

**BALDOR • RELIANCE**

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# Customer information packet

## EWDM41906T

20HP, 3520RPM, 3PH, 60HZ, 256T, TEFC, F1

Class - None

Division - Not Applicable

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## Specifications

Enclosure	TEFC
Frame	256T
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	20.000 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	NEMA PREMIUM UR CSA EEV
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	23.000 A @ 460.0 V 46.000 A @ 230.0 V
Design Code	A
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	91.0 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Heater Indicator	No Heater
High Voltage Full Load Amps	23.0 a
Insulation Class	F

## Part detail

Revision	F
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	39WGX191
Layout	39LYS015
Eff. date	02-14-2024
CD Diagram	CD0005
Poles	02
Leads	9#12
Proprietary	False
Created date	08-13-2019

<b>Inverter Code</b>	Inverter Ready
<b>IP Rating</b>	IP55
<b>KVA Code</b>	H
<b>Lifting Lugs</b>	Standard Lifting Lugs
<b>Locked Bearing Indicator</b>	Locked Bearing
<b>Max Speed</b>	5400 rpm
<b>Motor Lead Termination</b>	Flying Leads
<b>Motor Standards</b>	NEMA
<b>Motor Type</b>	3940M
<b>Mounting Arrangement</b>	F1
<b>Number of Poles</b>	2
<b>Overall Length</b>	23.57 IN
<b>Power Factor</b>	90
<b>Product Family</b>	Wash Down
<b>Pulley Face Code</b>	Standard
<b>Rodent Screen</b>	None
<b>Service Factor</b>	1.00
<b>Shaft Diameter</b>	1.625 IN
<b>Shaft Ground Indicator</b>	No Shaft Grounding
<b>Shaft Rotation</b>	Reversible
<b>Speed</b>	3520 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**

<b>NP1669L</b>									
<b>CAT.NO.</b>	EWDM41906T								
<b>SPEC.</b>	39-0000-0185								
<b>HP</b>	20								
<b>VOLTS</b>	230/460								
<b>AMP</b>	46/23								
<b>RPM</b>	3520								
<b>FRAME</b>	256T		<b>HZ</b>	60		<b>PH</b>	3		
<b>SER.F.</b>	1.00	<b>CODE</b>	H	<b>DES</b>	A	<b>CLASS</b>	F		
<b>NEMA-NOM-EFF</b>	91	<b>PF</b>	90						
<b>RATING</b>	40C AMB-CONT								
<b>CC</b>	010A								
<b>DE</b>	6309		<b>ODE</b>	6208					
<b>ENCL</b>	TEFC	<b>SN</b>							
<b>BLANK</b>	20:1 CT/VT								

**AC Induction Motor Performance Data**

Record # 41946

Typical performance - not guaranteed values

<b>Winding: 39WGX191-R001</b>		<b>Type: 3940M</b>		<b>Enclosure: TEFC</b>	
<b>Nameplate Data</b>			<b>460 V, 60 Hz: High Voltage Connection</b>		
<b>Rated Output (HP)</b>	20	<b>Full Load Torque</b>	29.6 LB-FT		
<b>Volts</b>	230/460	<b>Start Configuration</b>	direct on line		
<b>Full Load Amps</b>	46/23	<b>Breakdown Torque</b>	108 LB-FT		
<b>R.P.M.</b>	3520	<b>Pull-up Torque</b>	40.8 LB-FT		
<b>Hz</b>	60	<b>Locked-rotor Torque</b>	51.6 LB-FT		
<b>NEMA Design Code</b>	A	<b>Starting Current</b>	168 A		
<b>Service Factor (S.F.)</b>	1.15	<b>No-load Current</b>	6.78 A		
<b>NEMA Nom. Eff.</b>	91	<b>Line-line Res. @ 25°C</b>	0.446 Ω		
<b>Rating - Duty</b>	40C AMB-CONT	<b>Temp. Rise @ Rated Load</b>	77°C		
<b>S.F. Amps</b>		<b>Temp. Rise @ S.F. Load</b>	94°C		
		<b>Locked-rotor Power Factor</b>	28.4		
		<b>Rotor inertia</b>	1.02 lb-ft <sup>2</sup>		

**Load Characteristics 460 V, 60 Hz, 20 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	80	87	90	91	91	91
<b>Efficiency</b>	85.1	90.4	91.3	91.1	90.3	89.2	90.6
<b>Speed</b>	3580.6	3561.9	3542.4	3521.2	3498.6	3473.5	3508
<b>Line amperes</b>	8.79	12.7	17.5	22.6	28.5	34.3	26.1

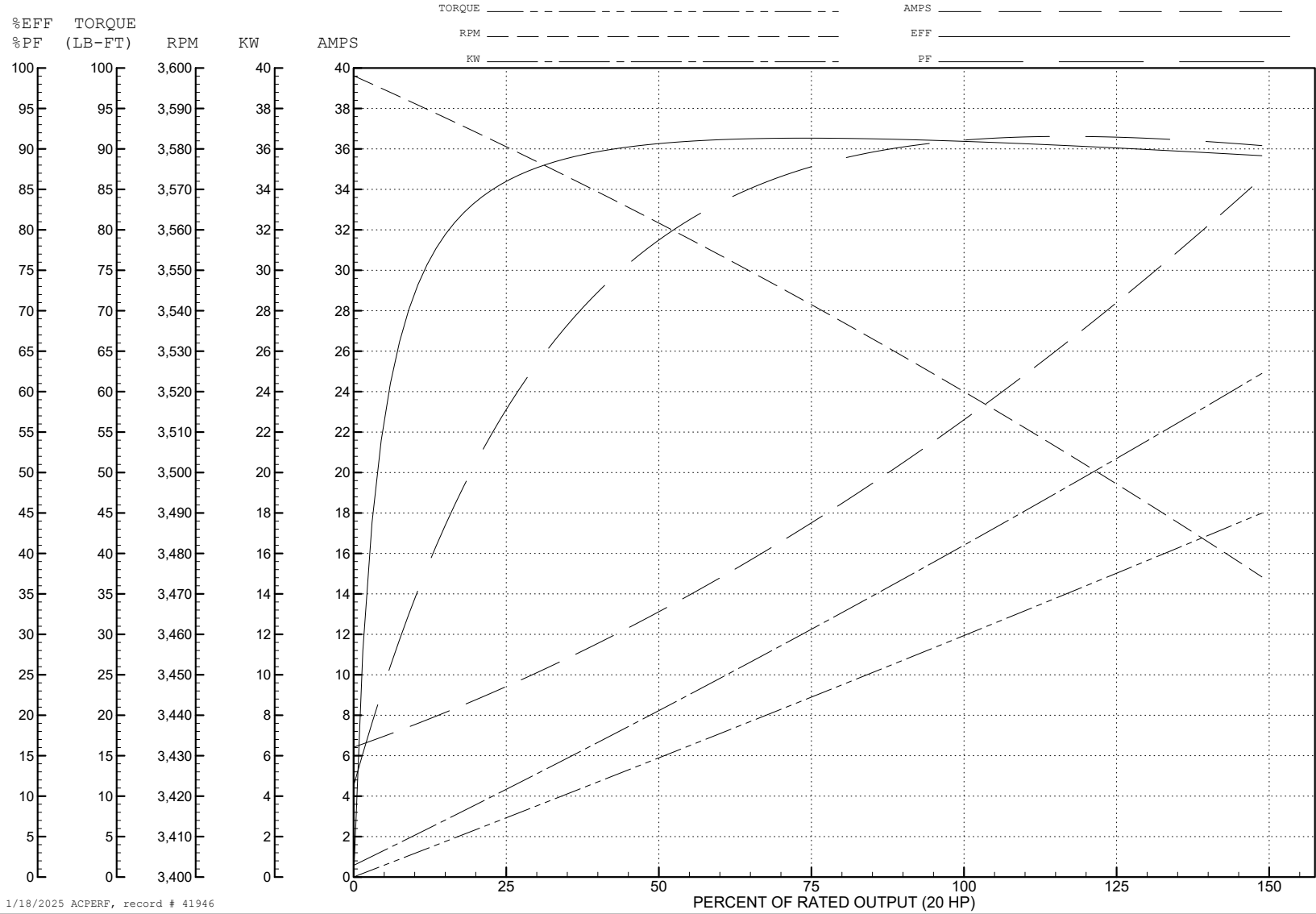
ABB Motors and Mechanical Inc.

WINDING # 39WGx191

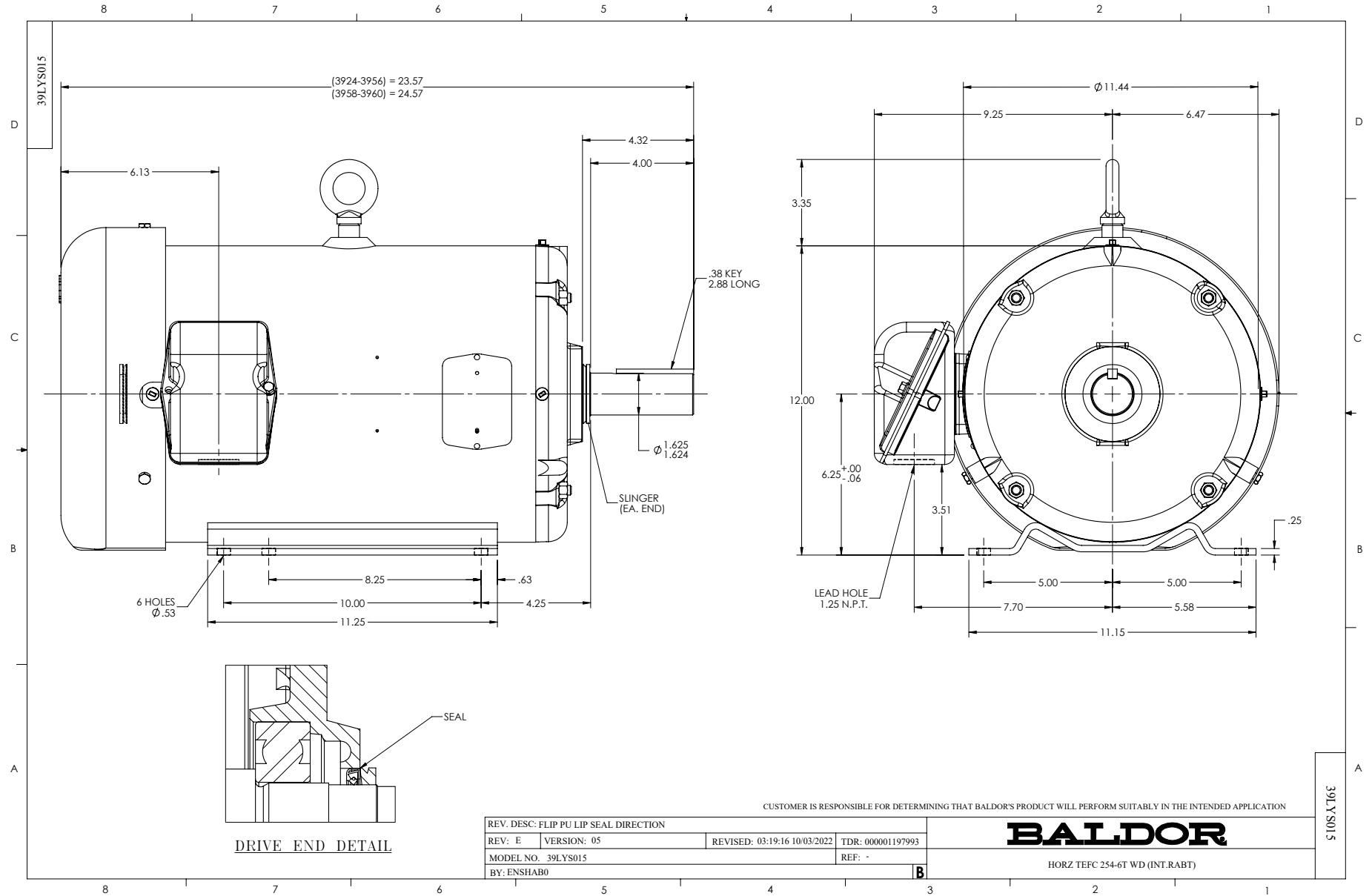
Typical performance - not guaranteed values.

20 HP 3 PH 60 HZ 3520 RPM 460 V 3940M

TORQUES (LB-FT): PO=108 PU=40.8 LR=51.6 LRA=168



1/18/2025 ACPERF, record # 41946



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.

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

CD0005