

ABB BALDOR RELIANCE III

Customer information packet

M3539-TP

.5 AIR OVERHP, 1170RPM, 3PH, 60HZ, 56Z, 3516M

Class - None

Division - Not Applicable

Specifications

Enclosure	TEAO
Frame	56Z
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	1200 RPM @ 60 HZ
Voltage @ Frequency	230.0 V @ 60 HZ 208.0 V @ 60 HZ 460.0 V @ 60 HZ
Agency Approvals	C UR US CSA UR
Ambient Temperature	40 °C
Auxiliary Box	NO AUXILLARY BOX
Auxiliary Box Lead Termination	None
Base Indicator	No Mounting
Bearing Grease Type	AEROSHELL #7 (-73°C TO +149°
Blower	None
Current @ Voltage	2.400 A @ 230.0 V 2.200 A @ 208.0 V 1.200 A @ 460.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	72.0 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Shaft Indicator	None

Part Detail

Revision	F
Type	AC
Mech. spec.	35E4820
Base	
Status	PRD/A
Elec. spec.	35WGG348
Layout	35LYE4820
Eff. date	12-29-2025
CD Diagram	CD0007
Poles	06
Leads	12#18
Proprietary	False
Created date	12-19-2022

Heater Indicator	No Heater
High Voltage Full Load Amps	1.2 a
Insulation Class	F
Inverter Code	Not Inverter
KVA Code	N
Lifting Lugs	No Lifting Lugs
Locked Bearing Indicator	No Locked Bearing
Motor Lead Quantity/Wire Size	12 @ 18 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3516M
Mounting Arrangement	F1
Number of Poles	6
Overall Length	11.68 IN
Power Factor	57
Product Family	General Purpose
Pulley End Bearing Type	Ball
Pulley Face Code	Standard
Pulley Shaft Indicator	Key And Flat
Rodent Screen	None
Service Factor	1.25
Shaft Diameter	0.625 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	1170 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	Automatic Thermal Overload
Winding Thermal 1 Location	EP
Winding Thermal 2	None

Nameplate

NP1257L											
CAT.NO.	M3539-TP										
SPEC.	35E4820G348G1										
HP	.5 AIR OVER										
VOLTS	208-230/460										
AMP	2.2-2.4/1.2										
RPM	1170										
FRAME	56Z			HZ	60			PH	3		
SER.F.	1.25		CODE	N		DES	B	CL	F		
NEMA-NOM-EFF	72		PF	57							
RATING	40C AMB-CONT										
CC											
DE	6205		ODE	6203							
ENCL	TEAO		SN								
	SFA 2.24-2.6/1.3										

Parts List

Part number	Description	Quantity
SA410211	SA 35E4820G348G1	1.000 ea
RA401794	RA 35E4820G348G1	1.000 ea
34FN3002B01	EXTERNAL FAN, PLASTIC, .637/.639 HUB W/	1.000 ea
SP1003A01	TERM. BOARD, MODE 35 SW X H-23655	1.000 ea
51XW0832A07	8-32 X .44, TAPTITE II, HEX WSHR SLTD SE	3.000 ea
11XW0832G06	#8-32 X 3/8, TAPTITE II, HEX WSHR SLTD	1.000 ea
35EP3102A51	FR EP RESIL. W/TERM PANEL, .75 ATO & 203	1.000 ea
HA6001A01	THERMAL RETAINER (PLATED)	1.000 ea
51XB1214A10	12-14 X 5/8HX WS SL SR TYBX	2.000 ea
NS2500A06	INSULATOR,AUTO THER PROT,W/PSA ON 1 SIDE	1.000 ea
HA4067A01	PUSH IN DRAIN FITTING (BLACK)	2.000 ea
HW5100A03	WAVY WASHER (W1543-017)	1.000 ea
RM1001A01	GROMMET "MIDSTATES"	1.000 ea
35EP3123R38	CUSTOM DE,205 BRG,.998SH,.125NPT&.125NPT	1.000 ea
HW4072A01	BLACK DRAIN PLUG FOR .125 NPT	3.000 ea
HA4054	SHORT T-DRAIN FITTING, .125" N.P.T.	3.000 ea
XY1032A02	10-32 HEX NUT DIRECTIONAL SERRATION	4.000 ea
35CB4500	TERMINAL BOX LID STAMPED	1.000 ea
35GS1002	GASKET,1/16 THICK LEXIDE	1.000 ea
51XW0832A07	8-32 X .44, TAPTITE II, HEX WSHR SLTD SE	2.000 ea
HW2501D13	KEY, 3/16 SQ X 1.375	1.000 ea
HA7000A04	KEY RETAINER 0.625 DIA SHAFTS	1.000 ea
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	2.000 ea
MJ1000A04-5	GREASE,AEROSHELL #7	0.050 lb
MG1050G01	CELEROL MEDIUM CHARCOAL METALLIC GRAY	0.017 ga
HA3100A15	THRUBOLT 10-32 X 8.375	4.000 ea
LB1118	LABEL,WARNING (ROLL LABEL)	1.000 ea
LC0007	CONNECTION LABEL	1.000 ea
NP1257L	ALUM UL CC THERMAL REV MTG	1.000 ea
35PA1066	PKG GRP, PRINT PK1008A07	1.000 ea
MN416A01	TAG-INSTAL-MAINT no wire (2500 bx)11/25	1.000 ea

AC Induction Motor Performance Data

Record # 100099

Typical performance - not guaranteed values

Winding: 35WGG348-R002			Type: 3516M		Enclosure: TEAO		
Nameplate Data			460 V, 60 Hz: High Voltage Connection				
Rated Output (HP)		.5 AIR OVER	Full Load Torque		2.281 LB-FT		
Volts		208-230/460	Start Configuration		direct on line		
Full Load Amps		2-2.2/1.1	Breakdown Torque		11.2 LB-FT		
R.P.M.		1170	Pull-up Torque		5.04 LB-FT		
Hz	60	Phase	3	Locked-rotor Torque		6.32 LB-FT	
NEMA Design Code		B	KVA Code	N	Starting Current		6.68 A
Service Factor (S.F.)		1.25		No-load Current		1.01 A	
NEMA Nom. Eff.		72	Power Factor	57	Line-line Res. @ 25°C		39.575 Ω
Rating - Duty		40C AMB-CONT		Temp. Rise @ Rated Load		45°C	
S.F. Amps		2.2-2.4/1.2		Temp. Rise @ S.F. Load		53°C	
				Locked-rotor Power Factor		68.8	
				Rotor inertia		0.116 lb-ft²	

Load Characteristics 460 V, 60 Hz, 0.5 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	24	36	46	56	63	70	63
Efficiency	50.1	65.4	71.8	74.8	75.8	75.7	75.8
Speed	1191.5	1184.7	1177.3	1169.4	1161	1151.4	1161
Line amperes	1.01	1.03	1.08	1.15	1.23	1.34	1.23

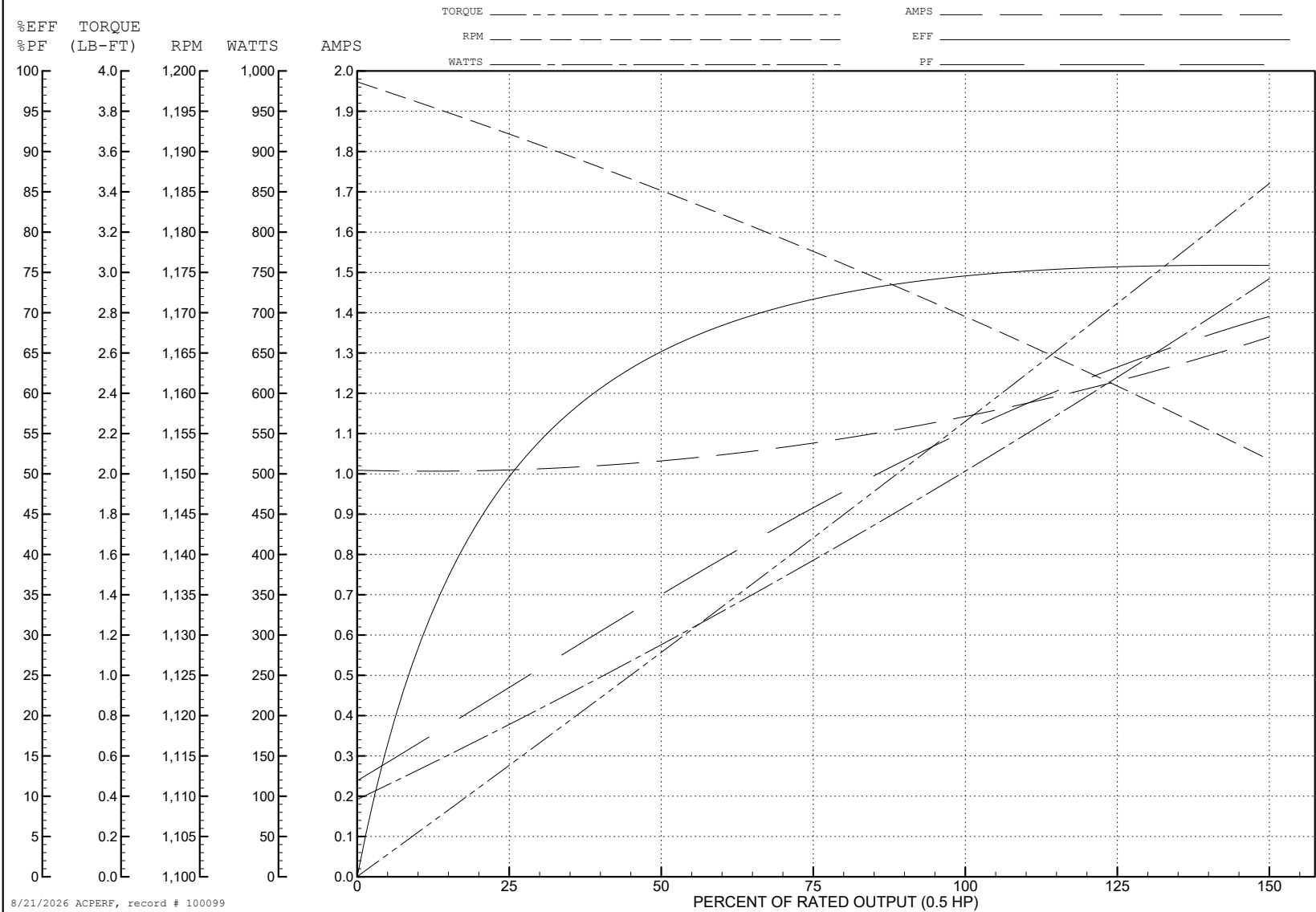
ABB Motors and Mechanical Inc.

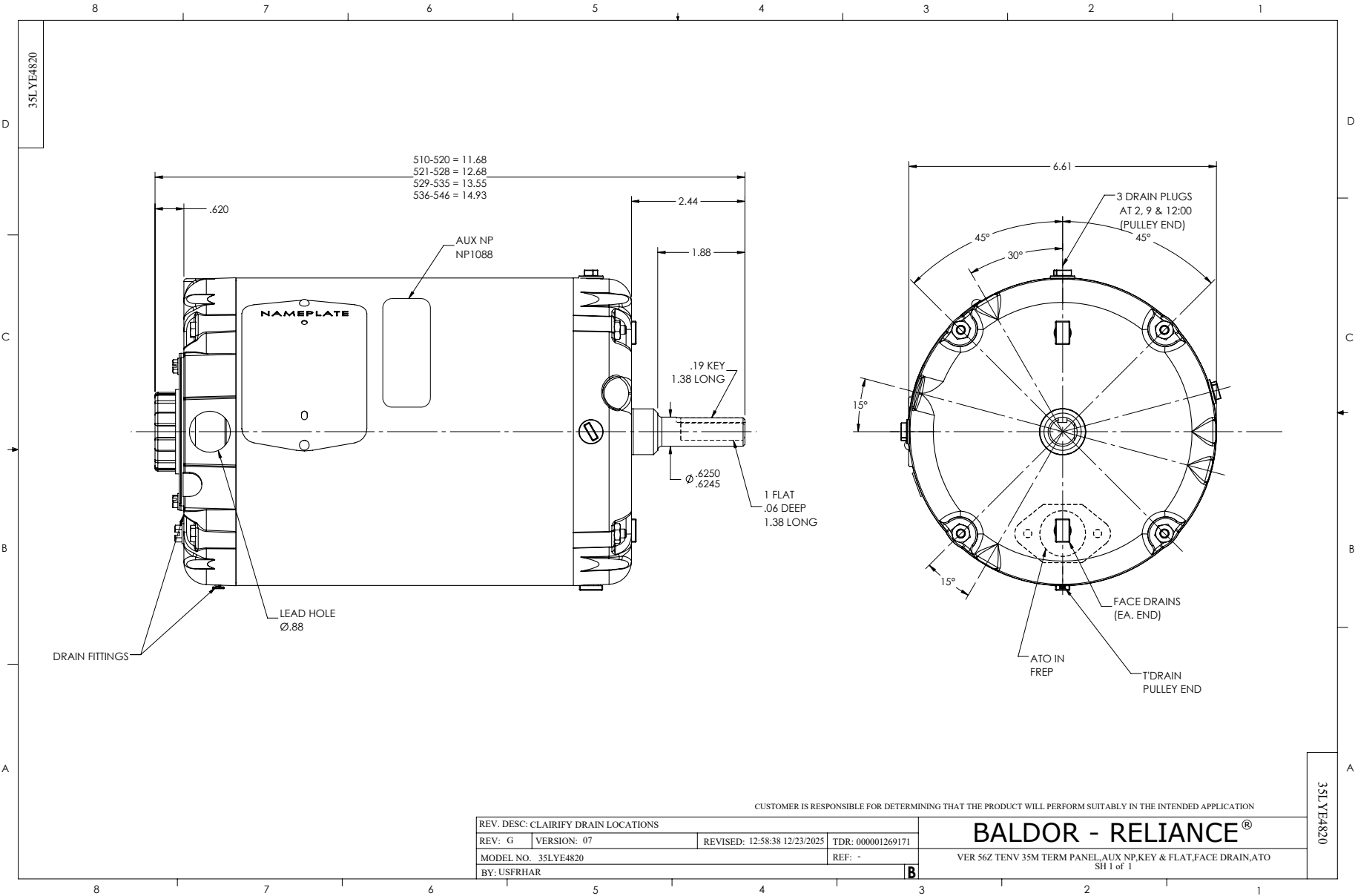
WINDING # 35WGG348

Typical performance - not guaranteed values.

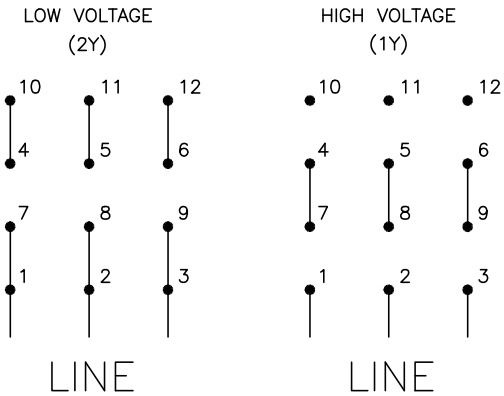
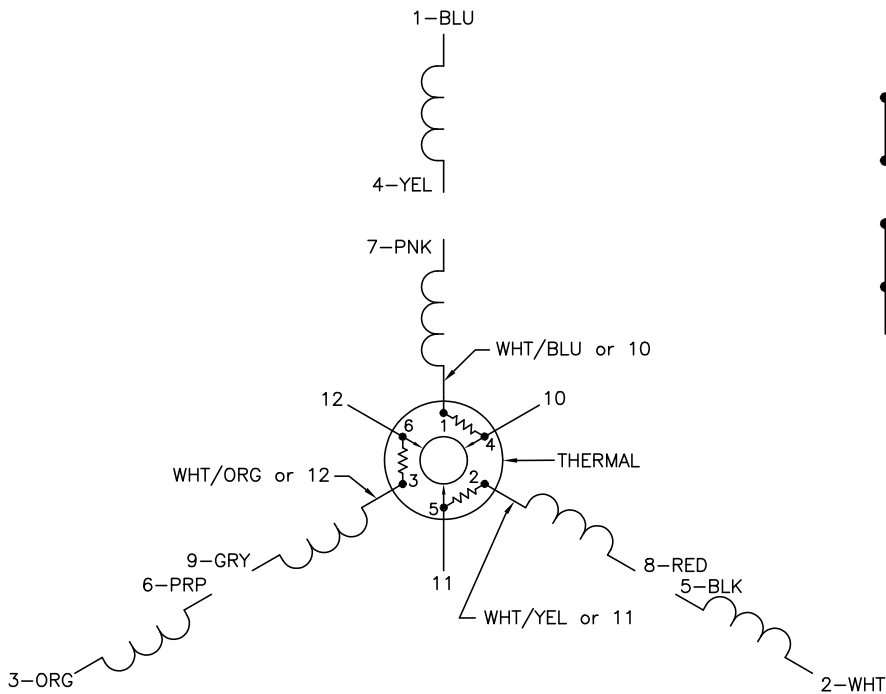
0.5 HP 3 PH 60 HZ 1170 RPM 460 V 3516M

TORQUES (LB-FT): PO=11.2 PU=5.04 LR=6.32 LRA=6.68





CD0007



- NOTES:
1. INTERCHANGE ANY TWO LINE LEADS TO REVERSE ROTATION.
 2. ACTUAL NUMBER OF INTERNAL PARALLEL CIRCUITS MAY VARY.
 3. LEAD COLORS ARE OPTIONAL. LEADS MUST ALWAYS BE NUMBERED AS SHOWN.

REV. DESC: ADDED "CK" PLANT CODE			
REV. LTR: E	BY: EAH	REVISED: 05/06/99 17:1	TDR: 0181040
200000		FILE: AAA00008370	MDL: -
		MTL: -	

BALDOR ELECTRIC Co.

3PH, DV, THERMAL, 12 LEADS

CD0007