ABB BALDOR RELIANCE

Customer information packet

M3539-TP

.5 AIR OVERHP, 1170RPM, 3PH, 60HZ, 56Z, 3516M
Class - None
Division - Not Applicable

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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										

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. @ 25ºC**	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

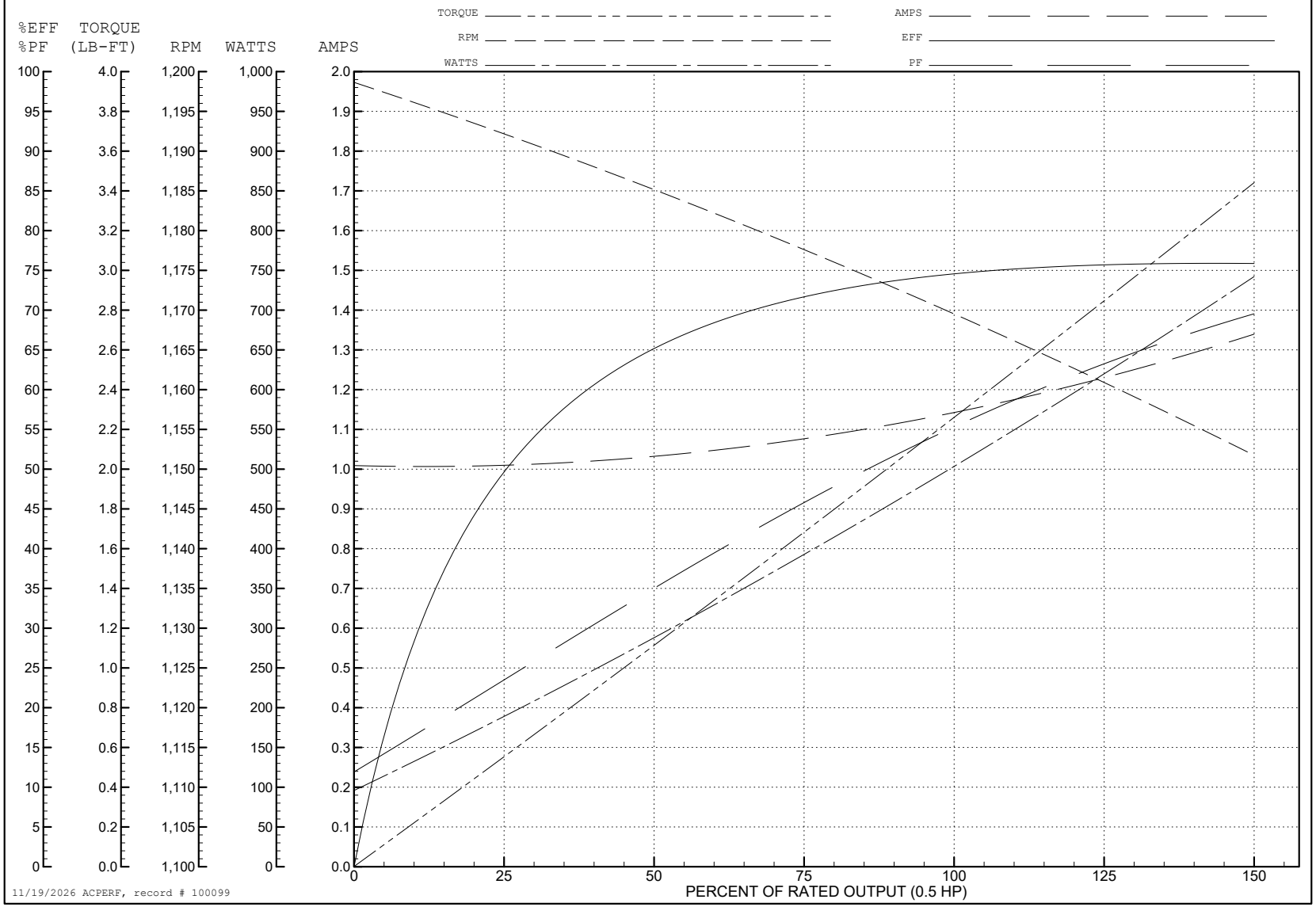
ABB Motors and Mechanical Inc.

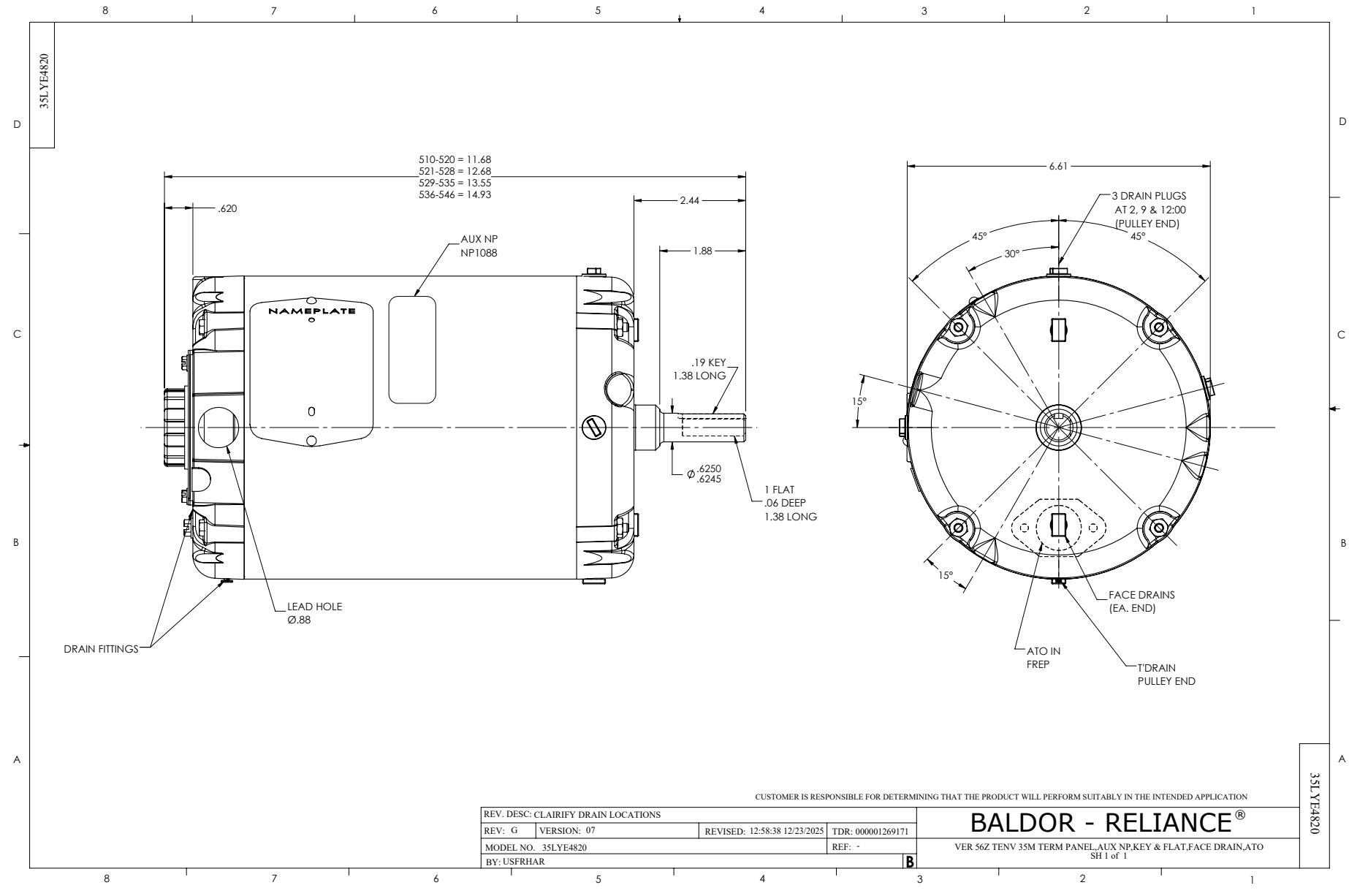
WINDING # 35WGG348

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

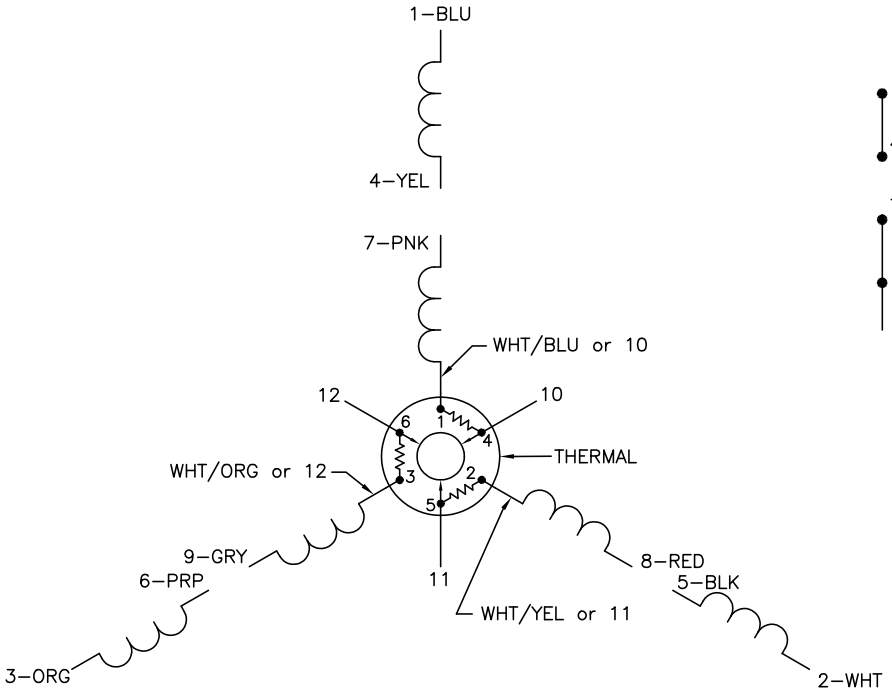
Typical performance - not guaranteed values.

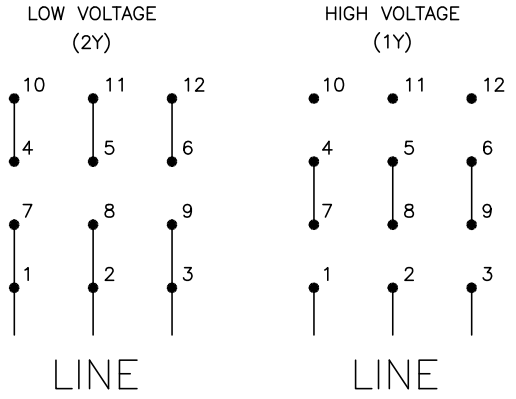
TORQUES(LB-FT): PO=11.2 PU=5.04 LR=6.32 LRA=6.68




35LYE4820
510-520 = 11.68
521-528 = 12.68
529-535 = 13.55
536-546 = 14.93
.620
2.44
1.88
AUX NP
NP1088
NAMEPLATE
.19 KEY
1.38 LONG
Ø .6250
.6245
1 FLAT
.06 DEEP
1.38 LONG
LEAD HOLE
Ø.88
DRAIN FITTINGS
6.61
3 DRAIN PLUGS
AT 2, 9 & 12:00
(PULLEY END)
45°
30°
45°
15°
15°
FACE DRAINS
(EA. END)
ATO IN
FREP
T'DRAIN
PULLEY END
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT THE PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION
REV. DESC: CLAIRIFY DRAIN LOCATIONS
REV: G
VERSION: 07
REVISED: 12:58:38 12/23/2025
TDR: 000001269171
MODEL NO. 35LYE4820
REF: -
BY: USFRHAR
B
BALDOR - RELIANCE®
VER 56Z TENV 35M TERM PANEL,AUX NP,KEY & FLAT,FACE DRAIN,ATO
SH 1 of 1
35LYE4820

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			BALDOR ELECTRIC Co.
REV. LTR: E	BY: EAH	REVISED: 05/06/99 17:1	TDR: 0181040
CD0007		FILE: AAA00008370	MDL: –
		MTL: –	3PH, DV, THERMAL, 12 LEADS

CD0007