

ABB BALDOR RELIANCE III

Customer information packet

VESSWDM3558T-5

2HP, 1765RPM, 3PH, 60HZ, 145TC, 3528M, TEFC, F1

Class - None

Division - Not Applicable

Specifications

Enclosure	TEFC
Frame	145TC
Frame Material	Stainless Steel
Frequency	60.00 Hz
Haz Area Class and Group	None
Haz Area Division	Not Applicable
Motor Letter Type	Three Phase
Output @ Frequency	2.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	575.0 V @ 60 HZ
Agency Approvals	NEMA PREMIUM NEMA_PREMIUM UR CSA EEV
Ambient Temperature	40 °C
Auxiliary Box	NO AUXILLARY BOX
Auxiliary Box Lead Termination	None
Base Indicator	No Mounting
Bearing Grease Type	Polyrex EM (-20F +300F)
Blower	None
Current @ Voltage	2.150 A @ 575.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	86.5 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	2.2 a
Insulation Class	H

Part Detail

Revision	A
Type	AC
Mech. spec.	35VV821
Base	
Status	PRD/A
Elec. spec.	35WGZ823
Layout	35LYVV821
Eff. date	08-14-2023
CD Diagram	CD0006
Poles	04
Leads	3#18
Proprietary	False
Created date	02-23-2023

Inverter Code	Not Inverter
KVA Code	L
Lifting Lugs	No Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Motor Finish	UNPAINTED
Motor Lead Quantity/Wire Size	3 @ 18 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3528M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	13.41 IN
Power Factor	81
Product Family	Wash Down All Stainless Steel
Pulley End Bearing Type	Ball
Pulley Face Code	C-Face
Pulley Shaft Indicator	Standard
Rodent Screen	None
Service Factor	1.15
Shaft Diameter	0.875 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Speed	1765 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

NP1953A05											
CAT.NO.	VESSWDM3558T-5										
SPEC.	35VV821Z823										
HP	2										
VOLTS	575										
AMP	2.15										
RPM	1765										
FRAME	145TC			HZ	60			PH	3		
SER.F.	1.15		CODE	L	DES	B		CLASS	H		
NEMA-NOM-EFF	86.5			PF	81						
RATING	40C AMB-CONT										
CC	010A				USABLE AT 208V				N/A		
DE	6205			ODE	6203						
ENCL	TEFC		SN								
	SFA 2.45										

Parts List

Part number	Description	Quantity
SA415003	SA 35VV821Z823	1.000 ea
RA406772	RA 35VV821Z823	1.000 ea
34FN3002B01	EXTERNAL FAN, PLASTIC, .637/.639 HUB W/	1.000 ea
NS2512A01	INSULATOR, CONDUIT BOX X	1.000 ea
35CB5001A17	KOBX KIT, (ALL STAINLESS) W/ .75 NPT	1.000 ea
HA5027A02	HA4054 T-DRAIN X2 BAGGED WITH LABEL	1.000 ea
11XW1032G06	10-32 X .38, TAPTITE II, HEX WSHR SLTD U	1.000 ea
HW3001B01	BRASS CUP WASHER, FOR #10 SCREW	1.000 ea
35EP1913A02	FR EP MADE FROM 35EP1913A01	1.000 ea
HW4500S33	1/8 NPT STAINLESS #304 SS PLUG	3.000 ea
HW4606A01	JM CLIPPER/SEAL (WDE-0667-1064-BH49)	1.000 ea
HW5100A03	WAVY WASHER (W1543-017)	1.000 ea
35EP1914A02	PU EP FOR LOCKED 6205 BRG	1.000 ea
HW4500S33	1/8 NPT STAINLESS #304 SS PLUG	3.000 ea
HW4606A02	JM CLIPPER/SEAL (LWE-0938-1624-AL23)	1.000 ea
12XN1032S22	10-32 X 1 3/8 SLOT HEX, STAINLESS STEEL	2.000 ea
HA1049A01	DUBO LOK WASHER SIZE 10 (NYLON LOCK SEAL	2.000 ea
HA1049A01	DUBO LOK WASHER SIZE 10 (NYLON LOCK SEAL	4.000 ea
35FH4005A39	IEC FH NO GREASER DEBURR/CLEAN - SS	1.000 ea
10XN1032S06	HEX HD CAP SCREW, SS	3.000 ea
HW2502D13	SS KEY, 3/16 SQ X 1.375	1.000 ea
HA7000A01	KEY RETAINER 7/8" DIA SHAFT	1.000 ea
MJ5001A02	732 CL SEALANT 3 OZ DIXIE BEARING 289100	0.001 ea
PK3082	STYROFOAM CRADLE	1.000 ea
MN416A01	TAG-INSTAL-MAINT no wire (2500 bx)11/25	1.000 ea
34FN3002B01	EXTERNAL FAN, PLASTIC, .637/.639 HUB W/	1.000 ea
MJ1000A02	GREASE, POLYREX EM EXXON	0.050 lb
HA3100S02	THRUBOLT - 10-32 X 9.00 SS	4.000 ea
36PA1001	PKG GRP, PRINT PK1017A07	1.000 ea
FE-0000007	ZRTG FE ASSEMBLY	1.000 ea
PE-0000012	ZRTG PE ASSEMBLY	1.000 ea

AC Induction Motor Performance Data

Record # 35976

Typical performance - not guaranteed values

Winding: 35WGP956-R008			Type: 3538M		Enclosure: TEAO		
Nameplate Data			575 V, 60 Hz: Single Voltage Motor				
Rated Output (HP)		2 AIR OVER	Full Load Torque		5.99 LB-FT		
Volts		575	Start Configuration		direct on line		
Full Load Amps		2.2	Breakdown Torque		25.2 LB-FT		
R.P.M.		1755	Pull-up Torque		14.9 LB-FT		
Hz	60	Phase	3	Locked-rotor Torque		17.9 LB-FT	
NEMA Design Code		B	KVA Code	L	Starting Current		19.3 A
Service Factor (S.F.)		1	No-load Current		1.24 A		
NEMA Nom. Eff.		88.5	Power Factor	78	Line-line Res. @ 25°C		10.2 Ω
Rating - Duty		40C	AMB-CONT		Temp. Rise @ Rated Load		53°C
					Locked-rotor Power Factor		45.9
					Rotor inertia		0.225 LB-FT ²

Load Characteristics 575 V, 60 Hz, 2 HP

% of Rated Load	25	50	75	100	125	150
Power Factor	35	55	69	77	82	84
Efficiency	80.6	87.1	88.6	88.7	88.1	87.1
Speed	1791	1783	1773	1762	1751	1740
Line amperes	1.33	1.54	1.85	2.21	2.61	3.05

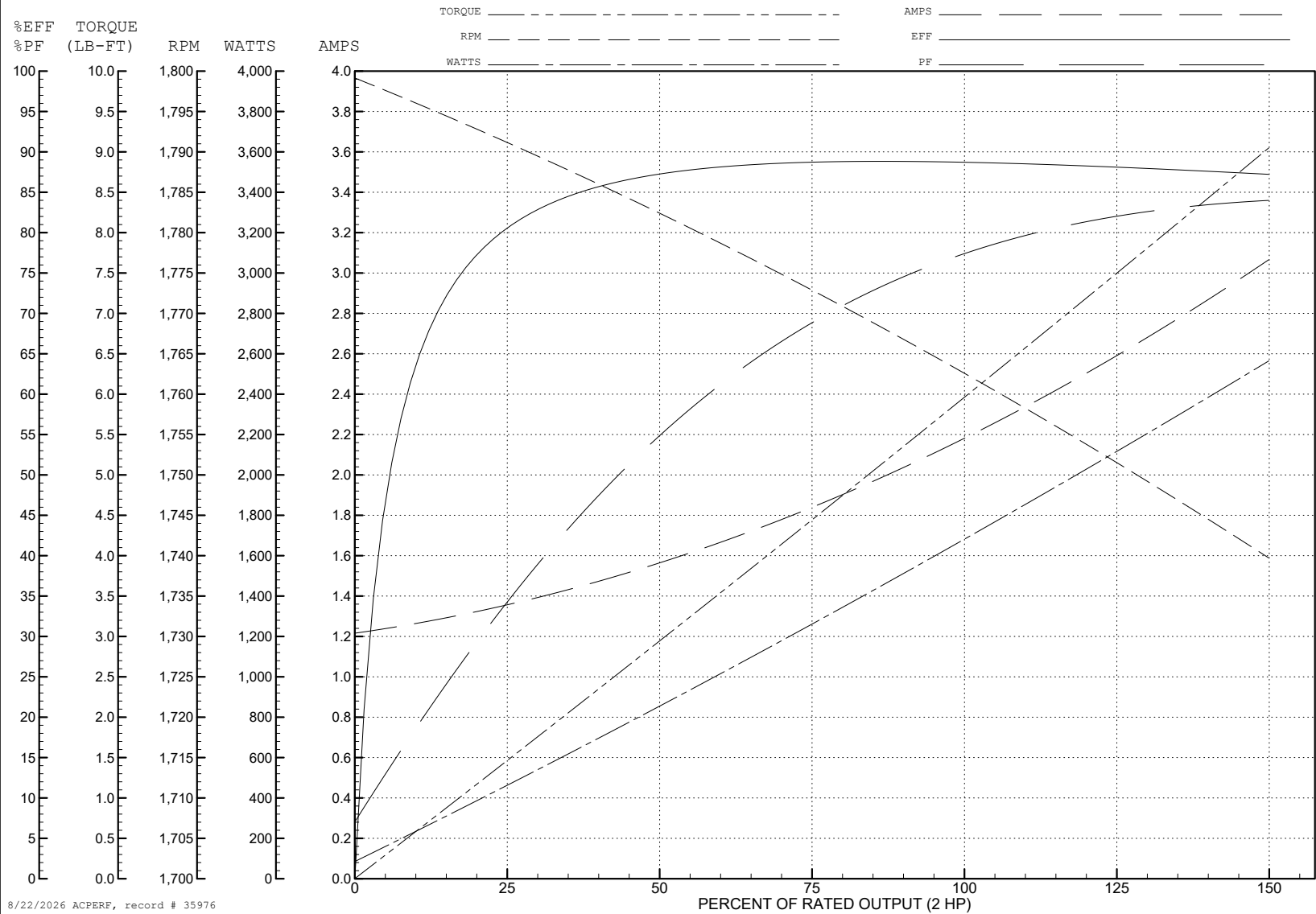
ABB Motors and Mechanical Inc.

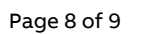
WINDING # 35WGP956

Typical performance - not guaranteed values.

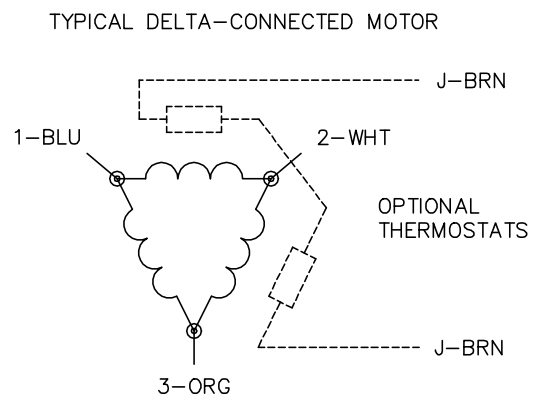
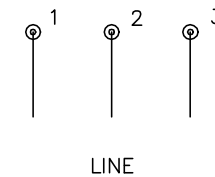
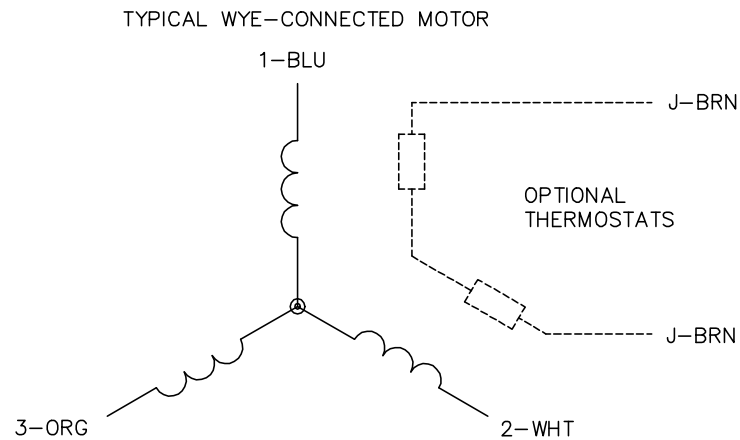
2 HP 3 PH 60 HZ 1755 RPM 575 V 3538M

TORQUES (LB-FT): PO=25.2 PU=14.9 LR=17.9 LRA=19.3





CD0006


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: ENBRIRO

MTL: —


BALDOR - RELIANCE®

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

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