

**BALDOR • RELIANCE**

---

# Customer information packet

## VFSWDM3545-E

1HP, 3450RPM, 3PH, 60HZ, 56C, 3520M, TENV, F1, N

Class - None

Division - Not Applicable

## Specifications

Enclosure	TENV
Frame	56C
Frame Material	Stainless Steel
Frequency	60.00 Hz
Haz Area Class and Group	None
Haz Area Division	Not Applicable
Motor Letter Type	Three Phase
Output @ Frequency	1.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	3600 RPM @ 60 HZ
Voltage @ Frequency	230.0 V @ 60 HZ 460.0 V @ 60 HZ
Agency Approvals	UR CSA
Ambient Temperature	40 °C
Auxillary Box	No Auxillary Box
Auxillary Box Lead Termination	None
Base Indicator	No Mounting
Bearing Grease Type	Polyrex EM (-20F +300F)
Blower	None
Current @ Voltage	1.400 A @ 460.0 V 2.800 A @ 230.0 V 2.900 A @ 208.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	82.5 %
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	P
Type	AC
Mech. spec.	35E4656
Base	
Status	PRD/A
Elec. spec.	35WGL314
Layout	35LYE4656
Eff. date	08-14-2023
CD Diagram	CD0005
Poles	02
Leads	9#18,0#,0#,0# Y
Proprietary	False
Created date	06-20-2017

High Voltage Full Load Amps	1.4 a
Insulation Class	H
Inverter Code	Not Inverter
KVA Code	N
Lifting Lugs	No Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Motor Finish	UNPAINTED
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	@ 0 AWG 9 @ 18 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3520M
Mounting Arrangement	F1
Number of Poles	2
Overall Length	11.78 IN
Power Factor	82
Product Family	WD All SS Encapsulated
Pulley End Bearing Type	Sealed Bearing
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	3450 rpm
Speed Code	Single Speed
Starting Method	Direct on line
Thermal Device - Bearing	None
Thermal Device - Winding	None

<b>Vibration Sensor Indicator</b>	<b>No Vibration Sensor</b>
<b>Winding Thermal 1</b>	<b>None</b>
<b>Winding Thermal 2</b>	<b>None</b>



**AC Induction Motor Performance Data**

Record # 63641

Typical performance - not guaranteed values

<b>Winding: 35WGL314-R002</b>		<b>Type: 3520M</b>		<b>Enclosure: TENV</b>	
<b>Nameplate Data</b>			<b>460 V, 60 Hz: High Voltage Connection</b>		
<b>Rated Output (HP)</b>	1	<b>Full Load Torque</b>	1.52 LB-FT		
<b>Volts</b>	230/460	<b>Start Configuration</b>	direct on line		
<b>Full Load Amps</b>	2.8/1.4	<b>Breakdown Torque</b>	8.51 LB-FT		
<b>R.P.M.</b>	3450	<b>Pull-up Torque</b>	6.16 LB-FT		
<b>Hz</b>	60 <b>Phase</b>	3	<b>Locked-rotor Torque</b>	8.01 LB-FT	
<b>NEMA Design Code</b>	<b>B KVA Code</b>	N	<b>Starting Current</b>	15.1 A	
<b>Service Factor (S.F.)</b>	1.15	<b>No-load Current</b>	0.722 A		
<b>NEMA Nom. Eff.</b>	82.5 <b>Power Factor</b>	82	<b>Line-line Res. @ 25°C</b>	10.85 Ω	
<b>Rating - Duty</b>	40C AMB-CONT	<b>Temp. Rise @ Rated Load</b>	91°C		
<b>S.F. Amps</b>	3.2/1.6	<b>Temp. Rise @ S.F. Load</b>	105°C		

**Load Characteristics 460 V, 60 Hz, 1 HP**

<b>% of Rated Load</b>	<b>25</b>	<b>50</b>	<b>75</b>	<b>100</b>	<b>125</b>	<b>150</b>	<b>S.F.</b>
<b>Power Factor</b>	44	64	76	82	86	88	84
<b>Efficiency</b>	67.8	79	82.4	83.4	83.4	82.5	83.4
<b>Speed</b>	3566.5	3536.9	3507.4	3477.1	3442.7	3405	3456
<b>Line amperes</b>	0.791	0.953	1.15	1.38	1.63	1.93	1.53

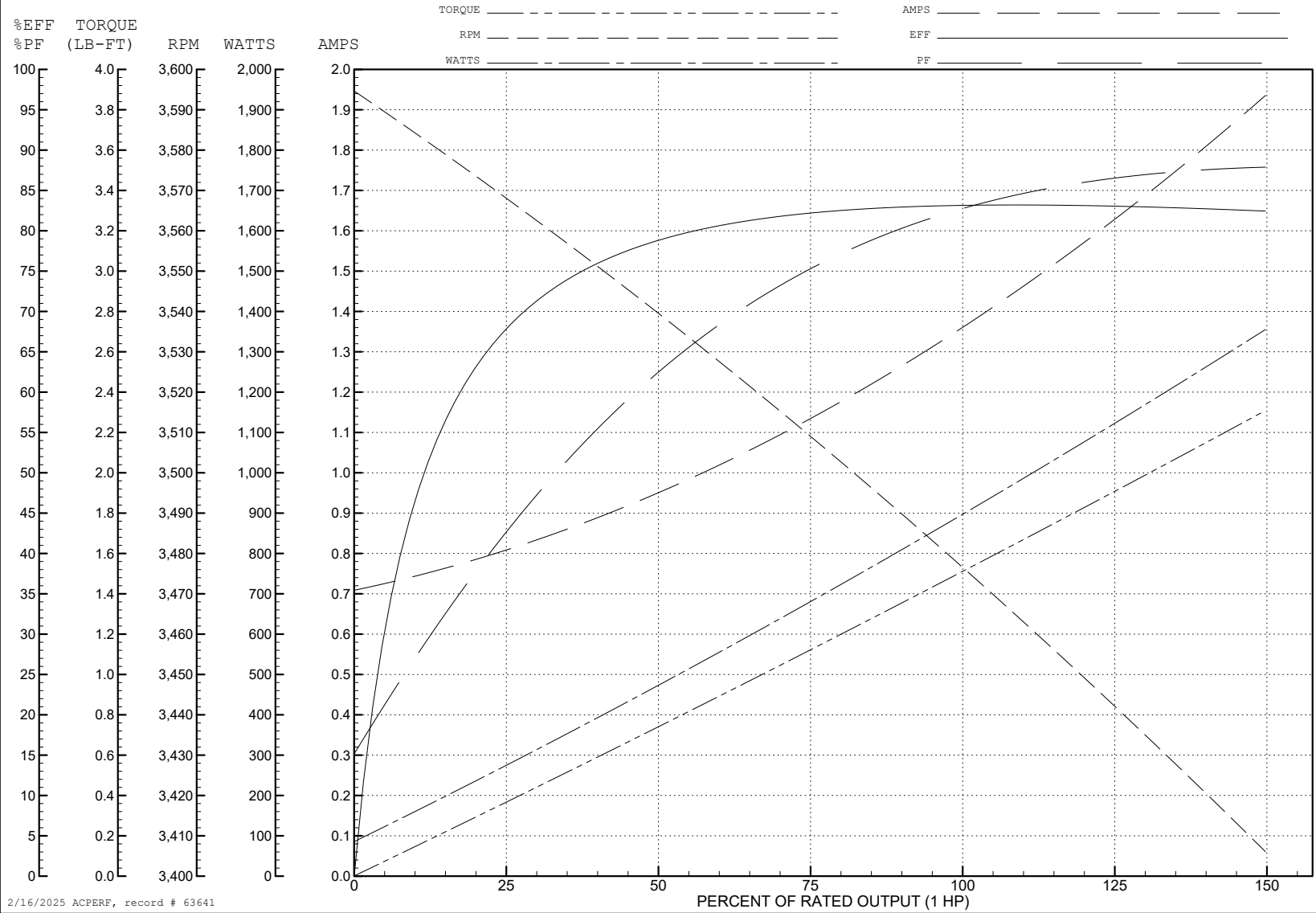
ABB Motors and Mechanical Inc.

WINDING # 35WGL314

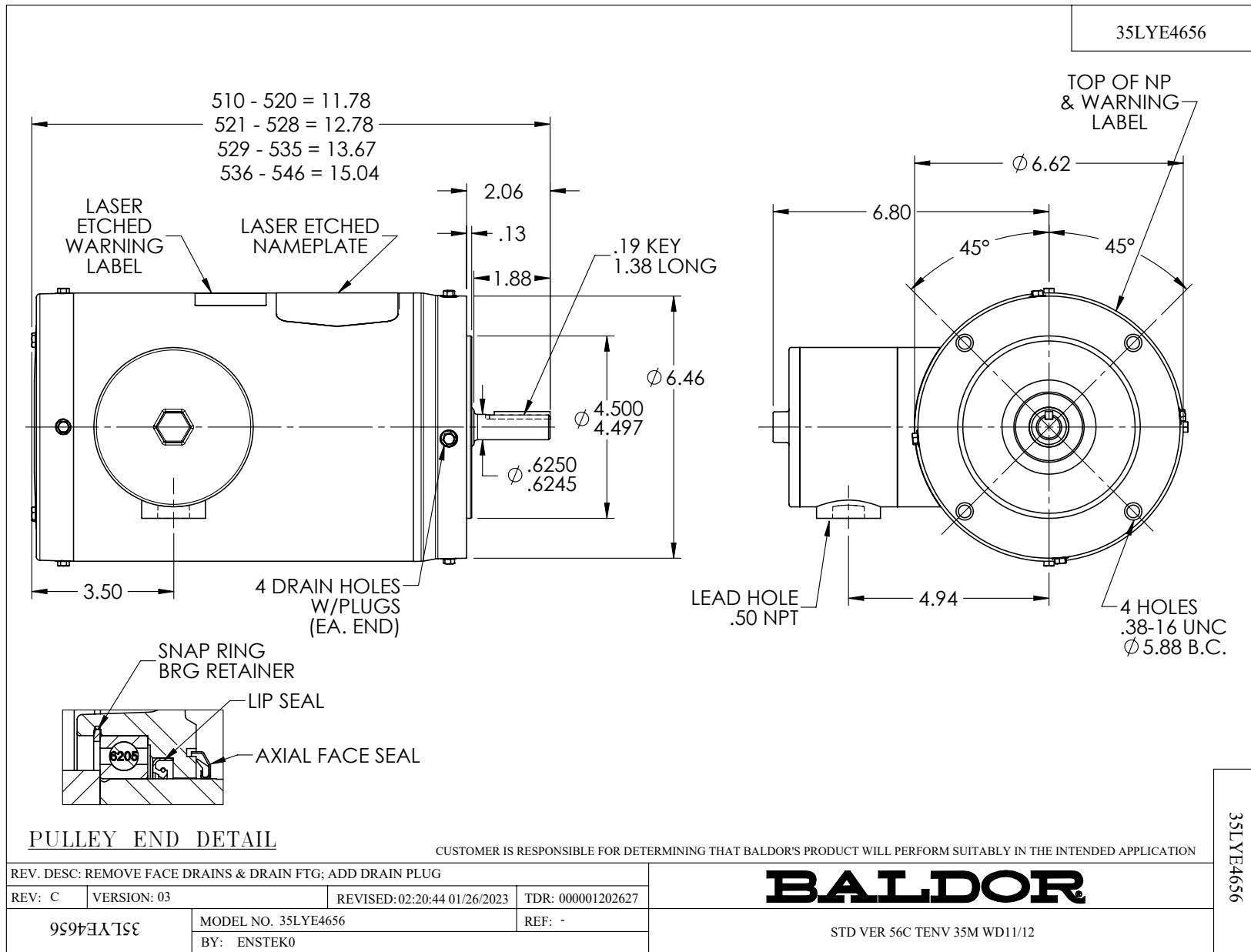
Typical performance - not guaranteed values.

1 HP 3 PH 60 HZ 3450 RPM 460 V 3520M

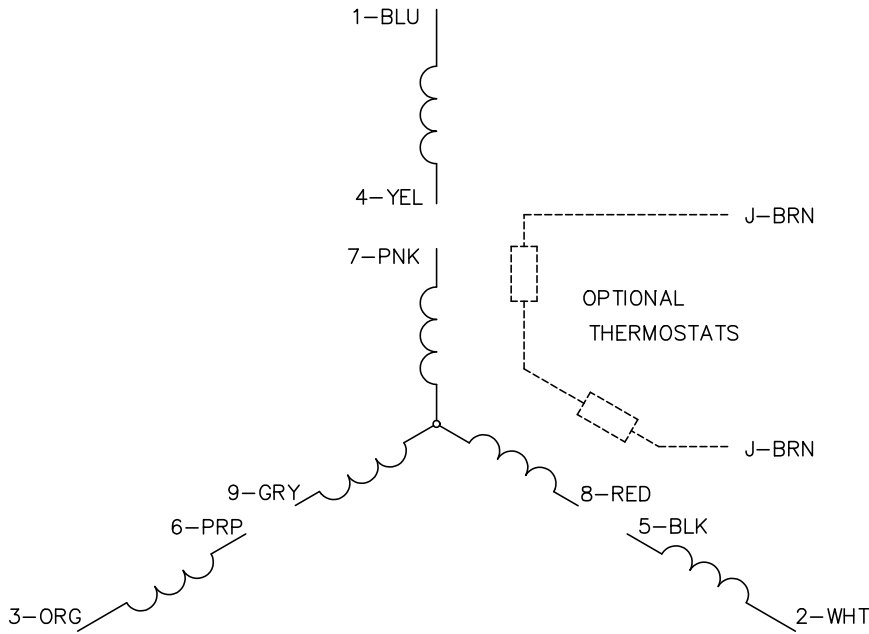
TORQUES (LB-FT): PO=8.51 PU=6.16 LR=8.01 LRA=15.1



2/16/2025 ACPERF, record # 63641



CD0005



LOW VOLTAGE  
(2Y)



LINE

HIGH VOLTAGE  
(1Y)



LINE

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			
REV. LTR: E	BY: JLP	REVISED: 01/19/99 10:15	TDR: 0171435
S00000		FILE: AAA00005140	MDL: -
		MTL: -	

**BALDOR ELECTRIC Co.**

3PH, DV, 9 LEADS