

BALDOR® • RELIANCE 

Product Information Packet

CEM3538-BG

.5HP, 1735RPM, 3PH, 60HZ, 56C, 3514M, TEFC, F1

Part Detail							
Revision:	J	Status:	PRD/A	Change #:		Proprietary:	No
Type:	AC	Elec. Spec:	35WGP862	CD Diagram:	CD0005	Mfg Plant:	
Mech. Spec:	35E2213	Layout:	35LYE2213	Poles:	04	Created Date:	10-04-2013
Base:	RG	Eff. Date:	03-02-2018	Leads:	9#18		

Specs			
Catalog Number:	CEM3538-BG	Heater Indicator:	No Heater
Enclosure:	TEFC	Insulation Class:	H
Frame:	56C	Inverter Code:	Not Inverter
Frame Material:	Steel	KVA Code:	K
Output @ Frequency:	.500 HP @ 60 HZ	Lifting Lugs:	No Lifting Lugs
Synchronous Speed @ Frequency:	1800 RPM @ 60 HZ	Locked Bearing Indicator:	Locked Bearing
Voltage @ Frequency:	208.0 V @ 60 HZ	Motor Lead Quantity/Wire Size:	9 @ 18 AWG
	460.0 V @ 60 HZ	Motor Lead Exit:	Ko Box
	230.0 V @ 60 HZ	Motor Lead Termination:	Flying Leads
XP Class and Group:	None	Motor Type:	3514M
XP Division:	Not Applicable	Mounting Arrangement:	F1
Agency Approvals:	CSA	Power Factor:	74
	CSA EEV	Product Family:	General Purpose
	UR	Pulley End Bearing Type:	Ball
Auxillary Box:	No Auxillary Box	Pulley Face Code:	C-Face
Auxillary Box Lead Termination:	None	Pulley Shaft Indicator:	Standard
Base Indicator:	Rigid	Rodent Screen:	None
Bearing Grease Type:	Polyrex EM (-20F +300F)	RoHS Status:	ROHS COMPLIANT

Blower:	None	Shaft Extension Location:	Pulley End
Current @ Voltage:	1.700 A @ 208.0 V	Shaft Ground Indicator:	Shaft Grounding
	1.600 A @ 230.0 V	Shaft Rotation:	Reversible
	.800 A @ 460.0 V	Shaft Slinger Indicator:	No Slinger
Design Code:	B	Speed Code:	Single Speed
Drip Cover:	No Drip Cover	Motor Standards:	NEMA
Duty Rating:	CONT	Starting Method:	Direct on line
Electrically Isolated Bearing:	Not Electrically Isolated	Thermal Device - Bearing:	NONE (OLD)
Feedback Device:	NO FEEDBACK	Thermal Device - Winding:	None
Front Face Code:	Standard	Vibration Sensor Indicator:	No Vibration Sensor
Front Shaft Indicator:	None	Winding Thermal 1:	None
		Winding Thermal 2:	None

Nameplate NP3441L										
CAT.NO.	CEM3538-BG									
SPEC.	35E2213P862G1									
HP	.5									
VOLTS	208-230/460									
AMP	1.7-1.6/.8									
RPM	1735									
FRAME	56C				HZ	60			PH	3
SER.F.	1.15		CODE	K	DES	B		CL	H	
NEMA-NOM-EFF	82.5		PF	74						
RATING	40C AMB-CONT									
CC	USABLE AT 208V									
DE	6205				ODE	6203				
ENCL	TEFC		SN							
VPWM INVERTER READY										
CT6-60H(10:1)VT3-60H(20:1)										
	SFA 1.9-1.8/.9									

Parts List		
Part Number	Description	Quantity
SA270202	SA 35E2213P862G1	1.000 EA
RA256841	RA 35E2213P862G1	1.000 EA
34FN3002B01	EXTERNAL FAN, PLASTIC, .637/.639 HUB W/	1.000 EA
NS2512A01	INSULATOR, CONDUIT BOX X	1.000 EA
35CB3007	35 CB CASTING W/.88 DIA. LEAD HOLE	1.000 EA
36GS1000SP	GASKET-CONDUIT BOX, .06 THICK #SV-330 LE	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
35EP3122K00	MASTER ODE,203 BRG,.683SH,#26 DRN,FH MTG	1.000 EA
HW5100A03	WAVY WASHER (W1543-017)	1.000 EA
35EP3307F00	MASTER DE,205 BRG,.998SH,#26 DRN	1.000 EA
51XN1032A20	10-32 X 1 1/4 HX WS SL SR	2.000 EA
51XB1214A16	12-14X1.00 HXWSSLD SERTYB	1.000 EA
35FH4005A32SP	IEC FH NO GRSR W/3 HOLES - PRIMED	1.000 EA
51XW1032A06	10-32 X .38, TAPTITE II, HEX WSHR SLTD S	3.000 EA
35CB4521GX	CONDUIT BOX LID KIT **ORDER INDIV PARTS	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
HA7000A04	KEY RETAINER 0.625 DIA SHAFTS	1.000 EA
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	2.000 EA
LB1508	LABEL "SHAFT GROUNDING BRUSH" 1.50 X .81	1.000 EA
MJ1000A02	GREASE, POLYREX EM EXXON (USe 4824-15A)	0.050 LB
MG1000Y03	MUNSELL 2.53Y 6.70/ 4.60, GLOSS 20,	0.017 GA
HA3100A12	THRUBOLT 10-32 X 7.375	4.000 EA

Parts List (continued)		
Part Number	Description	Quantity
LC0005E01	CONN.DIA./WARNING LABEL (LC0005/LB1119N)	1.000 EA
NP3441L	ALUM SUPER-E VPWM INVERTER READY UL	1.000 EA
35PA1066	PKG GRP, PRINT PK1008A06	1.000 EA
MN416A01	TAG-INSTAL-MAINT no wire (1200/bx) 5/18	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 # 68079 - Typical performance - not guaranteed values

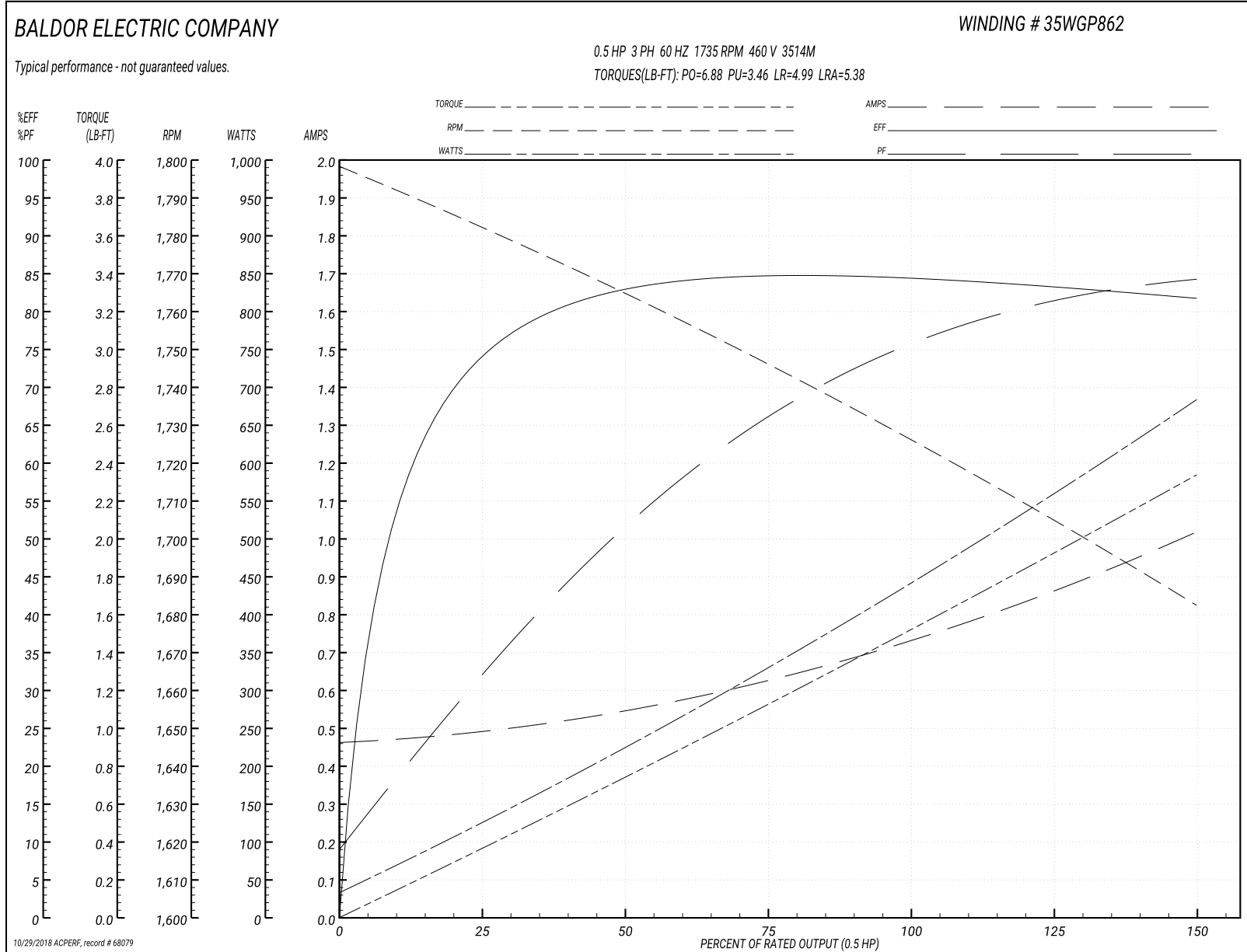
Winding: 35WGP862-R072	Type: 3514M	Enclosure: TEFC
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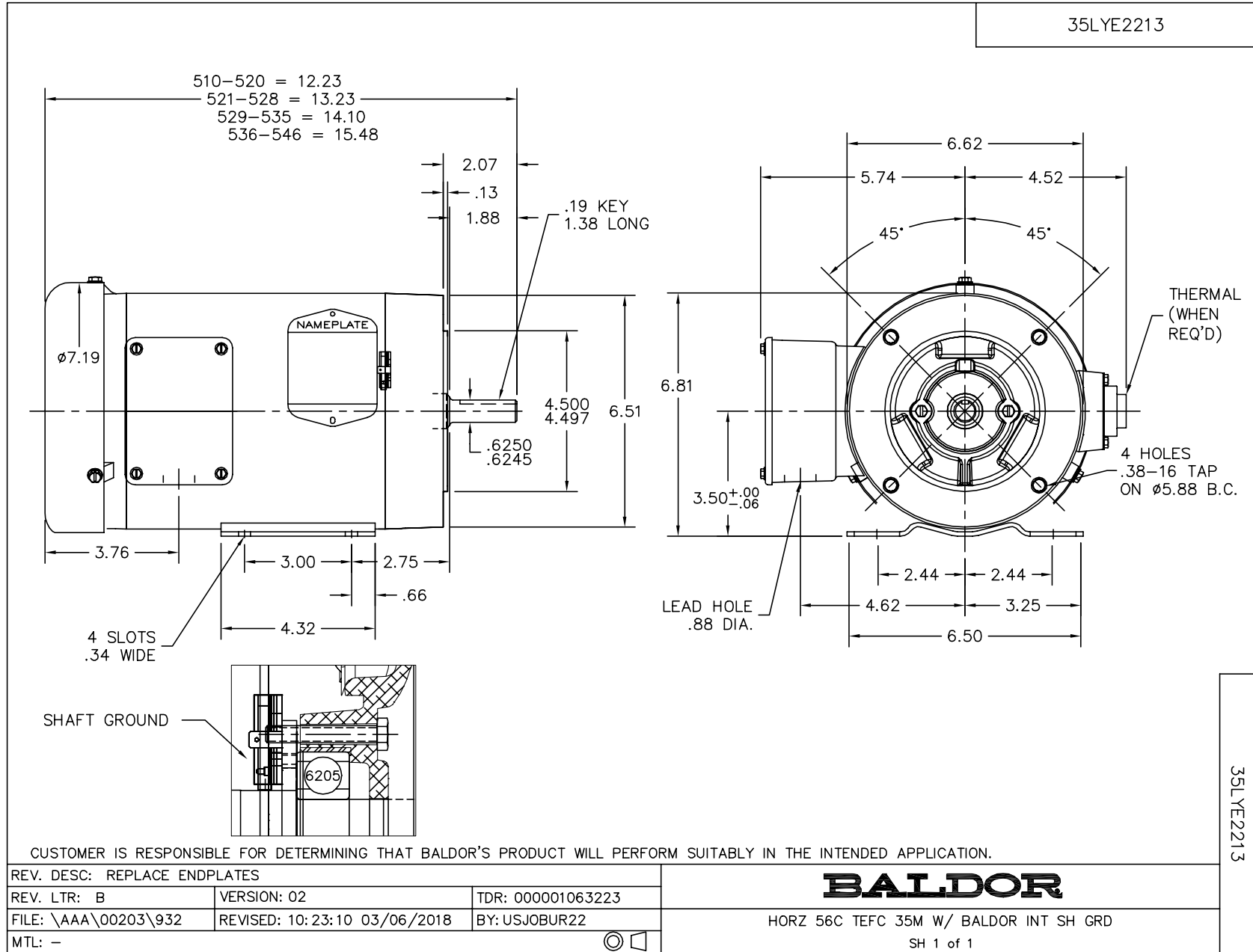
Nameplate Data				460 V, 60 Hz: High Voltage Connection	
Rated Output (HP)	.5			Full Load Torque	1.53 LB-FT
Volts	208-230/460			Start Configuration	direct on line
Full Load Amps	1.7-1.6/.8			Breakdown Torque	6.88 LB-FT
R.P.M.	1735			Pull-up Torque	3.46 LB-FT
Hz	60	Phase	3	Locked-rotor Torque	4.99 LB-FT
NEMA Design Code	B	KVA Code	K	Starting Current	5.38 A
Service Factor (S.F.)	1.15			No-load Current	0.465 A
NEMA Nom. Eff.	82.5	Power Factor	74	Line-line Res. @ 25°C	35.3 Ω
Rating - Duty	40C AMB-CONT			Temp. Rise @ Rated Load	52°C
S.F. Amps	1.9-1.8/.9			Temp. Rise @ S.F. Load	68°C
				Locked-rotor Power Factor	67.6
				Rotor inertia	0.0827 LB-FT ²

Load Characteristics 460 V, 60 Hz, 0.5 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	33	52	66	76	82	84	80
Efficiency	74.3	82.6	84.6	84.4	83.4	81.6	83.8
Speed	1781	1764	1746	1726	1705	1682	1713
Line amperes	0.489	0.545	0.634	0.737	0.86	1.02	0.811

Performance Graph at 460V, 60Hz, 0.5HP Typical performance - Not guaranteed values





CD0005

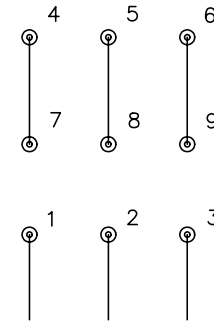


LOW VOLTAGE
(2Y)



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

90000

FILE: AAA00005140

MDL: -

MTL: -

BALDOR ELECTRIC Co.

3PH, DV, 9 LEADS

CD0005