

BALDOR • RELIANCE

Customer information packet

VEM3538

.5HP, 1770RPM, 3PH, 60HZ, 56C, 3512M, TEFC, F1

Class - None

Division - Not Applicable

Specifications

Enclosure	TEFC
Frame	56C
Frame Material	Steel
Frequency	60.00 Hz
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 460.0 V @ 60 HZ
XP Class and Group	None
XP Division	Not Applicable
Agency Approvals	CSA UR
Ambient Temperature	40 °C
Auxillary Box	No Auxillary Box
Auxillary Box Lead Termination	None
Base Indicator	No Mounting
Bearing Grease Type	Polyrex EM (-20F +300F)
Blower	None
Current @ Voltage	.900 A @ 460.0 V 1.800 A @ 230.0 V 1.900 A @ 208.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	78.2 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	0.9 a

Part detail

Revision	E
Type	AC
Mech. spec.	35J302
Base	
Status	PRD/A
Elec. spec.	35WGG155
Layout	35LYJ302
Eff. date	04-12-2023
CD Diagram	CD0005
Poles	04
Leads	9#18
Proprietary	False
Created date	07-16-2021

Insulation Class	F
Inverter Code	Inverter Duty
KVA Code	M
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	3512M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	12.23 IN
Power Factor	62
Product Family	General Purpose
Pulley End Bearing Type	Ball
Pulley Face Code	C-Face
Pulley Shaft Indicator	Standard
Rodent Screen	None
RoHS Status	ROHS COMPLIANT
Service Factor	1.25
Shaft Diameter	0.625 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	1770 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

NP2116L									
CAT.NO.	VEM3538								
SPEC.	35J302G155								
HP	.5								
VOLTS	230/460								
AMP	1.8/.9								
RPM	1770								
FRAME	56C			HZ	60		PH	3	
SER.F.	1.25	CODE	M	DES	B	CL	F		
NEMA-NOM-EFF	78.2	PF	62						
RATING	40C AMB-CONT								
CC				USABLE AT 208V	N/A				
DE	6205	ODE	6203						
ENCL	TEFC	SN							
	SFA 2/1								

AC Induction Motor Performance Data

Record # 82208

Typical performance - not guaranteed values

Winding: 35WGG155-R002		Type: 3512M		Enclosure: TEFC	
Nameplate Data			460 V, 60 Hz: High Voltage Connection		
Rated Output (HP)	.5	Full Load Torque	1.49 LB-FT		
Volts	230/460	Start Configuration	direct on line		
Full Load Amps	1.8/9	Breakdown Torque	6.28 LB-FT		
R.P.M.	1770	Pull-up Torque	3.26 LB-FT		
Hz	60	Phase	3	Locked-rotor Torque	4.04 LB-FT
NEMA Design Code	B	KVA Code	M	Starting Current	6.71 A
Service Factor (S.F.)	1.25		No-load Current	0.792 A	
NEMA Nom. Eff.	80	Power Factor	65	Line-line Res. @ 25°C	40.94 Ω
Rating - Duty	40C AMB-CONT		Temp. Rise @ Rated Load	22°C	
S.F. Amps	2/1		Temp. Rise @ S.F. Load	26°C	
			Locked-rotor Power Factor	70.8	

Load Characteristics 460 V, 60 Hz, 0.5 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	27	41	52	62	69	75	69
Efficiency	56.6	70.7	76.4	79	80	80	80
Speed	1792.1	1785.5	1778.6	1771.3	1763.2	1754.7	1763
Line amperes	0.795	0.827	0.889	0.966	1.06	1.18	1.06

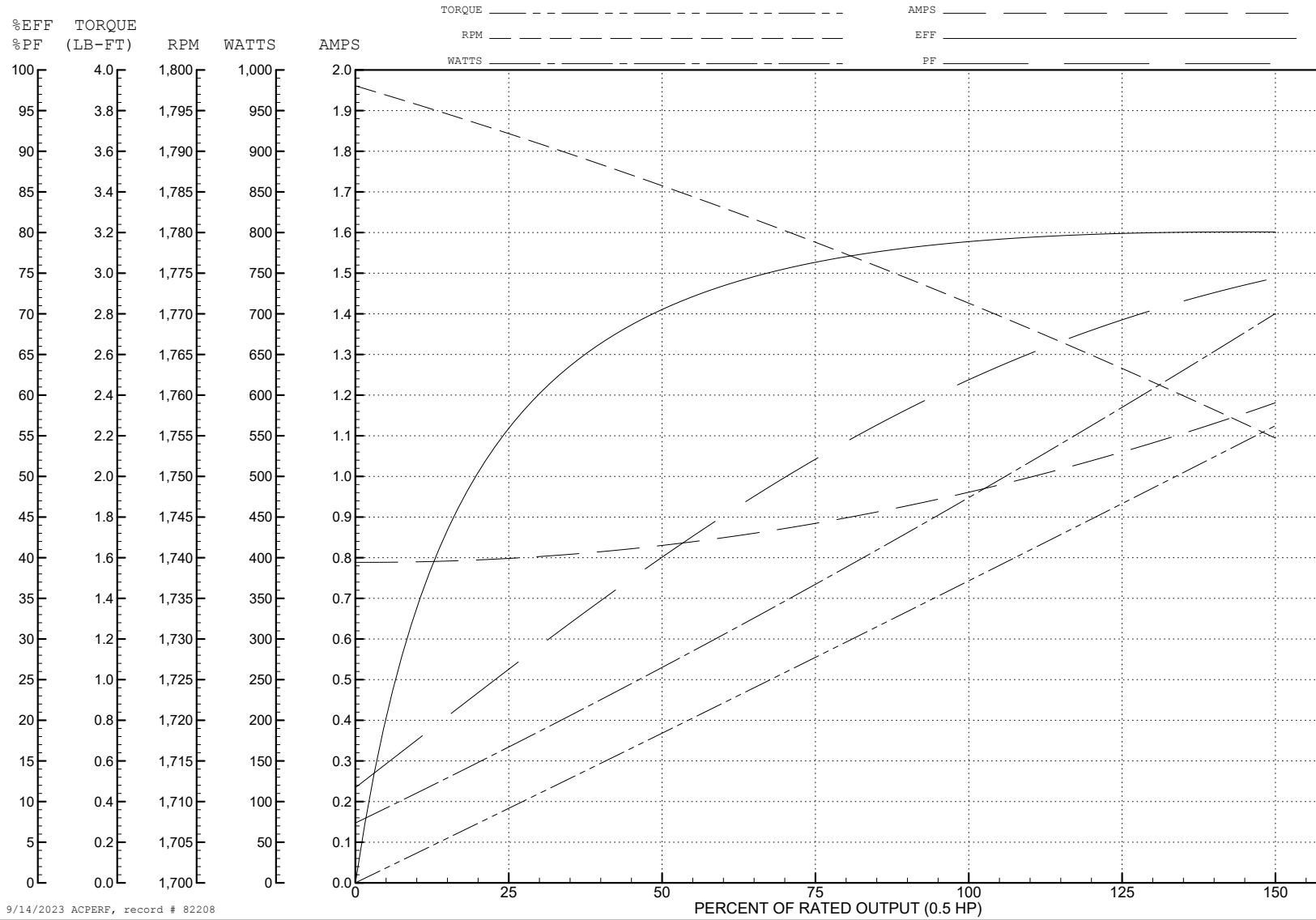
ABB Motors and Mechanical Inc.

WINDING # 35WGG155

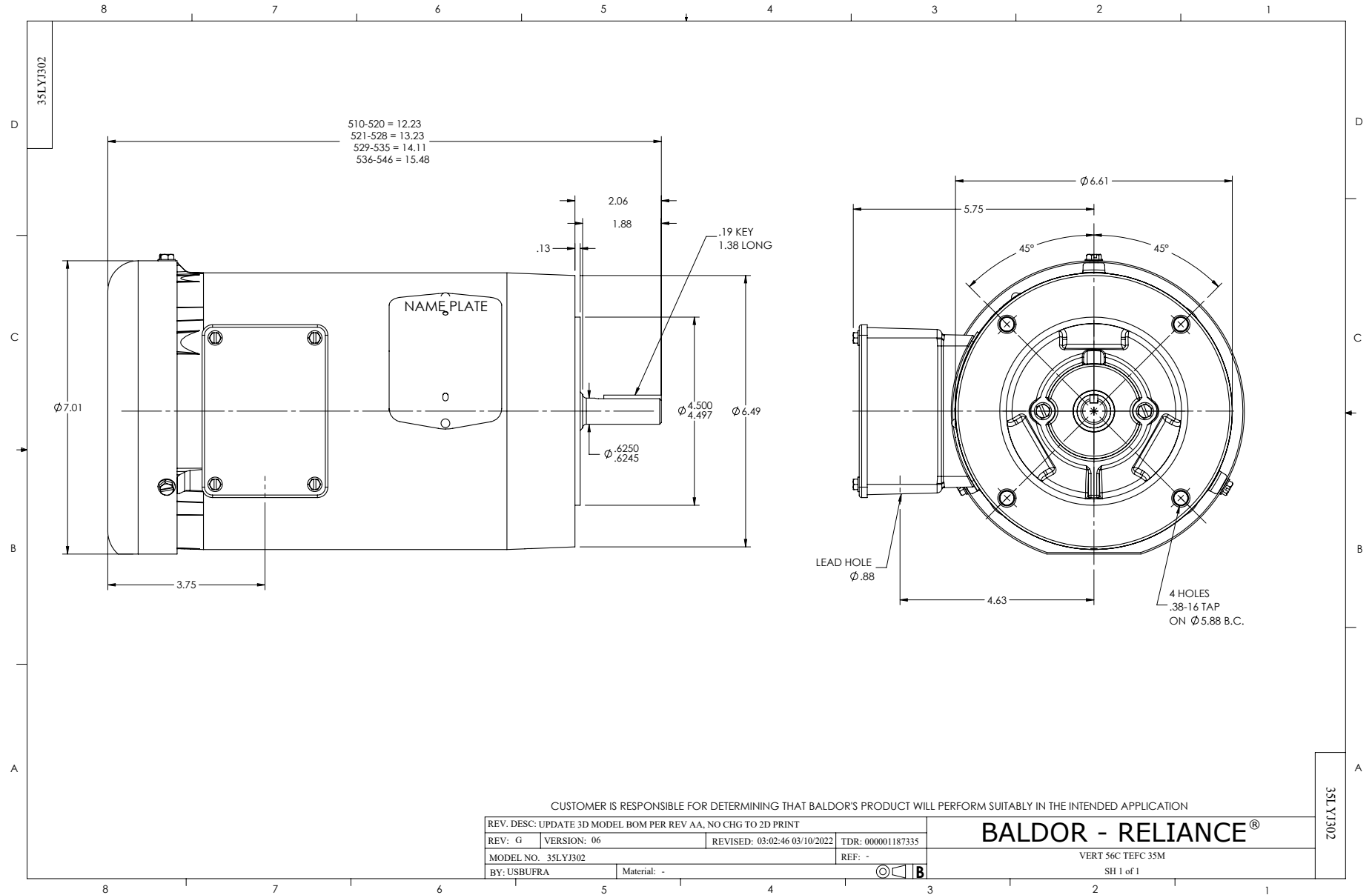
0.5 HP 3 PH 60 HZ 1770 RPM 460 V 3512M

Typical performance - not guaranteed values.

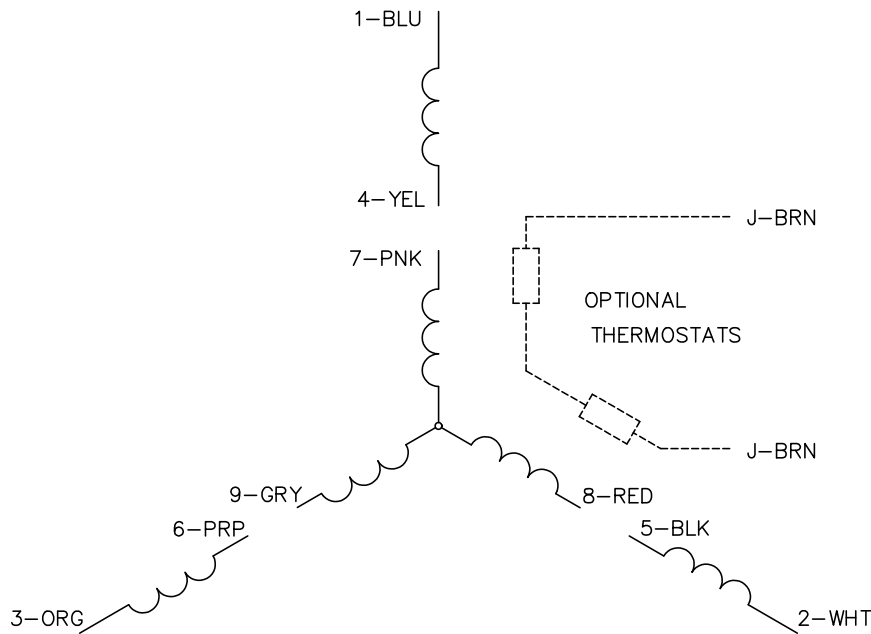
TORQUES (LB-FT): PO=6.28 PU=3.26 LR=4.04 LRA=6.71



9/14/2023 ACPERF, record # 82208



CD0005

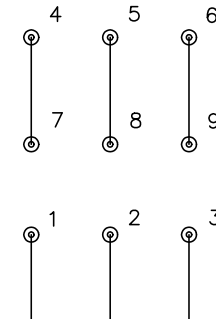


LOW VOLTAGE
(2Y)



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.

CD0005

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