

**BALDOR® • RELIANCE™**

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# Customer information packet

## EWDM4102T

20HP, 1175RPM, 3PH, 60HZ, 286T, TEFC, F1

Class - None

Division - Not Applicable

## Specifications

Enclosure	TEFC
Frame	286T
Frame Material	Iron
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	1200 RPM @ 60 HZ
Voltage @ Frequency	230.0 V @ 60 HZ 460.0 V @ 60 HZ
Agency Approvals	CSA EEV NEMA PREMIUM 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	52.000 A @ 230.0 V 26.000 A @ 460.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	91.7 %
Electrically Isolated Bearing	Not Electrically Isolated
Enclosure Modification	Severe Duty Features
Feedback Device	NO FEEDBACK
Heater Indicator	No Heater
High Voltage Full Load Amps	26.0 a

## Part detail

Revision	J
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	10WGZ467
Layout	10LYN057
Eff. date	02-14-2024
CD Diagram	CD0180
Poles	06
Leads	9#10
Proprietary	False
Created date	08-19-2019

<b>Insulation Class</b>	F
<b>Inverter Code</b>	Inverter Duty
<b>IP Rating</b>	IP55
<b>KVA Code</b>	G
<b>Lifting Lugs</b>	Standard Lifting Lugs
<b>Locked Bearing Indicator</b>	Locked Bearing
<b>Max Speed</b>	1800 rpm
<b>Motor Lead Termination</b>	Flying Leads
<b>Motor Standards</b>	NEMA
<b>Motor Type</b>	1056M
<b>Mounting Arrangement</b>	F1
<b>Number of Poles</b>	6
<b>Overall Length</b>	27.56 IN
<b>Power Factor</b>	78
<b>Product Family</b>	Washdown Features
<b>Pulley Face Code</b>	Standard
<b>Rodent Screen</b>	None
<b>Service Factor</b>	1.00
<b>Shaft Diameter</b>	1.875 IN
<b>Shaft Ground Indicator</b>	No Shaft Grounding
<b>Shaft Rotation</b>	Reversible
<b>Speed</b>	1175 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>	EWDM4102T								
<b>SPEC.</b>	10-0000-1005								
<b>HP</b>	20								
<b>VOLTS</b>	230/460								
<b>AMP</b>	52/26								
<b>RPM</b>	1175								
<b>FRAME</b>	286T		<b>HZ</b>	60		<b>PH</b>	3		
<b>SER.F.</b>	1.15	<b>CODE</b>	G	<b>DES</b>	B	<b>CLASS</b>	F		
<b>NEMA-NOM-EFF</b>	91.7	<b>PF</b>	78						
<b>RATING</b>	40C AMB-CONT								
<b>CC</b>	010A								
<b>DE</b>	6311		<b>ODE</b>	6309					
<b>ENCL</b>	TEFC	<b>SN</b>							
<b>BLANK</b>	20:1 VT/CT @ 1.00SF								

**AC Induction Motor Performance Data**

Record # 59571

Typical performance - not guaranteed values

<b>Winding: 10WGZ467-R003</b>		<b>Type: 1056M</b>		<b>Enclosure: TEFC</b>	
<b>Nameplate Data</b>			<b>460 V, 60 Hz: Single Voltage Motor</b>		
<b>Rated Output (HP)</b>	20	<b>Full Load Torque</b>	89.1 LB-FT		
<b>Volts</b>	230/460	<b>Start Configuration</b>	direct on line		
<b>Full Load Amps</b>	52/26	<b>Breakdown Torque</b>	236 LB-FT		
<b>R.P.M.</b>	1175	<b>Pull-up Torque</b>	95.1 LB-FT		
<b>Hz</b>	60 <b>Phase</b>	3	<b>Locked-rotor Torque</b>	137 LB-FT	
<b>NEMA Design Code</b>	<b>B KVA Code</b>	G	<b>Starting Current</b>	143 A	
<b>Service Factor (S.F.)</b>	1.15	<b>No-load Current</b>	11.6 A		
<b>NEMA Nom. Eff.</b>	91.7	<b>Power Factor</b>	78	<b>Line-line Res. @ 25°C</b>	0.47101 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>	79°C	
			<b>Locked-rotor Power Factor</b>	31.8	

**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>	41	63	73	78	80	80	79
<b>Efficiency</b>	88.6	92.1	92.5	91.9	90.8	89.2	91.2
<b>Speed</b>	1194.6	1189.1	1183.8	1177.1	1169.8	1160.7	1173
<b>Line amperes</b>	13.1	16.4	20.7	26.1	32	39.1	29.6

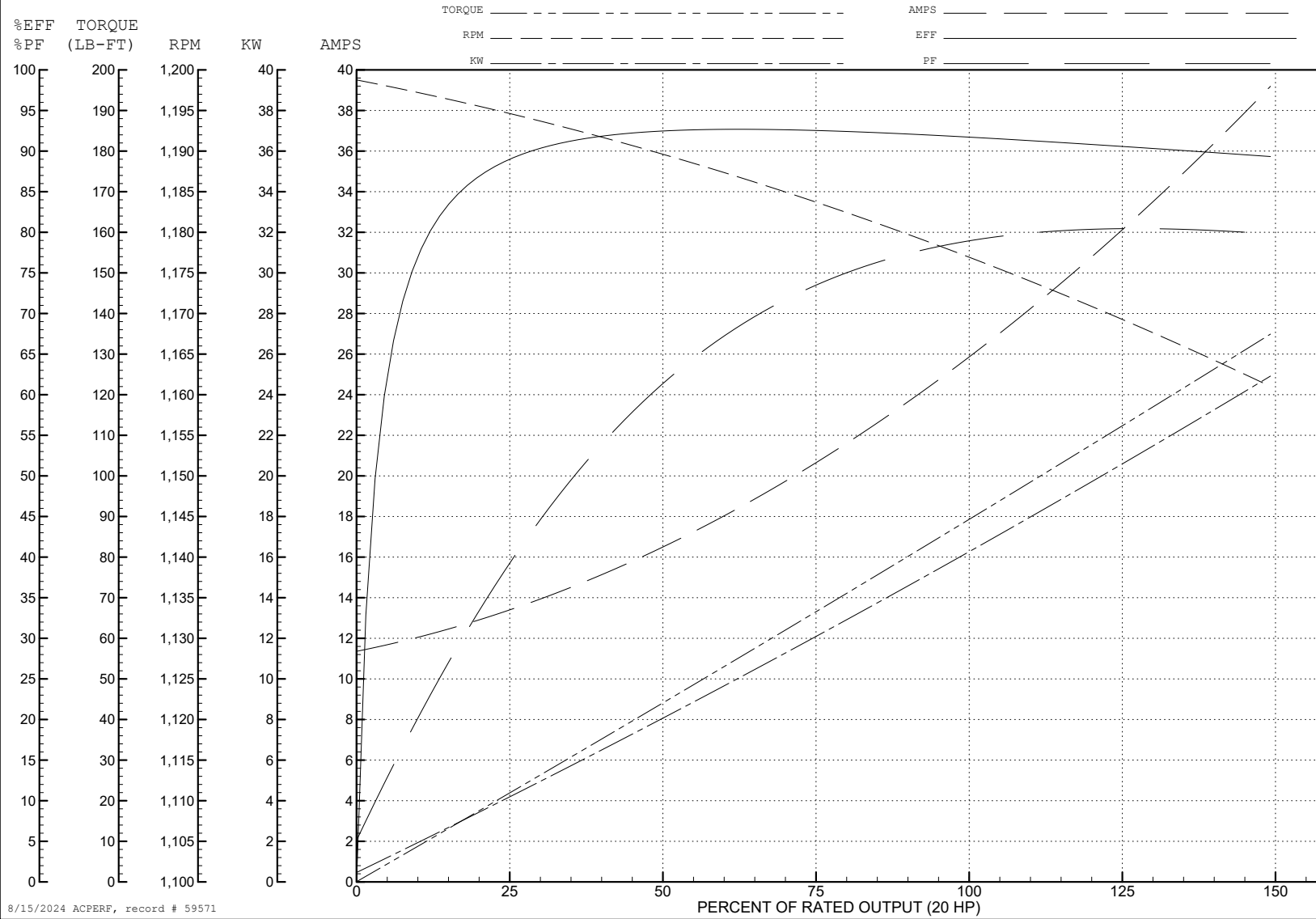
ABB Motors and Mechanical Inc.

WINDING # 10WGZ467

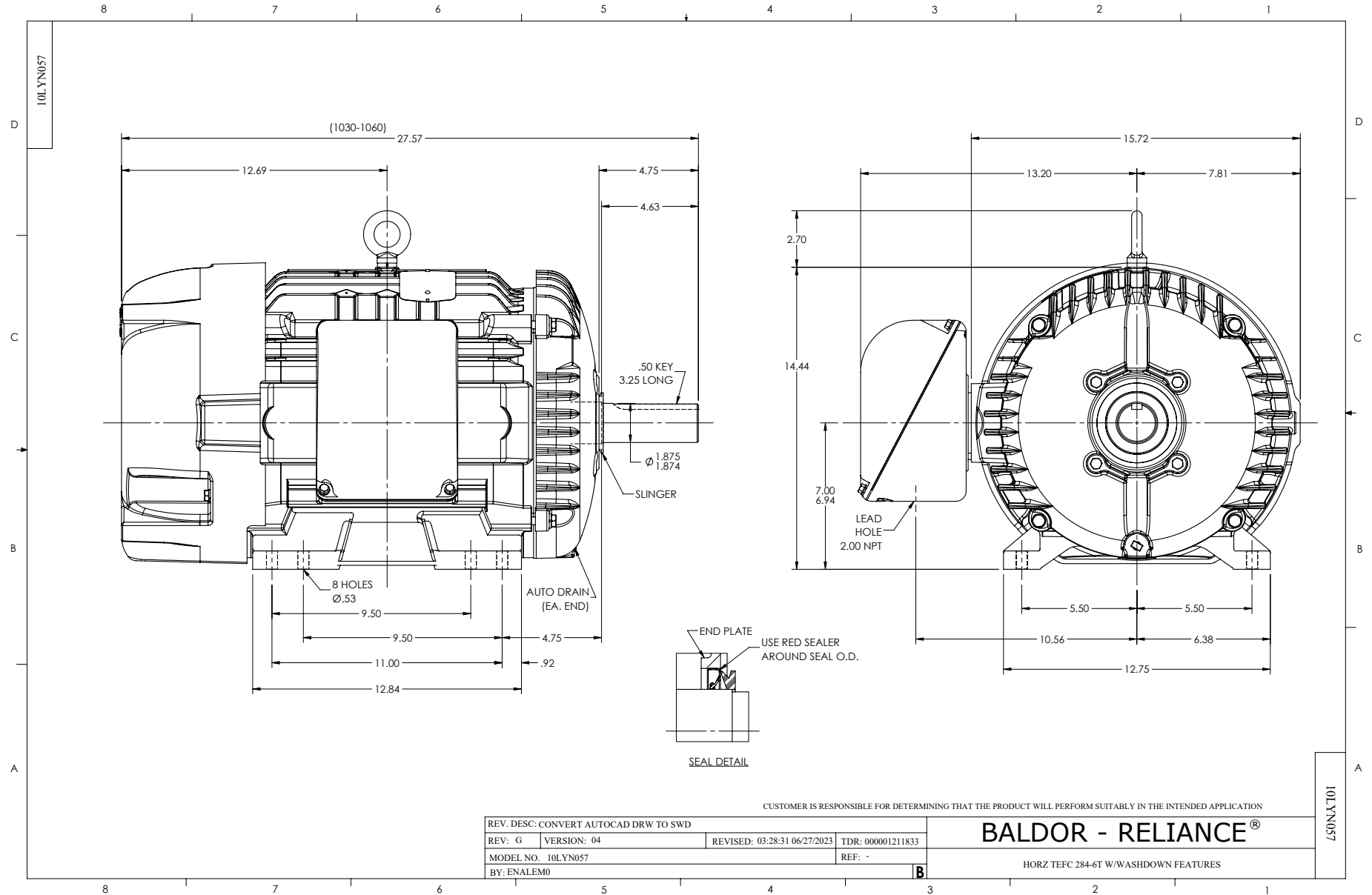
Typical performance - not guaranteed values.

20 HP 3 PH 60 HZ 1175 RPM 460 V 1056M

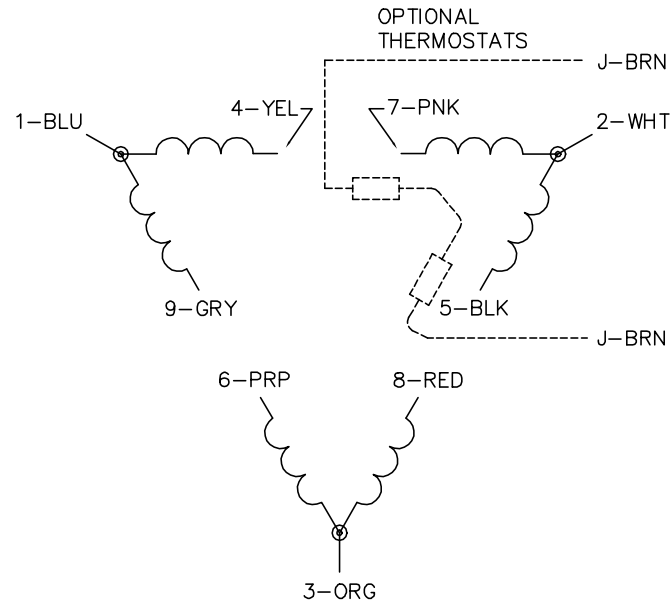
TORQUES (LB-FT): PO=236 PU=95.1 LR=137 LRA=143



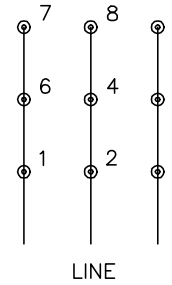
8/15/2024 ACPERF, record # 59571



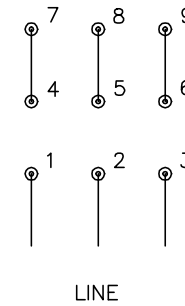
CD0180



LOW VOLTAGE  
(2D)



HIGH VOLTAGE  
(1D)



**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.

CD0180

REV. DESC: ADD CLASS CONN00000007		
REV. LTR: D	VERSION: 01	TDR: 000001099922
FILE: \AAA\00005\148	REVISED: 10: 25: 29 02/19/2019	BY: ENBRIRO
MTL: -	© □	

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3PH, DV, 9 LEADS, DELTA CONNECTION

SH 1 of 1