

ABB BALDOR RELIANCE III

Customer information packet

ZDVSCP2334T

20HP, 1770RPM, 3PH, 60HZ, 256TC, 0960M, TEFC, F

Class - None

Division - Not Applicable

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	230.0 V @ 60 HZ 460.0 V @ 60 HZ
Agency Approvals	CSA UR
Ambient Temperature	40 °C
Auxiliary Box	NO AUXILLARY BOX
Auxiliary Box Lead Termination	None
Base Indicator	Rigid
Bearing Grease Type	Polyrex EM (-20F +300F)
Blower	None
Current @ Voltage	52.000 A @ 208.0 V 48.000 A @ 230.0 V 24.000 A @ 460.0 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	TACHOMETER
Front Face Code	Standard
Front Shaft Indicator	None
Heater Indicator	No Heater

Part Detail

Revision	M
Type	AC
Mech. spec.	09K342
Base	
Status	PRD/A
Elec. spec.	09WGT459
Layout	09LYK342
Eff. date	08-28-2025
CD Diagram	CD0180
Poles	04
Leads	9#10
Proprietary	False
Created date	11-27-2017

High Voltage Full Load Amps	24.0 a
Insulation Class	F
Inverter Code	Inverter Duty
KVA Code	J
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Max Speed	2700 rpm
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	9 @ 10 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	0960M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	28.14 IN
Power Factor	83
Product Family	Chemical Processing (Not DC)
Pulley End Bearing Type	Ball
Pulley Face Code	C-Face
Pulley Shaft Indicator	Standard
Rodent Screen	None
Service Factor	1.00
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	Normally Closed Thermostat
Vibration Sensor Indicator	No Vibration Sensor
Winding Thermal 1	None

Winding Thermal 2

None

Nameplate

NP3303L									
CAT NO	ZDVSCP2334T								
SPEC.	09K342T459Z1								
FRAME	256TC			HP	20 TE				
VOLTS	230/460								
MAG CUR	20.8/10.4				FLA	48/24			
RPM	1770			RPM MAX	2700				
HZ	60		PH	3		CLASS	F		
SER.F.	1.00			SL HZ	1				
NEMA-NOM-EFF	93		WK2	2.62					
RATING	40C AMB-CONT								
DE BRG	6309		ODE BRG	6309					
CC	010A	SN							
	1.5:1 CHP PWM								
	1000:1 CT, 1000:1 VT								

NP0090L	
FRONT	6309
PULLEY	6309
LUBRICATE WITH	
GREASE	POLYREX EM

ABB BALDOR/460		CUSTOMER INFORMATION PACKET		MAX SAFE RPM 2700		WYE CONN EQ CKT OHMS PER PHASE (BASE RATING, 20C)			
RELIANCE III		ZDVSCP2334T - 20HP, 1770RPM		3PH, 60HZ, 256TC, 0960M, TEFC, F					
HP	40/24	Base Volt		460	R1	0.167	X1	0.876	
HP	20 HP	NL AMPS		10.40	R2	0.159	X2	1.160	
BASE SPEED	1772	Slips(HZ)		0.94			XM	30.000	
PHASE/HZ	3/60	WK2 ()		0.000					

Rated Full Load Data

	RPM	HP	Torque	Volts	Freq-Hz	Amps
Base Speed	1771.9	20.0	59.3	460	60	24.0
Max Speed	2657	20.0	39.5	460	90	23.1
Min Speed	0	0.0	59.3	17.91	0.94	24.0

Load Performance at Base Speed

	RPM	HP	Torque	Volts	Freq-Hz	Amps
No Load	1798.9	0.0	0.0	460	60	10.4
1/4	1793.2	5.0	14.7	460	60	11.8
1/2	1786.4	10.0	29.4	460	60	15.0
3/4	1779.1	15.0	44.3	460	60	19.2
Full Load	1771.9	20.0	59.3	460	60	24.0
O/L	1741	40.1	121.0	460	60	48.7

Blower Data	Volts	Ph/Hz	FL Amps	LR Amps	Frame	CFM

Remarks: Calculated Data
Vector PWM Inverter Duty

BALDOR
A MEMBER OF THE ABB GROUP

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CK BY
APP BY USBRRAN1
DATE 11/27/2017

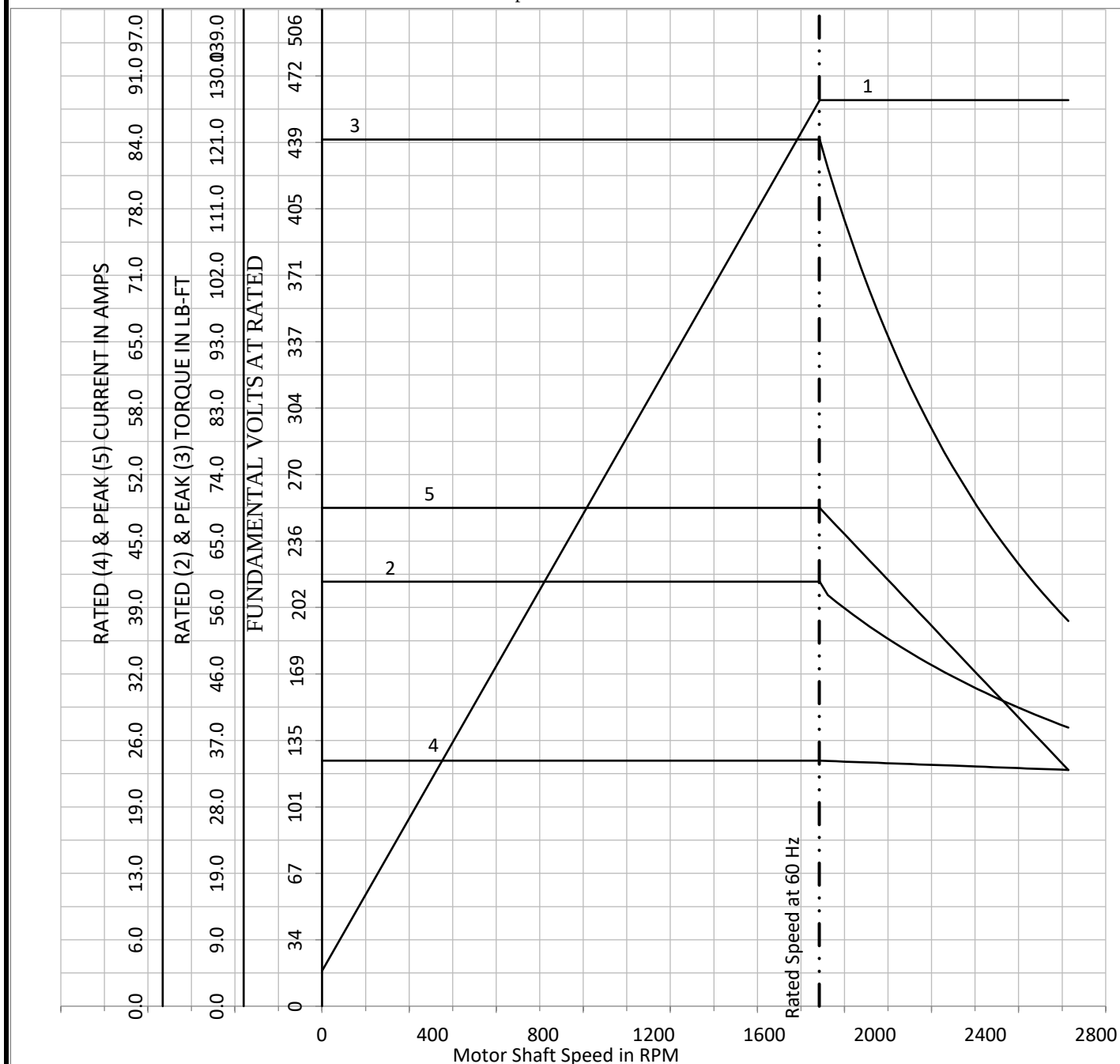
**A-C MOTOR
PERFORMANCE
CURVES**
09WGT459
Record: 67965

HP 20 HP
 BASE SPEED 1771.90002
 PHASE/HZ 3/60

MAX SAFE RPM 2700
 VSC2334T - 20HP, 1770RPM
 Base Volt 460
 NL AMPS 10.40
 Slips(HZ) 0.94
 WK2 () 0.000

WYE CONN EQ CKT OHMS PER PHASE (BASE RATING, 20C)
 3PH, 60HZ, 256TC, 0960M, TEFC, F
 R1 0.167 X1 0.876
 R2 0.159 X2 1.160
 XM 30.000

Vector PWM Inverter Duty
 Variable Speed AC Motor Curves



Calculated Data

Data Valid For Nameplate Speed Range only



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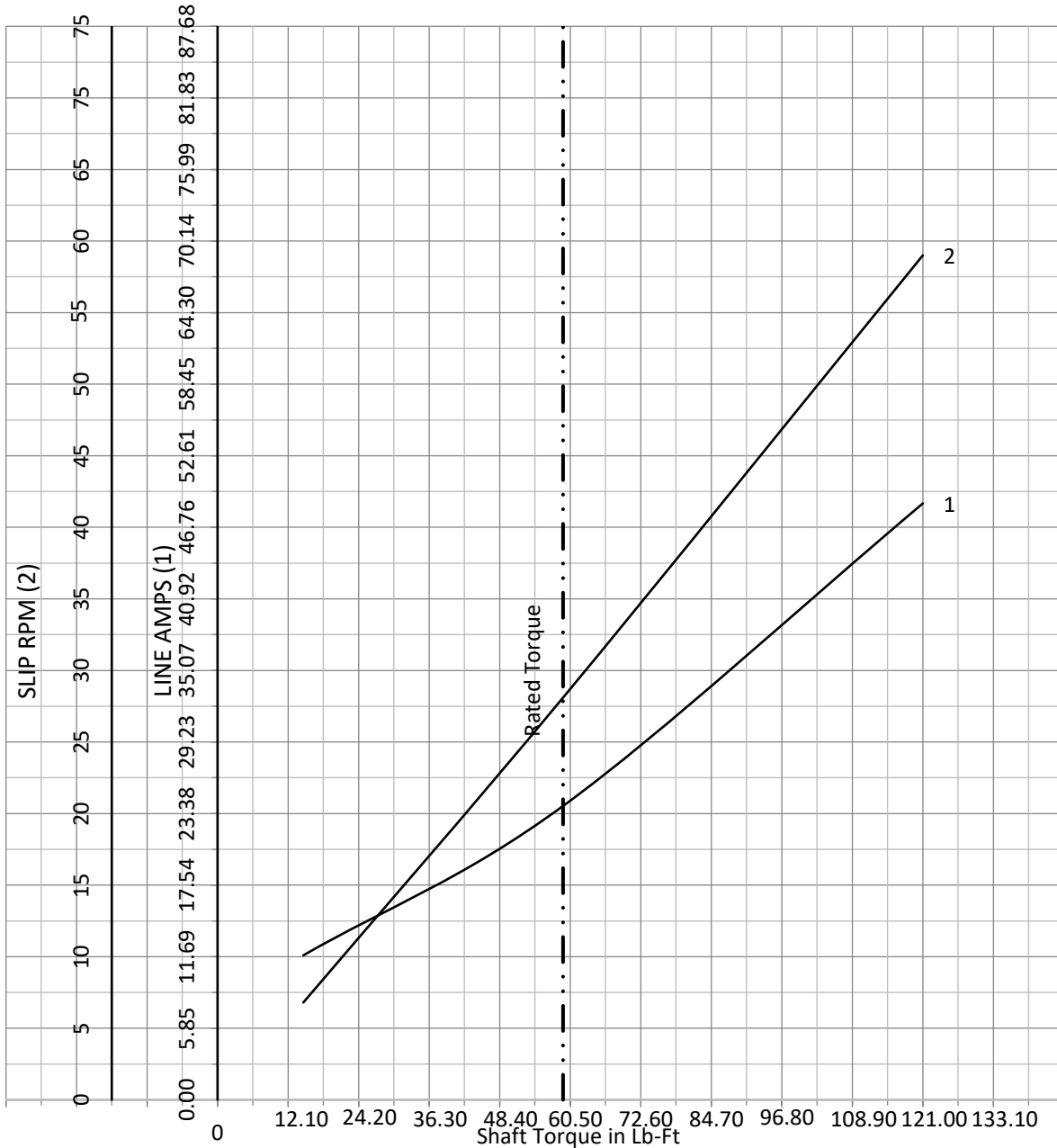
**A-C MOTOR
 PERFORMANCE
 CURVES**

09WGT459

Record: 67965

ABB BALDOR RELIANCE		333/460 20HP		CUSTOMER INFORMATION PACKET		MAX SAFE RPM 2700 ZDVSCP2334T - 20HP, 1770RPM		WYE CONN EQ CKT OHMS PER PHASE (BASE RATING, 20C)			
HP 20 HP		BASE SPEED 1771.900024		PHASE/HZ 3/60		Base Volt 460		R1	0.167	X1	0.876
						NL AMPS 10.40		R2	0.159	X2	1.160
						Slips(HZ) 0.94				XM	30.000
						WK2 () 0.000					

Vector PWM Inverter Duty
Variable Speed AC Motor Curves



Calculated Data

Data Valid For Nameplate Speed Range only

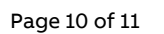


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DATE 11/27/2017

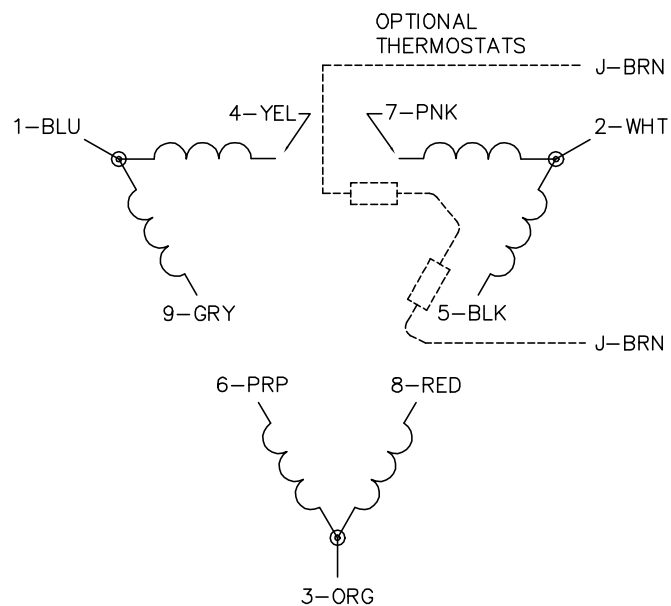
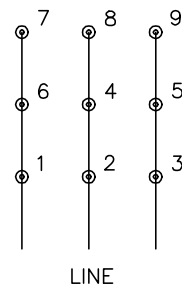
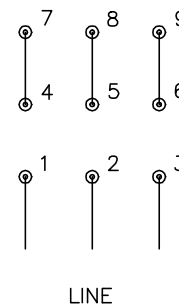
**A-C MOTOR
PERFORMANCE
CURVES**

09WGT459

Record: 67965



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

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