ABB BALDOR RELIANCE

Customer information packet

CEM3154T

1.5HP, 1770RPM, 3PH, 60HZ, 145TC, 3524M, OPSB
Class - None
Division - Not Applicable

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Specifications

Enclosure	OPSB
Frame	145TC
Frame Material	Steel
Frequency	60.00 Hz
Haz Area Class and Group	None
Haz Area Division	Not Applicable
Motor Letter Type	Three Phase
Output @ Frequency	1.500 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	230.0 V @ 60 HZ
	460.0 V @ 60 HZ
Agency Approvals	CURUSEEV
	NEMA PREMIUM
Ambient Temperature	40 °C
Auxiliary Box	NO AUXILLARY BOX
Auxiliary Box Lead Termination	None
Base Indicator	Rigid
Bearing Grease Type	Polyrex EM (-20F +300F)
Blower	None
Current @ Voltage	2.300 A @ 460.0 V
	4.600 A @ 230.0 V
	4.640 A @ 208.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	86.5 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	2.3 a

Part Detail

Revision	D
Type	AC
Mech. spec.	35BB102
Base	
Status	PRD/A
Elec. spec.	35WGL955
Layout	35LYBB102
Eff. date	01-05-2026
CD Diagram	CD0005
Poles	04
Leads	9#18
Proprietary	False
Created date	01-10-2022

Insulation Class	F
Inverter Code	Inverter Ready
KVA Code	M
Lifting Lugs	No Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Motor Lead Quantity/Wire Size	9 @ 18 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3524M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	11.62 IN
Power Factor	72
Product Family	General Purpose
Pulley End Bearing Type	Ball
Pulley Face Code	C-Face
Pulley Shaft Indicator	Standard
Rodent Screen	None
Service Factor	1.15
Shaft Diameter	0.875 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	1770 rpm
Speed Code	Single Speed
Starting Method	Direct on line
Thermal Device - Bearing	None
Thermal Device - Winding	None
Vibration Sensor Indicator	No Vibration Sensor
Winding Thermal 1	None
Winding Thermal 2	None

Nameplate

NP3553LUA									
CAT.NO.	CEM3154T								
SPEC.	35BB102L955G1								
HP	1.5								
VOLTS	230/460								
AMPS	4.6/2.3								
RPM	1770								
FRAME	145TC	**HZ**	60			**PH**	3		
SF	1.15	**CODE**	M	**DES**	B	**CLASS**	F		
NEMA NOM. EFF	86.5	**PF**	72						
RATING	40C AMB-CONT								
CC	010A								
ENCL	OPSB	**SN**							
DE	6205	**ODE**	6203						
VPWM INVERTER READY	SFA 5/2.5								
CT30-60(2:1) VT3-60(20:1)									
USABLE AT	1.5HP 190/380V 50HZ 5.2/2.6A								SF1.0

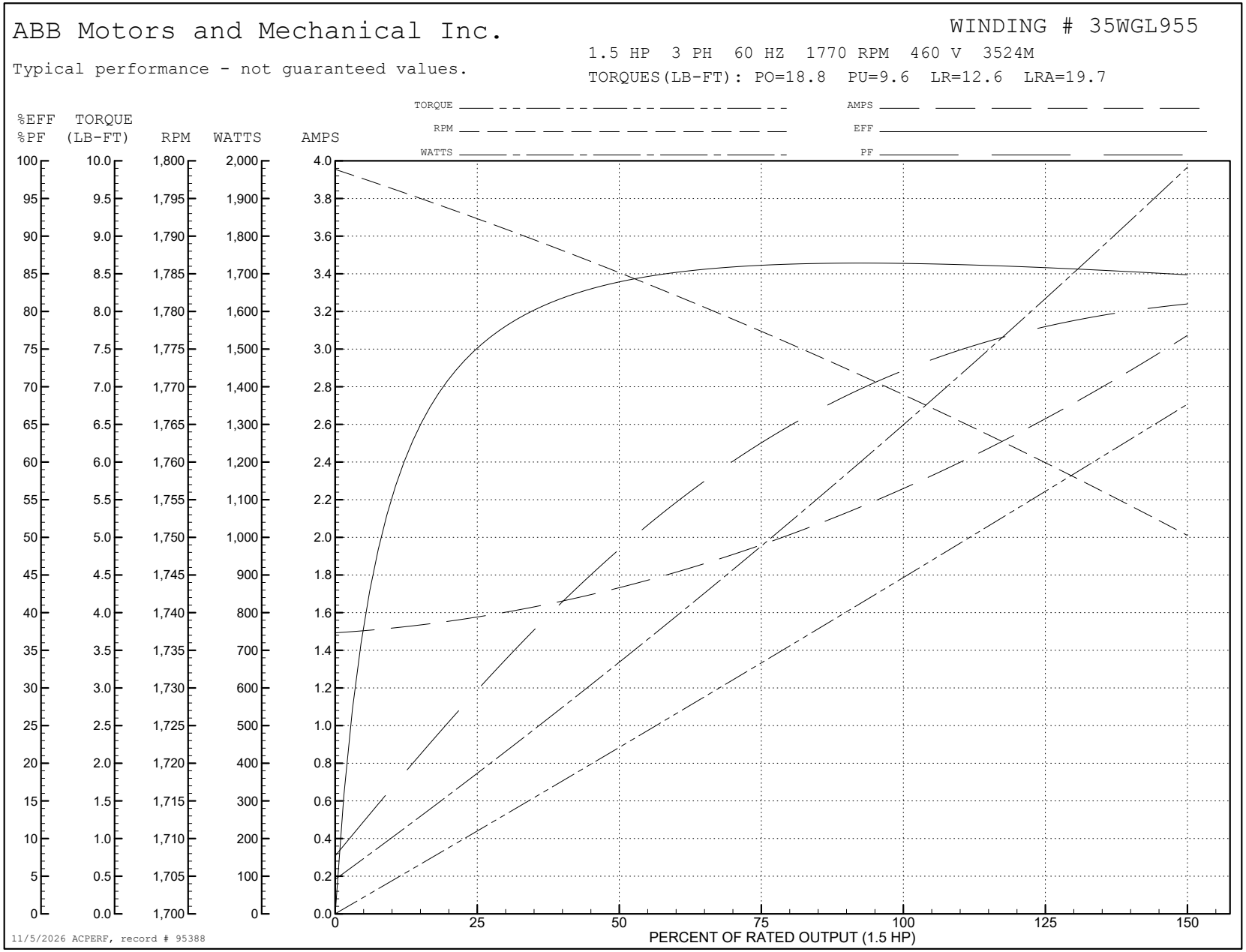
AC Induction Motor Performance Data
Record # 95388
Typical performance - not guaranteed values

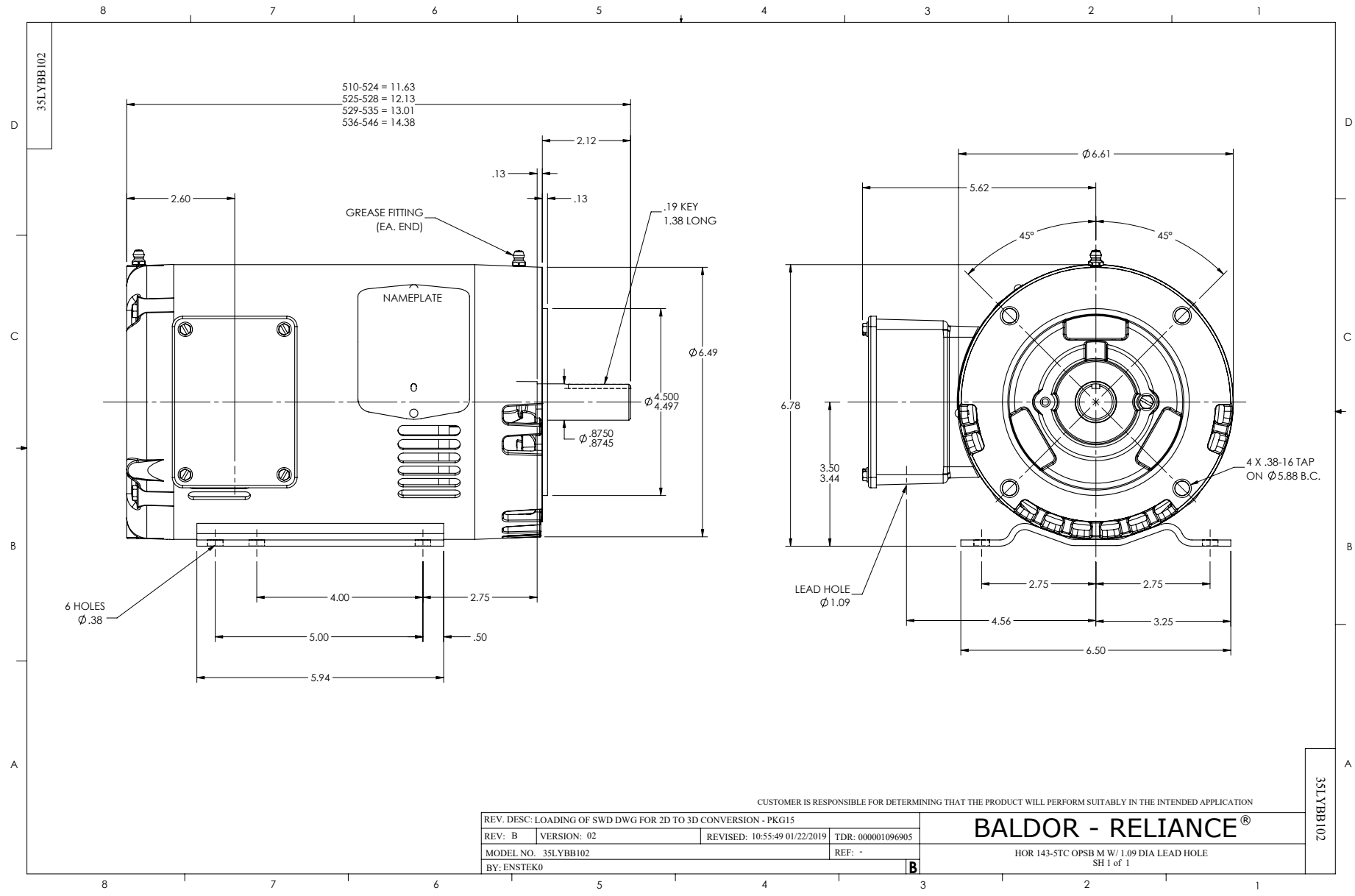
Winding: 35WGL955-R002	**Type:** 3524M	**Enclosure:** OPEN

Nameplate Data				**460 V, 60 Hz: High Voltage Connection**	
Rated Output (HP)			1.5	**Full Load Torque**	4.48 LB-FT
Volts			230/460	**Start Configuration**	direct on line
Full Load Amps			4.6/2.3	**Breakdown Torque**	18.8 LB-FT
R.P.M.			1770	**Pull-up Torque**	9.6 LB-FT
Hz	60	**Phase**	3	**Locked-rotor Torque**	12.6 LB-FT
NEMA Design Code	B	**KVA Code**	M	**Starting Current**	19.7 A
Service Factor (S.F.)			1.15	**No-load Current**	1.51 A
NEMA Nom. Eff.	86.5	**Power Factor**	72	**Line-line Res. @ 25ºC**	11.8 Ω
Rating - Duty			40C AMB-CONT	**Temp. Rise @ Rated Load**	48°C
S.F. Amps			5/2.5	**Temp. Rise @ S.F. Load**	57°C
				Locked-rotor Power Factor	58.4
				Rotor inertia	0.173 lb-ft²

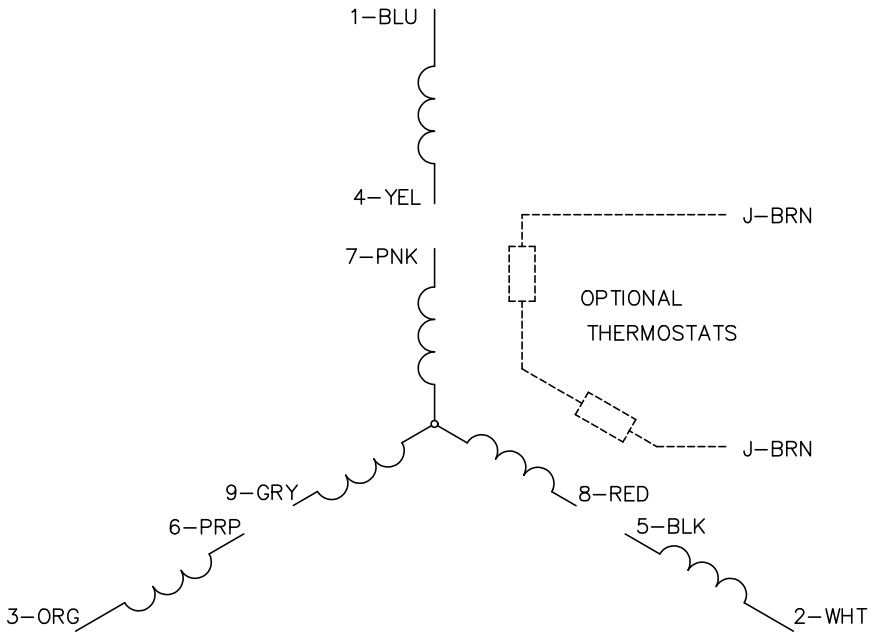
Load Characteristics 460 V, 60 Hz, 1.5 HP

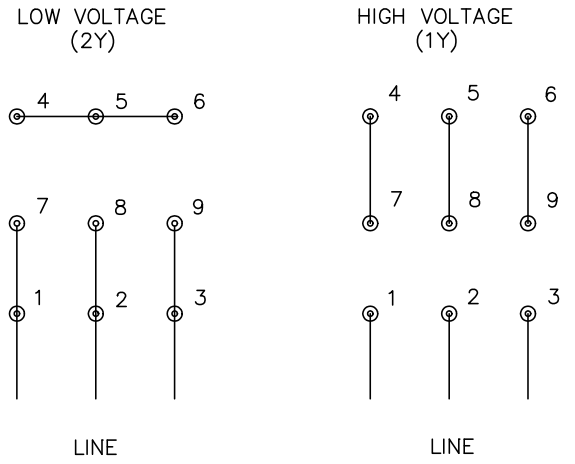
% of Rated Load	**25**	**50**	**75**	**100**	**125**	**150**	**S.F.**
Power Factor	31	49	63	72	78	81	76
Efficiency	75.1	83.5	86	86.5	85.8	84.8	86.1
Speed	1792	1785	1777	1769	1760	1750	1764
Line amperes	1.56	1.72	1.97	2.28	2.65	3.06	2.5


ABB Motors and Mechanical Inc.
WINDING # 35WGL955
1.5 HP 3 PH 60 HZ 1770 RPM 460 V 3524M
Typical performance - not guaranteed values.
TORQUES(LB-FT): PO=18.8 PU=9.6 LR=12.6 LRA=19.7
TORQUE
RPM
WATTS
AMPS
EFF
PF
%EFF %PF
TORQUE (LB-FT)
RPM
WATTS
AMPS
PERCENT OF RATED OUTPUT (1.5 HP)
11/5/2026 ACPERF, record # 95388


35LYBB102
510-524 = 11.63
525-528 = 12.13
529-535 = 13.01
536-546 = 14.38
2.12
.13
.13
2.60
GREASE FITTING
(EA. END)
.19 KEY
1.38 LONG
NAMEPLATE
Ø6.49
Ø4.500
4.497
Ø.8750
.8745
6 HOLES
Ø.38
4.00
2.75
5.00
.50
5.94
Ø6.61
5.62
45°
45°
6.78
3.50
3.44
4 X .38-16 TAP
ON Ø5.88 B.C.
LEAD HOLE
Ø1.09
2.75
2.75
4.56
3.25
6.50
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT THE PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION
REV. DESC: LOADING OF SWD DWG FOR 2D TO 3D CONVERSION - PKG15
REV: B
VERSION: 02
REVISED: 10:55:49 01/22/2019
TDR: 000001096905
MODEL NO. 35LYBB102
REF: -
BY: ENSTEK0
B
BALDOR - RELIANCE®
HOR 143-5TC OPSB M W/ 1.09 DIA LEAD HOLE
SH 1 of 1
35LYBB102

CD0005





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.

CD0005

REV. DESC: REVISE TO SHOW OPTIONAL COLORS			BALDOR ELECTRIC Co.
REV. LTR: E	BY: JLP	REVISED: 01/19/99 10:15	TDR: 0171435
CD0005		FILE: AAA00005140	MDL: –
		MTL: –	3PH, DV, 9 LEADS