

ABB BALDOR RELIANCE III

Customer information packet

VXM050542-5

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

Class - CLI GP D; CLII GP F,G

Division - Division I

Specifications

Enclosure	XPFC
Frame	56C
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	No Mounting
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	78.5 %
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	C
Type	AC
Mech. spec.	35E374
Base	
Status	PRD/A
Elec. spec.	35WGZ925
Layout	35LYE374
Eff. date	08-15-2025
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	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	65
Product Family	Hazardous Location Motor
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
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.	35E374Z925					INV.TYPE	PWM					
CAT.NO.	VXM050542-5					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	.58					
RPM	1770					MX RPM						
HZ	60	PH	3	CL	F	NOM.EFF.	78.5					
SER.F.	1.15	DES	B	SL HZ	1	WK2	0.0866					
FRAME	56C	RATING	40C AMB-CONT									
	SFA .79											
	1.15 SF ON SINE WAVE											

AC Induction Motor Performance Data

Record # 87737

Typical performance - not guaranteed values

Winding: 35WGN367-R007			Type: 3512M		Enclosure: XPFC		
Nameplate Data			575 V, 60 Hz: Single Voltage Motor				
Rated Output (HP)		.5	Full Load Torque		1.53 LB-FT		
Volts		575	Start Configuration		direct on line		
Full Load Amps		.7	Breakdown Torque		7.42 LB-FT		
R.P.M.		1740	Pull-up Torque		4.94 LB-FT		
Hz	60	Phase	3	Locked-rotor Torque		5.58 LB-FT	
NEMA Design Code		B	KVA Code	M	Starting Current		4.87 A
Service Factor (S.F.)		1	No-load Current		0.578 A		
NEMA Nom. Eff.		78.5	Power Factor	69	Line-line Res. @ 25°C		49.7 Ω
Rating - Duty		40C AMB-CONT		Temp. Rise @ Rated Load		31°C	
S.F. Amps				Temp. Rise @ S.F. Load		35°C	
				Locked-rotor Power Factor		73.9	
				Rotor inertia		0.0709 lb-ft²	

Load Characteristics 575 V, 60 Hz, 0.5 HP

% of Rated Load	25	50	75	100	125	150
Power Factor	30	44	57	67	75	81
Efficiency	55.4	70.1	75.8	78.4	79.4	78.7
Speed	1784	1769	1753	1736	1718	1695
Line amperes	0.577	0.609	0.656	0.72	0.799	0.913

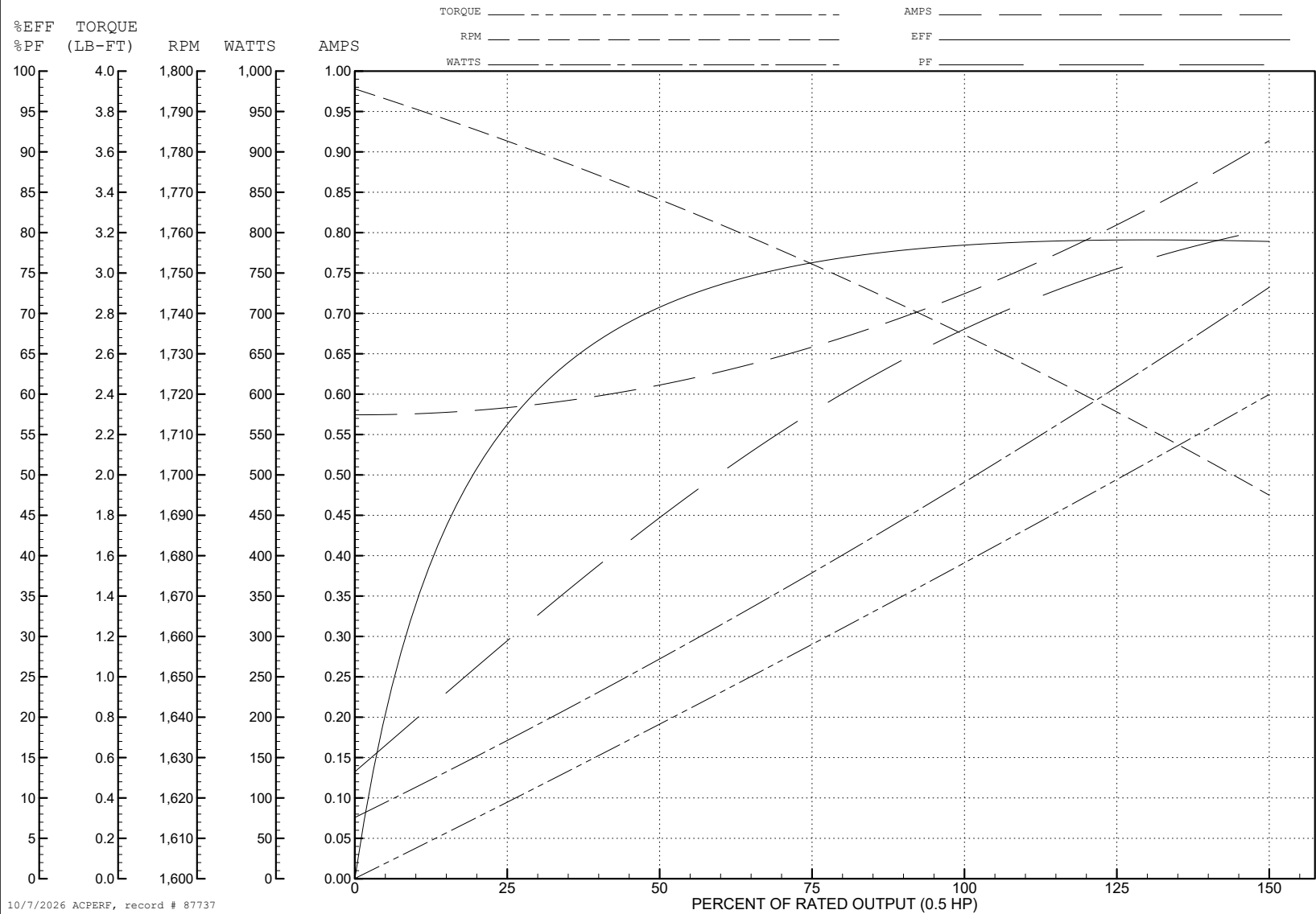
ABB Motors and Mechanical Inc.

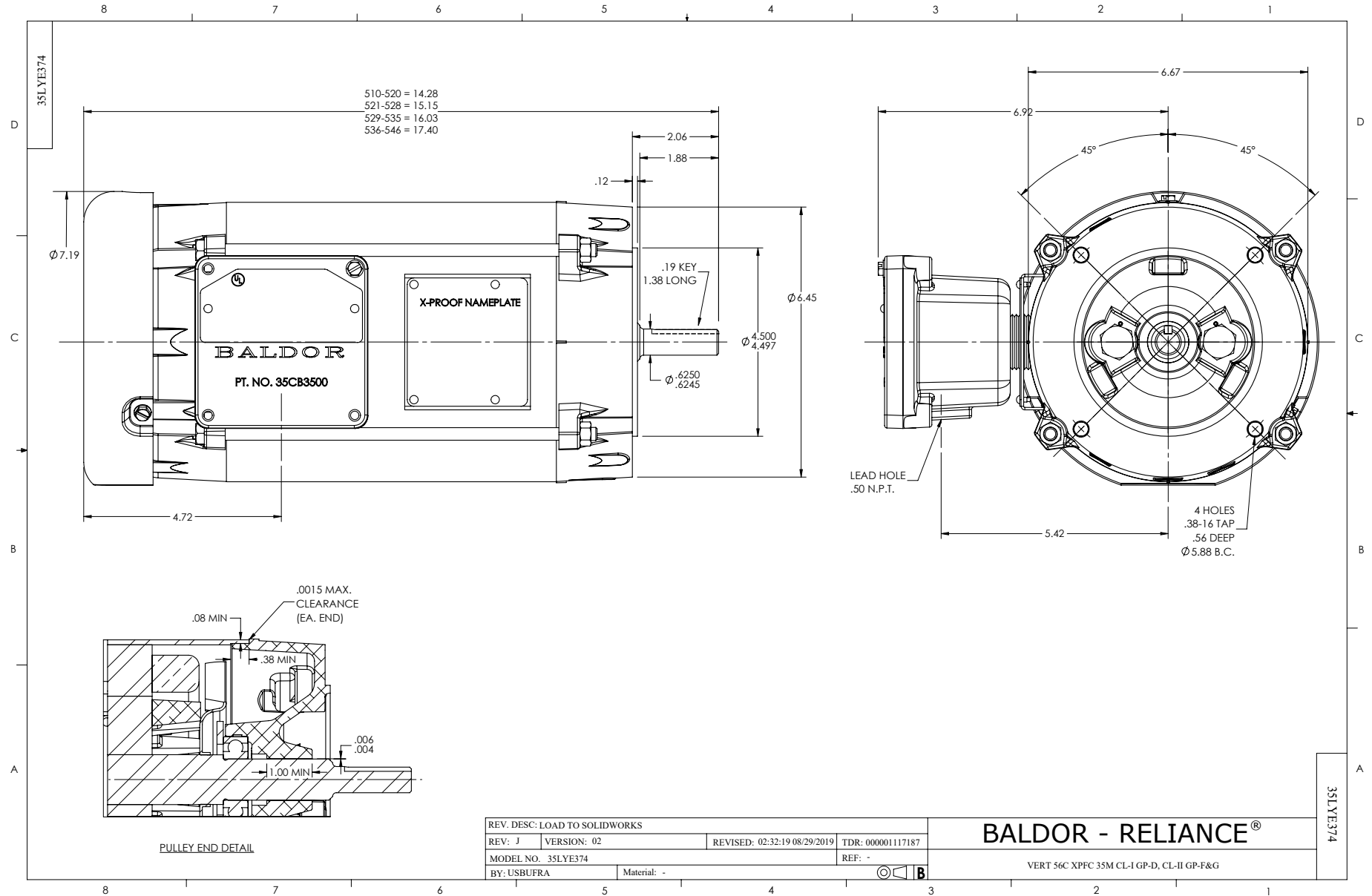
WINDING # 35WGN367

Typical performance - not guaranteed values.

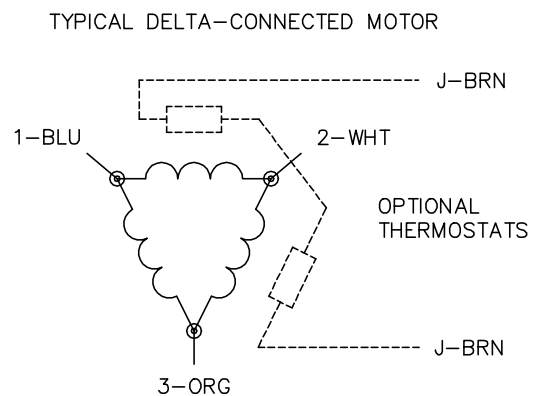
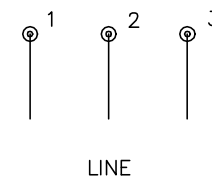
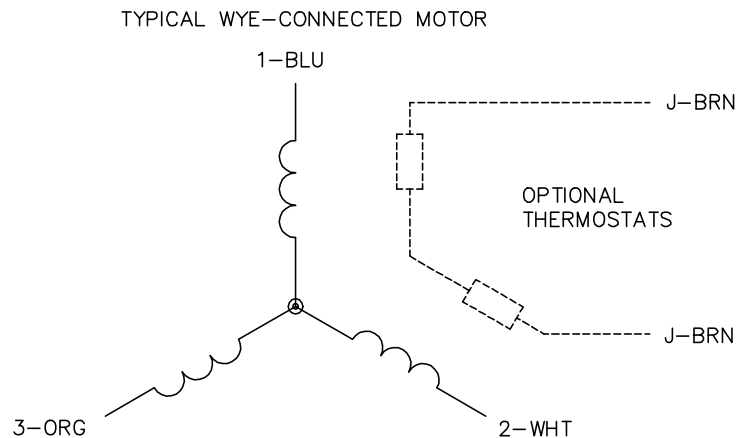
0.5 HP 3 PH 60 HZ 1740 RPM 575 V 3512M

TORQUES (LB-FT) : PO=7.42 PU=4.94 LR=5.58 LRA=4.87





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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