

**BALDOR • RELIANCE**

---

# Customer information packet

## ZDWNM3546T

1HP, 1770RPM, 3PH, 60HZ, 143TC, 3522M, TENV, F1

Class - None

Division - Not Applicable

## Specifications

Enclosure	TENV
Frame	143TC
Frame Material	Steel
Frequency	60.00 Hz
Motor Letter Type	Three Phase
Output @ Frequency	1.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1800 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	Rigid
Bearing Grease Type	Polyrex EM (-20F +300F)
Blower	None
Current @ Voltage	1.670 A @ 460.0 V
	3.300 A @ 208.0 V
	3.340 A @ 230.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	85.5 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	ENCODER
Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	1.7 a

## Part detail

Revision	B
Type	AC
Mech. spec.	35RR179
Base	
Status	PRD/A
Elec. spec.	35WGZ818
Layout	35LYRR179
Eff. date	07-14-2022
CD Diagram	CD0005
Poles	04
Leads	9#18
Proprietary	False
Created date	01-10-2022

<b>Insulation Class</b>	H
<b>Inverter Code</b>	Inverter Ready
<b>KVA Code</b>	M
<b>Lifting Lugs</b>	No Lifting Lugs
<b>Locked Bearing Indicator</b>	Locked Bearing
<b>Max Speed</b>	2700 rpm
<b>Motor Lead Quantity/Wire Size</b>	9 @ 18 AWG
<b>Motor Lead Termination</b>	Flying Leads
<b>Motor Standards</b>	NEMA
<b>Motor Type</b>	3522M
<b>Mounting Arrangement</b>	F1
<b>Number of Poles</b>	4
<b>Overall Length</b>	14.90 IN
<b>Power Factor</b>	66
<b>Product Family</b>	Wash Down
<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>Service Factor</b>	1.00
<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>	Shaft Slinger
<b>Speed</b>	1770 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>	Normally Closed Thermostat
<b>Vibration Sensor Indicator</b>	No Vibration Sensor
<b>Winding Thermal 1</b>	None
<b>Winding Thermal 2</b>	None

**Nameplate**

<b>NP1609L</b>					
<b>CAT NO</b>	ZDWNM3546T				
<b>SPEC.</b>	35RR179Z818G1				
<b>FRAME</b>	143TC	<b>HP</b>	1 TE		
<b>VOLTS</b>	230/460				
<b>MAG CUR</b>	2.5/1.25	<b>FLA</b>	3.34/1.67		
<b>RPM</b>	1770	<b>RPM MAX</b>	2700		
<b>HZ</b>	60	<b>PH</b>	3	<b>CLASS</b>	H
<b>SER.F.</b>	1.00	<b>DES</b>	B	<b>SL HZ</b>	1
<b>NEMA-NOM-EFF</b>	85.5	<b>WK2</b>	0.159		
<b>BLWR V</b>	<b>PH</b>	<b>HZ</b>	<b>A</b>		
<b>RATING</b>	40C AMB-CONT				
<b>DE BRG</b>	6205	<b>ODE BRG</b>	6203		
<b>CC</b>	010A	<b>SER.NO</b>			

**AC Induction Motor Performance Data**

Record # 89787

Typical performance - not guaranteed values

<b>Winding:</b> 35WGZ818-R005		<b>Type:</b> 3522M		<b>Enclosure:</b> TENV	
<b>Nameplate Data</b>			<b>460 V, 60 Hz: High Voltage Connection</b>		
<b>Rated Output (HP)</b>	1	<b>Full Load Torque</b>	2.99 LB-FT		
<b>Volts</b>	230/460	<b>Start Configuration</b>	direct on line		
<b>Full Load Amps</b>	3.34/1.67	<b>Breakdown Torque</b>	16.6 LB-FT		
<b>R.P.M.</b>	1770	<b>Pull-up Torque</b>	7.42 LB-FT		
<b>Hz</b>	60 <b>Phase</b>	3	<b>Locked-rotor Torque</b>	10.32 LB-FT	
<b>NEMA Design Code</b>	<b>B KVA Code</b>	M	<b>Starting Current</b>	16.1 A	
<b>Service Factor (S.F.)</b>	1	<b>No-load Current</b>	1.23 A		
<b>NEMA Nom. Eff.</b>	85.5 <b>Power Factor</b>	66	<b>Line-line Res. @ 25°C</b>	14.4 Ω	
<b>Rating - Duty</b>	40C AMB-CONT		<b>Temp. Rise @ Rated Load</b>	63°C	
			<b>Locked-rotor Power Factor</b>	59.3666	
			<b>Rotor inertia</b>	0.159 lb-ft <sup>2</sup>	

**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>Power Factor</b>	27	43	56	66	73	78
<b>Efficiency</b>	70.8	81.2	84.5	85.9	85.8	85.2
<b>Speed</b>	1793	1786	1781	1773	1766	1758
<b>Line amperes</b>	1.25	1.34	1.49	1.67	1.87	2.12

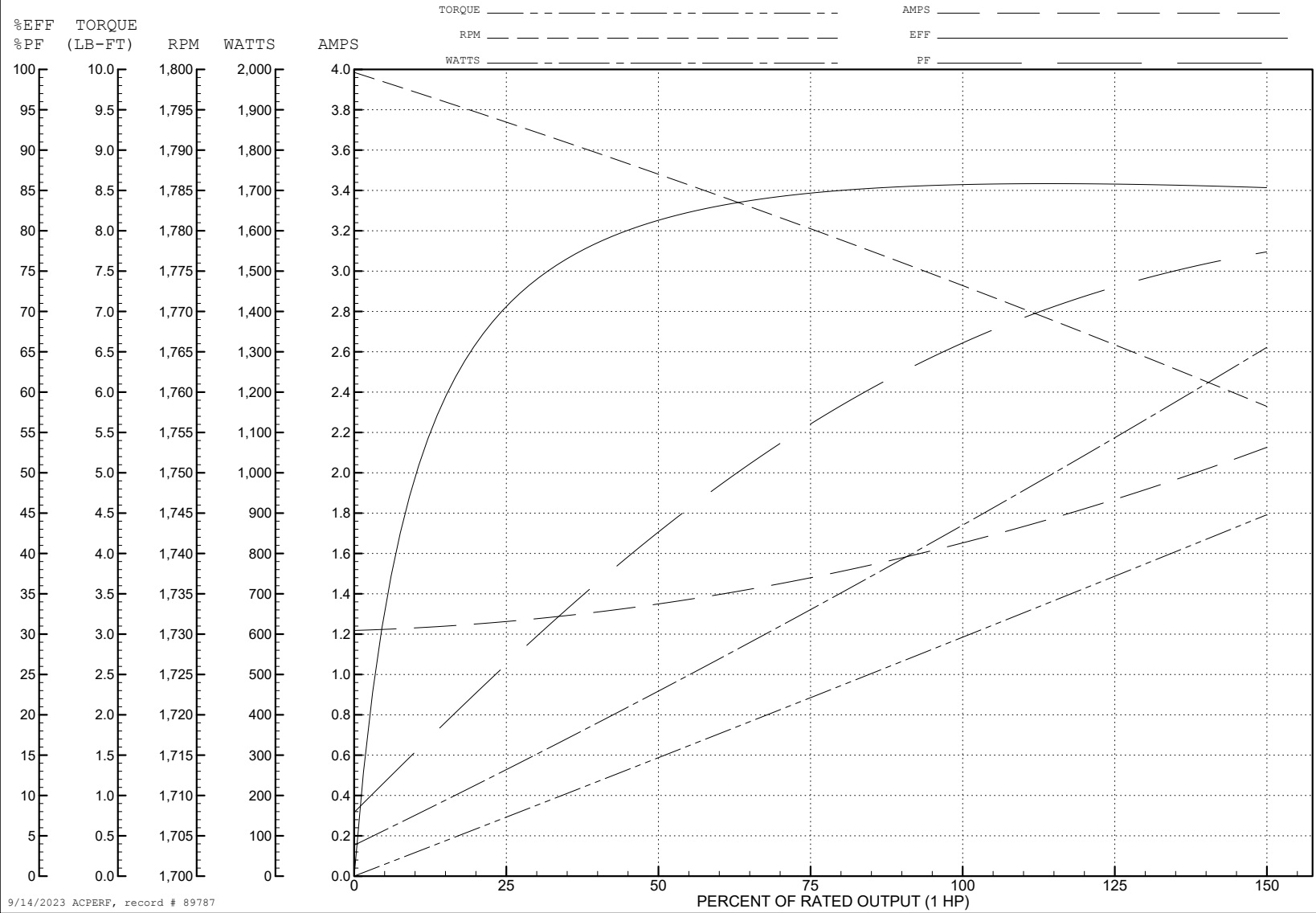
ABB Motors and Mechanical Inc.

WINDING # 35WGZ818

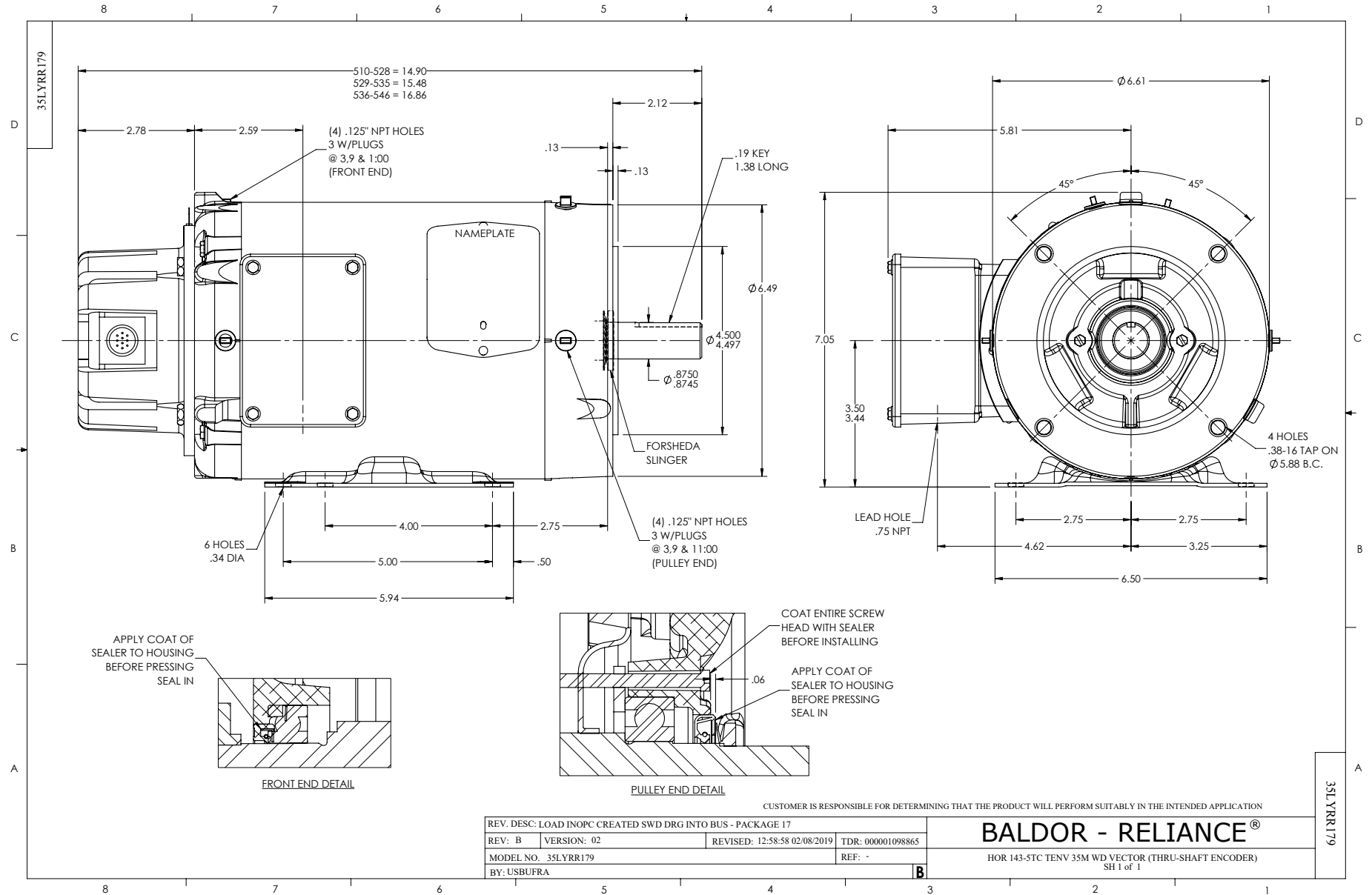
Typical performance - not guaranteed values.

1 HP 3 PH 60 HZ 1770 RPM 460 V 3522M

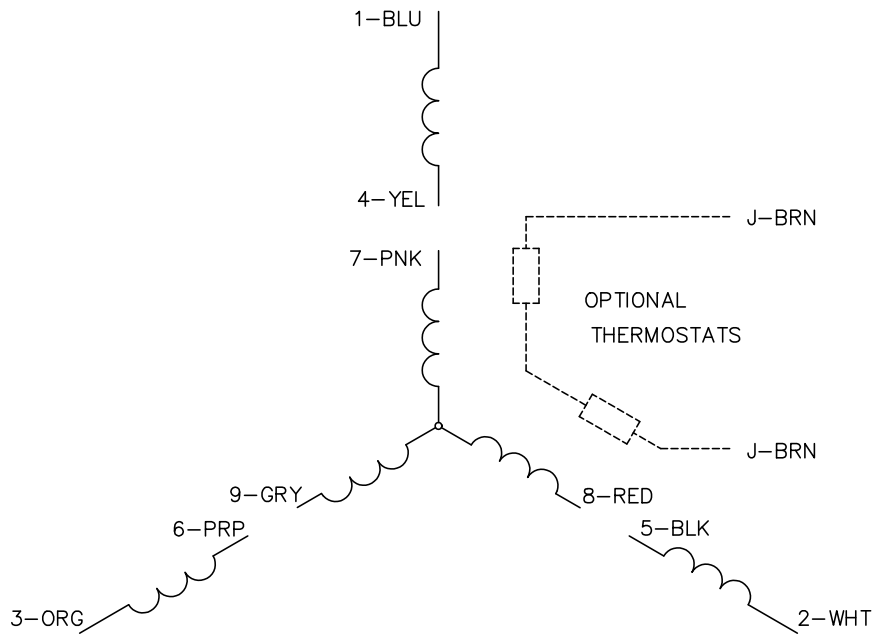
TORQUES (LB-FT): PO=16.6 PU=7.42 LR=10.32 LRA=16.1



9/14/2023 ACPERF, record # 89787



CD0005

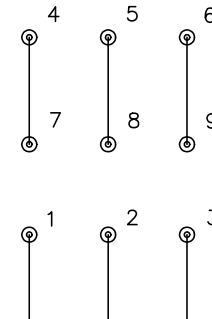


LOW VOLTAGE  
(2Y)



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