

ABB BALDOR RELIANCE III

Customer information packet

VEM3584T-5

1.5HP, 1768RPM, 3PH, 60HZ, 143TC, 0522M, TEFC

Class - None

Division - Not Applicable

Specifications

Enclosure	TEFC
Frame	145TC
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	1.500 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	575.0 V @ 60 HZ
Agency Approvals	CURUSEEV NEMA PREMIUM
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	1.710 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	1.7 a
Insulation Class	F
Inverter Code	Inverter Ready
KVA Code	L

Part Detail

Revision	D
Type	AC
Mech. spec.	05C053
Base	
Status	PRD/A
Elec. spec.	05WGX559
Layout	05LYC053
Eff. date	04-29-2024
CD Diagram	CD0006
Poles	04
Leads	3#18
Proprietary	False
Created date	03-11-2022

Lifting Lugs	No Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Motor Lead Quantity/Wire Size	3 @ 18 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	0522M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	13.03 IN
Power Factor	76
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	0.875 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	1768 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.		VEM3584T-5									
SPEC.		05C053X559G1									
HP		1.5									
VOLTS		575									
AMP		1.71									
RPM		1768									
FRAME		145TC		HZ		60		PH		3	
SER.F.		1.15	CODE		L	DES	B	CL	F		
NEMA-NOM-EFF		86.5	PF		76						
RATING		40C AMB-CONT									
CC		010A									
DE		6205	ODE		6203						
ENCL		TEFC	SN								
VPWM INVERTER READY											
CT6-60H(10:1)VT3-60H(20:1											
SFA 2											

Parts List

Part number	Description	Quantity
SA408933	SA 05C053X559G1	1.000 ea
RA400480	RA 05C053X559G1	1.000 ea
35FN3002A05SP	EXFN, PLASTIC, 6.376 OD, .638 ID	1.000 ea
06CB3000	BALDOR CONDUIT BOX CAST	1.000 ea
06GS1000	GASKET, CONDUIT BOX	1.000 ea
51XW2520A12	SCREW, HEX SER SLT HD, ZN, 1/4-20 X .75	2.000 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
35EP1100A02	FR ENDPLATE, TEFC W/GREASER	1.000 ea
HW4500A01	1641B(ALEMITE)400 UNIV, GREASE FITT	1.000 ea
HW5100A03	WAVY WASHER (W1543-017)	1.000 ea
35EP1329A01	PU EP ENCL 143-5TC 205 BRG W/GRSR & STD	1.000 ea
HW4500A01	1641B(ALEMITE)400 UNIV, GREASE FITT	1.000 ea
51XN1032A20	10-32 X 1 1/4 HX WS SL SR	2.000 ea
HA3100A28	THRUBOLT 10-32 X 8.187	4.000 ea
51XB1214A16	12-14X1.00 HXWSSLD SERTYB	1.000 ea
35FH4005A02	IEC FH W/GREASER - W/PRIMER	1.000 ea
51XW1032A06	10-32 X .38, TAPTITE II, HEX WSHR SLTD S	3.000 ea
06CB3500	BALDOR CONDUIT BOX LID	1.000 ea
06GS1001	BALDOR CONDUIT BOX GASKET	1.000 ea
51XW2520A12	.25-20 X .75, TAPTITE II, HEX WSHR SLTD	2.000 ea
HW2501D13	KEY, 3/16 SQ X 1.375	1.000 ea
HA7000A01	KEY RETAINER 7/8" DIA SHAFT	1.000 ea
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	2.000 ea
MJ1000A02	GREASE, POLYREX EM EXXON	0.050 lb
MG1050Y01	CELEROL BALDOR GOLD *5 GALLON BUCKET*	0.022 ga
LB1624	COMBINED WARNING LABEL, ISO/ANSI PICTOGR	1.000 ea
LC0006	CONNECTION LABEL	1.000 ea
NP3441L	ALUM SUPER-E VPWM INVERTER READY UL EEV	1.000 ea
36PA1000	PKG GRP, PRINT PK1016A08	1.000 ea
PK3082	STYROFOAM CRADLE	1.000 ea

MN416A01	TAG-INSTAL-MAINT no wire (2500 bx)11/25	1.000 ea
PE-0000001	ZRTG PE ASSEMBLY	1.000 ea

AC Induction Motor Performance Data

Record # 82041

Typical performance - not guaranteed values

Winding: 05WGX559-R001			Type: 0522M		Enclosure: TEFC		
Nameplate Data			575 V, 60 Hz: Single Voltage Motor				
Rated Output (HP)		1.5	Full Load Torque		4.46 LB-FT		
Volts		575	Start Configuration		direct on line		
Full Load Amps		1.71	Breakdown Torque		16.69 LB-FT		
R.P.M.		1768	Pull-up Torque		9.8 LB-FT		
Hz	60	Phase	3	Locked-rotor Torque		11.36 LB-FT	
NEMA Design Code		B	KVA Code	L	Starting Current		14.18 A
Service Factor (S.F.)		1.15	No-load Current		1.05 A		
NEMA Nom. Eff.		86.5	Power Factor	76	Line-line Res. @ 25°C		22 Ω
Rating - Duty		40C AMB-CONT		Temp. Rise @ Rated Load		34°C	
S.F. Amps				Temp. Rise @ S.F. Load		41°C	
				Locked-rotor Power Factor		62	
				Rotor inertia		0.159 lb-ft²	

Load Characteristics 575 V, 60 Hz, 1.5 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	35	54	67	76	81	84	79
Efficiency	75.8	83.9	86.1	86.4	85.5	84.2	85.9
Speed	1791	1784	1776	1768	1758	1748	1762
Line amperes	1.1	1.24	1.45	1.72	2.03	2.38	1.91

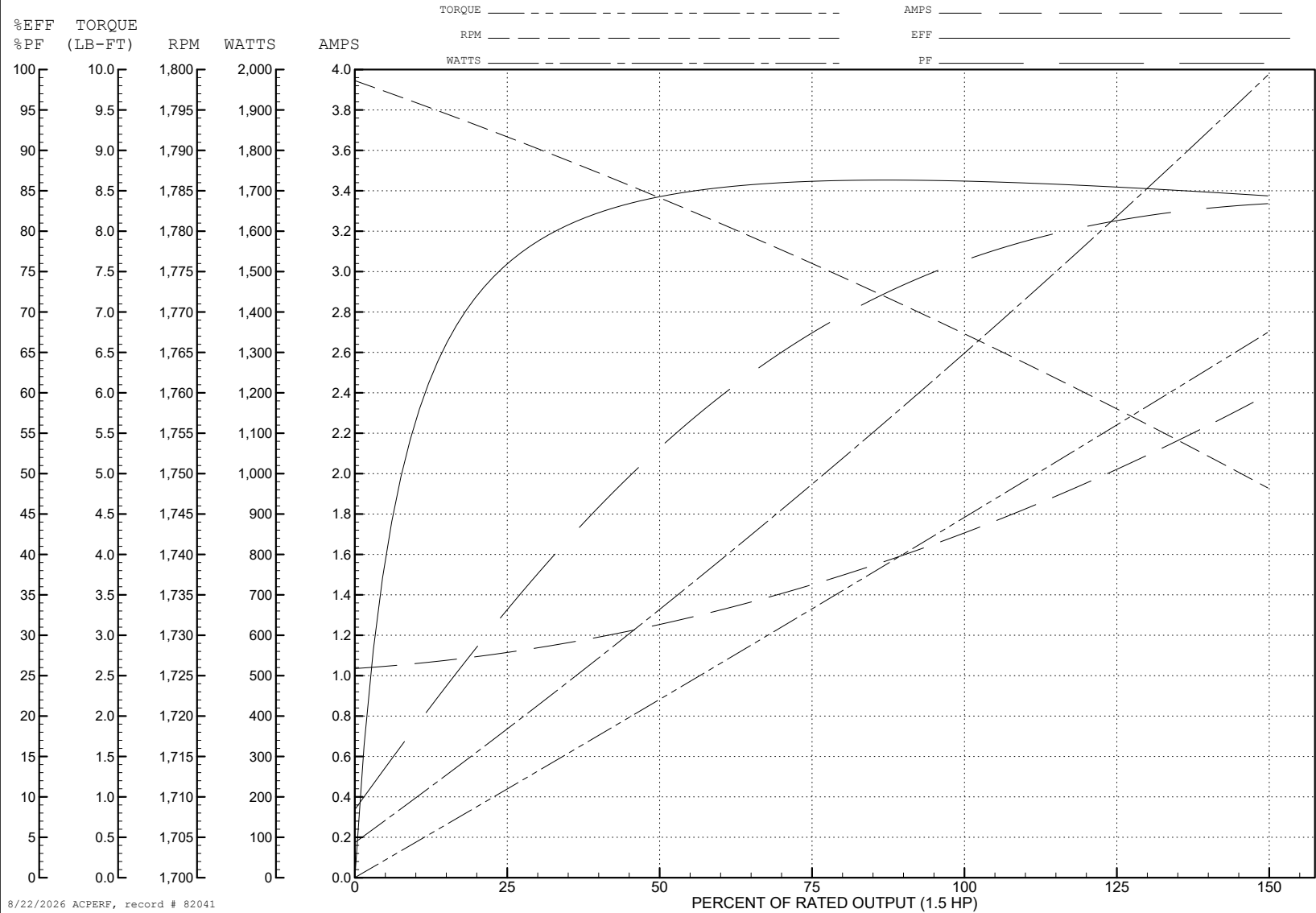
ABB Motors and Mechanical Inc.

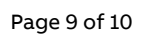
WINDING # 05WGX559

Typical performance - not guaranteed values.

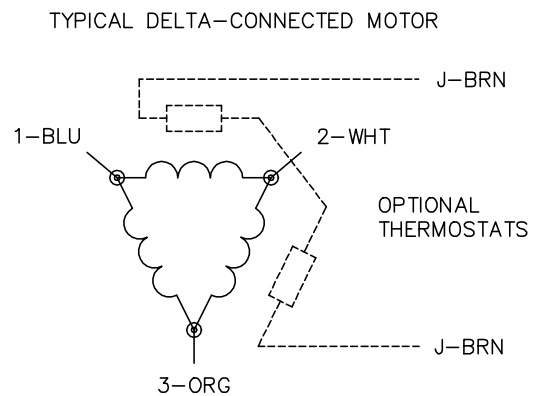
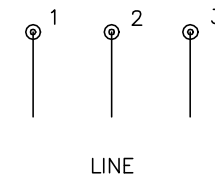
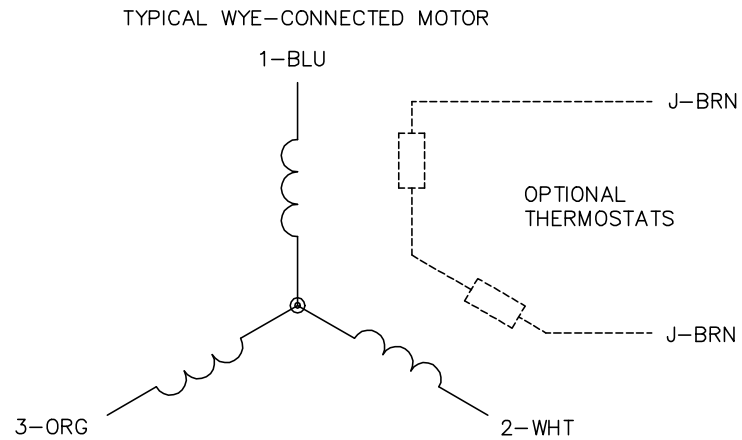
1.5 HP 3 PH 60 HZ 1768 RPM 575 V 0522M

TORQUES (LB-FT): PO=16.69 PU=9.8 LR=11.36 LRA=14.18





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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