

ABB BALDOR RELIANCE III

Customer information packet

XM050542-5

.5HP, 1770RPM, 3PH, 60HZ, 56, 3512M, XPFC, F1, N

Class - CLI GP D; CLII GP F,G

Division - Division I

Specifications

Enclosure	XPFC
Frame	56
Frame Material	Steel
Frequency	60.00 Hz
Haz Area Class and Group	CLI GP D; CLII GP F,G
Haz Area Division	Division I
Motor Letter Type	Three Phase
Output @ Frequency	.500 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	575.0 V @ 60 HZ
Agency Approvals	CSA EEV UL
Ambient Temperature	40 °C
Auxiliary Box	NO AUXILLARY BOX
Auxiliary Box Lead Termination	None
Base Indicator	Rigid
Bearing Grease Type	Polyrex EM (-20F +300F)
Blower	None
Constant Torque Speed Range	6
Current @ Voltage	.770 A @ 575.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	80.0 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Shaft Indicator	None
Haz Area Temp Code	T3C
Heater Indicator	No Heater
High Voltage Full Load Amps	0.8 a
Insulation Class	F

Part Detail

Revision	D
Type	AC
Mech. spec.	35E354
Base	
Status	PRD/A
Elec. spec.	35WGG200
Layout	35LYE354
Eff. date	07-02-2025
CD Diagram	CD0006
Poles	04
Leads	3#18
Proprietary	False
Created date	02-23-2023

Inverter Code	Not Inverter
KVA Code	M
Lifting Lugs	No Lifting Lugs
Locked Bearing Indicator	No Locked Bearing
Max Speed	2700 rpm
Motor Lead Quantity/Wire Size	3 @ 18 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	X3512M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	14.28 IN
Power Factor	62
Product Family	Hazardous Location Motor
Pulley End Bearing Type	Ball
Pulley Face Code	Standard
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
Speed	1770 rpm
Speed Code	Single Speed
Starting Method	Direct on line
Thermal Device - Bearing	None
Thermal Device - Winding	Normally Closed Thermostat
Vibration Sensor Indicator	No Vibration Sensor
Winding Thermal 1	None
Winding Thermal 2	None

Nameplate

NP0887XPSLEV												
NO.						CC						
S/N						TEMP CODE	T3C					
SPEC.	35E354G200					INV.TYPE	PWM					
CAT.NO.	XM050542-5					C HP FR	60	C HP TO	90			
HP	.5					CT HZ FROM	6	CT HZ TO	60			
VOLTS	575					VT HZ FROM	6	VT HZ TO	60			
AMPS	.77				MAG CUR	.7						
RPM	1770				MX RPM	2700						
HZ	60	PH	3	CL	F	NOM.EFF.	77					
SER.F.	1.00	DES	B	SL HZ	1	WK2	0.087					
FRAME	56	RATING		40C AMB-CONT								
1.15 SF ON SINE WAVE												

AC Induction Motor Performance Data

Record # 39332

Typical performance - not guaranteed values

Winding: 35WGN367-R004			Type: 3512M		Enclosure: TEFC		
Nameplate Data			575 V, 60 Hz: Single Voltage Motor				
Rated Output (HP)		.5	Full Load Torque		1.49 LB-FT		
Volts		575	Start Configuration		direct on line		
Full Load Amps		.7	Breakdown Torque		6.65 LB-FT		
R.P.M.		1740	Pull-up Torque		4.62 LB-FT		
Hz	60	Phase	3	Locked-rotor Torque		5.25 LB-FT	
NEMA Design Code		B	KVA Code	M	Starting Current		5.05 A
Service Factor (S.F.)		1.15	No-load Current		0.487 A		
NEMA Nom. Eff.		78.5	Power Factor	69	Line-line Res. @ 25°C		53.6 Ω
Rating - Duty		40C	AMB-CONT		Temp. Rise @ Rated Load		27°C
S.F. Amps					Temp. Rise @ S.F. Load		31°C
					Locked-rotor Power Factor		74
					Rotor inertia		0.0709 LB-FT2

Load Characteristics 575 V, 60 Hz, 0.5 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	28	45	58	69	75	80	73
Efficiency	59.5	73.1	78.5	79.8	80.1	78.9	80
Speed	1788	1774	1759	1741	1722	1702	1730
Line amperes	0.5	0.536	0.596	0.676	0.766	0.88	0.73

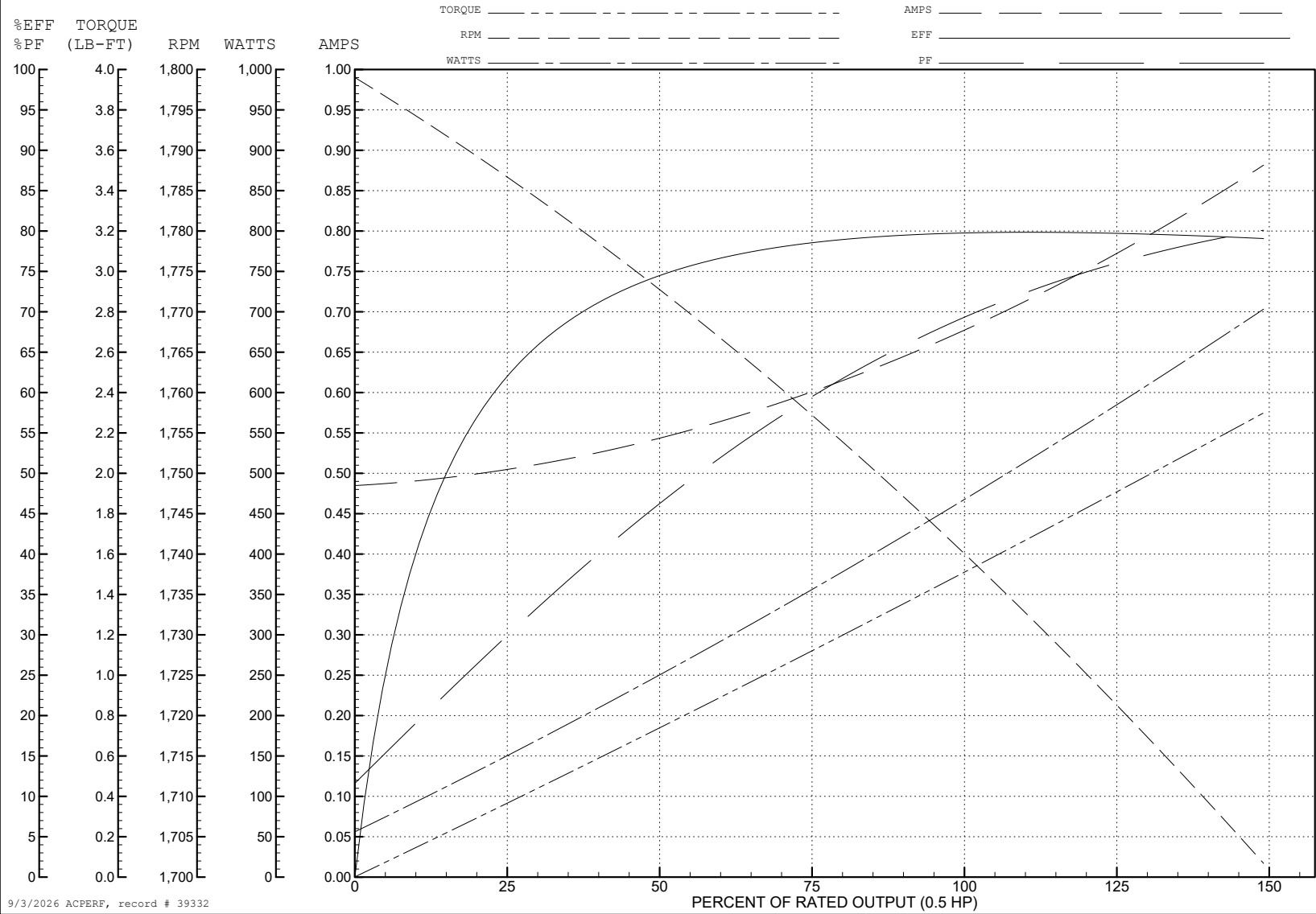
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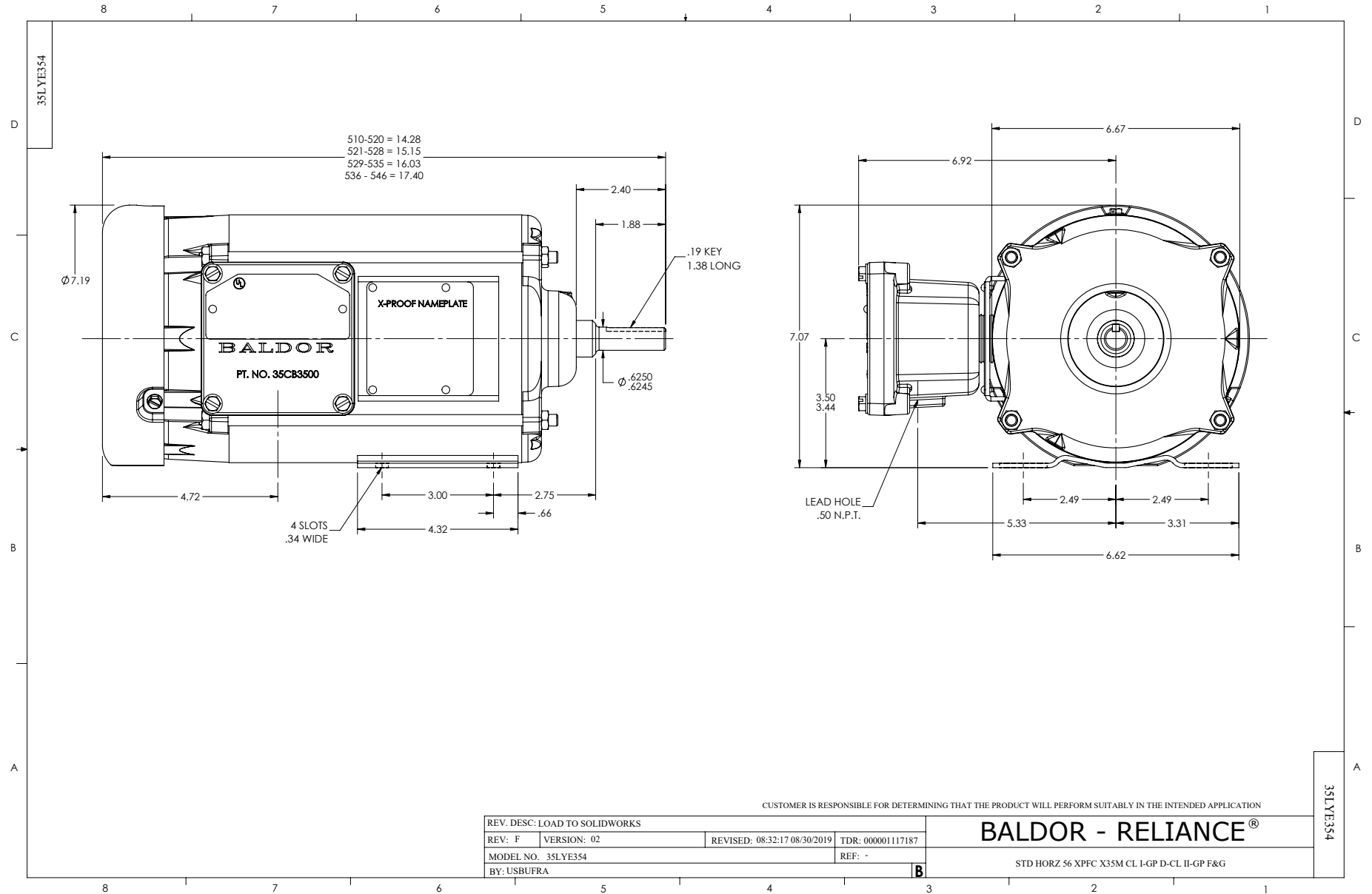
WINDING # 35WGN367

Typical performance - not guaranteed values.

0.5 HP 3 PH 60 HZ 1740 RPM 575 V 3512M

TORQUES (LB-FT) : PO=6.65 PU=4.62 LR=5.25 LRA=5.05





CD0006


NOTES:

1. THREE LEAD MOTOR MAY BE EITHER WYE CONNECTED OR DELTA CONNECTED.
2. INTERCHANGE ANY TWO LINE LEADS TO REVERSE ROTATION.
3. OPTIONAL THERMOSTATS ARE PROVIDED WHEN SPECIFIED.
4. ACTUAL NUMBER OF INTERNAL PARALLEL CIRCUITS MAY VARY.
5. LEAD COLORS ARE OPTIONAL. LEADS MUST BE NUMBERED AS SHOWN.

CD0006

REV. DESC: ADD CLASS CONN00000007

REV. LTR: E

VERSION: 01

TDR: 000001099922

FILE: \AAA\00005\141

REVISED: 10:24:49 02/19/2019

BY: ENBRIRO

MTL: —


BALDOR - RELIANCE®

3PH, SV, 3 LEADS, WYE OR DELTA CONNECTED

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