

BALDOR® • RELIANCE 

Product Information Packet

CEM3120T-G

1.5HP,3490RPM,3PH,60HZ,143TC,3518M,OPSB

Part Detail							
Revision:	A	Status:	PRD/A	Change #:		Proprietary:	No
Type:	AC	Elec. Spec:	35WGM761	CD Diagram:	CD0005	Mfg Plant:	
Mech. Spec:		Layout:	35LY-000-271	Poles:	02	Created Date:	03-09-2020
Base:		Eff. Date:	11-11-2021	Leads:	9#18		

Specs			
Catalog Number:	CEM3120T-G	Feedback Device:	NO FEEDBACK
Enclosure:	OPSB	Heater Indicator:	No Heater
Frame:	143TC	Insulation Class:	H
Frame Material:	Steel	Inverter Code:	Inverter Ready
Output @ Frequency:	1.500 HP @ 60 HZ	IP Rating:	NONE
Synchronous Speed @ Frequency:	3600 RPM @ 60 HZ	KVA Code:	L
Voltage @ Frequency:	460.0 V @ 60 HZ	Lifting Lugs:	No Lifting Lugs
	230.0 V @ 60 HZ	Locked Bearing Indicator:	Locked Bearing
XP Class and Group:	None	Motor Lead Termination:	Flying Leads
XP Division:	Not Applicable	Motor Type:	3518M
Agency Approvals:	CSA	Mounting Arrangement:	F1
	CSA EEV	Power Factor:	83
	UR	Product Family:	General Purpose
Auxillary Box:	No Auxillary Box	Pulley Face Code:	C-Face
Auxillary Box Lead Termination:	None	Rodent Screen:	None
Base Indicator:	Rigid	Shaft Ground Indicator:	Shaft Grounding
Bearing Grease Type:	Polyrex EM (-20F +300F)	Shaft Rotation:	Reversible
Blower:	None	Speed Code:	Single Speed

Current @ Voltage:	2.000 A @ 460.0 V	Motor Standards:	NEMA
	4.000 A @ 230.0 V	Starting Method:	Direct on line
Design Code:	B	Thermal Device - Bearing:	None
Drip Cover:	No Drip Cover	Thermal Device - Winding:	None
Duty Rating:	CONT	Vibration Sensor Indicator:	No Vibration Sensor
Electrically Isolated Bearing:	Not Electrically Isolated	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	
NEMA NOM. EFF	84			PF	83			CLASS	H
RATING	40C AMB-CONT								
CC	010A						USABLE AT 208V	4.2	
DE	6205			ODE	6203				
ENCL	OPSB			SN					
VPWM INVERTER READY									
CT30-60(2:1) VT3-60(20:1)									
USABLE AT	50HZ 1.5HP 190/380V 4.6/2.3A								SF1.0

Parts List		
Part Number	Description	Quantity
SA379870	SA 35-0000836	1.000 EA
RA369897	RA 35-0000836	1.000 EA
LC0005E01	CONN.DIA./WARNING LABEL (LC0005/LB1119N)	1.000 EA
NP3553LUA	ALUM SUPER-E VPWM INVERTER READY UL	1.000 EA
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	2.000 EA
MN416A01	TAG-INSTAL-MAINT no wire (2100/bx) 4/22	1.000 EA
MJ1000A02	GREASE, MOBIL POLYREX EM - 124047	0.050 LB
HA3100A14	THRUBOLT 10-32 X 7.875	4.000 EA
LB1459	AEGIS SGR LABEL "AEGISLBL-100"	1.000 EA
35EP3209G00	MASTER ODE,203 BRG	1.000 EA
HW5100A03	WAVY WASHER (W1543-017)	1.000 EA
35EP3402C00	MASTER DE,205 BRG,OPEN	1.000 EA
51XN1032A20	10-32 X 1 1/4 HX WS SL SR	2.000 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
FE-0000001	ZRTG FE ASSEMBLY	1.000 EA
11XW1032G06	10-32 X .38, TAPTITE II, HEX WSHR SLTD U	1.000 EA
PE-0000001	ZRTG PE ASSEMBLY	1.000 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
NS2512A01	INSULATOR, CONDUIT BOX X	1.000 EA
35AD2005B01	BAFFLE PLATE,MOD 35-SLTD BAND MTR TDR	1.000 EA
35AD2005B01	BAFFLE PLATE,MOD 35-SLTD BAND MTR TDR	1.000 EA
MG1000Y03	MUNSELL 2.53Y 6.70/ 4.60, GLOSS 20,	0.022 GA

Parts List (continued)		
Part Number	Description	Quantity
36PA1000	PKG GRP, PRINT PK1016A06	1.000 EA
35PA1066	PKG GRP, PRINT PK1008A06	1.000 EA
HW2501D13	KEY, 3/16 SQ X 1.375	1.000 EA
HA7000A01	KEY RETAINER 7/8" DIA SHAFT	1.000 EA

AC Induction Motor Performance Data

Record # 53128

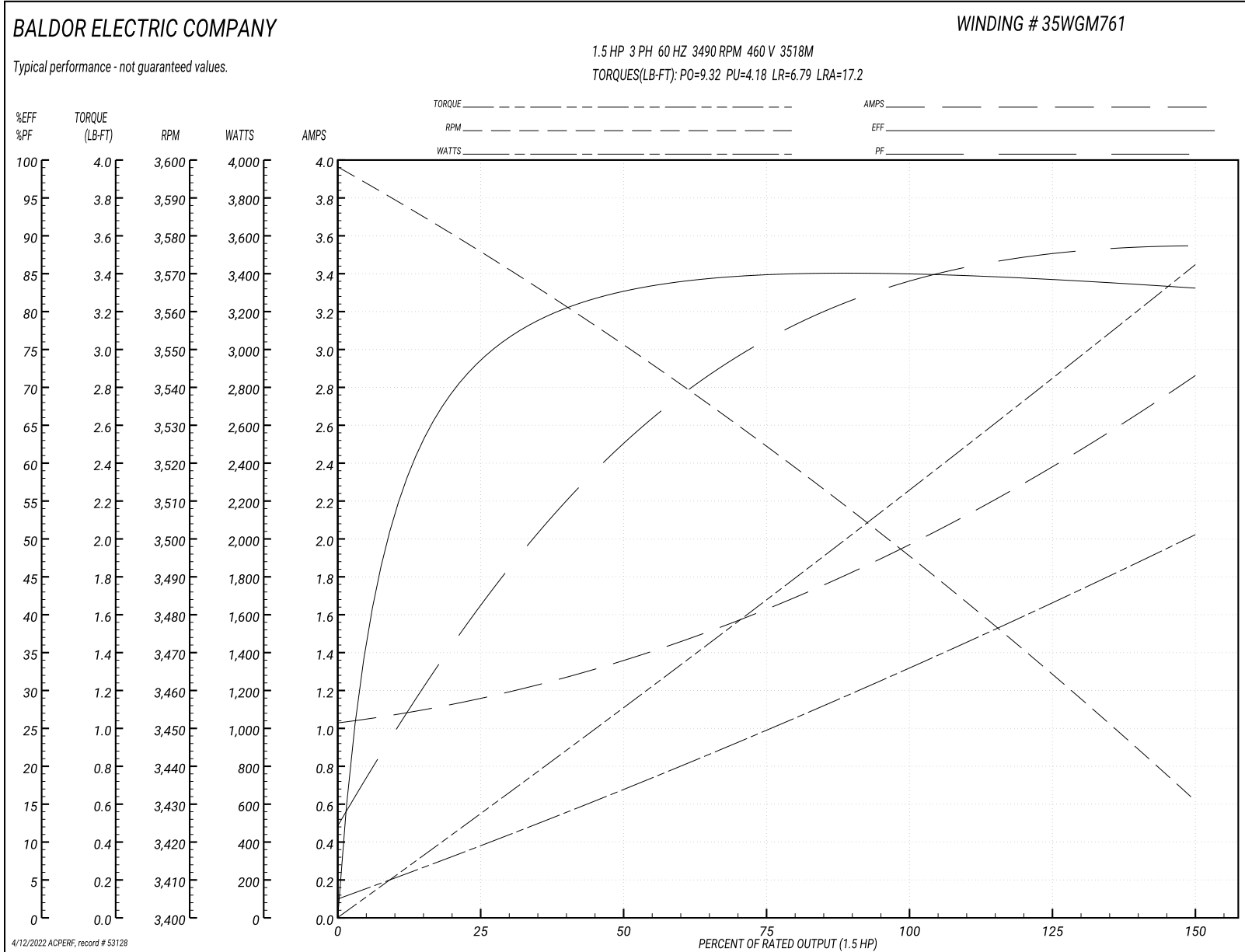
Typical performance - not guaranteed values

Winding: 35WGM761-R009		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	Locked-rotor Torque	6.79 LB-FT		
NEMA Design Code	B	Starting Current	17.2 A		
Service Factor (S.F.)	1.15	No-load Current	1.05 A		
NEMA Nom. Eff.	84	Line-line Res. @ 25°C	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-FT ²		

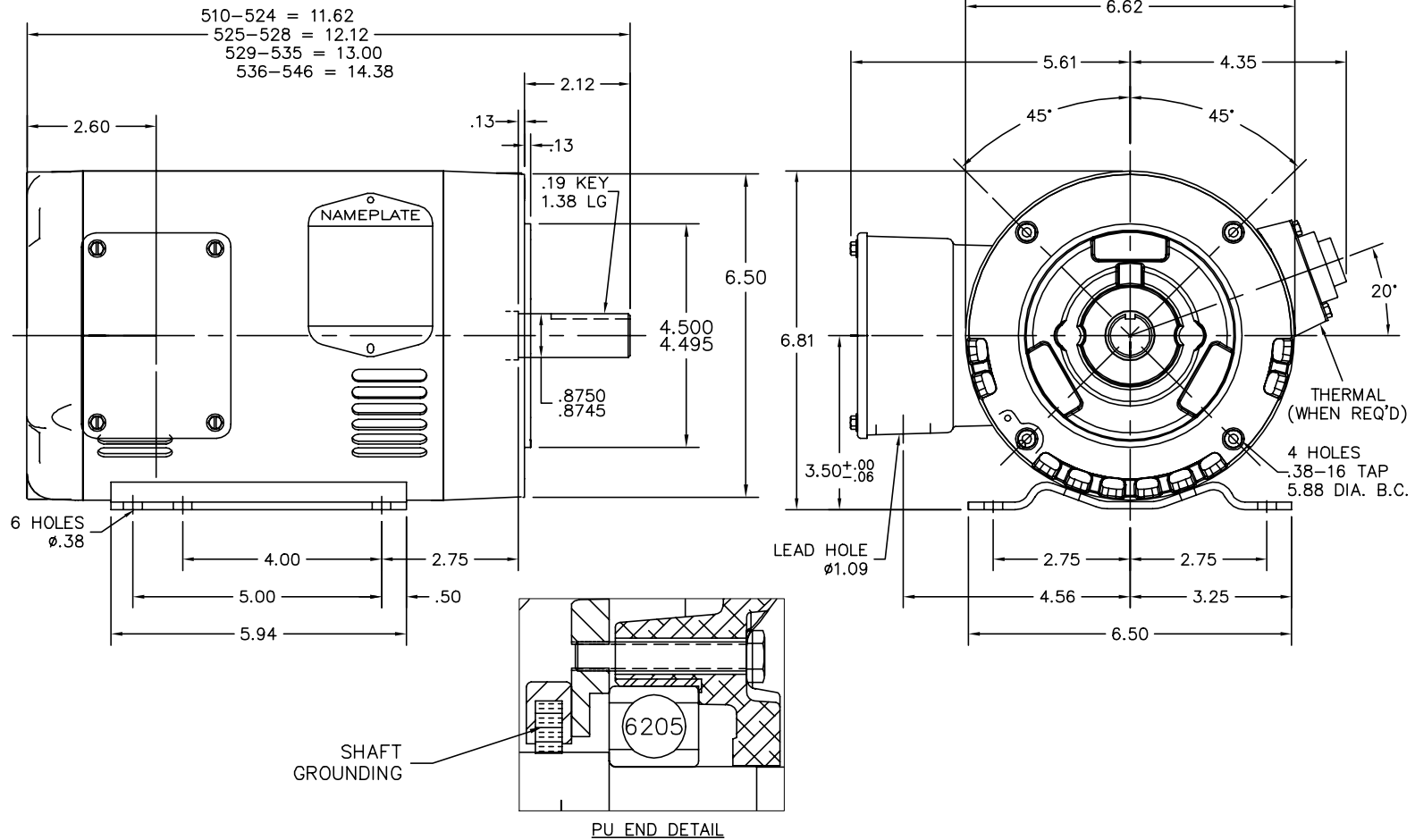
Load Characteristics 460 V, 60 Hz, 1.5 HP

% 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

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



35LY-000-271



CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT THE PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION.

REV. DESC: NEW		
REV. LTR: -	VERSION: 00	TDR: 000001130400
FILE: \AAA\00252\316	REVISED: 02: 37: 54 01/22/2020	BY: ENROBRO
MTL: -		

BALDOR - RELIANCE®

HOR 143-5TC OPSB 35M W/AEGIS INT SHAFT GROUND & "W" BASE

SH 1 of 1

35LY-000-271

CD0005

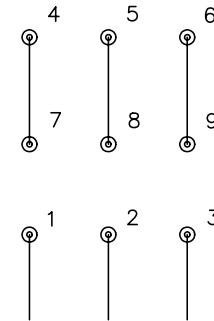


LOW VOLTAGE
(2Y)



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

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