



Customer information packet

CEM3538-BG

.5HP, 1775RPM, 3PH, 60HZ, 56C, 3514M, TEFC, F1

Class - None

Division - Not Applicable

Specifications

Enclosure	TEFC
Frame	56C
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	.500 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	230.0 V @ 60 HZ 208.0 V @ 60 HZ 460.0 V @ 60 HZ
Agency Approvals	NEMA PREMIUM NEMA_PREMIUM UR CSA EEV
Ambient Temperature	40 °C
Auxillary Box	No Auxillary Box
Auxillary Box Lead Termination	None
Base Indicator	Rigid
Bearing Grease Type	Polyrex EM (-20F +300F)
Blower	None
Current @ Voltage	2.020 A @ 230.0 V 1.900 A @ 208.0 V 1.010 A @ 460.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	81.5 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK

Part detail

Revision	C
Type	AC
Mech. spec.	35E2213
Base	
Status	PRD/A
Elec. spec.	35WGG069
Layout	35LYE2213
Eff. date	04-29-2024
CD Diagram	CD0005
Poles	04
Leads	9#18
Proprietary	False
Created date	09-15-2023

Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	1.0 a
Insulation Class	H
Inverter Code	Inverter Duty
KVA Code	N
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	3514M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	12.23 IN
Power Factor	63
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	0.625 IN
Shaft Ground Indicator	Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	1775 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

NP3441LUA

CAT.NO.	CEM3538-BG						
SPEC	35E2213G069G2						
HP	.5						
VOLTS	208-230/460						
AMPS	1.9-2/1						
RPM	1775						
FRAME	56C		HZ	60		PH	3
SF	1.15	CODE	N	DES	B	CLASS	H
NEMA NOM. EFF	81.5	PF	63				
RATING	40C AMB-CONT						
CC							
ENCL	TEFC	SER					
DE	6205	ODE	6203				
VPWM INVERTER READY							
CT6-60H(10:1)VT3-60H(20:1)							
.5HP 190/380V 50HZ 1.8/0.9A							

AC Induction Motor Performance Data

Record # 101698

Typical performance - not guaranteed values

Winding: 35WGG069-R090		Type: 3514M	Enclosure: TEFC	
Nameplate Data			460 V, 60 Hz: High Voltage Connection	
Rated Output (HP)	.5	Full Load Torque	1.48 LB-FT	
Volts	208-230/460	Start Configuration	direct on line	
Full Load Amps	1.9-2.02/1.01	Breakdown Torque	8 LB-FT	
R.P.M.	1775	Pull-up Torque	4.4 LB-FT	
Hz	60 Phase	Locked-rotor Torque	5.1 LB-FT	
NEMA Design Code	B KVA Code	Starting Current	8.4 A	
Service Factor (S.F.)	1.15	No-load Current	0.85 A	
NEMA Nom. Eff.	81.5 Power Factor	Line-line Res. @ 25°C	30.3 Ω	
Rating - Duty	40C AMB-CONT	Temp. Rise @ Rated Load	19°C	
S.F. Amps		Temp. Rise @ S.F. Load	20°C	
		Locked-rotor Power Factor	66.8	
		Rotor inertia	0.101 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	24	37	48	58	65	71	62
Efficiency	58.9	72.5	78.4	80.5	81.6	81.5	81.2
Speed	1793	1788	1782	1776	1771	1763	1773
Line amperes	0.85	0.89	0.94	1.01	1.11	1.21	1.07

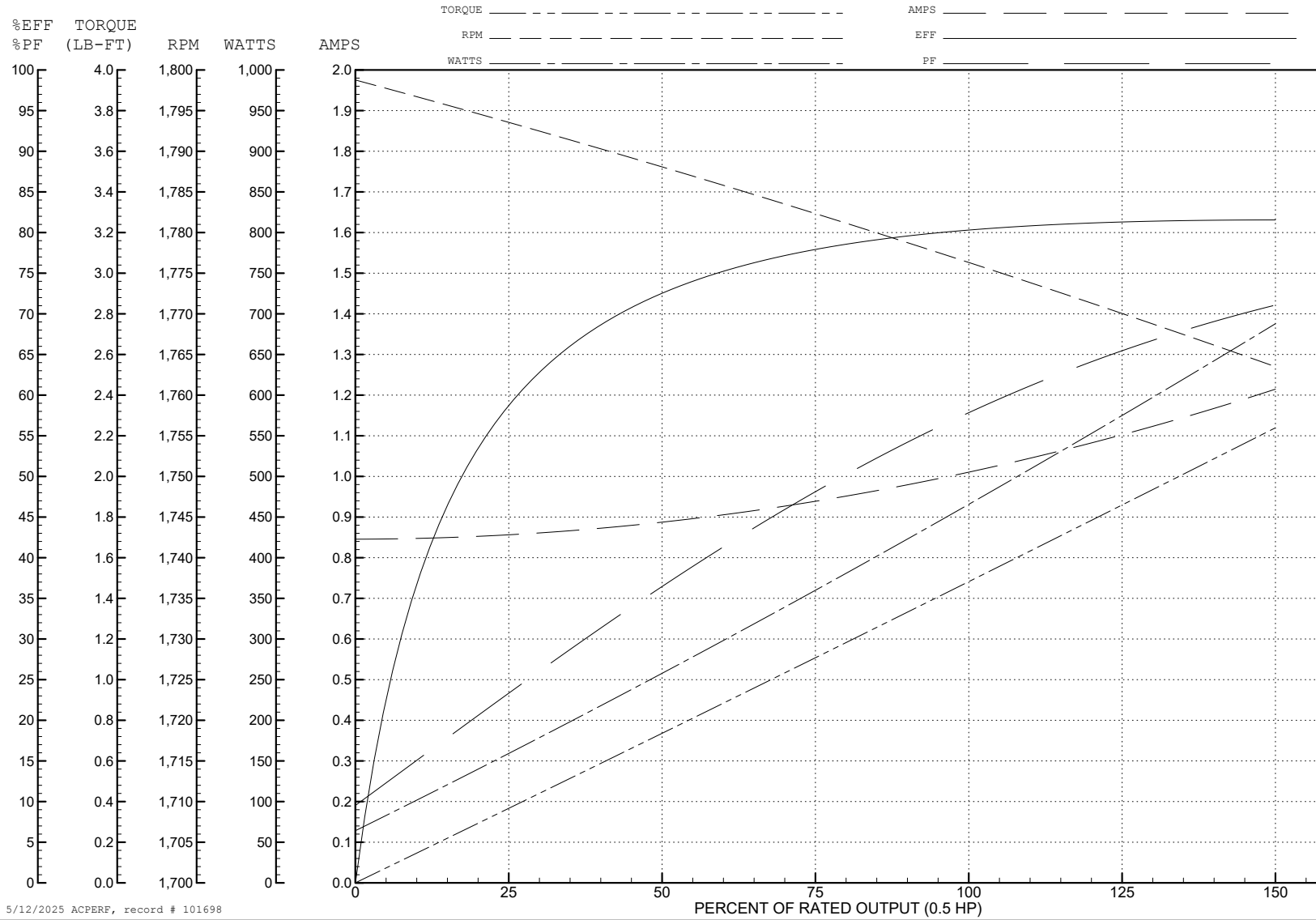
ABB Motors and Mechanical Inc.

WINDING # 35WGG069

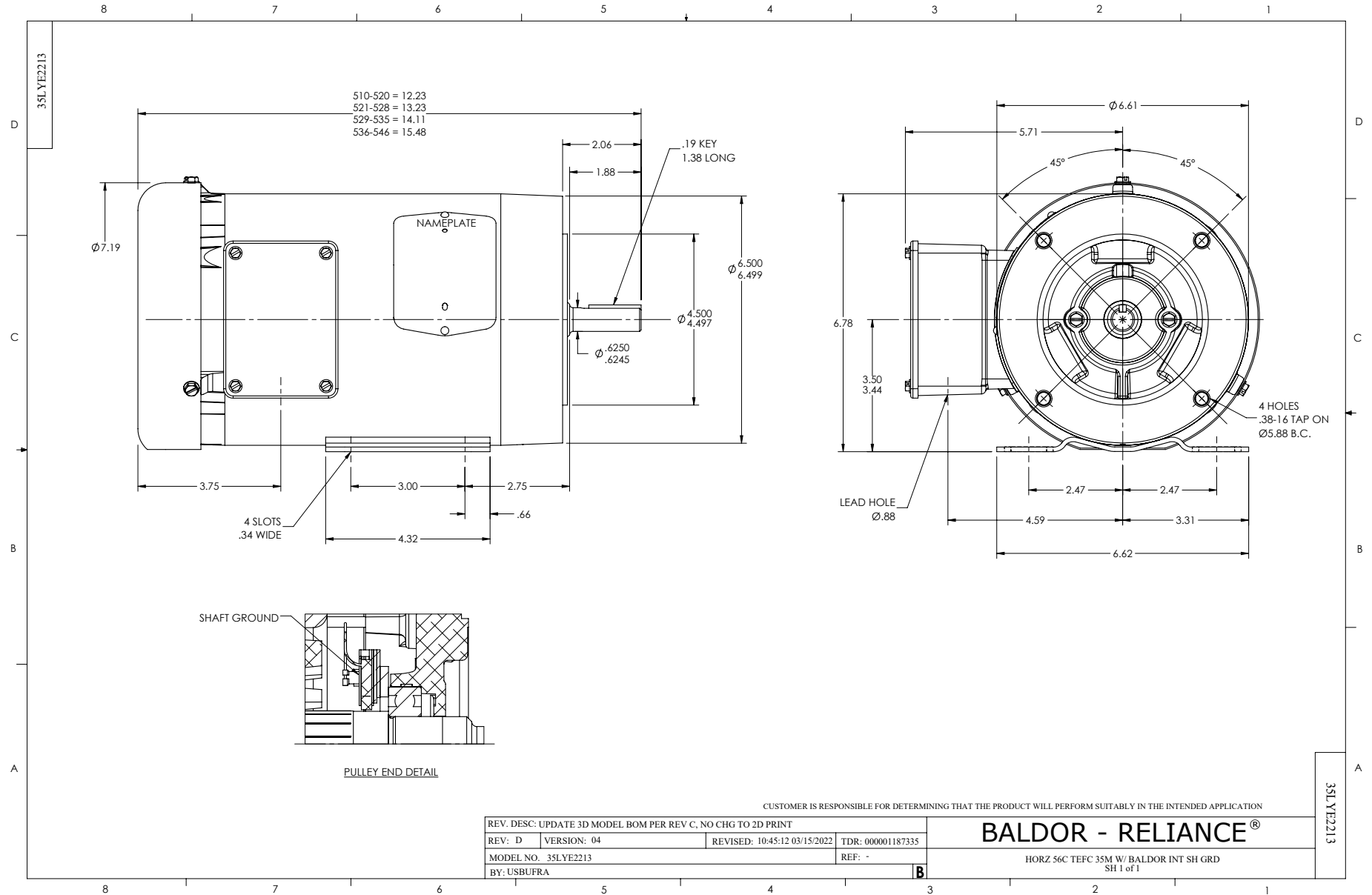
0.5 HP 3 PH 60 HZ 1775 RPM 460 V 3514M

Typical performance - not guaranteed values.

TORQUES (LB-FT): PO=8 PU=4.4 LR=5.1 LRA=8.4



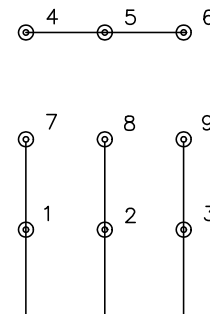
5/12/2025 ACPERF, record # 101698



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
S00000		FILE: AAA00005140	MDL: -
		MTL: -	

BALDOR ELECTRIC Co.

3PH, DV, 9 LEADS

CD0005