

**BALDOR • RELIANCE**

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# Customer information packet

## VFSWDNM3554T-E

1.5HP, 1765RPM, 3PH, 60HZ, 145TC, 3540M, TENV

Class - None

Division - Not Applicable

## Specifications

Enclosure	TENV
Frame	145TC
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	1.500 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	230.0 V @ 60 HZ 460.0 V @ 60 HZ
Agency Approvals	CSA EEV CURUSEEV NEMA PREMIUM NEMA_PREMIUM WEEE
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	3.900 A @ 230.0 V 1.950 A @ 460.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	86.5 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Shaft Indicator	None

## Part detail

Revision	C
Type	AC
Mech. spec.	35E4717
Base	
Status	PRD/A
Elec. spec.	35WGZ820
Layout	35LYE4717
Eff. date	08-14-2023
CD Diagram	CD0005
Poles	04
Leads	9#18
Proprietary	False
Created date	03-11-2022

Heater Indicator	No Heater
High Voltage Full Load Amps	2.0 a
Insulation Class	H
Inverter Code	Inverter Duty
KVA Code	M
Lifting Lugs	No Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Max Speed	2700 rpm
Motor Finish	UNPAINTED
Motor Lead Quantity/Wire Size	9 @ 18 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3540M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	15.09 IN
Power Factor	72
Product Family	WD All SS Encapsulated
Pulley End Bearing Type	Sealed Bearing
Pulley Face Code	C-Face
Pulley Shaft Indicator	Standard
Rodent Screen	None
Service Factor	1.15
Shaft Diameter	0.875 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	1765 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**

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Nameplate

NP4427AAA01

<b>CAT #</b>	VFSWDNM3554T-E	<b>WT</b>	59	<b>LBS</b>	
<b>SPEC</b>	35E4717Z820G1	<b>ENCL</b>	TENV		
<b>SER #</b>		<b>CC</b>	010A	<b>IP</b>	69
<b>HP</b>	1.5	<b>MAG CUR</b>	2/1		
<b>VOLTS</b>	230/460	<b>NEMA NOM. EFF</b>	86.5		
<b>AMPS</b>	3.9/1.95	<b>PF</b>	72		
<b>RATING</b>	40C AMB-CONT				
<b>RPM</b>	1765	<b>MAX RPM</b>	2700		
<b>FRAME</b>	145TC	<b>HZ</b>	60	<b>CODE</b>	M
		<b>CLASS</b>	H		
<b>SER.F.</b>	1.15	<b>SF AMP</b>	4.4/2.2	<b>PH</b>	3
		<b>DES</b>	B		
<b>DE</b>	6205	<b>ODE</b>	6205		
<b>LUBRICATION</b>	POLYREX EM				
<b>ID LOGO</b>	<b>INVERTER TYPE</b>	<b>VPWM</b>	<b>CHP</b>	60	<b>TO</b>
				90	1.5:1
<b>ID LOGO</b>	<b>WK2</b>	0.289	<b>CT</b>	15	<b>TO</b>
				60	4:1
<b>ID LOGO</b>	<b>SL HZ</b>	1.2	<b>VT</b>	3	<b>TO</b>
				60	20:1
<b>YR</b>				<b>QR</b>	

**AC Induction Motor Performance Data**

Record # 87357

Preliminary Data Sheet

Winding: 35WGZ820-R001		Type: 3540M	Enclosure: TENV			
<b>Nameplate Data</b>			<b>460 V, 60 Hz: High Voltage Connection</b>			
Rated Output (HP)	1.5	Full Load Torque	4.49 LB-FT			
Volts	230/460	Start Configuration	direct on line			
Full Load Amps	3.9/1.95	Breakdown Torque	18.2 LB-FT			
R.P.M.	1765	Pull-up Torque	10.49 LB-FT			
Hz	60 Phase	3	Locked-rotor Torque	12.72 LB-FT		
NEMA Design Code	B	KVA Code	M	Starting Current	18.17 A	
Service Factor (S.F.)	1.15	No-load Current	1.03 A			
NEMA Nom. Eff.	86.5	Power Factor	72	Line-line Res. @ 25°C	10.9 Ω	
Rating - Duty	40C	AMB-CONT	Temp. Rise @ Rated Load			51°C
S.F. Amps	4.4/2.2	Temp. Rise @ S.F. Load			62°C	
			Locked-rotor Power Factor	53.1		
			Rotor inertia	0.289 lb-ft <sup>2</sup>		

**Load Characteristics 460 V, 60 Hz, 1.5 HP**

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	39	61	74	81	85	87	83
Efficiency	83	88.6	89.4	88.9	88	86.6	88.4
Speed	1789	1782	1774	1765	1756	1746	1760
Line amperes	1.11	1.31	1.6	1.96	2.35	2.8	2.19

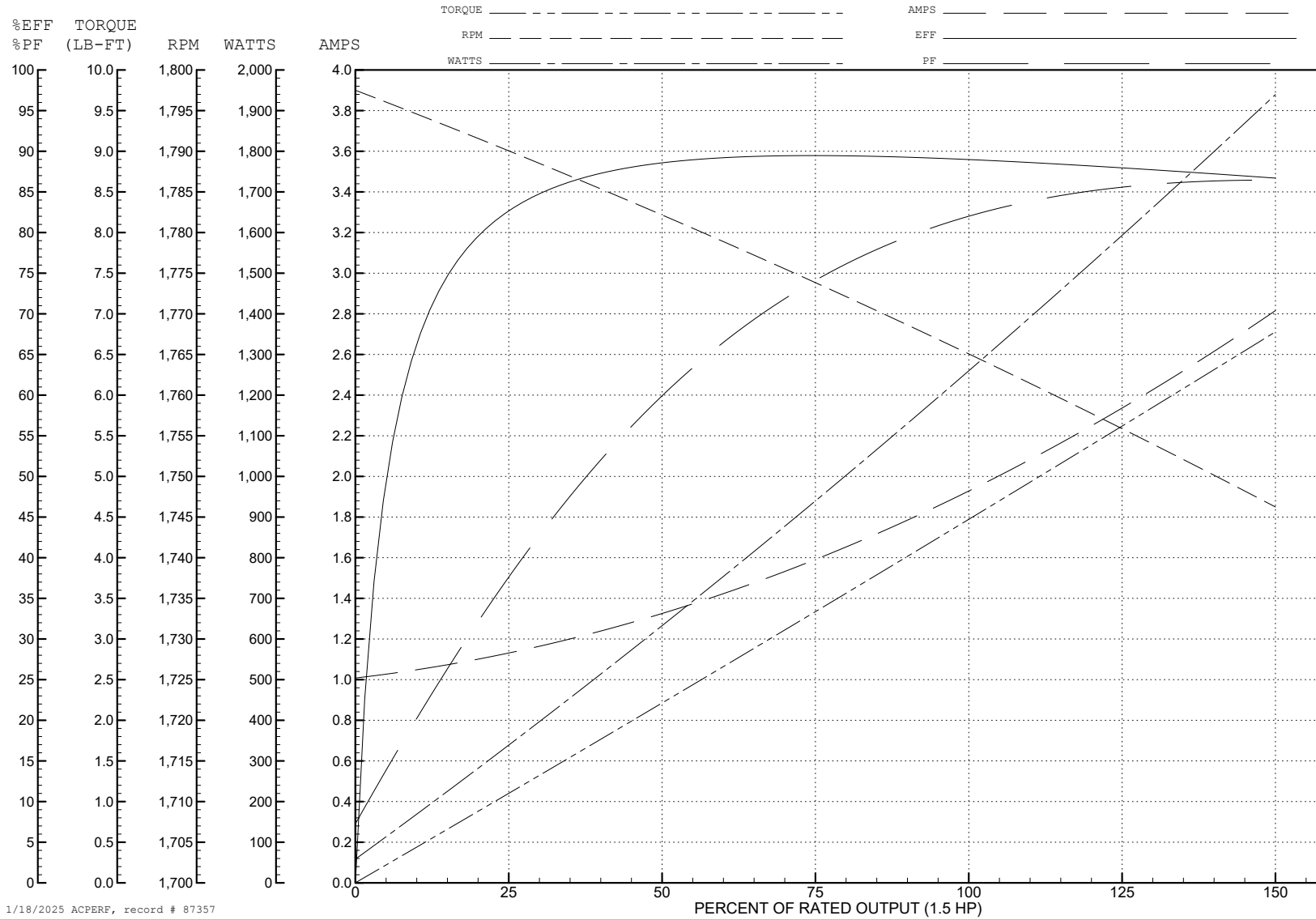
ABB Motors and Mechanical Inc.

WINDING # 35WGZ820

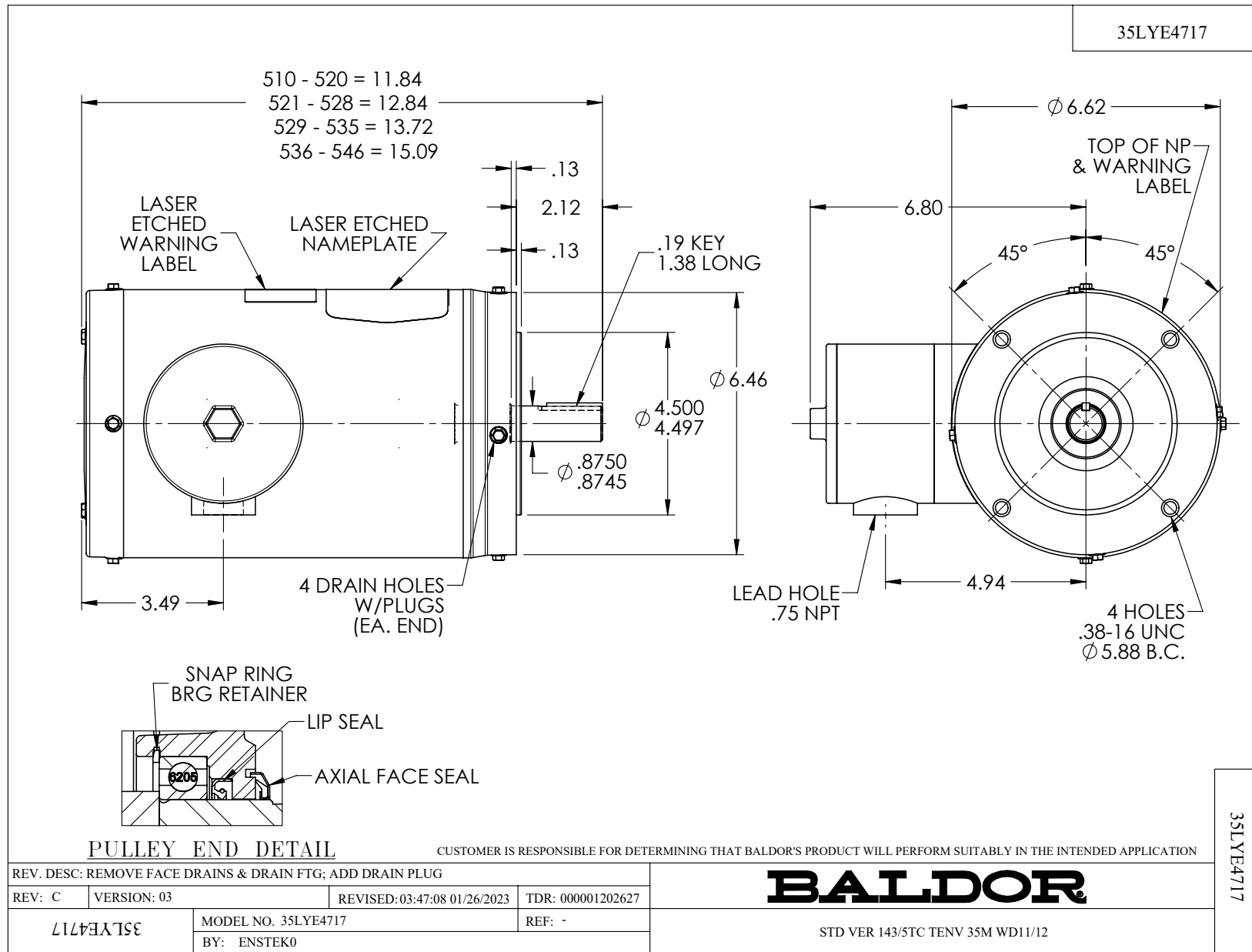
Typical performance - not guaranteed values.

1.5 HP 3 PH 60 HZ 1765 RPM 460 V 3540M

TORQUES (LB-FT): PO=18.2 PU=10.49 LR=12.72 LRA=18.17



1/18/2025 ACPERF, record # 87357

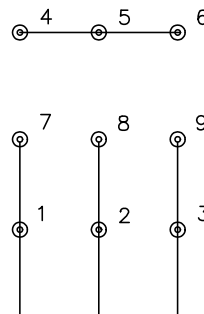




CD0005

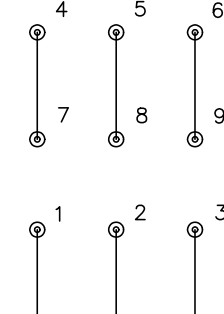


LOW VOLTAGE  
(2Y)



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