Customer information packet

CEM3120T

1.5HP, 3490RPM, 3PH, 60HZ, 143TC, 3518M, OPSB
Class - None
Division - Not Applicable

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Specifications

Enclosure	OPSB
Frame	143TC
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	3600 RPM @ 60 HZ
Voltage @ Frequency	230.0 V @ 60 HZ
	460.0 V @ 60 HZ
Agency Approvals	NEMA PREMIUM
	NEMA PREMIUM (OLD LOGO)
	CURUSEEV
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	2.000 A @ 460.0 V
	4.000 A @ 230.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	84.0 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Heater Indicator	No Heater
High Voltage Full Load Amps	2.0 a
Insulation Class	F

Part Detail

Revision	E
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	35WGM761
Layout	35LYBB102
Eff. date	01-02-2026
CD Diagram	CD0005
Poles	02
Leads	9#18
Proprietary	False
Created date	03-09-2020

Inverter Code	Inverter Ready
IP Rating	NONE
KVA Code	L
Lifting Lugs	No Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3518M
Mounting Arrangement	F1
Number of Poles	2
Overall Length	17.07 IN
Power Factor	83
Product Family	General Purpose
Pulley Face Code	C-Face
Rodent Screen	None
Service Factor	1.15
Shaft Diameter	0.875 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Speed	3490 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

NP1259L									
CAT.NO.	CEM3120T								
SPEC.	35-0000-0671								
HP	1.5								
VOLTS	230/460								
AMP	4/2								
RPM	3490								
FRAME	143TC	**HZ**	60			**PH**	3		
SER.F.	1.15	**CODE**	L	**DES**	B	**CL**	F		
NEMA-NOM-EFF	84	**PF**	83						
RATING	40C AMB-CONT								
CC	010A								
DE	6205	**ODE**	6203						
ENCL	OPSB	**SN**							

AC Induction Motor Performance Data
Record # 53126
Typical performance - not guaranteed values

Winding: 35WGM761-R007	**Type:** 3518M	**Enclosure:** OPSB

Nameplate Data				**460 V, 60 Hz: High Voltage Connection**	
Rated Output (HP)			1.5	**Full Load Torque**	2.26 LB-FT
Volts			230/460	**Start Configuration**	direct on line
Full Load Amps			4/2	**Breakdown Torque**	9.32 LB-FT
R.P.M.			3490	**Pull-up Torque**	4.18 LB-FT
Hz	60	**Phase**	3	**Locked-rotor Torque**	6.79 LB-FT
NEMA Design Code	B	**KVA Code**	L	**Starting Current**	17.2 A
Service Factor (S.F.)			1.15	**No-load Current**	1.05 A
NEMA Nom. Eff.	84	**Power Factor**	83	**Line-line Res. @ 25ºC**	12.7 Ω
Rating - Duty			40C AMB-CONT	**Temp. Rise @ Rated Load**	24°C
S.F. Amps				**Temp. Rise @ S.F. Load**	28°C
				Locked-rotor Power Factor	64
				Rotor inertia	0.0493 lb-ft²

Load Characteristics 460 V, 60 Hz, 1.5 HP

% of Rated Load	**25**	**50**	**75**	**100**	**125**	**150**	**S.F.**
Power Factor	43	64	77	83	87	89	85
Efficiency	73.9	82.4	85.1	85.1	84.3	83.1	84.6
Speed	3574	3550	3524	3496	3465	3430	3477
Line amperes	1.14	1.35	1.63	1.99	2.41	2.84	2.24

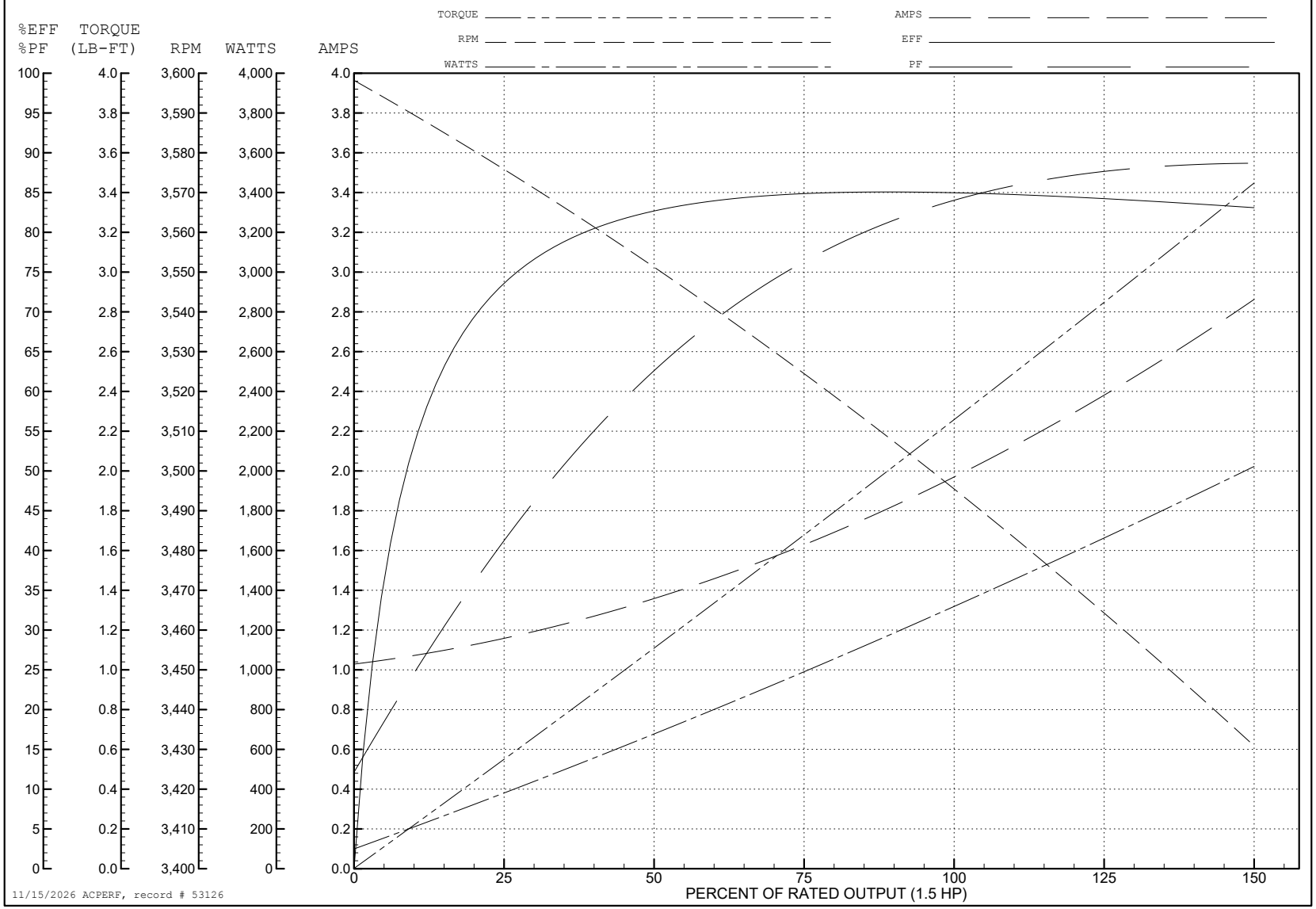
ABB Motors and Mechanical Inc.

WINDING # 35WGM761

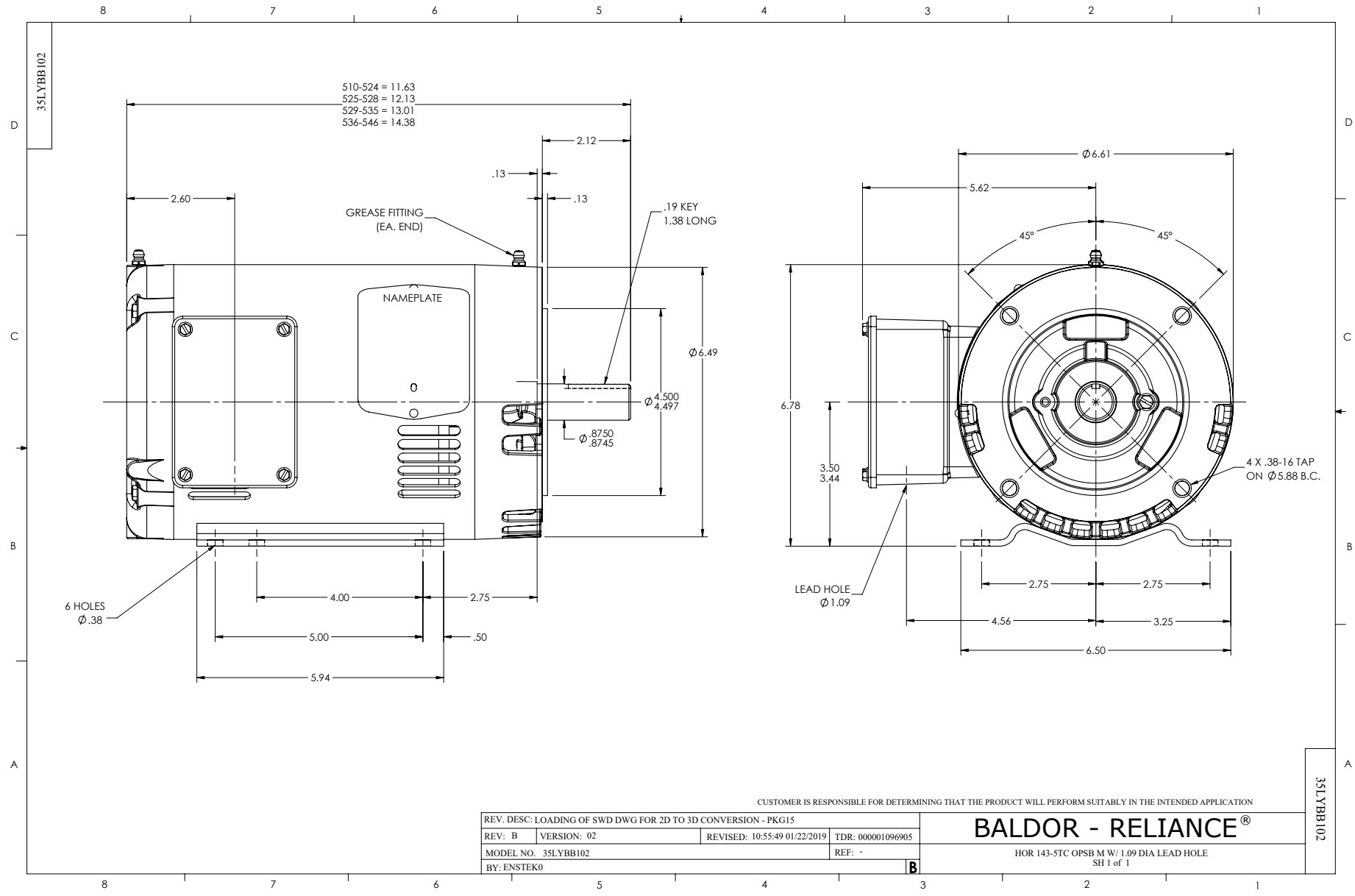
1.5 HP 3 PH 60 HZ 3490 RPM 460 V 3518M

Typical performance - not guaranteed values.

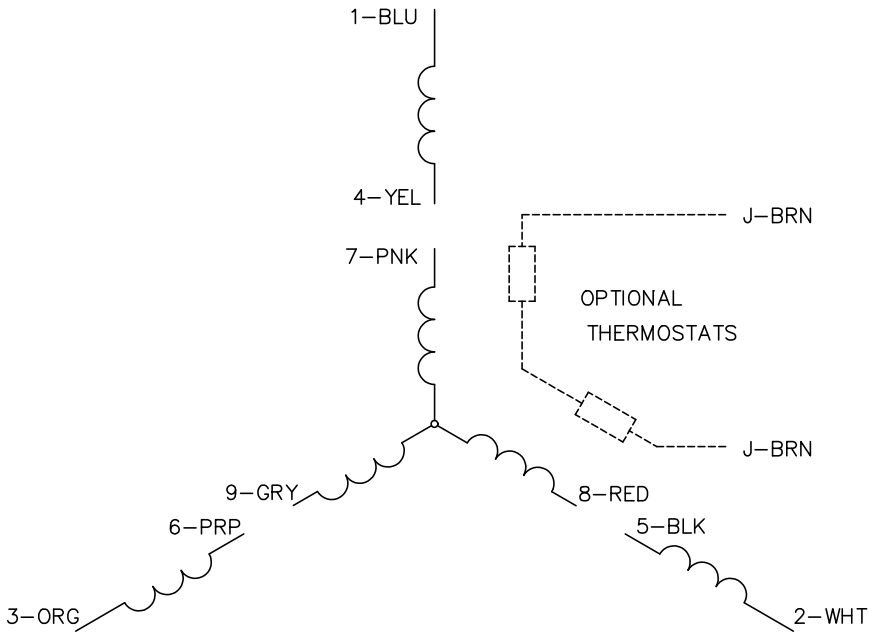
TORQUES(LB-FT): PO=9.32 PU=4.18 LR=6.79 LRA=17.2

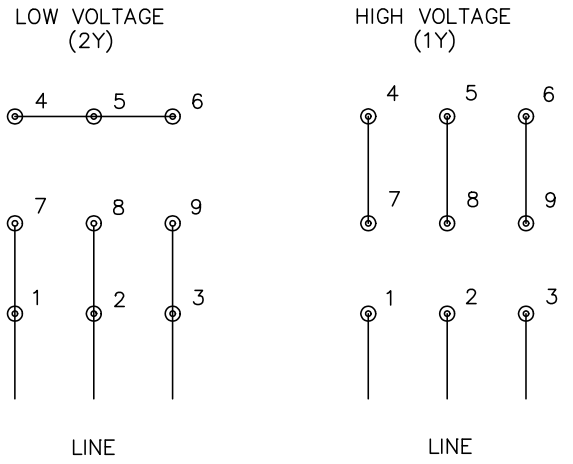


11/15/2026 ACPERF, record # 53126


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