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# Customer information packet

## VFSWDM3559T-E

3HP, 3470RPM, 3PH, 60HZ, 145TC, 3546M, TEFC, F1

Class - None

Division - Not Applicable

## Specifications

Enclosure	TEFC
Frame	145TC
Frame Material	Stainless Steel
Frequency	60.00 Hz
Motor Letter Type	Three Phase
Output @ Frequency	3.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	3600 RPM @ 60 HZ
Voltage @ Frequency	230.0 V @ 60 HZ 460.0 V @ 60 HZ
XP Class and Group	None
XP Division	Not Applicable
Agency Approvals	CSA UR
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	7.700 A @ 208.0 V 7.400 A @ 230.0 V 3.700 A @ 460.0 V
Design Code	A
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
Heater Indicator	No Heater
High Voltage Full Load Amps	3.7 a

## Part detail

Revision	M
Type	AC
Mech. spec.	35E4709
Base	
Status	PRD/A
Elec. spec.	35WGR930
Layout	35LYE4709
Eff. date	08-14-2023
CD Diagram	CD0005
Poles	02
Leads	9#18,0#,0#,0# Y
Proprietary	False
Created date	07-11-2017

<b>Insulation Class</b>	H
<b>Inverter Code</b>	Inverter Ready
<b>KVA Code</b>	P
<b>Lifting Lugs</b>	No Lifting Lugs
<b>Locked Bearing Indicator</b>	Locked Bearing
<b>Motor Finish</b>	UNPAINTED
<b>Motor Lead Quantity/Wire Size</b>	@ 0 AWG 9 @ 18 AWG
<b>Motor Lead Termination</b>	Flying Leads
<b>Motor Standards</b>	NEMA
<b>Motor Type</b>	3546M
<b>Mounting Arrangement</b>	F1
<b>Number of Poles</b>	2
<b>Overall Length</b>	16.28 IN
<b>Power Factor</b>	91
<b>Product Family</b>	WD All SS Encapsulated
<b>Pulley End Bearing Type</b>	Sealed Bearing
<b>Pulley Face Code</b>	C-Face
<b>Pulley Shaft Indicator</b>	Standard
<b>Rodent Screen</b>	None
<b>RoHS Status</b>	ROHS COMPLIANT
<b>Service Factor</b>	1.15
<b>Shaft Diameter</b>	0.875 IN
<b>Shaft Ground Indicator</b>	No Shaft Grounding
<b>Shaft Rotation</b>	Reversible
<b>Shaft Slinger Indicator</b>	No Slinger
<b>Speed</b>	3470 rpm
<b>Speed Code</b>	Single Speed
<b>Starting Method</b>	Direct on line
<b>Thermal Device - Bearing</b>	None
<b>Thermal Device - Winding</b>	None
<b>Vibration Sensor Indicator</b>	No Vibration Sensor
<b>Winding Thermal 1</b>	None
<b>Winding Thermal 2</b>	None

Nameplate

NP4427AAA01													
CAT #	VFSWDM3559T-E				WT	63	LBS						
SPEC	35E4709R930G1				ENCL	TEFC							
SER #					CC	010A	IP	69					
HP	3	MAG CUR											
VOLTS	230/460			NEMA NOM. EFF	86.5								
AMPS	7.4/3.7			PF	91								
RATING	40C AMB-CONT												
RPM	3470			MAX RPM	5400								
FRAME	145TC	HZ	60	CODE	P	CLASS	H						
SER.F.	1.15	SF AMP				PH	3	DES	A				
DE	6205		ODE	6205									
LUBRICATION	POLYREX EM												
ID LOGO	INVERTER TYPE		VPWM	CHP	60	TO	90	1.5:1					
ID LOGO	WK2	0.127	CT	15	TO	60	4:1						
ID LOGO	SL HZ		VT	3	TO	60	20:1						
											QR		
YR													

**AC Induction Motor Performance Data**

Record # 57380

Typical performance - not guaranteed values

<b>Winding: 35WGR930-R012</b>		<b>Type: 3546M</b>		<b>Enclosure: TEFC</b>	
<b>Nameplate Data</b>			<b>460 V, 60 Hz: High Voltage Connection</b>		
<b>Rated Output (HP)</b>		3	<b>Full Load Torque</b>		4.5 LB-FT
<b>Volts</b>		230/460	<b>Start Configuration</b>		direct on line
<b>Full Load Amps</b>		7.4/3.7	<b>Breakdown Torque</b>		17.2 LB-FT
<b>R.P.M.</b>		3470	<b>Pull-up Torque</b>		10.5 LB-FT
<b>Hz</b>	60	<b>Phase</b>	3	<b>Locked-rotor Torque</b>	17 LB-FT
<b>NEMA Design Code</b>	A	<b>KVA Code</b>	P	<b>Starting Current</b>	48.3 A
<b>Service Factor (S.F.)</b>		1.15	<b>No-load Current</b>		1.25 A
<b>NEMA Nom. Eff.</b>	86.5	<b>Power Factor</b>	91	<b>Line-line Res. @ 25°C</b>	3.47 Ω
<b>Rating - Duty</b>		40C	AMB-CONT	<b>Temp. Rise @ Rated Load</b>	63°C
<b>S.F. Amps</b>				<b>Temp. Rise @ S.F. Load</b>	74°C
				<b>Locked-rotor Power Factor</b>	42.3
				<b>Rotor inertia</b>	0.127 LB-FT <sup>2</sup>

**Load Characteristics 460 V, 60 Hz, 3 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>	59	79	87	90	91	90	91
<b>Efficiency</b>	80.1	86.4	87.3	86.9	85.7	83.9	86.2
<b>Speed</b>	3567	3541	3510	3479	3443	3403	3457
<b>Line amperes</b>	1.53	2.07	2.78	3.55	4.42	5.4	4.07

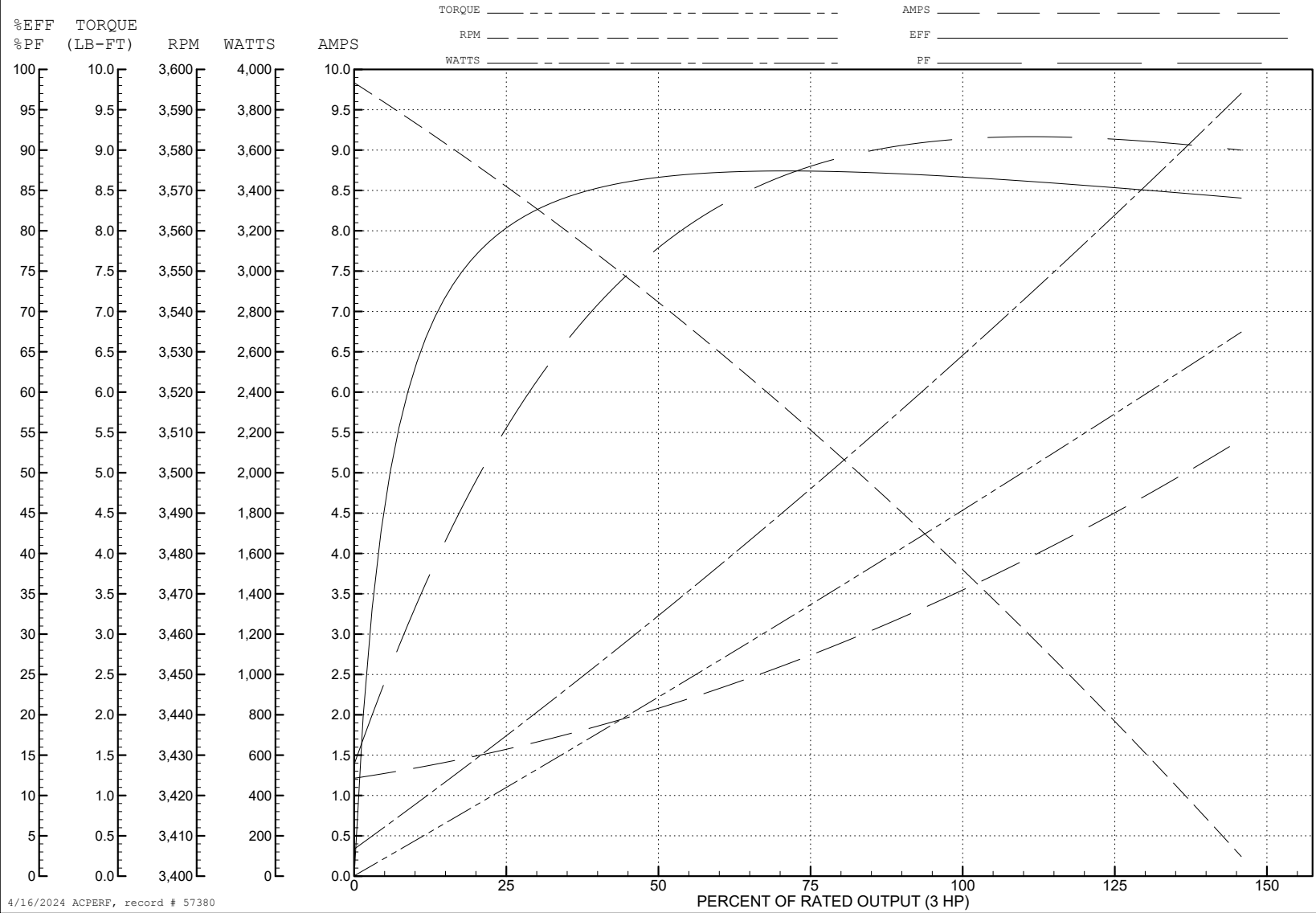
ABB Motors and Mechanical Inc.

WINDING # 35WGR930

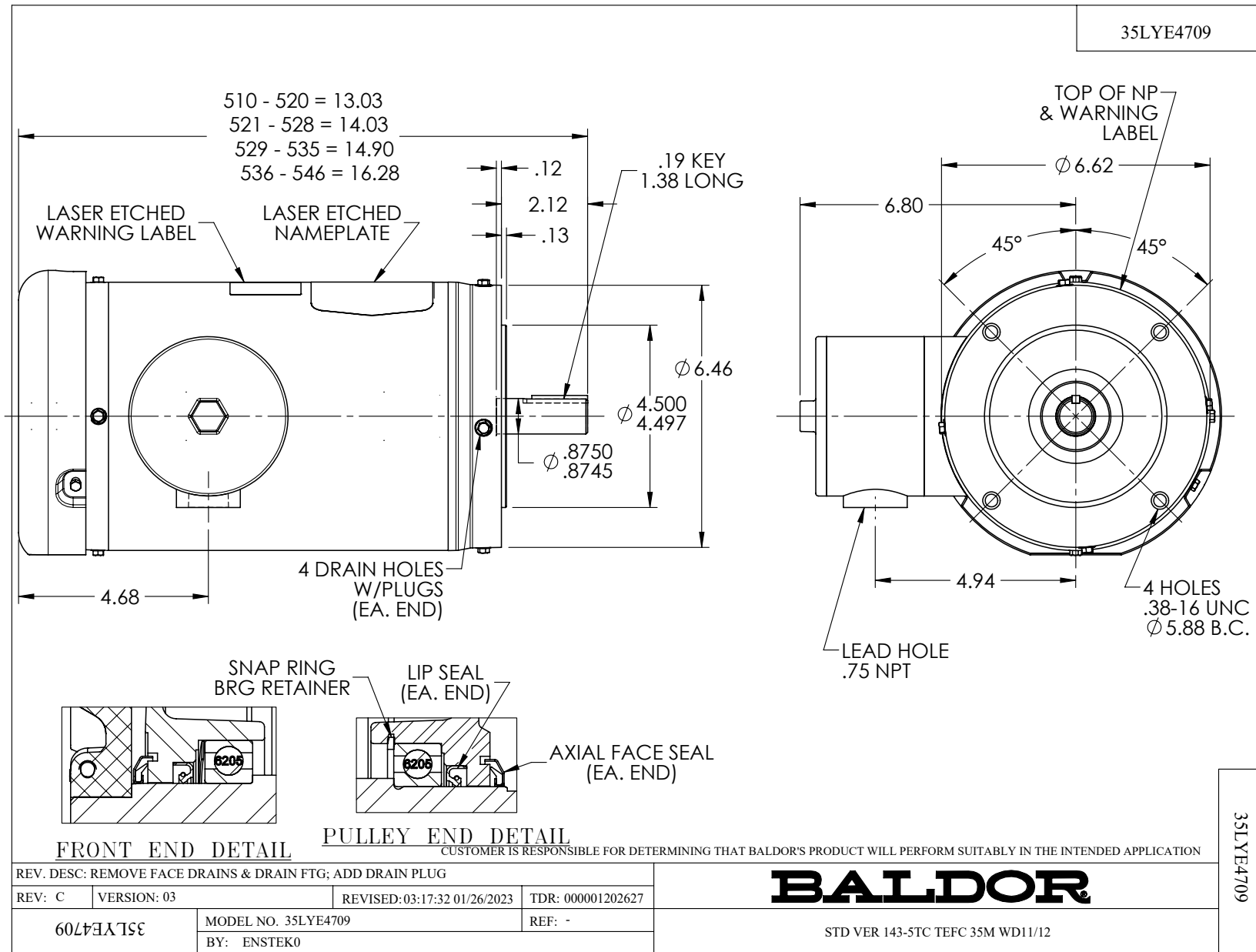
3 HP 3 PH 60 HZ 3470 RPM 460 V 3546M

Typical performance - not guaranteed values.

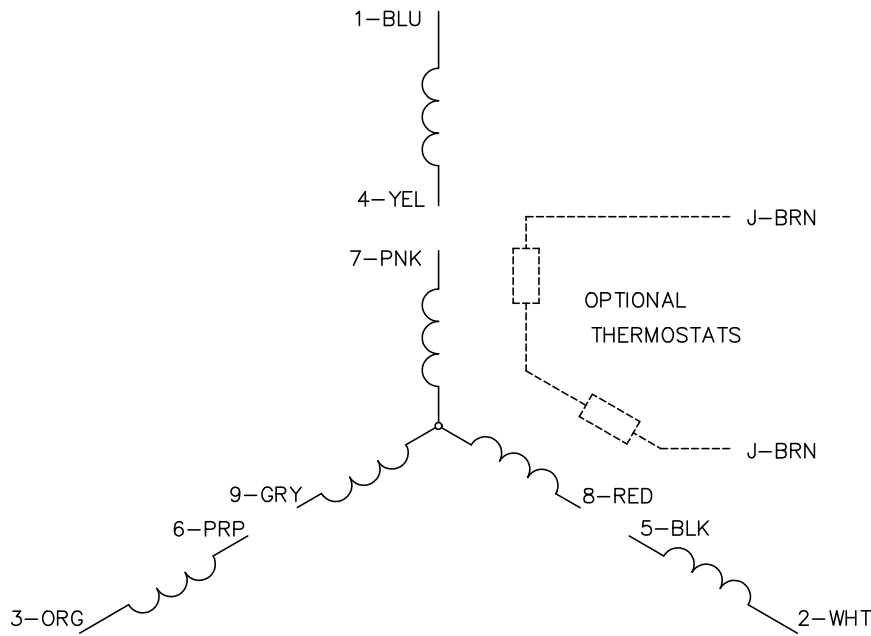
TORQUES (LB-FT): PO=17.2 PU=10.5 LR=17 LRA=48.3



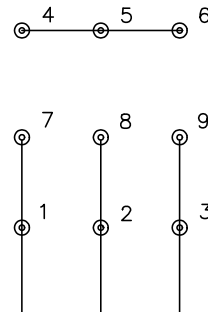
4/16/2024 ACPERF, record # 57380



CD0005

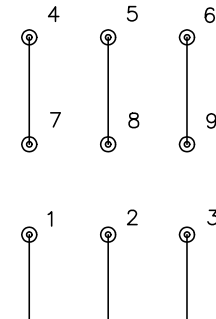


LOW VOLTAGE  
(2Y)



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