

ABB BALDOR RELIANCE III

Customer information packet

VXM14142T-5

1HP, 1770RPM, 3PH, 60HZ, 143TC, 3522M, XPFC, F1

Class - CLI GP D; CLII GP F,G

Division - Division I

Specifications

Enclosure	XPFC
Frame	143TC
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	1.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	575.0 V @ 60 HZ
Agency Approvals	UL CSA EEV
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	1.250 A @ 575.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	85.5 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Haz Area Temp Code	T3C
Heater Indicator	No Heater
High Voltage Full Load Amps	1.3 a
Insulation Class	F
Inverter Code	Inverter Duty

Part Detail

Revision	B
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	35WGG119
Layout	35LYE380
Eff. date	10-31-2024
CD Diagram	CD0006
Poles	04
Leads	3#18
Proprietary	False
Created date	10-28-2021

KVA Code	M
Lifting Lugs	No Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Max Speed	2700 rpm
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3522M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	16.09 IN
Power Factor	71
Product Family	General Purpose
Pulley Face Code	C-Face
Rodent Screen	None
Service Factor	1.00
Shaft Diameter	0.875 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	010A					
S/N						TEMP CODE	T3C					
SPEC.	35-0000-1376					INV.TYPE	PWM					
CAT.NO.	VXM14142T-5					C HP FR	60	C HP TO	90			
HP	1					CT HZ FROM	6	CT HZ TO	60			
VOLTS	575					VT HZ FROM	6	VT HZ TO	60			
AMPS	1.3				MAG CUR	.87						
RPM	1775				MX RPM	2700						
HZ	60	PH	3	CL	F	NOM.EFF.	85.5					
SER.F.	1.00	DES	B	SL HZ	1	WK2	0.159					
FRAME	143TC	RATING	40C AMB-CONT									
	NEMA MG-1 PART 5, IP54											
	1.15 SF ON SINE WAVE											

AC Induction Motor Performance Data

Record # 87429

Typical performance - not guaranteed values

Winding: 35WGG119-R003			Type: 3522M		Enclosure: XPFC	
Nameplate Data			575 V, 60 Hz: Single Voltage Motor			
Rated Output (HP)		1	Full Load Torque		2.99 LB-FT	
Volts		575	Start Configuration		direct on line	
Full Load Amps		1.3	Breakdown Torque		13.4 LB-FT	
R.P.M.		1775	Pull-up Torque		6.8 LB-FT	
Hz	60	Phase	3	Locked-rotor Torque	8.3 LB-FT	
NEMA Design Code	B	KVA Code	M	Starting Current	10.9 A	
Service Factor (S.F.)			1	No-load Current	0.87 A	
NEMA Nom. Eff.	85.5	Power Factor	70	Line-line Res. @ 25°C	30.1 Ω	
Rating - Duty		40C AMB-CONT		Temp. Rise @ Rated Load	36°C	
S.F. Amps				Temp. Rise @ S.F. Load	43°C	
				Locked-rotor Power Factor	63.4	
				Rotor inertia	0.159 lb-ft²	

Load Characteristics 575 V, 60 Hz, 1 HP

% of Rated Load	25	50	75	100	125	150
Power Factor	31	48	61	70	76	80
Efficiency	72.1	81.6	84.9	85.8	85.7	85
Speed	1794	1787	1781	1774	1767	1758
Line amperes	0.89	0.97	1.1	1.26	1.44	1.65

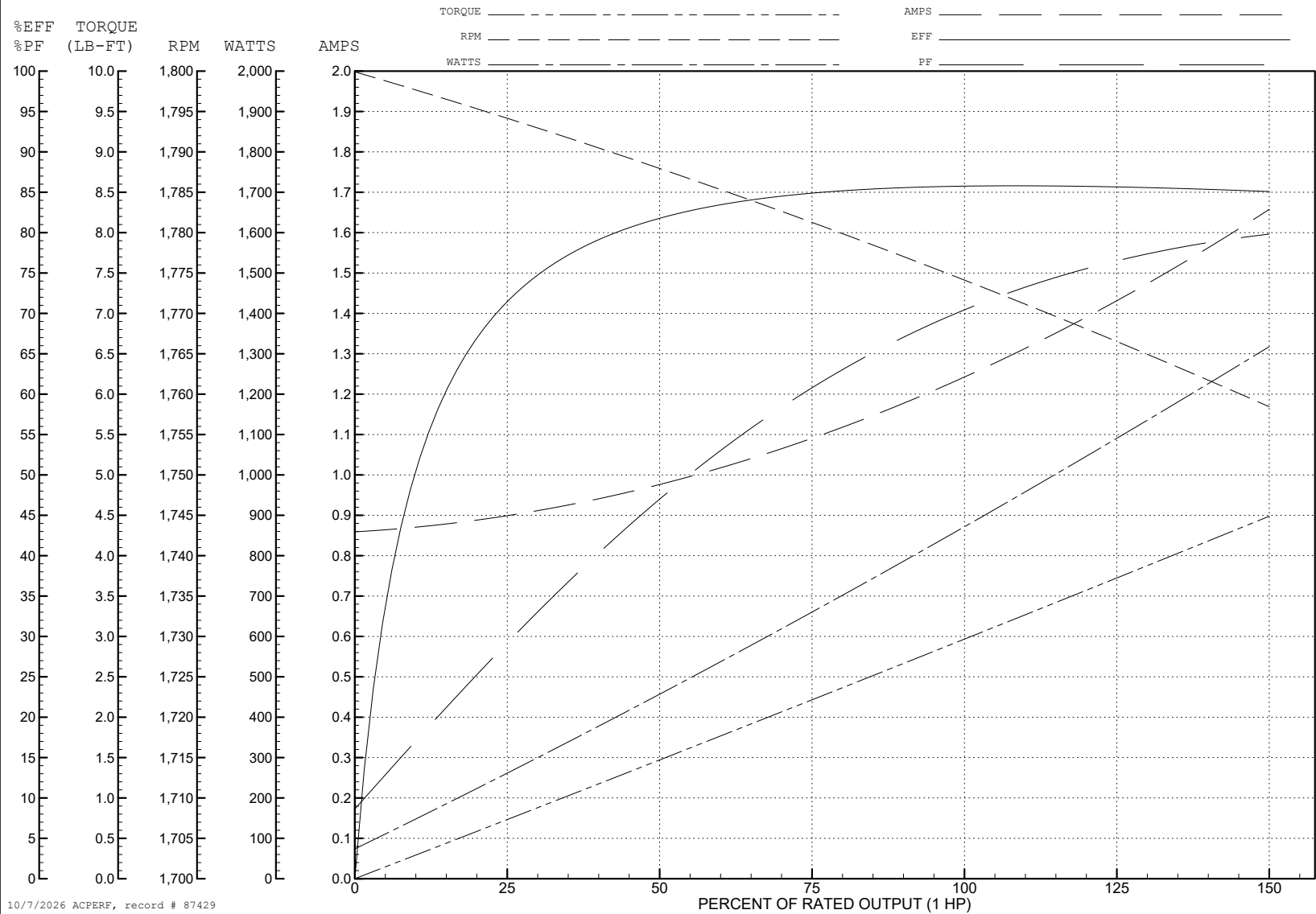
ABB Motors and Mechanical Inc.

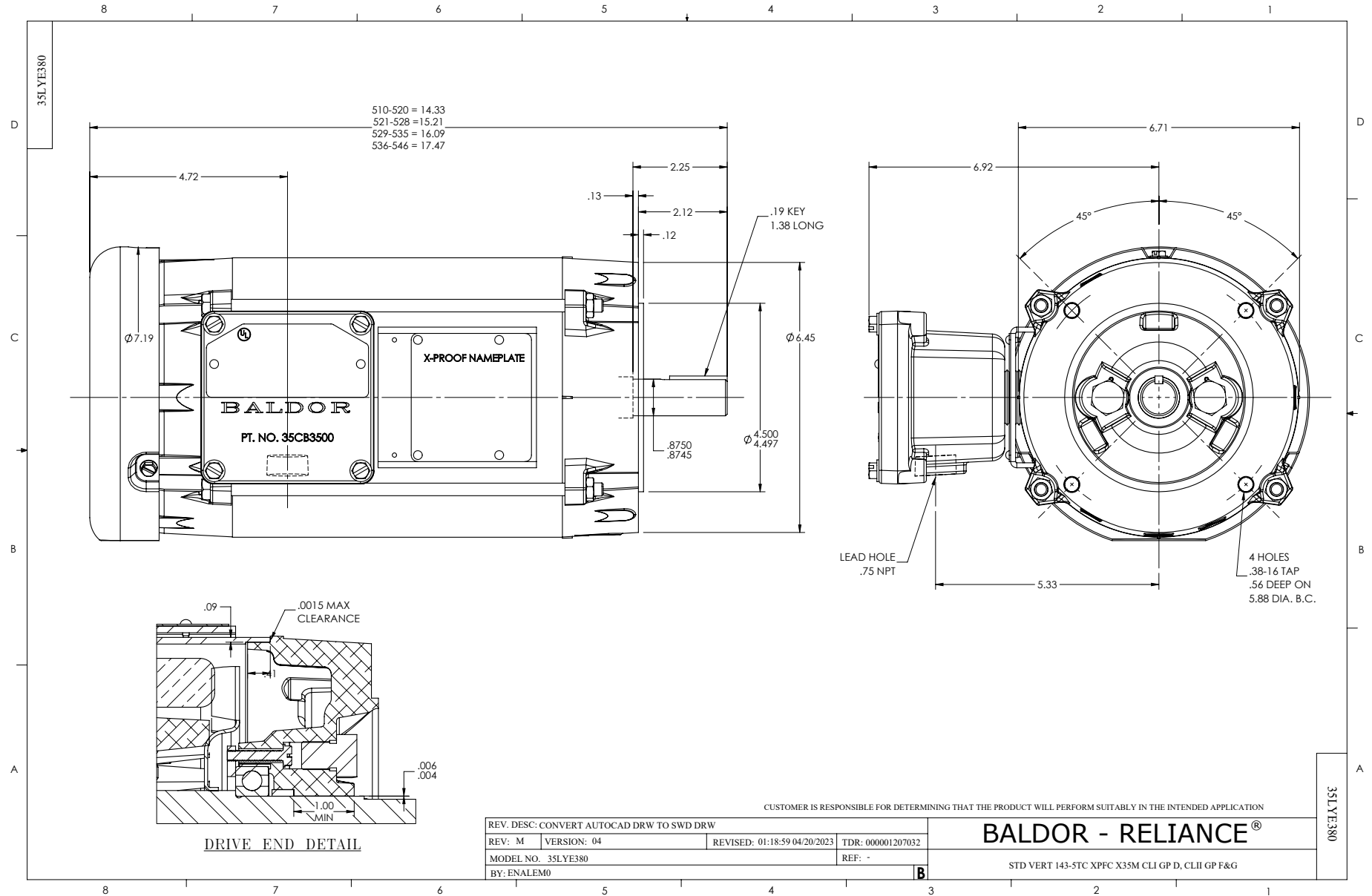
WINDING # 35WGG119

Typical performance - not guaranteed values.

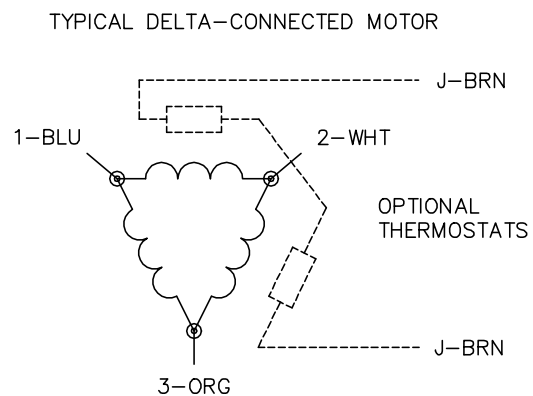
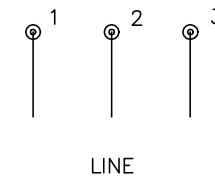
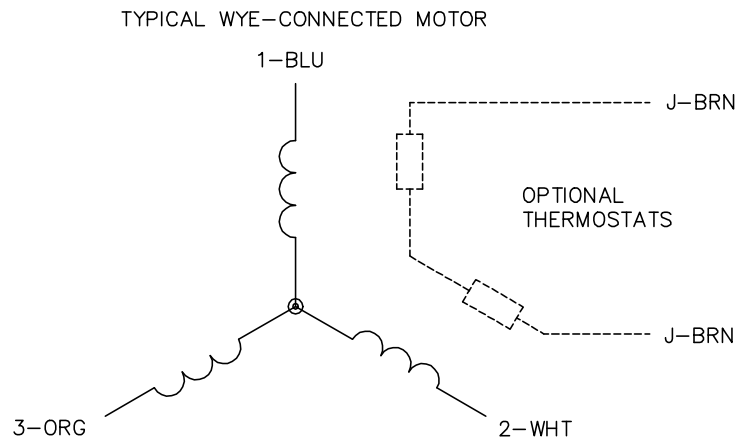
1 HP 3 PH 60 HZ 1775 RPM 575 V 3522M

TORQUES (LB-FT): PO=13.4 PU=6.8 LR=8.3 LRA=10.9





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

SH 1 of 1