

ABB BALDOR RELIANCE III

Customer information packet

VBNM3538-D

.5/.37 KWHP, 1780RPM, 3PH, 60HZ, 56C, 3514M, T

Class - None

Division - Not Applicable

Specifications

Enclosure	TENV
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	208.0 V @ 60 HZ 230.0 V @ 60 HZ 460.0 V @ 60 HZ 480.0 V @ 60 HZ
Agency Approvals	C UR US CE CURUS UKCA WEEE
Ambient Temperature	40 °C
Auxiliary Box	NO AUXILLARY BOX
Auxiliary Box Lead Termination	None
Base Indicator	No Mounting
Bearing Grease Type	Polyrex EM (-20F +300F)
Blower	None
Current @ Voltage	2.020 A @ 230.0 V 1.900 A @ 208.0 V 1.070 A @ 480.0 V 1.010 A @ 460.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT

Part Detail

Revision	C
Type	AC
Mech. spec.	35X058
Base	
Status	PRD/A
Elec. spec.	35WGG069
Layout	35LYX058
Eff. date	01-05-2026
CD Diagram	CD0005
Poles	04
Leads	9#18
Proprietary	False
Created date	09-15-2023

Efficiency @ 100% Load	81.5 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	1.0 a
Insulation Class	F
Inverter Code	Not Inverter
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	F3
Number of Poles	4
Overall Length	15.96 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	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	1780 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

NP1372L										
CAT.NO.	VBNM3538-D									
SPEC.	35X058G069G3									
HP	.5/.37 KW									
VOLTS	208-230/460-480									
AMP	1.9-2.02/1.01-1.07									
R.P.M. (1/MIN)	1780									
FRAME	56C	HZ		60			PH	3		
SER.F.	1.15	CODE	N	DES	B	CL	F			
NEMA-NOM-EFF	81.5	PF	63							
RATING	40C AMB-S1 CONT									
CC		IP44 KG20 IC410								
DE	6205	ODE		6203						
ENCL	TENV	SN								
	IE2-79.0(75%)74.0(50%)									

AC Induction Motor Performance Data

Record # 101704

Typical performance - not guaranteed values

Winding: 35WGG069-R095			Type: 3514M		Enclosure: TENV		
Nameplate Data			480 V, 60 Hz: High Voltage Connection				
Rated Output (HP)		.5	Full Load Torque		1.49 LB-FT		
Volts		208-230/460-480	Start Configuration		direct on line		
Full Load Amps		1.9-2.02/1.01-1.07	Breakdown Torque		8.8 LB-FT		
R.P.M.		1780	Pull-up Torque		4.9 LB-FT		
Hz	60	Phase	3	Locked-rotor Torque		5.7 LB-FT	
NEMA Design Code		B	KVA Code	Starting Current		8.9 A	
Service Factor (S.F.)		1.15	No-load Current		0.95 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		20°C
S.F. Amps					Temp. Rise @ S.F. Load		22°C
					Locked-rotor Power Factor		67.4
					Rotor inertia		0.101 lb-ft²

Load Characteristics 480 V, 60 Hz, 0.5 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	22	33	44	53	61	67	58
Efficiency	56.5	70.1	76.7	79.2	80.7	80.9	80.1
Speed	1793	1788	1783	1778	1772	1766	1774
Line amperes	0.95	0.98	1.01	1.07	1.16	1.25	1.12

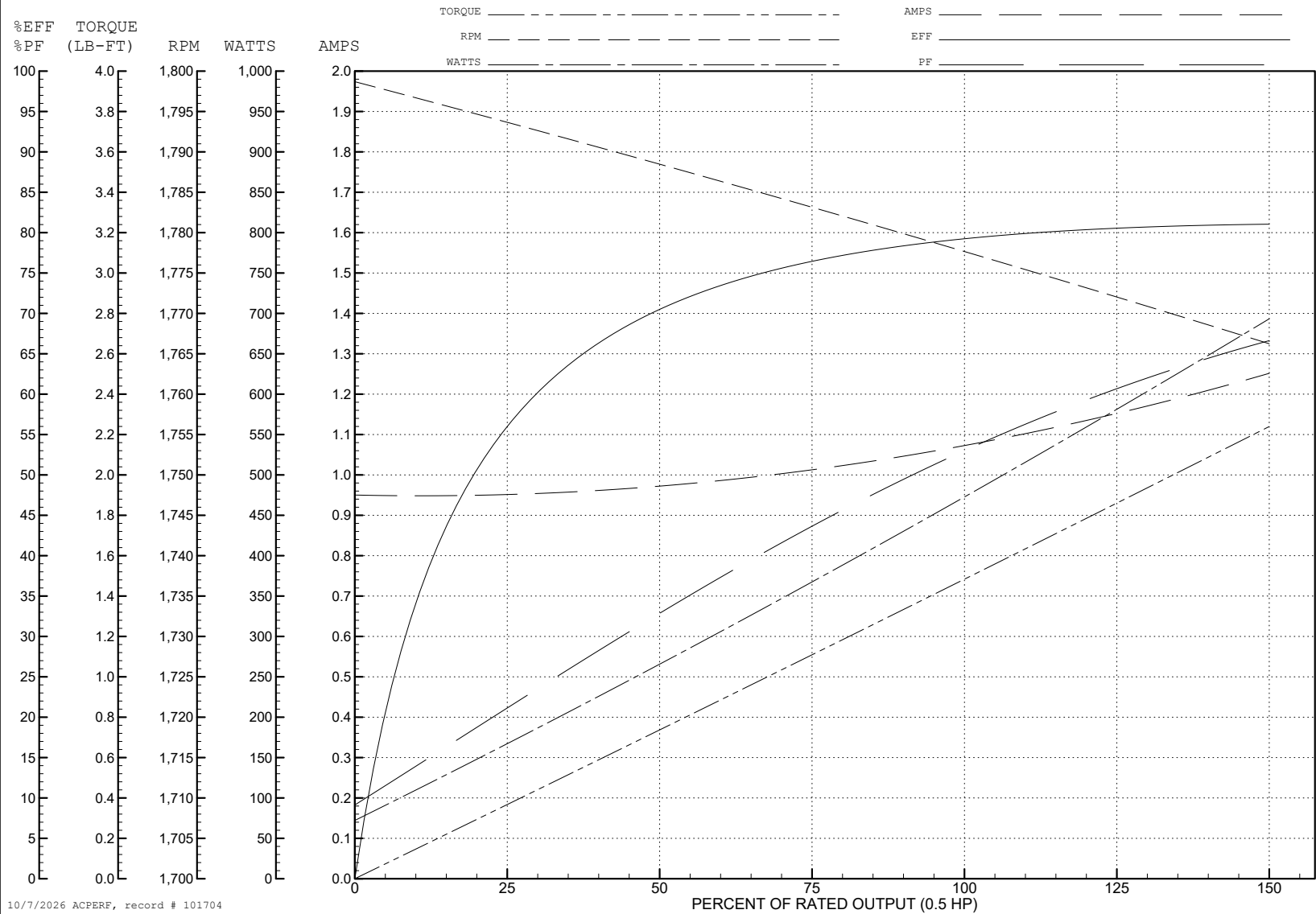
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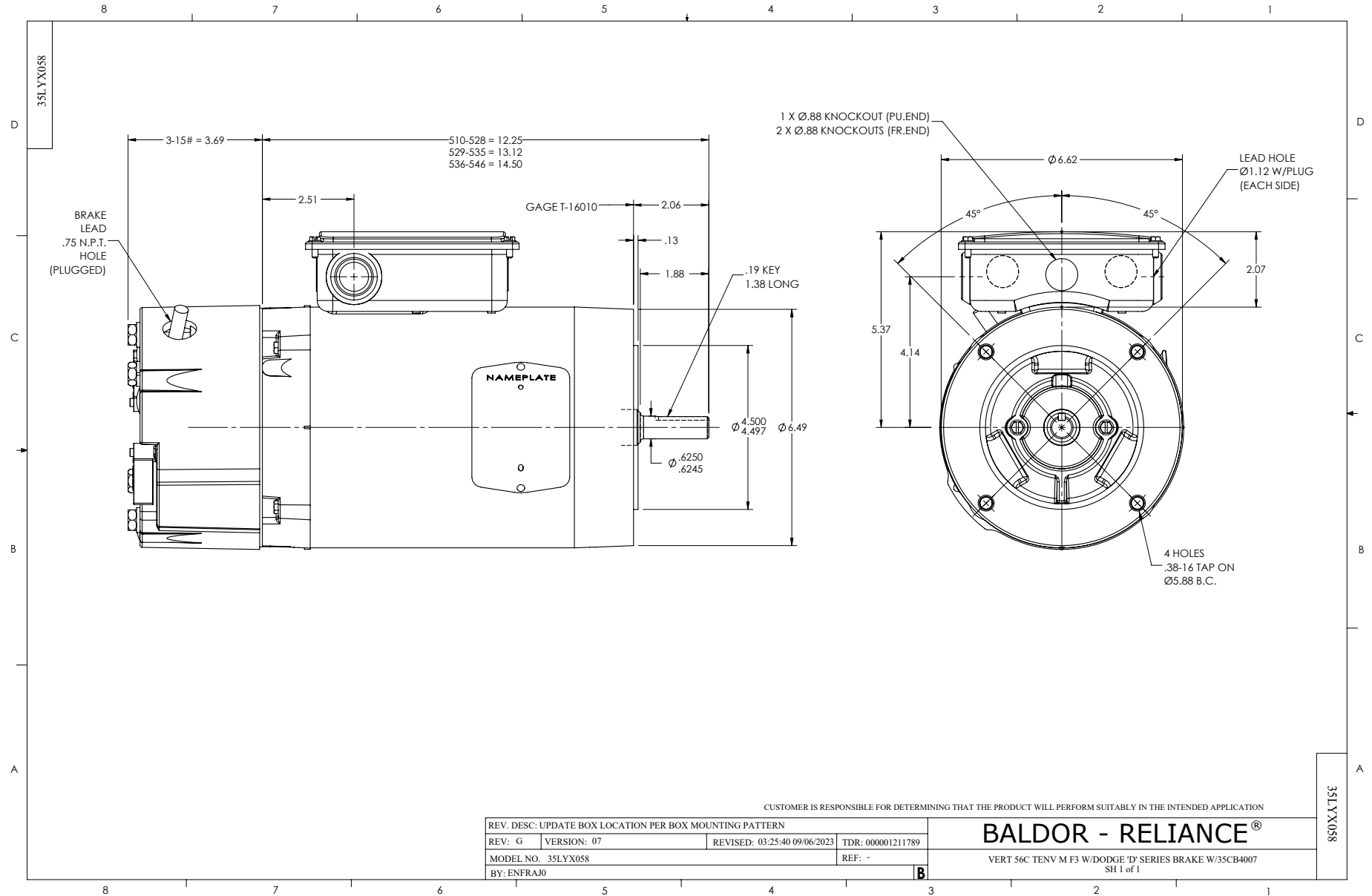
WINDING # 35WGG069

Typical performance - not guaranteed values.

0.5 HP 3 PH 60 HZ 1780 RPM 480 V 3514M

TORQUES (LB-FT): PO=8.8 PU=4.9 LR=5.7 LRA=8.9







CD2120

WIRING CONNECTIONS (1 PHASE VAC)

	POWER LINE A	POWER LINE B	CAP TOGETHER	CAP ALONE
AC LOW VOLT.	B1	B2	B3 & B5	B4
AC HIGH VOLT.	B1 & B5	B2	---	B3 CAP ALONE B4 CAP ALONE
DC VOLT.	B1	B2	B3 & B5	B4

B1 WHITE
 B2 BLACK
 B3 GRAY
 B4 BLUE
 B5 RED

CD2120

REV. DESC: NEW			BALDOR • DODGE • RELIANCE	
REV. LTR: -	VERSION: 00	TDR: 000000741785		
FILE: \CKA\00037\282		REVISED: 12: 28: 11 04/12/2012	D-SERIES MOTOR BRAKE 5LD AC\DC	
MTL: -		BY: CKRONSO	SH 1 of 1	