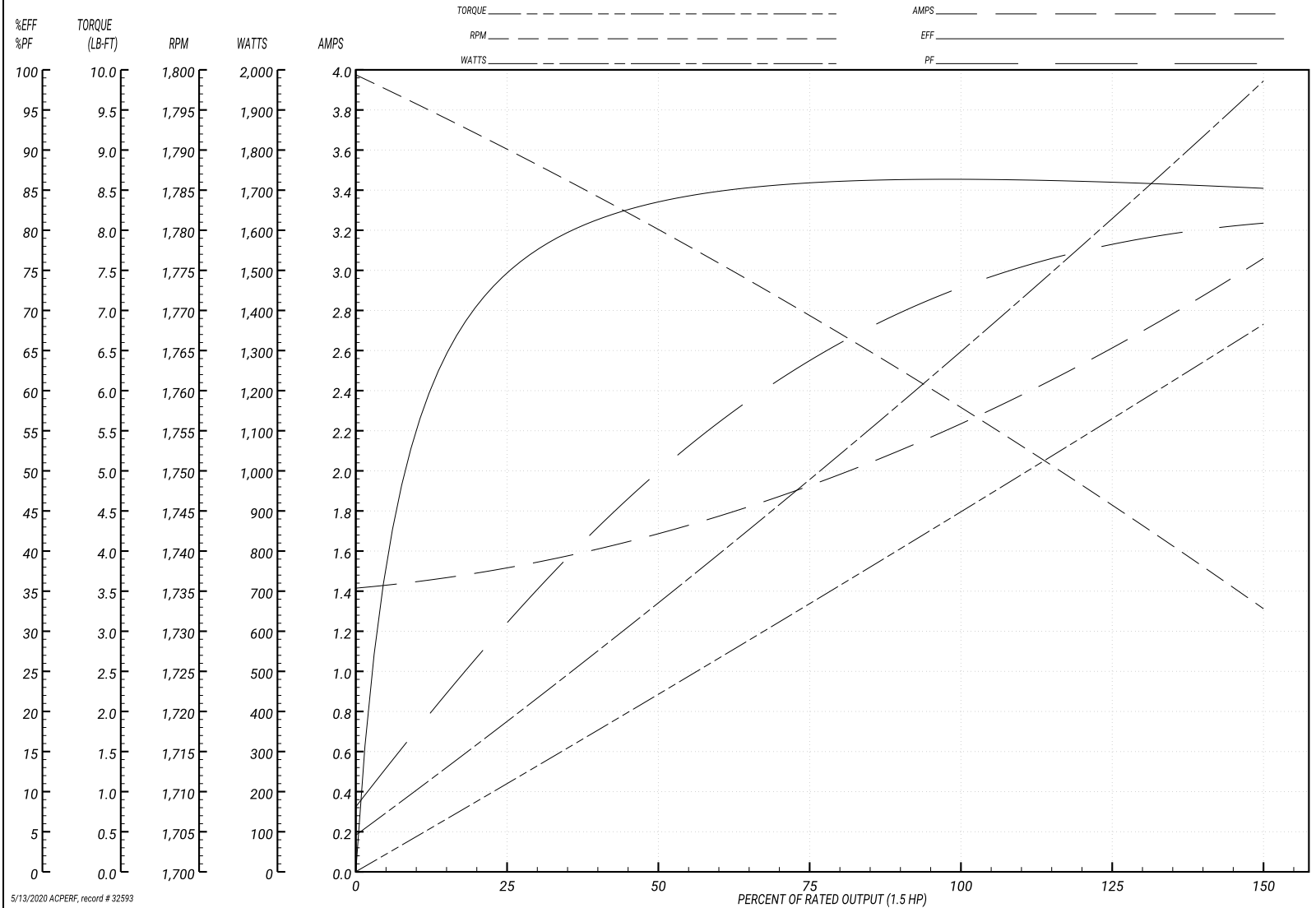
Performance Graph at 460V, 60Hz, 1.5HP Typical performance - Not guaranteed values

ABB Motors and Mechanical Inc.

WINDING # 35WGM495

Typical performance - not guaranteed values.

1.5 HP 3 PH 60 HZ 1755 RPM 460 V 3522M  
 TORQUES(LB-FT): PO=17.7 PU=10.8 LR=12.6 LRA=17.5



5/13/2020 ACPERF, record # 32593

**AC Induction Motor Performance Data**

Record # 60670 - Typical performance - not guaranteed values

<b>Winding:</b> 35WGM495-R001	<b>Type:</b> 3522M	<b>Enclosure:</b> OPSB
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Nameplate Data				230 V, 60 Hz: Low Voltage Connection	
Rated Output (HP)	1.5			Full Load Torque	4.46 LB-FT
Volts	230/460			Start Configuration	direct on line
Full Load Amps	4.4/2.2			Breakdown Torque	17.7 LB-FT
R.P.M.	1755			Pull-up Torque	10.8 LB-FT
Hz	60	Phase	3	Locked-rotor Torque	12.6 LB-FT
NEMA Design Code	B	KVA Code	L	Starting Current	35 A
Service Factor (S.F.)	1.15			No-load Current	2.86 A
NEMA Nom. Eff.	86.5	Power Factor	72	Line-line Res. @ 25°C	2.59 Ω
Rating - Duty	40C AMB-CONT			Temp. Rise @ Rated Load	34°C
S.F. Amps				Temp. Rise @ S.F. Load	40°C
				Locked-rotor Power Factor	52.5
				Rotor inertia	0.13 LB-FT <sup>2</sup>

Load Characteristics 230 V, 60 Hz, 1.5 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	32	50	63	72	78	81	76
Efficiency	74.7	83.3	85.9	86.5	86.1	85.2	86.3
Speed	1790	1780	1769	1758	1746	1733	1751
Line amperes	3	3.34	3.86	4.48	5.22	6.1	4.92

Performance Graph at 230V, 60Hz, 1.5HP Typical performance - Not guaranteed values

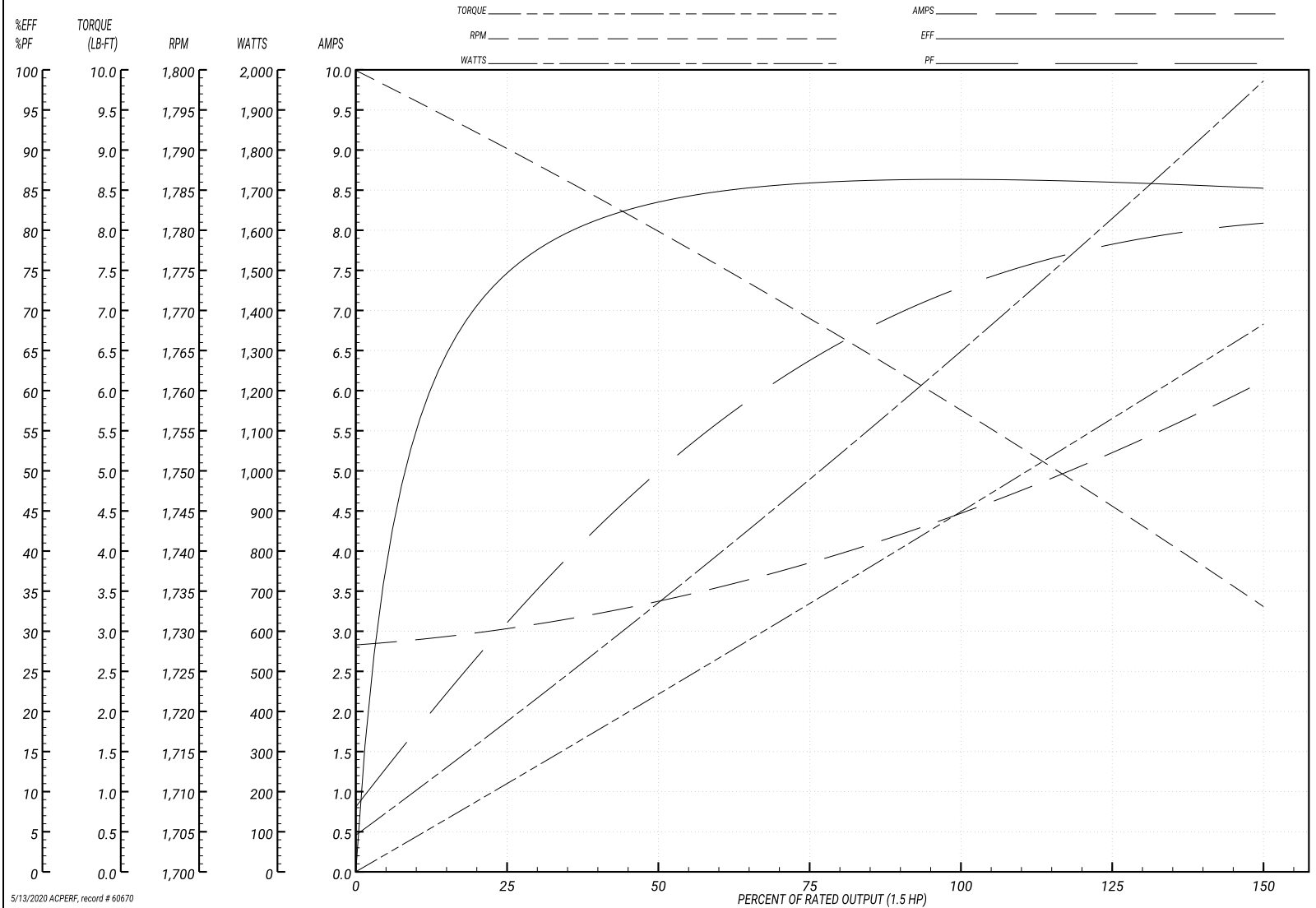
ABB Motors and Mechanical Inc.

WINDING # 35WGM495

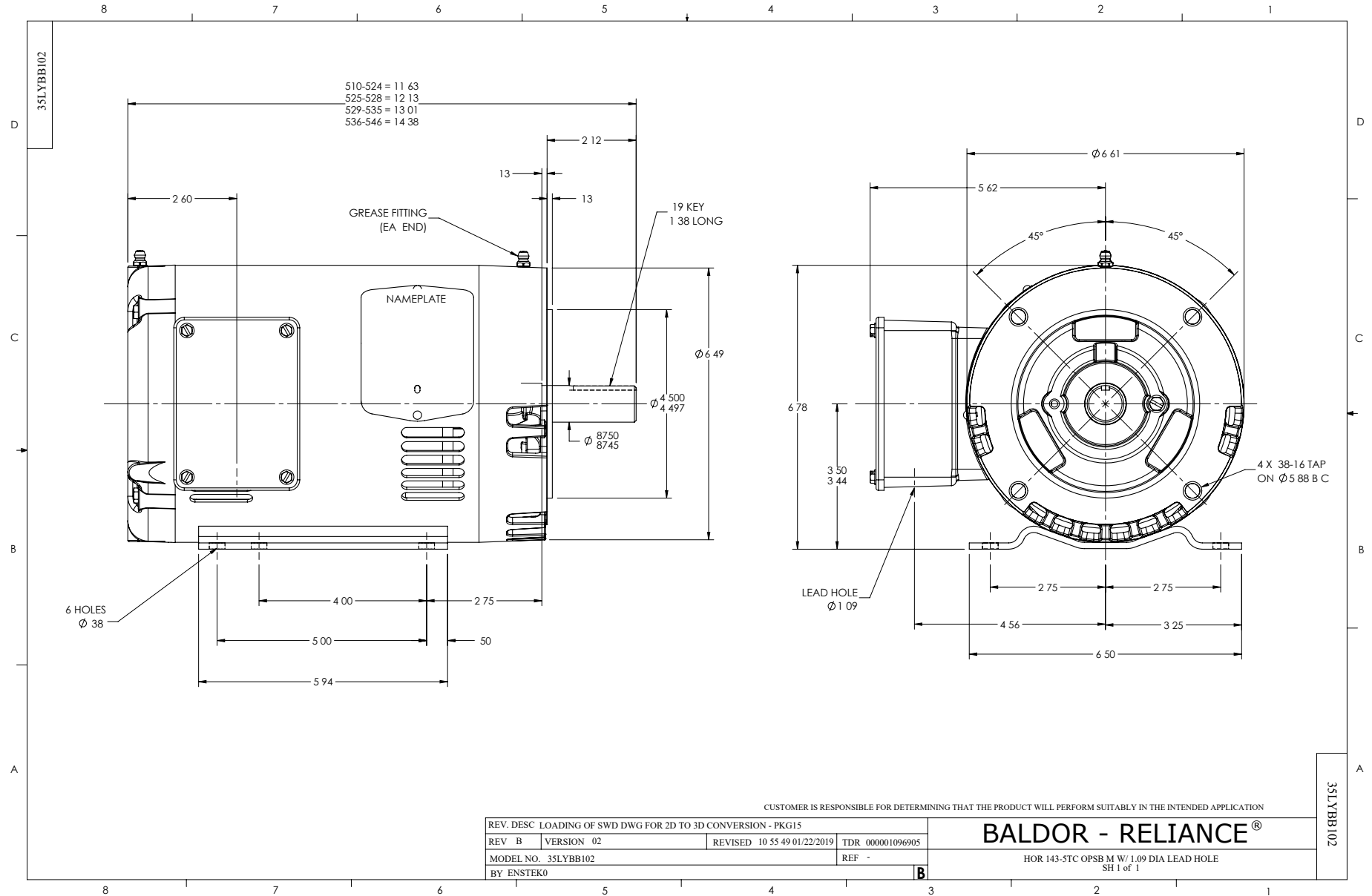
Typical performance - not guaranteed values.

1.5 HP 3 PH 60 HZ 1755 RPM 230 V 3522M

TORQUES(LB-FT): PO=17.7 PU=10.8 LR=12.6 LRA=35



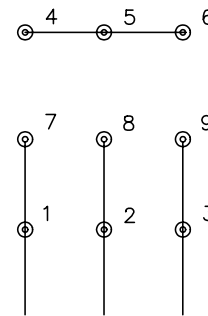
5/13/2020 ACPERF, record # 60670



CD0005

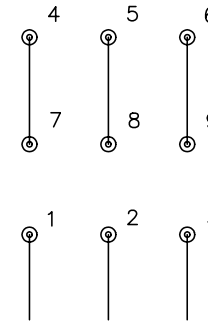


LOW VOLTAGE  
(2Y)



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

9000D

FILE: AAA00005140

MDL: -

MTL: -

**BALDOR ELECTRIC Co.**

3PH, DV, 9 LEADS

CD0005