BALDOR • RELIANCE

Customer information packet

VEM2334T-5

20HP, 1770RPM, 3PH, 60HZ, 256TC, 0960M, TEFC, F
Class - None
Division - Not Applicable

4/10/2025 10:55:29 PM

Specifications

Enclosure	TEFC
Frame	256TC
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	1800 RPM @ 60 HZ
Voltage @ Frequency	575.0 V @ 60 HZ
Agency Approvals	CSA EEV NEMA PREMIUM NEMA_PREMIUM 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	19.200 A @ 575.0 V
Design Code	A
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	93.0 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Face Code	Standard
Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	19.2 a

Part detail

Revision	T
Type	AC
Mech. spec.	09C103
Base	
Status	PRD/A
Elec. spec.	09WGT507
Layout	09LYC103
Eff. date	05-14-2024
CD Diagram	CD0006
Poles	04
Leads	3#10
Proprietary	False
Created date	11-17-2017

Insulation Class	F
Inverter Code	Inverter Ready
KVA Code	J
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	3 @ 10 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	0960M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	23.86 IN
Power Factor	83
Product Family	General Purpose
Pulley End Bearing Type	Ball
Pulley Face Code	C-Face
Pulley Shaft Indicator	Standard
Rodent Screen	None
Service Factor	1.15
Shaft Diameter	1.625 IN
Shaft Extension Location	Pulley End
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	Shaft Slinger
Speed	1770 rpm
Speed Code	Single Speed
Starting Method	Direct on line
Thermal Device - Bearing	None
Thermal Device - Winding	None
Vibration Sensor Indicator	No Vibration Sensor
Winding Thermal 1	None
Winding Thermal 2	None

Nameplate

NP3441L									
CAT.NO.	VEM2334T-5								
SPEC.	09C103T507G1								
HP	20								
VOLTS	575								
AMP	19.2								
RPM	1770								
FRAME	256TC		**HZ**	60			**PH**	3	
SER.F.	1.15	**CODE**	J	**DES**	A	**CL**	F		
NEMA-NOM-EFF	93	**PF**	83						
RATING	40C AMB-CONT								
CC	010A								
DE	6309		**ODE**	6208					
ENCL	TEFC	**SN**							
VPWM INVERTER READY									
CT6-60H(10:1)VT3-60H(20:1									
	SFA 21.7								

AC Induction Motor Performance Data
Record # 67979
Typical performance - not guaranteed values

Winding: 09WGT507-R001 **Type:** 0960M **Enclosure:** TEFC

Nameplate Data			
Rated Output (HP)			20
Volts			575
Full Load Amps			19.2
R.P.M.			1770
Hz	60	**Phase**	3
NEMA Design Code	A	**KVA Code**	J
Service Factor (S.F.)			1.15
NEMA Nom. Eff.	93	**Power Factor**	83
Rating - Duty			40C AMB-CONT
S.F. Amps			

575 V, 60 Hz: Single Voltage Motor	
Full Load Torque	59.29 LB-FT
Start Configuration	direct on line
Breakdown Torque	231 LB-FT
Pull-up Torque	126 LB-FT
Locked-rotor Torque	140 LB-FT
Starting Current	158 A
No-load Current	8.28 A
Line-line Res. @ 25ºC	0.499 Ω
Temp. Rise @ Rated Load	58°C
Temp. Rise @ S.F. Load	69°C
Locked-rotor Power Factor	26.5
Rotor inertia	2.65 lb-ft²

Load Characteristics 575 V, 60 Hz, 20 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	45	67	78	83	86	87	85
Efficiency	89.2	93	93.7	93.5	93.1	92.4	93.3
Speed	1793	1786	1779	1772	1764	1755	1767
Line amperes	9.41	11.99	15.34	19.19	23.44	27.92	21.7

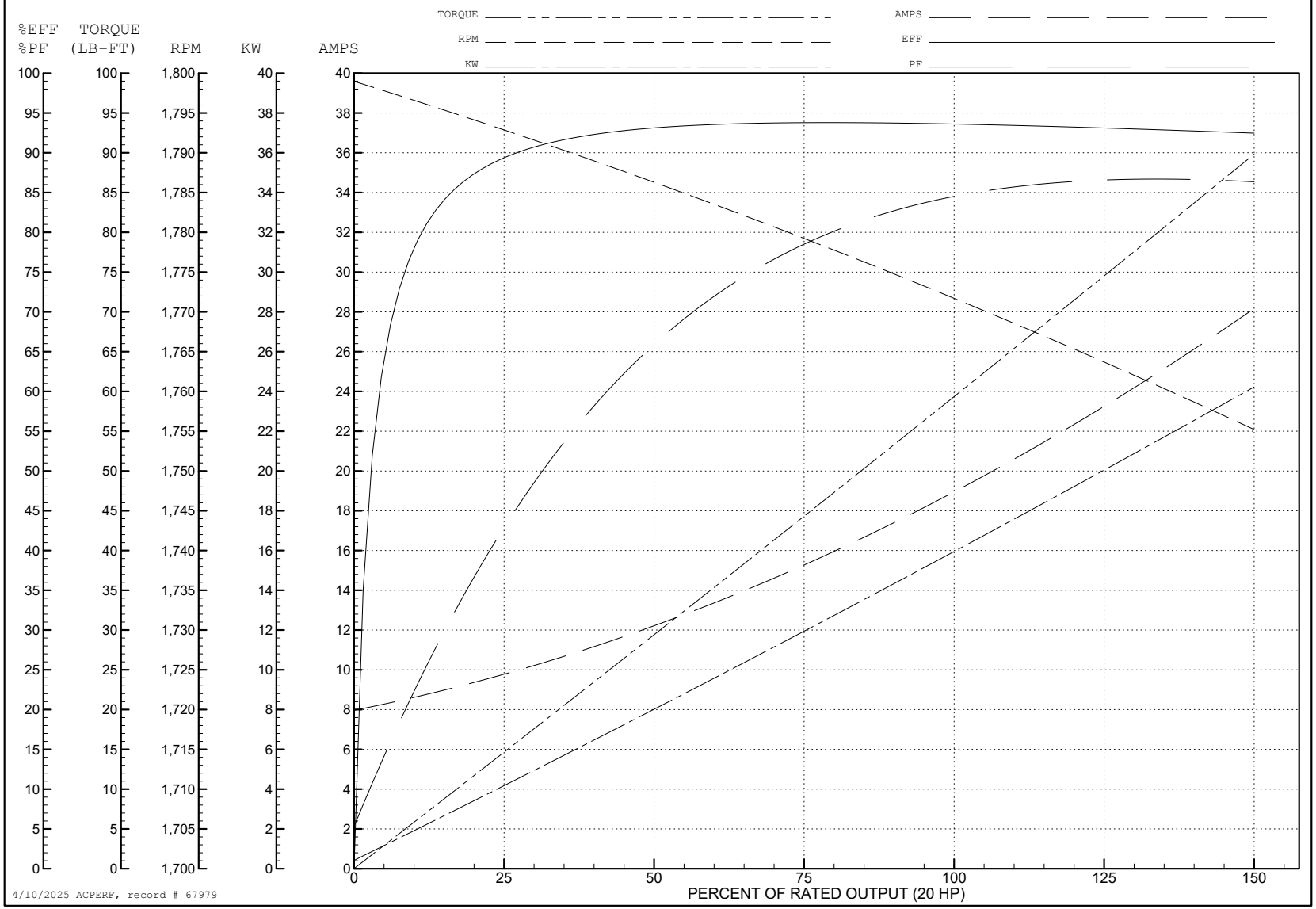
ABB Motors and Mechanical Inc.

WINDING # 09WGT507

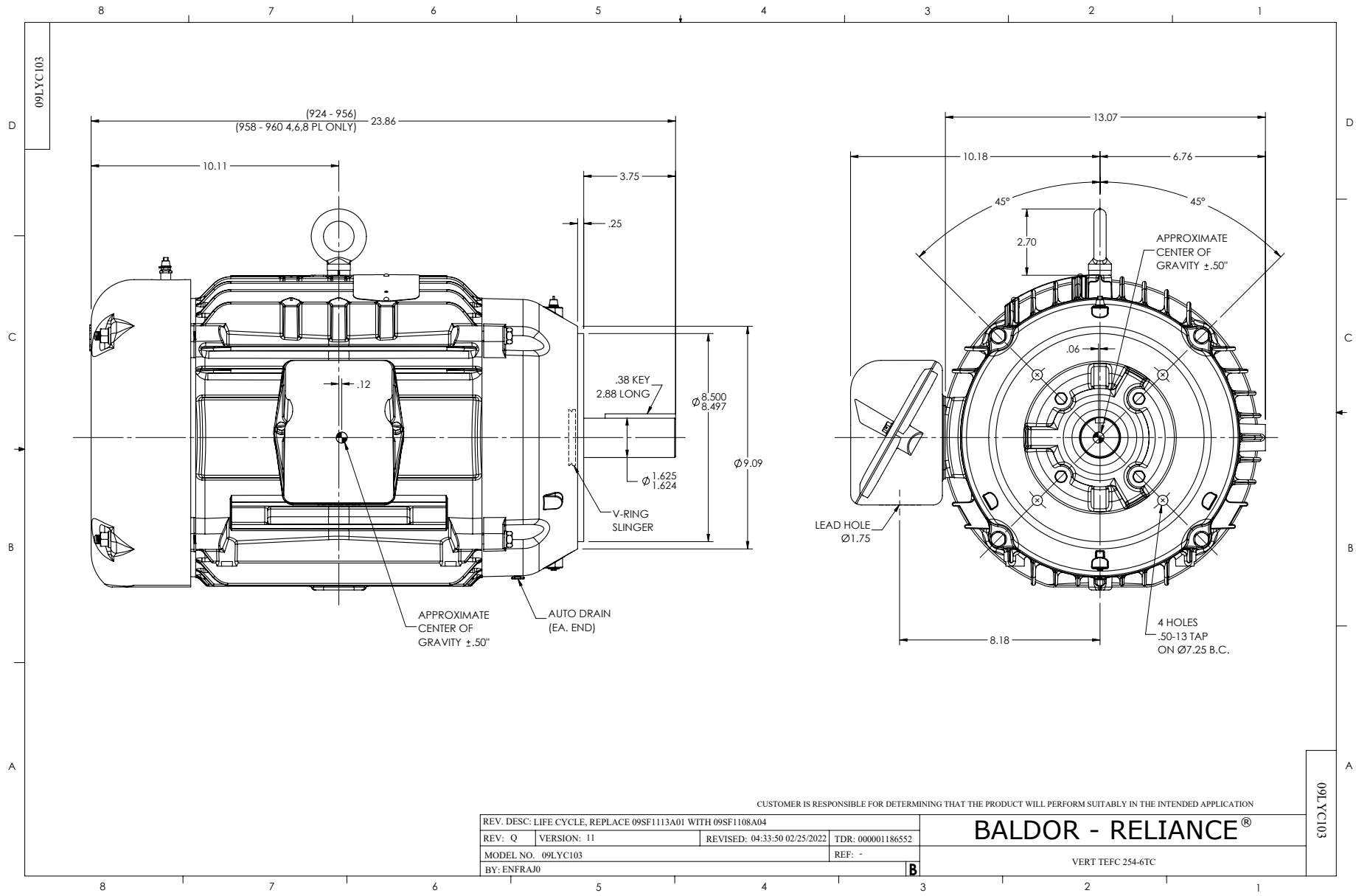
20 HP 3 PH 60 HZ 1770 RPM 575 V 0960M

Typical performance - not guaranteed values.

TORQUES(LB-FT): PO=231 PU=126 LR=140 LRA=158

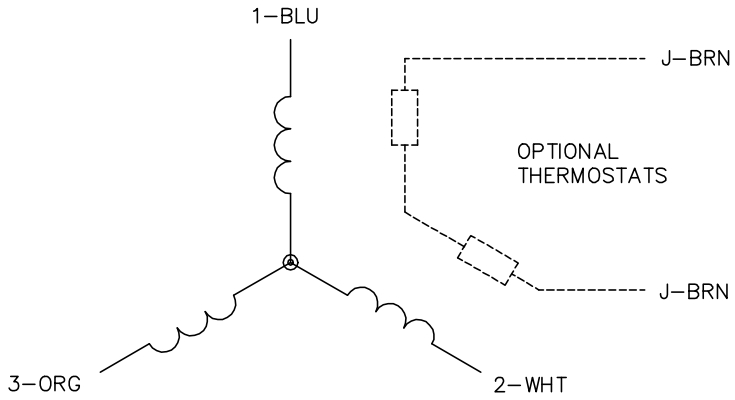


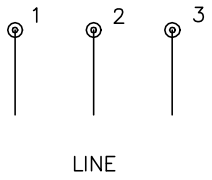
4/10/2025 ACPERF, record # 67979


09LYC103
(924 - 956)
(958 - 960 4,6,8 PL ONLY)
23.86
10.11
3.75
.25
.12
.38 KEY
2.88 LONG
Ø8.500
8.497
Ø9.09
Ø1.625
1.624
V-RING
SLINGER
APPROXIMATE
CENTER OF
GRAVITY ±.50"
AUTO DRAIN
(EA. END)
13.07
10.18
6.76
45°
45°
2.70
APPROXIMATE
CENTER OF
GRAVITY ±.50"
.06
LEAD HOLE
Ø1.75
8.18
4 HOLES
.50-13 TAP
ON Ø7.25 B.C.
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT THE PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION
REV. DESC: LIFE CYCLE, REPLACE 09SF1113A01 WITH 09SF1108A04
REV: Q
VERSION: 11
REVISED: 04:33:50 02/25/2022
TDR: 000001186552
MODEL NO. 09LYC103
REF: -
BY: ENFRAJ0
B
BALDOR - RELIANCE®
VERT TEFC 254-6TC
09LYC103

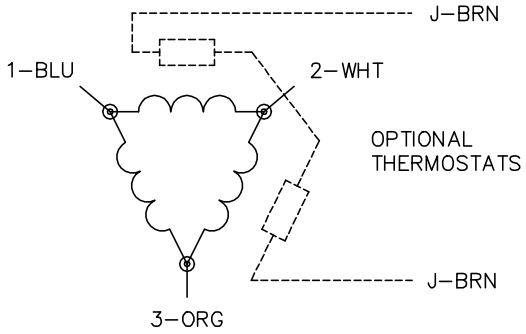
CD0006

TYPICAL WYE–CONNECTED MOTOR





TYPICAL DELTA–CONNECTED MOTOR



NOTES:

1. THREE LEAD MOTOR MAY BE EITHER WYE CONNECTED OR DELTA CONNECTED.
2. INTERCHANGE ANY TWO LINE LEADS TO REVERSE ROTATION.
3. OPTIONAL THERMOSTATS ARE PROVIDED WHEN SPECIFIED.
4. ACTUAL NUMBER OF INTERNAL PARALLEL CIRCUITS MAY VARY.
5. LEAD COLORS ARE OPTIONAL. LEADS MUST BE NUMBERED AS SHOWN.

CD0006

REV. DESC: ADD CLASS CONN00000007		
REV. LTR: E	VERSION: 01	TDR: 000001099922
FILE: \AAA\00005\141	REVISED: 10:24:49 02/19/2019	BY: ENBRIR0
MTL: –		

BALDOR - RELIANCE®

3PH, SV, 3 LEADS, WYE OR DELTA CONNECTED

SH 1 of 1