

ABB BALDOR RELIANCE III

Customer information packet

IDNM3584T

1.5HP, 1770RPM, 3PH, 60HZ, 143TC, 0530M, TENV

Class - None

Division - Not Applicable

Specifications

Enclosure	TENV
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	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	4.600 A @ 230.0 V 2.300 A @ 460.0 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	2.3 a
Insulation Class	H

Part Detail

Revision	D
Type	AC
Mech. spec.	05E534
Base	
Status	PRD/A
Elec. spec.	05WGX543
Layout	05LYE534
Eff. date	03-16-2026
CD Diagram	CD0005
Poles	04
Leads	9#18
Proprietary	False
Created date	03-11-2022

Inverter Code	Inverter Duty
KVA Code	M
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Max Speed	6000 rpm
Motor Lead Quantity/Wire Size	9 @ 18 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	0530M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	14.65 IN
Power Factor	72
Product Family	General Purpose
Pulley End Bearing Type	Ball
Pulley Face Code	C-Face
Pulley Shaft Indicator	Standard
Rodent Screen	None
Service Factor	1.00
Shaft Diameter	0.875 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No 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

NP4544L									
CAT.NO.	IDNM3584T								
SPEC.	05E534X543G1								
FRAME	145TC		H.P.	1.5					
VOLTS	230/460								
MAG. CUR.	2.58/1.29			F.L. AMPS			4.6/2.3		
R.P.M.	1770		R.P.M. MAX			6000			
HZ.	60	PH.	3	CLASS		H			
SER.F.	1.00	DES.	B	SL HZ		1.03			
NEMA NOM. EFF.	86.5	WK2	0.217						
BLOWER		V		PH		HZ		AMPS	
RATING	40C AMB-CONT				ENCL		TENV		
DE	6205	ODE	6203						
CC	010A	SN							
	1000:1 CT/VT								

Parts List

Part number	Description	Quantity
SA408880	SA 05E534X543G1	1.000 ea
RA400427	RA 05E534X543G1	1.000 ea
LB1624	COMBINED WARNING LABEL, ISO/ANSI PICTOGR	1.000 ea
HW3201A05	3/8-16 EYEBOLT	1.000 ea
WD1000B16	T&B CX70TN OR L70P TERMINAL LUG	1.000 ea
10XN2520A06	1/4 20X3/8 HX HD CAP	2.000 ea
06CB3000	BALDOR CONDUIT BOX CAST	1.000 ea
06GS1000	GASKET,CONDUIT BOX	1.000 ea
51XW2520A12	.25-20 X .75, TAPTITE II, HEX WSHR SLTD	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
35EP1100B45	FRONT TENV 203 BRG W/GRSR & THRU-SHAFT E	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
35FH4801G	THRU-SHAFT ENCODER COVER INV/VECTOR F1 &	1.000 ea
WD4129	1.50 X 1.50 GRAY SNAP IN PLUG PROMOULD #	2.000 ea
10XN2520A08	1/4-20X1/2 HEX HEAD CAP	4.000 ea
10XN2520A08	1/4-20X1/2 HEX HEAD CAP	1.000 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
MJ5004A05	#242-21 LOCTITE GENERAL PURPOSE MED. STR	0.005 ea
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	2.000 ea
MJ1000A02	GREASE, POLYREX EM EXXON	0.050 lb
MG1025G29	WILKOFAS, 789.229, DARK CHARCOAL GRAY	0.022 ga

LC0005	CONN.DIA.,TY M,9-LD,DUAL VOLT,REVERSING	1.000 ea
NP4544L	ALUM INV UL EEV CC NEMA PREM W/ENCL	1.000 ea
36PA1000	PKG GRP, PRINT PK1016A08	1.000 ea
MN416A01	TAG-INSTAL-MAINT no wire (2500 bx)11/25	1.000 ea
PE-0000001	ZRTG PE ASSEMBLY	1.000 ea

NP VOLTS	230/460			WYE CONN EQ CKT OHMS PER PHASE (BASE RATING, 20C)			
NP AMPS	4.2/2.1	Base Volt	460	R1	5.320	X1	7.810
HP	1.5	NL AMPS	1.29	R2	2.080	X2	5.860
BASE SPEED	1769	Slip (HZ)	1.03			XM	197.000
PHASE/HZ	3/60	WK ² (lb-ft ²)	0.217				

Rated Full Load Data

	RPM	HP	Torque	Volts	Freq-Hz	Amps
Base Speed	1769	1.5	4.5	460	60	2.1
Max Speed	2653	1.5	3.0	460	90	1.9
CT Min Speed	1.769	0.002	4.5	0.46	0.06	2.1

Load Performance at Base Speed

	RPM	HP	Torque	Volts	Freq-Hz	Amps
No Load	1798	0.0	0.0	460	60	1.3
1/4	1790	0.4	1.1	460	60	1.4
1/2	1783	0.8	2.3	460	60	1.5
3/4	1776	1.1	3.3	460	60	1.8
Full Load	1769	1.5	4.5	460	60	2.1
O/L	1740	3.0	9.1	460	60	3.7

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

Remarks: Calculated Data

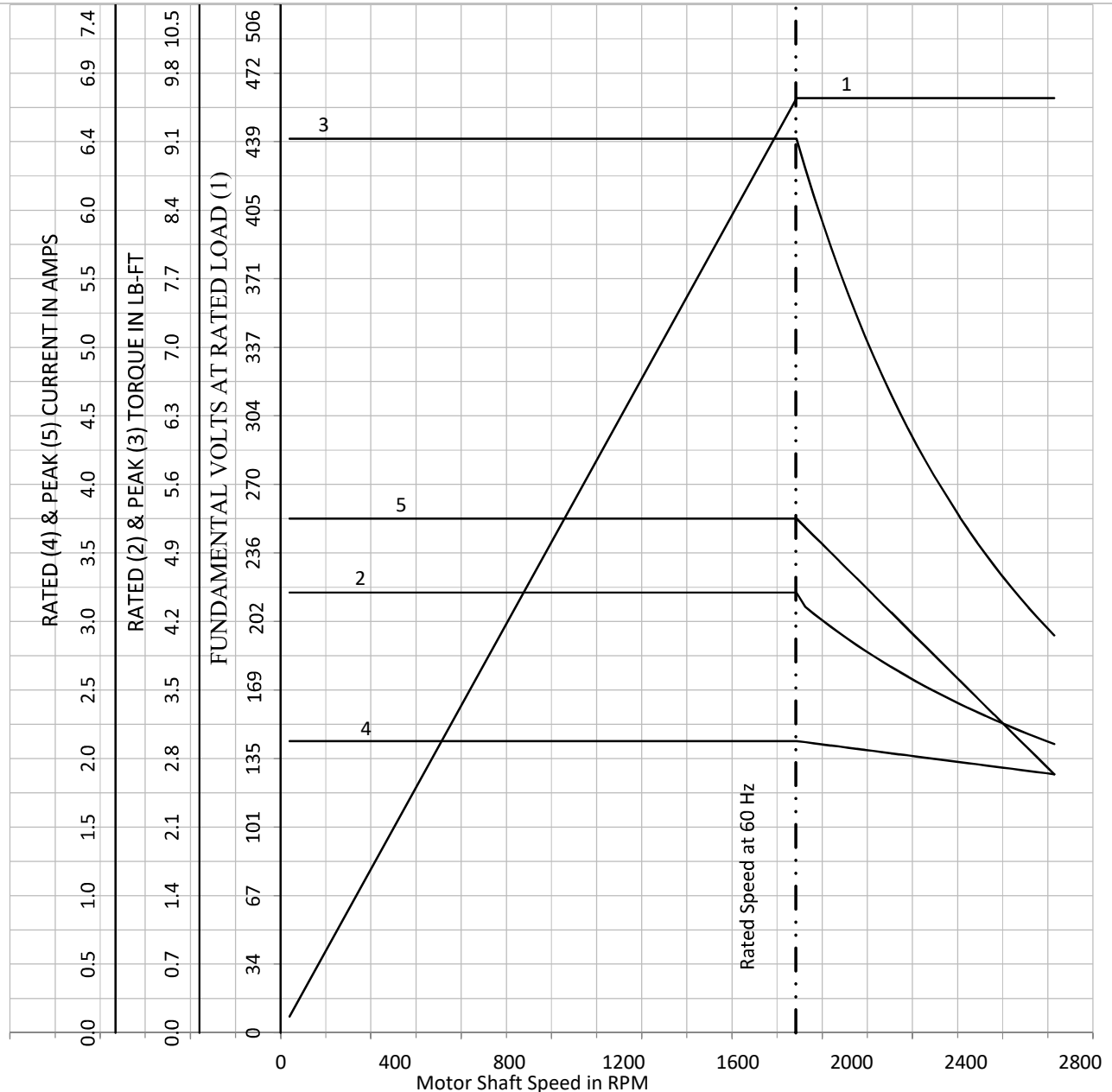
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DATE 12/19/2023
**A-C MOTOR
PERFORMANCE
CURVES**
05WGX543

Record: 82095

NP VOLTS	230/460	Base Volt	460	WYE CONN EQ CKT OHMS PER PHASE (BASE RATING, 20C)			
NP AMPS	4.2/2.1			R1	5.320	X1	7.810
HP	1.5			R2	2.080	X2	5.860
BASE SPEED	1769					XM	197.000
PHASE/HZ	3/60						
		Slip (HZ)	1.03				
		WK ² (lb-ft ²)	0.217				

Variable Speed AC Motor Curves



Calculated Data

Data Valid For Nameplate Speed Range only

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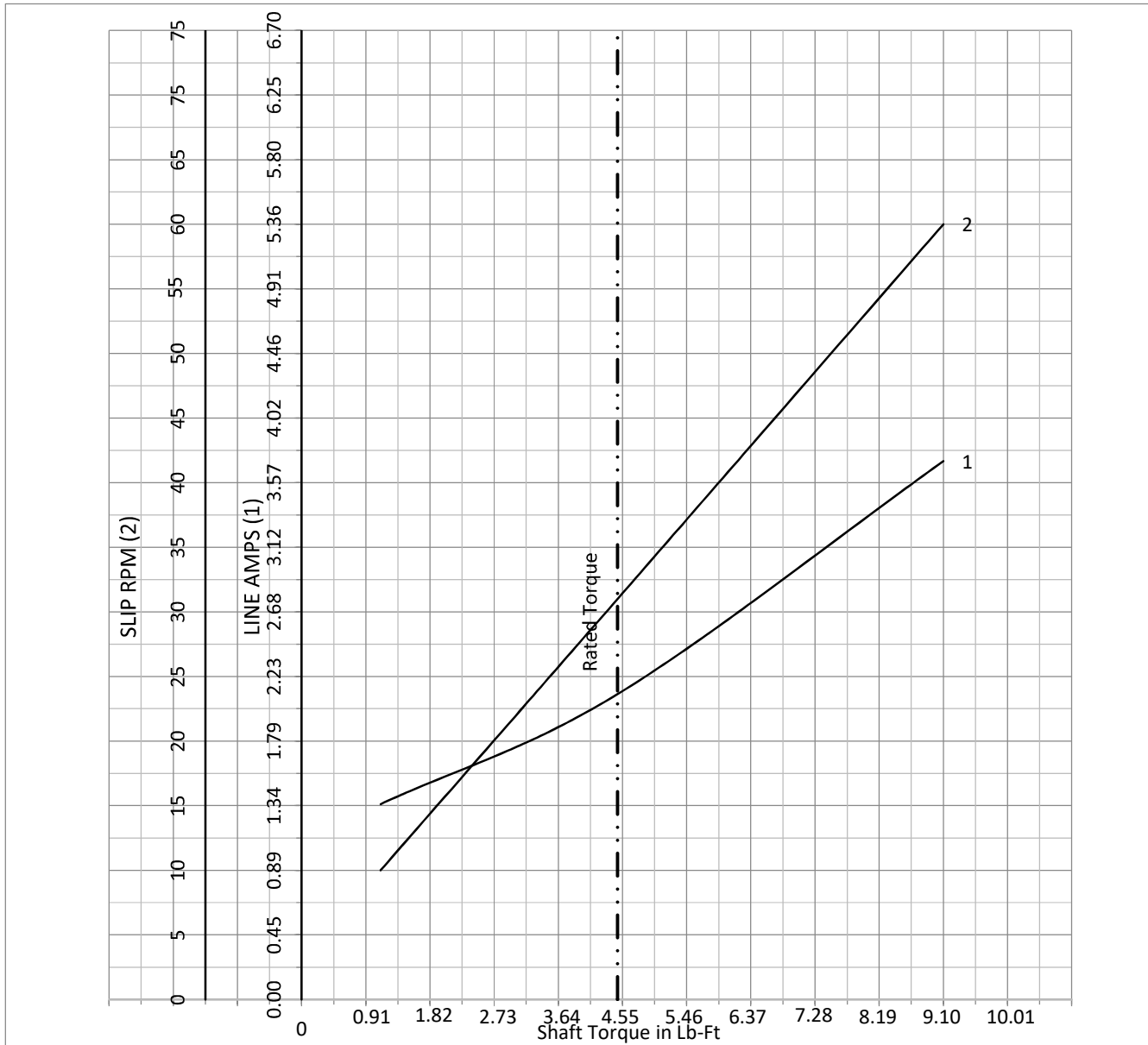
 APP BY USBRRAN1

 DATE 12/19/2023
**A-C MOTOR
PERFORMANCE
CURVES**
05WGX543

Record: 82095

NP VOLTS	230/460	0	0	WYE CONN EQ CKT OHMS PER PHASE (BASE RATING, 20C)			
NP AMPS	4.2/2.1	Base Volt	460	R1	5.320	X1	7.810
HP	1.5	NL AMPS	1.29	R2	2.080	X2	5.860
BASE SPEED	1769	Slip (HZ)	1.03			XM	197.000
PHASE/HZ	3/60	WK2 (lb-ft2)	0.217				

Vector PWM Inverter Duty
Variable Speed AC Motor Curves



Calculated Data

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