



---

# Customer information packet

## VEM2515T

20HP, 1765RPM, 3PH, 60HZ, 256TC, 3948M, ODP, F1

Class - None

Division - Not Applicable

## Specifications

Enclosure	ODP
Frame	256TC
Frame Material	Steel
Frequency	60.00 Hz
Motor Letter Type	Three Phase
Output @ Frequency	20.000 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	NEMA PREMIUM CURUSEEV
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	24.000 A @ 460.0 V 48.000 A @ 230.0 V
Design Code	A
Drip Cover	Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	93.0 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Face Code	Drip Cover Mounting
Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	24.0 a

## Part detail

Revision	K
Type	AC
Mech. spec.	39M071
Base	
Status	PRD/A
Elec. spec.	39WGX952
Layout	39LYM071
Eff. date	11-14-2023
CD Diagram	CD0180
Poles	04
Leads	9#10
Proprietary	False
Created date	07-19-2017

<b>Insulation Class</b>	F
<b>Inverter Code</b>	Inverter Ready
<b>KVA Code</b>	G
<b>Lifting Lugs</b>	Standard Lifting Lugs
<b>Locked Bearing Indicator</b>	Locked Bearing
<b>Motor Lead Exit</b>	Ko Box
<b>Motor Lead Quantity/Wire Size</b>	9 @ 10 AWG
<b>Motor Lead Termination</b>	Flying Leads
<b>Motor Standards</b>	NEMA
<b>Motor Type</b>	3948M
<b>Mounting Arrangement</b>	F1
<b>Number of Poles</b>	4
<b>Overall Length</b>	23.28 IN
<b>Power Factor</b>	85
<b>Product Family</b>	General Purpose
<b>Pulley End Bearing Type</b>	Ball
<b>Pulley Face Code</b>	C-Face
<b>Pulley Shaft Indicator</b>	Standard
<b>Rodent Screen</b>	None
<b>Service Factor</b>	1.15
<b>Shaft Diameter</b>	1.625 IN
<b>Shaft Extension Location</b>	Pulley End
<b>Shaft Ground Indicator</b>	No Shaft Grounding
<b>Shaft Rotation</b>	Reversible
<b>Shaft Slinger Indicator</b>	Shaft Slinger
<b>Speed</b>	1765 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>NP1259L</b>									
<b>CAT.NO.</b>	VEM2515T								
<b>SPEC.</b>	39M071X952G1								
<b>HP</b>	20								
<b>VOLTS</b>	230/460								
<b>AMP</b>	48/24								
<b>RPM</b>	1765								
<b>FRAME</b>	256TC	<b>HZ</b>	60	<b>PH</b>	3				
<b>SER.F.</b>	1.15	<b>CODE</b>	G	<b>DES</b>	A	<b>CL</b>	F		
<b>NEMA-NOM-EFF</b>	93	<b>PF</b>	85						
<b>RATING</b>	40C AMB-CONT								
<b>CC</b>	010A								
<b>DE</b>	6309	<b>ODE</b>	6208						
<b>ENCL</b>	ODP	<b>SN</b>							

**AC Induction Motor Performance Data**

Record # 58165

Typical performance - not guaranteed values

<b>Winding:</b> 39WGX952-R004		<b>Type:</b> 3948M		<b>Enclosure:</b> ODP	
<b>Nameplate Data</b>			<b>460 V, 60 Hz: High Voltage Connection</b>		
<b>Rated Output (HP)</b>	20	<b>Full Load Torque</b>	59.7 LB-FT		
<b>Volts</b>	230/460	<b>Start Configuration</b>	direct on line		
<b>Full Load Amps</b>	48/24	<b>Breakdown Torque</b>	187 LB-FT		
<b>R.P.M.</b>	1765	<b>Pull-up Torque</b>	78.1 LB-FT		
<b>Hz</b>	60	<b>Locked-rotor Torque</b>	112 LB-FT		
<b>NEMA Design Code</b>	A	<b>Starting Current</b>	156 A		
<b>Service Factor (S.F.)</b>	1.15	<b>No-load Current</b>	8.83 A		
<b>NEMA Nom. Eff.</b>	93	<b>Line-line Res. @ 25°C</b>	0.48438 Ω		
<b>Rating - Duty</b>	40C AMB-CONT	<b>Temp. Rise @ Rated Load</b>	37°C		
<b>S.F. Amps</b>		<b>Temp. Rise @ S.F. Load</b>	46°C		
		<b>Locked-rotor Power Factor</b>	33.3		

**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>	50	72	81	85	87	87	86
<b>Efficiency</b>	90.2	93.3	93.5	93	92.2	91	92.5
<b>Speed</b>	1792.2	1784.8	1776.1	1767.5	1757.6	1746.3	1762
<b>Line amperes</b>	10.5	14	18.6	23.8	29.4	35.6	27.2

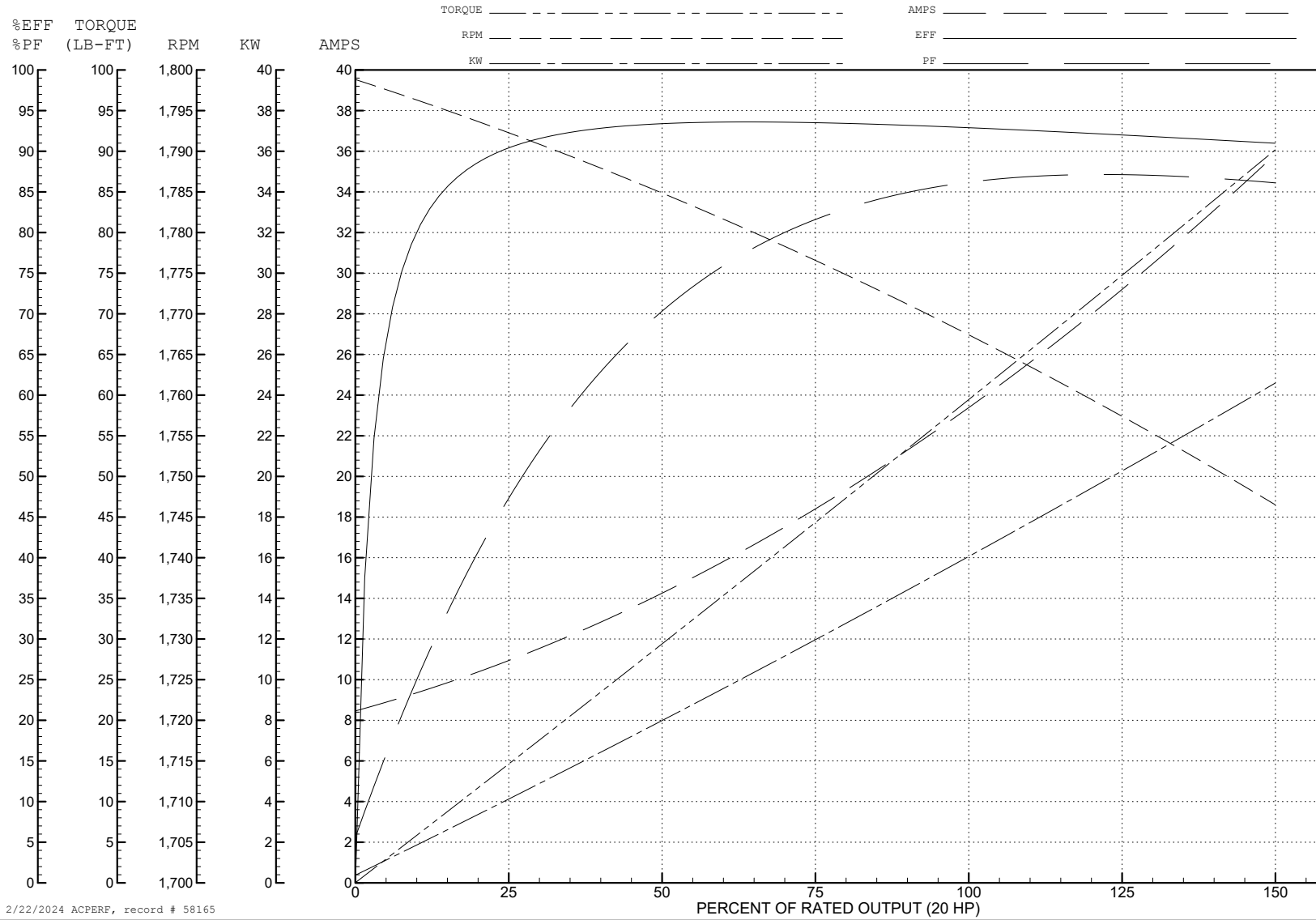
ABB Motors and Mechanical Inc.

WINDING # 39WGX952

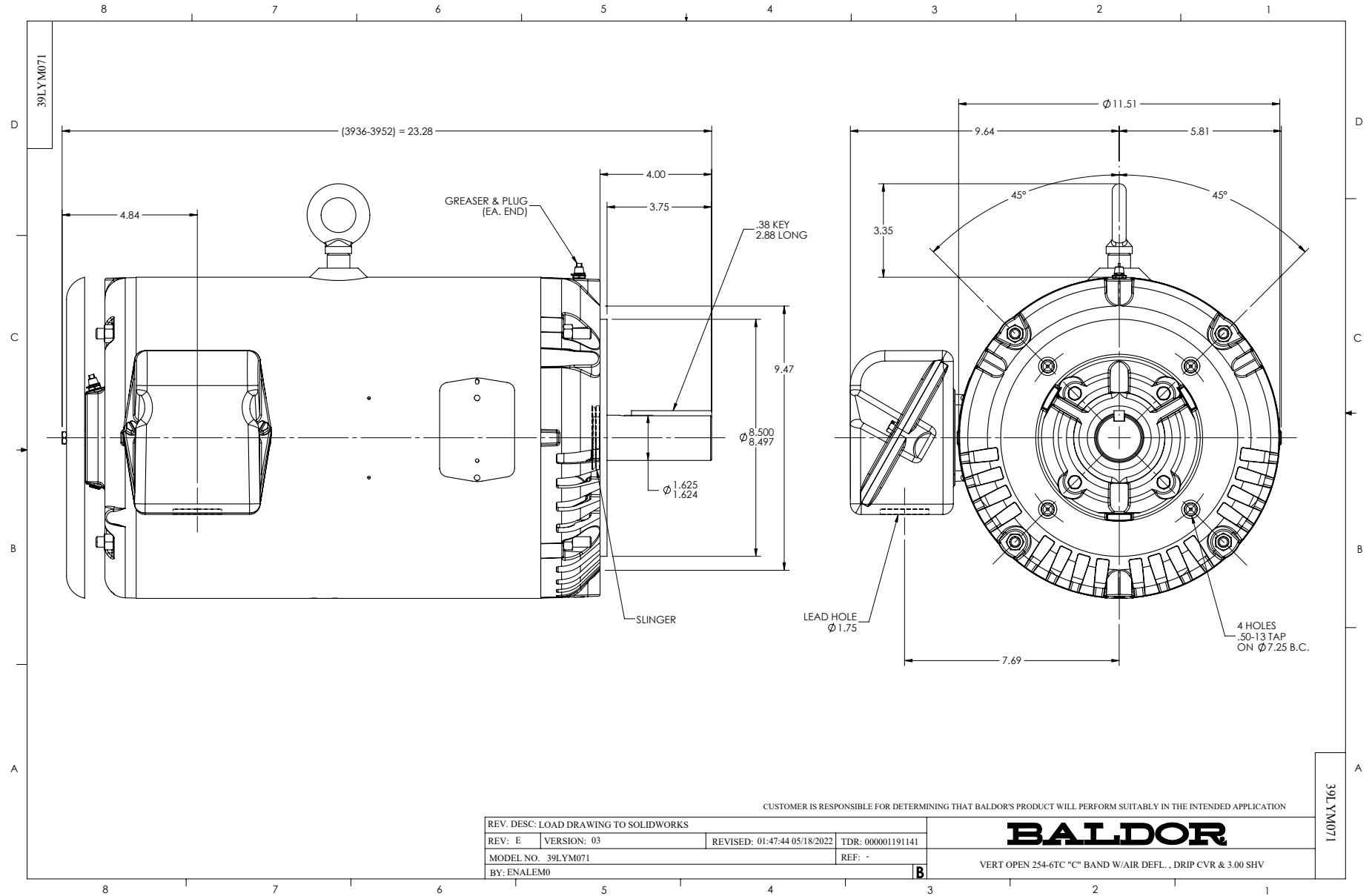
Typical performance - not guaranteed values.

20 HP 3 PH 60 HZ 1765 RPM 460 V 3948M

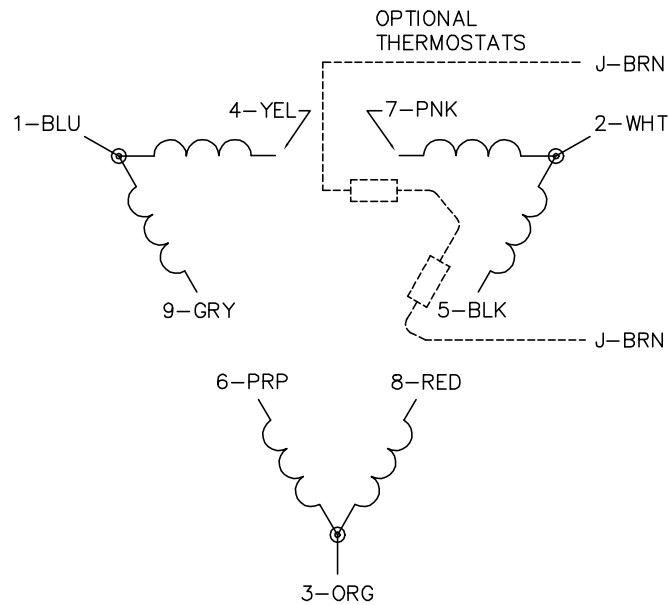
TORQUES (LB-FT): PO=187 PU=78.1 LR=112 LRA=156



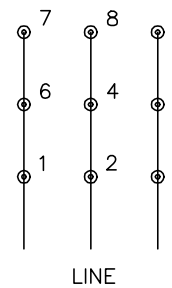
2/22/2024 ACPERF, record # 58165



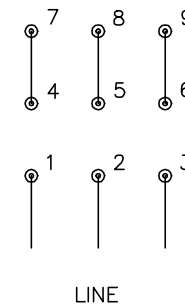
CD0180



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: -	© □	

**BALDOR - RELIANCE®**

3PH, DV, 9 LEADS, DELTA CONNECTION

SH 1 of 1