ABB BALDOR RELIANCE

Customer information packet

CEM3120T-G

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	CSA
	CSA EEV
	NEMA PREMIUM
	UR
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	4.000 A @ 230.0 V
	2.000 A @ 460.0 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

Part Detail

Revision	F
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	35WGM761
Layout	35LY-000-271
Eff. date	01-02-2026
CD Diagram	CD0005
Poles	02
Leads	9#18
Proprietary	False
Created date	03-09-2020

Insulation Class	H
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	11.62 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	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

NP3553LUA										
CAT.NO.	CEM3120T-G									
SPEC.	35-0000836									
HP	1.5									
VOLTS	230/460									
AMPS	4/2									
RPM	3490									
FRAME	143TC	**HZ**	60			**PH**	3			
SF	1.15	**CODE**	L	**DES**	B	**CLASS**	H			
NEMA NOM. EFF	84	**PF**	83							
RATING	40C AMB-CONT									
CC	010A									
ENCL	OPSB	**SN**								
DE	6205	**ODE**	6203							
VPWM INVERTER READY										
CT30-60(2:1) VT3-60(20:1)										
USABLE AT	50HZ 1.5HP 190/380V 4.6/2.3A									SF1.0

AC Induction Motor Performance Data
Record # 53128
Typical performance - not guaranteed values

Winding: 35WGM761-R009	**Type:** 3518M	**Enclosure:** OPSB

Nameplate Data			
Rated Output (HP)			1.5
Volts			230/460
Full Load Amps			4/2
R.P.M.			3490
Hz	60	**Phase**	3
NEMA Design Code	B	**KVA Code**	L
Service Factor (S.F.)			1.15
NEMA Nom. Eff.	84	**Power Factor**	83
Rating - Duty			40C AMB-CONT
S.F. Amps			

460 V, 60 Hz: High Voltage Connection	
Full Load Torque	2.26 LB-FT
Start Configuration	direct on line
Breakdown Torque	9.32 LB-FT
Pull-up Torque	4.18 LB-FT
Locked-rotor Torque	6.79 LB-FT
Starting Current	17.2 A
No-load Current	1.05 A
Line-line Res. @ 25ºC	12.7 Ω
Temp. Rise @ Rated Load	24°C
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

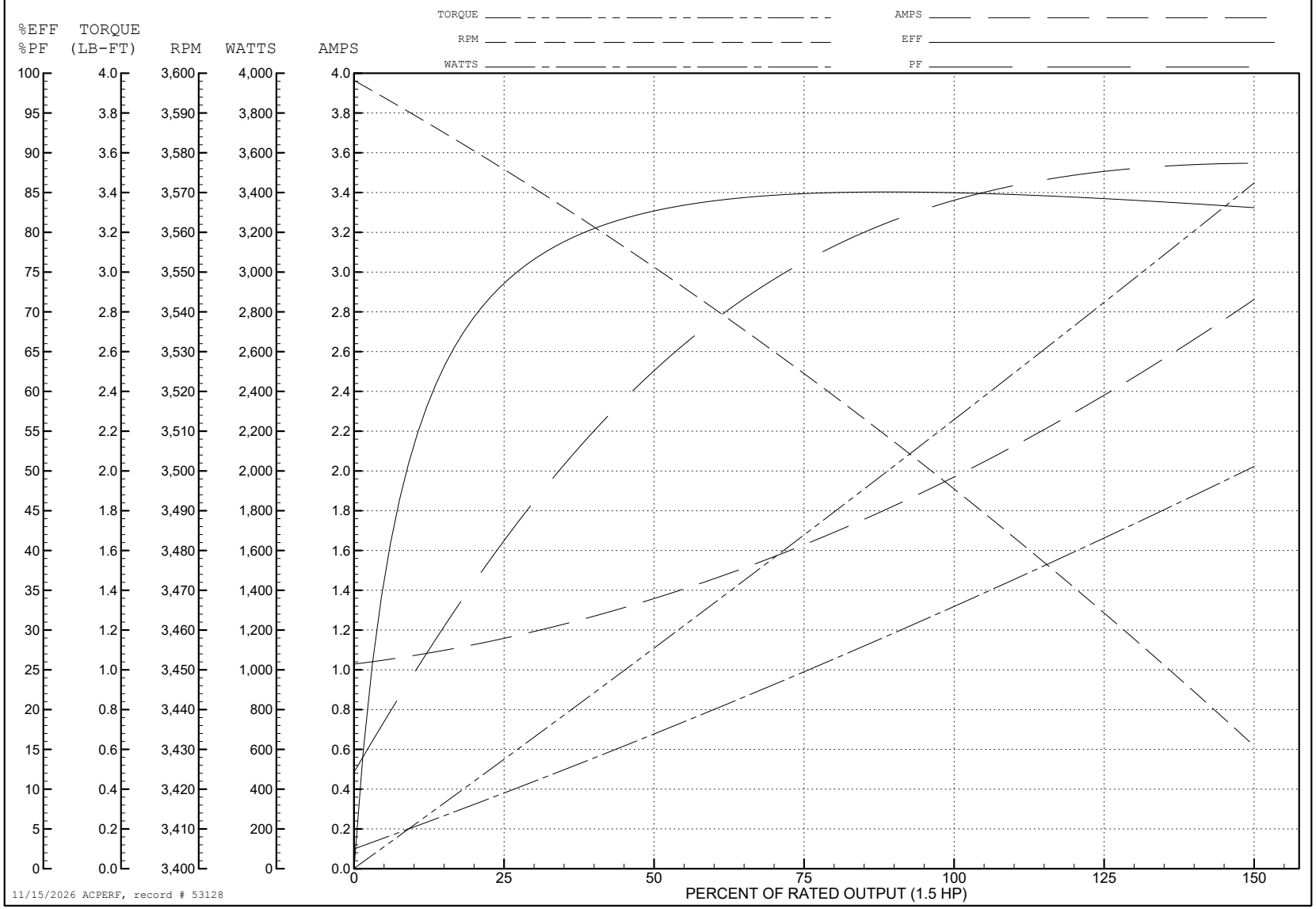
ABB Motors and Mechanical Inc.

WINDING # 35WGM761

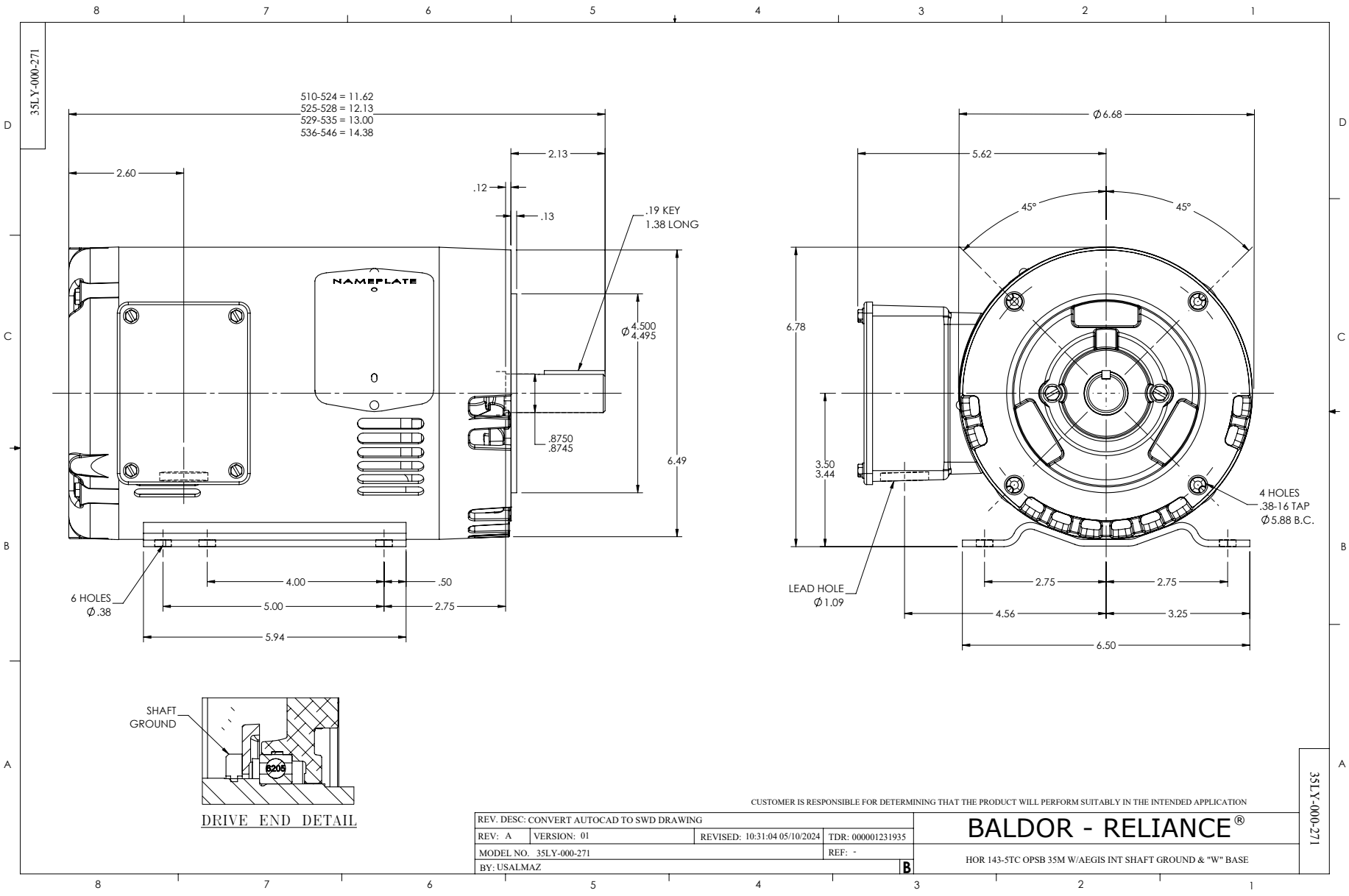
1.5 HP 3 PH 60 HZ 3490 RPM 460 V 3518M

Typical performance - not guaranteed values.

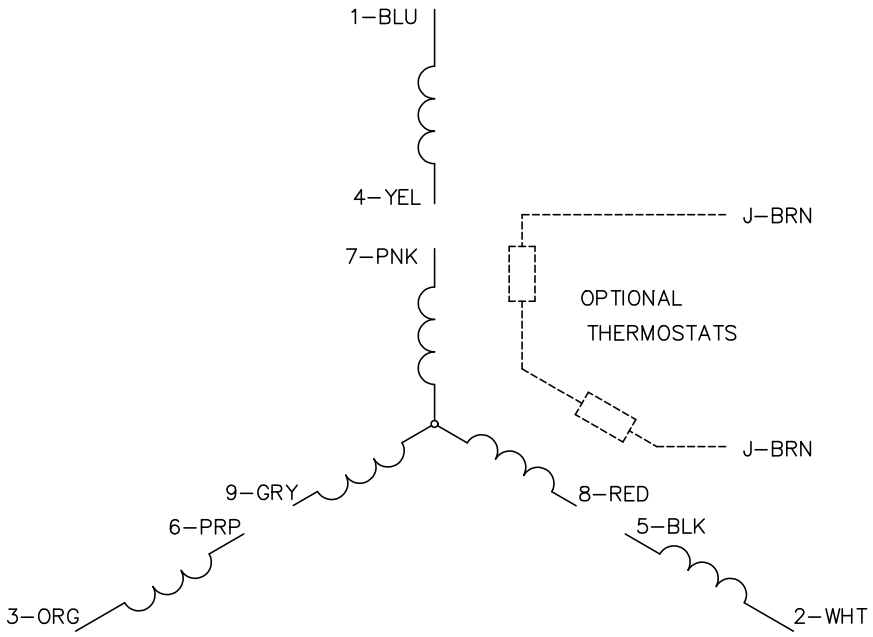
TORQUES(LB-FT): PO=9.32 PU=4.18 LR=6.79 LRA=17.2

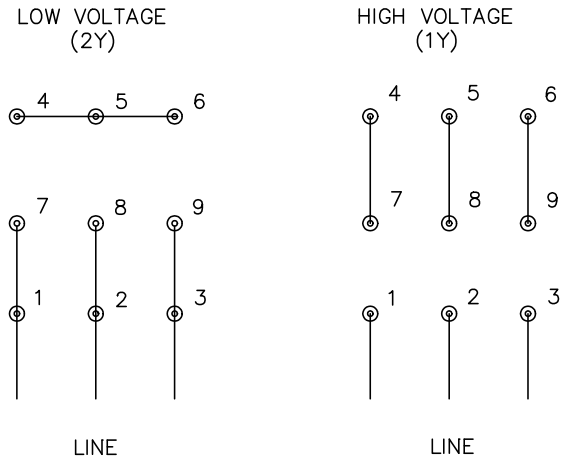


11/15/2026 ACPERF, record # 53128


35LY-000-271
510-524 = 11.62
525-528 = 12.13
529-535 = 13.00
536-546 = 14.38
2.60
2.13
.12
.13
.19 KEY
1.38 LONG
NAMEPLATE
Ø 4.500
4.495
.8750
.8745
6.49
6 HOLES
Ø .38
4.00
.50
5.00
2.75
5.94
Ø 6.68
5.62
45°
45°
6.78
3.50
3.44
4 HOLES
.38-16 TAP
Ø 5.88 B.C.
LEAD HOLE
Ø 1.09
2.75
2.75
4.56
3.25
6.50
SHAFT
GROUND
6205
DRIVE END DETAIL
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT THE PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION
REV. DESC: CONVERT AUTOCAD TO SWD DRAWING
REV: A
VERSION: 01
REVISED: 10:31:04 05/10/2024
TDR: 000001231935
MODEL NO. 35LY-000-271
REF: -
BY: USALMAZ
B
BALDOR - RELIANCE®
HOR 143-5TC OPSB 35M W/AEGIS INT SHAFT GROUND & "W" BASE
35LY-000-271

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