ABB BALDOR RELIANCE

Customer information packet

VEM31120

1.5HP, 3490RPM, 3PH, 60HZ, 56C, 3518M, OPEN, F1
Class - None
Division - Not Applicable

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Specifications

Enclosure	OPEN
Frame	56C
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	1.500 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	3600 RPM @ 60 HZ
Voltage @ Frequency	460.0 V @ 60 HZ
	208.0 V @ 60 HZ
	230.0 V @ 60 HZ
Agency Approvals	CURUSEEV
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
Current @ Voltage	2.000 A @ 460.0 V
	4.000 A @ 230.0 V
	4.200 A @ 208.0 V
Design Code	B
Drip Cover	Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	84.0 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Face Code	Standard
Front Shaft Indicator	None
Heater Indicator	No Heater

Part Detail

Revision	S
Type	AC
Mech. spec.	35E4017
Base	
Status	PRD/A
Elec. spec.	35WGM761
Layout	35LYE4017
Eff. date	01-05-2026
CD Diagram	CD0005
Poles	02
Leads	9#18
Proprietary	False
Created date	09-30-2014

High Voltage Full Load Amps	2.0 a
Insulation Class	F
Inverter Code	Inverter Ready
IP Rating	NONE
KVA Code	L
Lifting Lugs	No Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	9 @ 18 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3518M
Mounting Arrangement	F1
Number of Poles	2
Overall Length	12.22 IN
Power Factor	83
Product Family	General Purpose
Pulley End Bearing Type	Ball
Pulley Face Code	C-Face
Pulley Shaft Indicator	Standard
Rodent Screen	None
RoHS Status	ROHS COMPLIANT
Service Factor	1.15
Shaft Diameter	0.625 IN
Shaft Extension Location	Pulley End
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	3490 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	None
Winding Thermal 2	None

Nameplate

NP3155LUA											
CAT.NO.	VEM31120										
SPEC.	35E4017M761G1										
HP	1.5										
VOLTS	208-230/460										
AMPS	4.2-4/2										
RPM	3490										
FRAME	56C		**HZ**	60			**PH**	3			
SF	1.15	**CODE**	L	**DES**	B	**CLASS**	F				
F.L. AVG. EFF.	84	**PF**	83								
RATING	40C AMB-CONT										
CC											
DE	6205		**ODE**	6203							
ENCL	OPEN	**SN**									
USABLE AT	N/A										

AC Induction Motor Performance Data
Record # 61779
Typical performance - not guaranteed values

Winding: 35WGM761-R013	**Type:** 3518M	**Enclosure:** OPEN

Nameplate Data			**460 V, 60 Hz: High Voltage Connection**	
Rated Output (HP)		1.5	**Full Load Torque**	2.26 LB-FT
Volts		208-230/460	**Start Configuration**	direct on line
Full Load Amps		4.2-4/2	**Breakdown Torque**	9.32 LB-FT
R.P.M.		3490	**Pull-up Torque**	4.18 LB-FT
Hz	60 **Phase**	3	**Locked-rotor Torque**	6.79 LB-FT
NEMA Design Code	B **KVA Code**	L	**Starting Current**	17.2 A
Service Factor (S.F.)		1.15	**No-load Current**	1.05 A
NEMA Nom. Eff.	84 **Power Factor**	83	**Line-line Res. @ 25ºC**	12.897 Ω
Rating - Duty		40C AMB-CONT	**Temp. Rise @ Rated Load**	24°C
S.F. Amps			**Temp. Rise @ S.F. Load**	29°C
			Locked-rotor Power Factor	64
			Rotor inertia	0.0493 LB-FT2

Load Characteristics 460 V, 60 Hz, 1.5 HP

% of Rated Load	**25**	**50**	**75**	**100**	**125**	**150**	**S.F.**
Power Factor	43	64	76	83	87	90	85
Efficiency	73.6	82.2	84.7	85	84.3	83	84.6
Speed	3574.4	3550.4	3524.4	3496.4	3465.2	3430	3478
Line amperes	1.14	1.35	1.63	1.99	2.41	2.84	2.24

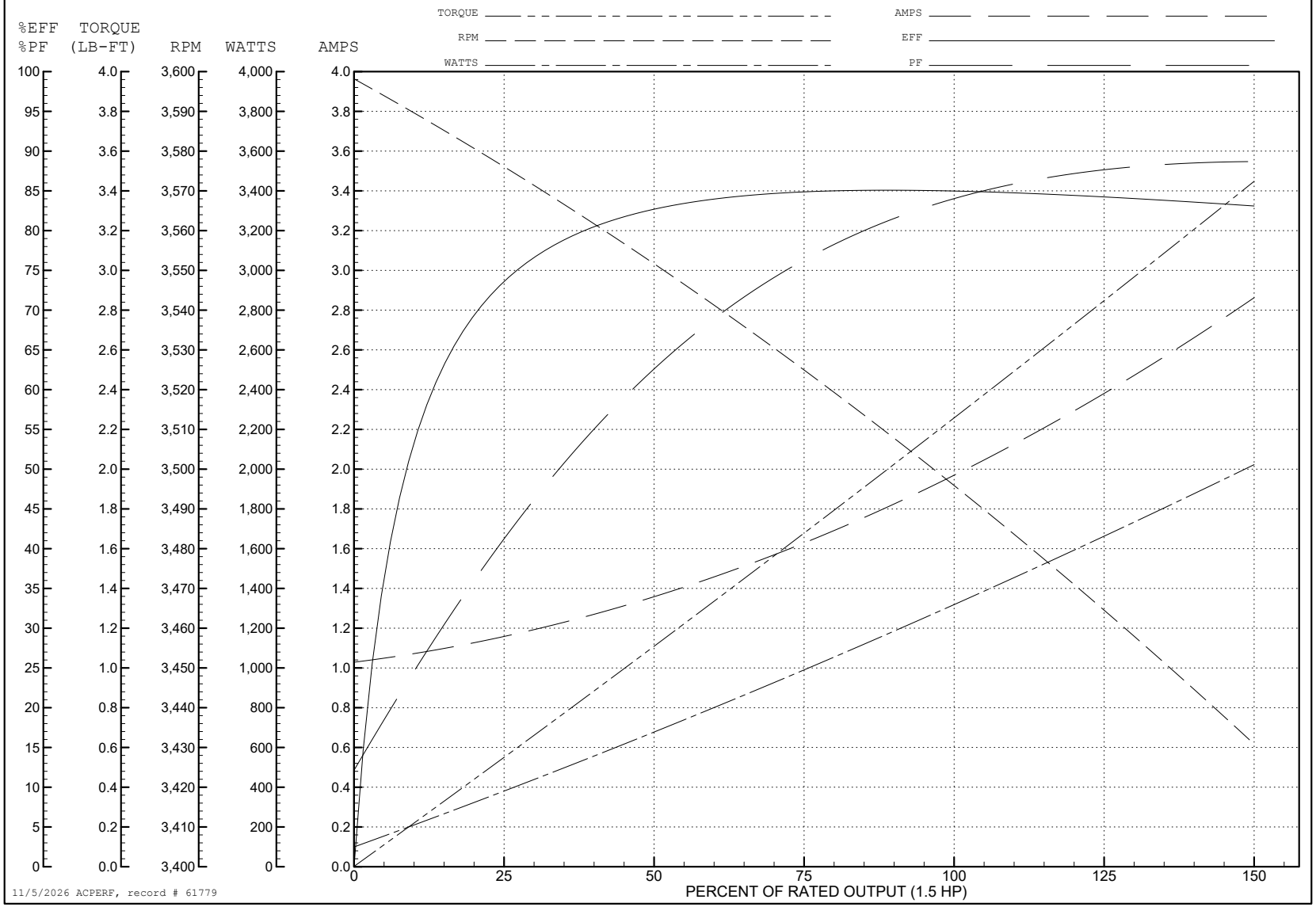
ABB Motors and Mechanical Inc.

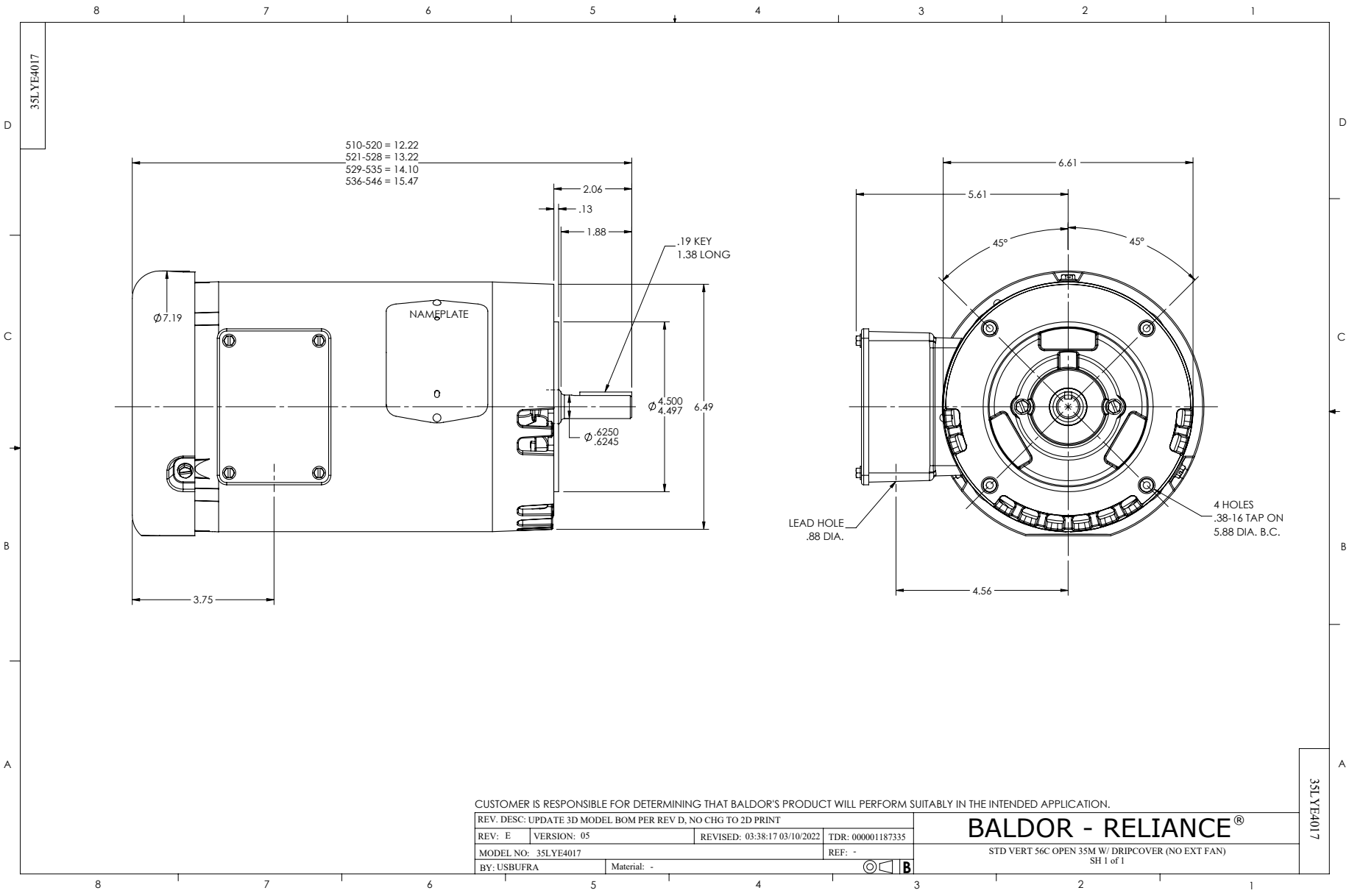
WINDING # 35WGM761

1.5 HP 3 PH 60 HZ 3490 RPM 460 V 3518M

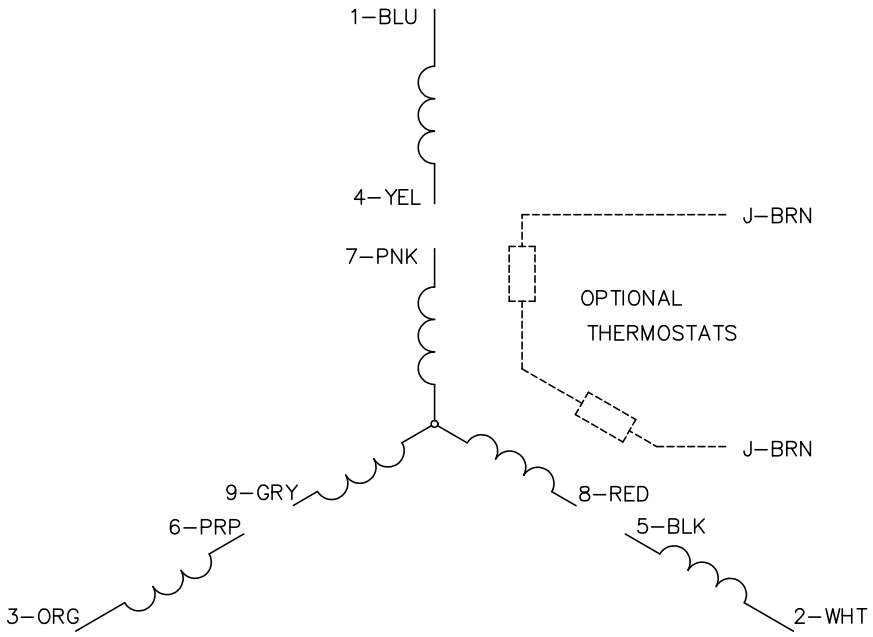
Typical performance - not guaranteed values.

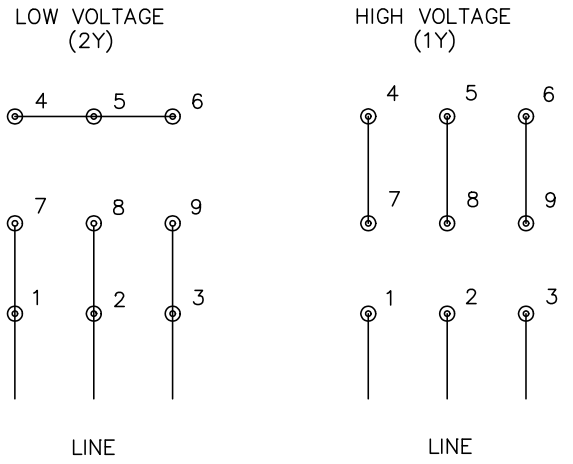
TORQUES(LB-FT): PO=9.32 PU=4.18 LR=6.79 LRA=17.2




35LYE4017
510-520 = 12.22
521-528 = 13.22
529-535 = 14.10
536-546 = 15.47
2.06
.13
1.88
.19 KEY
1.38 LONG
NAMEPLATE
Ø7.19
Ø4.500
4.497
6.49
Ø.6250
.6245
3.75
6.61
5.61
45°
45°
LEAD HOLE
.88 DIA.
4 HOLES
.38-16 TAP ON
5.88 DIA. B.C.
4.56
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT BALDOR'S PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION.
REV. DESC: UPDATE 3D MODEL BOM PER REV D, NO CHG TO 2D PRINT
REV: E
VERSION: 05
REVISED: 03:38:17 03/10/2022
TDR: 000001187335
MODEL NO: 35LYE4017
REF: -
BY: USBUFRA
Material: -
B
BALDOR - RELIANCE®
STD VERT 56C OPEN 35M W/ DRIPCOVER (NO EXT FAN)
SH 1 of 1
35LYE4017

CD0005





NOTES:

1. INTERCHANGE ANY TWO LINE LEADS TO REVERSE ROTATION.
2. OPTIONAL THERMOSTATS ARE PROVIDED WHEN SPECIFIED.
3. ACTUAL NUMBER OF INTERNAL PARALLEL CIRCUITS MAY BE A MULTIPLE OF THOSE SHOWN ABOVE.
4. LEAD COLORS ARE OPTIONAL. LEADS MUST ALWAYS BE NUMBERED AS SHOWN.

CD0005

REV. DESC: REVISE TO SHOW OPTIONAL COLORS			BALDOR ELECTRIC Co.
REV. LTR: E	BY: JLP	REVISED: 01/19/99 10:15	TDR: 0171435
CD0005		FILE: AAA00005140	MDL: –
		MTL: –	3PH, DV, 9 LEADS