

ABB BALDOR RELIANCE III

Customer information packet

ZDM2276T

54M 6P TEBC HOR 254TC T'STATS VECTOR

Class - None

Division - Not Applicable

Specifications

Enclosure	TEBC
Frame	254TC
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	7.500 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1200 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	BLOWER
Current @ Voltage	10.700 A @ 460.0 V 21.400 A @ 230.0 V 25.000 A @ 208.0 V
Design Code	A
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	91.0 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	ENCODER
Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	10.7 a

Part Detail

Revision	F
Type	AC
Mech. spec.	09T110
Base	
Status	PRD/A
Elec. spec.	09WGX827
Layout	09LYT110
Eff. date	08-28-2025
CD Diagram	CD0005
Poles	06
Leads	9#12
Proprietary	False
Created date	03-13-2019

Insulation Class	H
Inverter Code	Inverter Duty
KVA Code	J
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Max Speed	5000 rpm
Motor Lead Quantity/Wire Size	9 @ 12 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	0954M
Mounting Arrangement	F1
Number of Poles	6
Overall Length	29.41 IN
Power Factor	71
Product Family	General Purpose
Pulley End Bearing Type	Ball
Pulley Face Code	C-Face
Pulley Shaft Indicator	Standard
Rodent Screen	None
RoHS Status	ROHS COMPLIANT
Service Factor	1.00
Shaft Diameter	1.625 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	Shaft Slinger
Speed	1180 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

NP1168L									
CAT NO	ZDM2276T								
SPEC.	09T110X827Z1								
FRAME	254TC			HP	7.5 TE				
VOLTS	230/460								
MAG CUR	11/5.5			FLA		21.4/10.7			
RPM	1180		RPM MAX			5000			
HZ	60		PH	3		CLASS		H	
SER.F.	1.00		DES		A		SL HZ		1
NEMA-NOM-EFF	91		WK2		4.34				
BLWR V	PH		HZ		A				
RATING	40C AMB-CONT								
DE BRG	6309		ODE BRG			6208			
CC	010A		SER.NO						
	1000:1 CT, 1000:1 VT								

Parts List

Part number	Description	Quantity
SA371167	SA 09T110X827Z1	1.000 ea
RA360847	RA 09T110X827Z1	1.000 ea
HW1002A63	WASHER, 5/8 HI-COLLAR SPRLCKWASHER	1.000 ea
09CB3003	CB W/1.75" DIA LD HL - 37, 39, 307 & 309	1.000 ea
09GS1000	GASKET-CONDUIT BOX, 1/16 THICK LEXIDE	1.000 ea
51XW2520A12	.25-20 X .75, TAPTITE II, HEX WSHR SLTD	4.000 ea
HW1001A25	LOCKWASHER 1/4, ZINC PLT .493 OD, .255 I	2.000 ea
WD1000B16	T&B CX70TN OR L70P TERMINAL LUG	1.000 ea
59XW2520G07	.25-20X.44,HEX SER WSHR,TAPTITE 2,GREEN	1.000 ea
09EP1100A74	FR. E.P. TEBC/TENV W/THRU SHAFT ENCODER	1.000 ea
HA3400A39	STUD- 3/8-16 X 6.44 OAL HEX	4.000 ea
HW1001A38	LOCKWASHER 3/8, ZINC PLT .688 OD, .382 I	4.000 ea
XY3816A12	3/8-16 FINISHED NUT W/SERRATIONS	4.000 ea
HA1005A12	SLINGER, OD 2.50, ID 1.433, 208 BRG	1.000 ea
10XN2520K12	1/4-20 X.75 GRD 5	1.000 ea
HW1001A25	LOCKWASHER 1/4, ZINC PLT .493 OD, .255 I	1.000 ea
HW5100A08	W3118-035 WVY WSHR (WB)	1.000 ea
10XN2520K28	1/4-20 X 1.75" HX HD SCRWGRADE 5, ZINC P	2.000 ea
10XN2520K36	1/4-20 X 2.25" HX HD SCRWGRADE 5, ZINC P	4.000 ea
HW1001A25	LOCKWASHER 1/4, ZINC PLT .493 OD, .255 I	4.000 ea
09EP1300A12	ENDPLATE, MACH	1.000 ea
10XN3816K28	3/8-16 X 1.75 HEX HD CAP SCREW, GRADE 5	4.000 ea
HW1001A38	LOCKWASHER 3/8, ZINC PLT .688 OD, .382 I	4.000 ea
HW4600B44	V-RING SLINGER 1.500 X 1.810 X .28 VITON	1.000 ea
HW1001A38	LOCKWASHER 3/8, ZINC PLT .688 OD, .382 I	4.000 ea
09CB3501SP	CONDUIT BOX LID FOR 09CB3001 & 09CB3002	1.000 ea
09GS1013SP	GS FOR 09CB3501, 12CB1500 & 12CB1503 LID	1.000 ea
51XW2520A12	.25-20 X .75, TAPTITE II, HEX WSHR SLTD	2.000 ea
HW2501G25	KEY, 3/8 SQ X 2.875	1.000 ea
HW4500A05	1669B ALEM/UNIV860 GR FTG X	1.000 ea
HA4051A00	PLASTIC CAP FOR GREASE FITTING	1.000 ea

HW4500A17	317400 ALEMITE GREASE RELIEF	1.000 ea
HA4054	SHORT T-DRAIN FITTING, .125" N.P.T.	1.000 ea
MJ1000A02	GREASE, POLYREX EM EXXON	0.080 lb
HW4500A03	GREASE FITTING, .125 NPT 1610(ALEMITE) 8	1.000 ea
HA4051A00	PLASTIC CAP FOR GREASE FITTING	1.000 ea
HW4500A17	317400 ALEMITE GREASE RELIEF	1.000 ea
HA4054	SHORT T-DRAIN FITTING, .125" N.P.T.	1.000 ea
09FH5100A01	309 BLOWER ASSY. (09FH4016 & EF5101)	1.000 ea
MG1050G01	CELEROL MEDIUM CHARCOAL METALLIC GRAY	0.050 ga
LB1624	COMBINED WARNING LABEL, ISO/ANSI PICTOGR	1.000 ea
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	2.000 ea
ENC02BC-B2	ENCNDR KIT TEBC W/OEHS35A09 W/BLIND SHAFT	1.000 ea
LC0005E01	SPL CONN.DIA./WARN.LABEL(LC0005/LB1119)	1.000 ea
NP1168L	ALUM VEC UL CSA CC	1.000 ea
42PA1010	PACKAGING GROUP, PRINT PK1151A06	1.000 ea
MN416A01	TAG-INSTAL-MAINT no wire (2500 bx)11/25	1.000 ea
LD7020D09	LEAD SET, 12AWG, 9 LEAD, 20" LONG LEADS	1.000 ea

BALDOR RELIANCE		CUSTOMER INFORMATION PACKET		WYE CONNECT OHMS PER PHASE (BASE RATING, 20C)	
HP	7.5	Base Volt	460	R1	0.473
BASE SPEED	1184	NL AMPS	5.84	R2	0.384
PHASE/HZ	3/60	Slip (HZ)	0.80	X1	2.600
		WK ² (lb-ft ²)	4.340	X2	2.660
				XM	43.300

Rated Full Load Data

	RPM	HP	Torque	Volts	Freq-Hz	Amps
Base Speed	1184	7.5	32.4	460	60	10.7
Max Speed	1774	7.5	21.8	460	90	9.7
CT Min Speed	1.184	0.007	32.4	0.46	0.06	10.7

Load Performance at Base Speed

	RPM	HP	Torque	Volts	Freq-Hz	Amps
No Load	1199	0.0	0.0	460	60	5.8
1/4	1196	1.8	7.9	460	60	6.3
1/2	1192	3.7	16.4	460	60	7.5
3/4	1189	5.4	23.9	460	60	8.9
Full Load	1184	7.5	32.4	460	60	10.7
O/L	1163	14.7	66.4	460	60	19.8

Remarks: Calculated Data

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DR BY USBRAN1
 CK BY CD
 APP BY USBRAN1
 DATE 7/21/2026

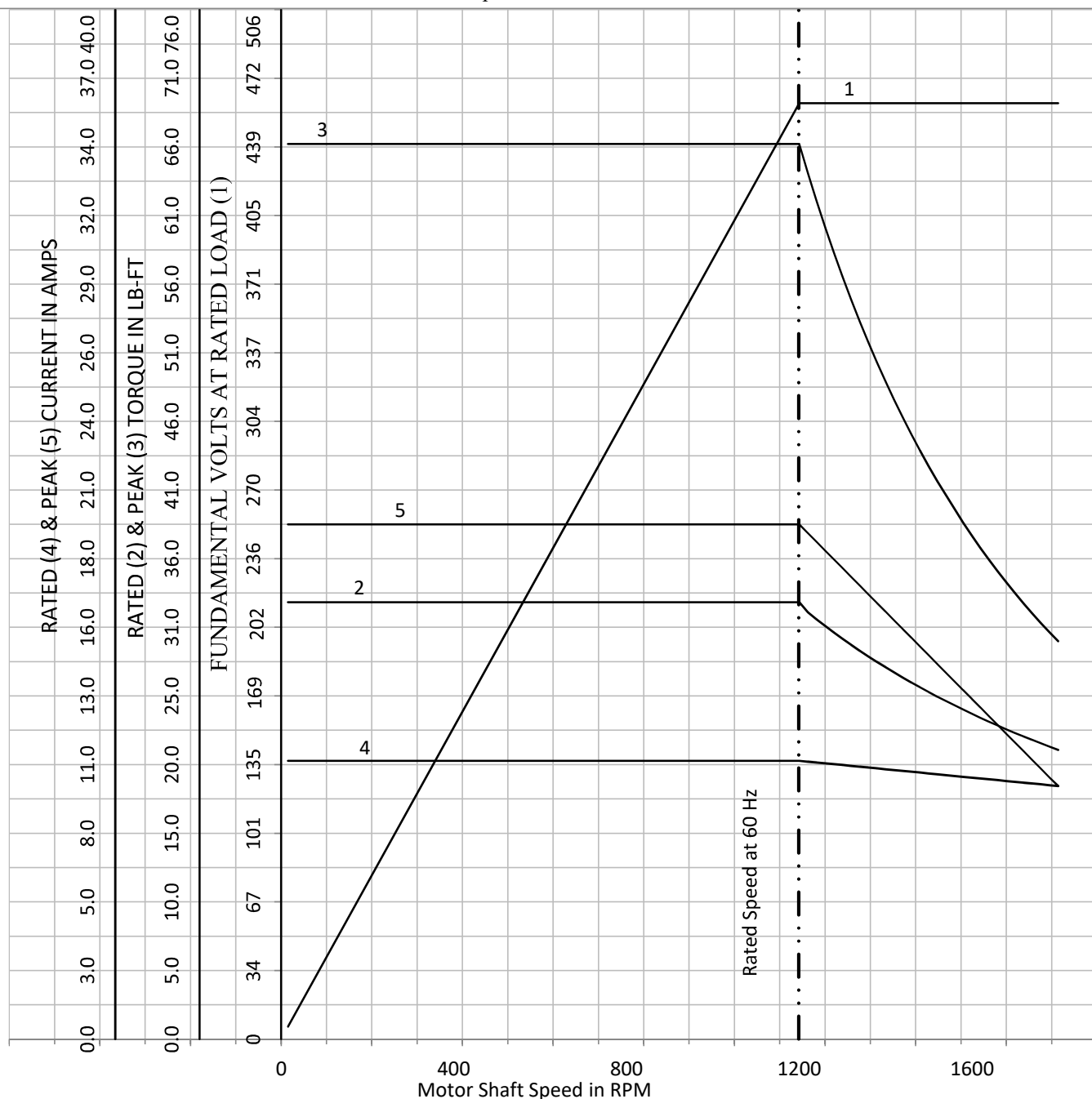
**A-C MOTOR
 PERFORMANCE
 CURVES**

09WGX827

Record: 20707

ABB BALDOR RELIANCE III		CUSTOMER INFORMATION PACKET		ZDM2276T - 54M 6P TEBC HOR 254TC T'STATS VECTOR		WYE CONN EQ CKT OHMS PER PHASE (BASE RATING, 20C)	
HP	7.5	Base Volt	460	R1	0.473	X1	2.600
BASE SPEED	1184	NL AMPS	5.84	R2	0.384	X2	2.660
PHASE/HZ	3/60	Slip (HZ)	0.80			XM	43.300
		WK ² (lb-ft ²)	4.340				

Variable Speed AC Motor Curves



Calculated Data

Data Valid For Nameplate Speed Range only

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DATE 7/21/2026

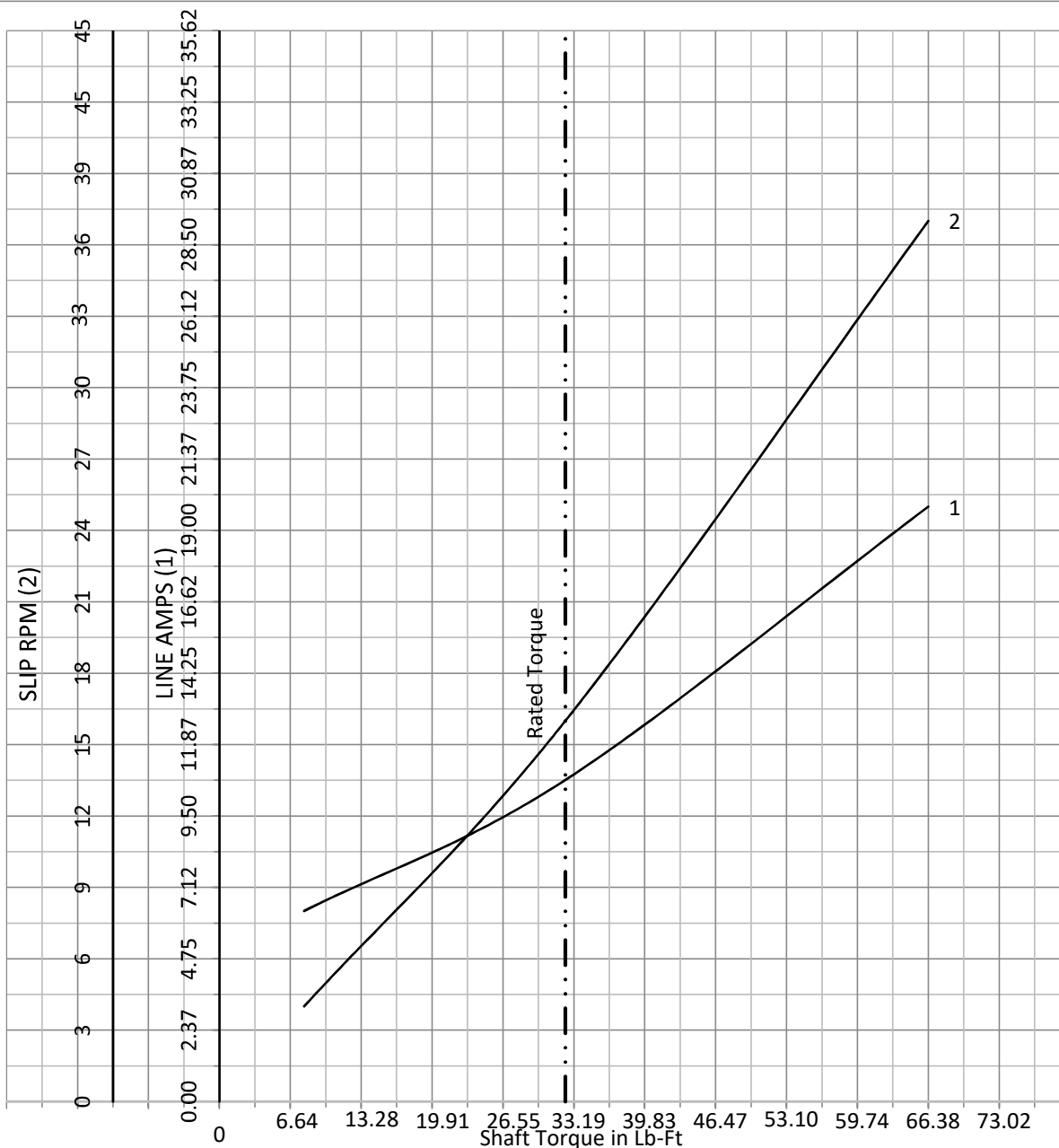
**A-C MOTOR
PERFORMANCE
CURVES**

09WGX827

Record: 20707

BALDOR-RELIANCE		CUSTOMER INFORMATION PACKET		ZDM2276T - 54M 6P TEBCHOR254TC T'STATS VECTOR		WYE CONN EQ CKT OHMS PER PHASE (BASE RATING, 20C)	
HP	7.5	Base Volt	460	R1	0.473	X1	2.600
BASE SPEED	1184	NL AMPS	5.84	R2	0.384	X2	2.660
PHASE/HZ	3/60	Slip (HZ)	0.80			XM	43.300
		WK2 (lb-ft2)	4.340				

Vector PWM Inverer Duty
Vaiaable Speed AC Motor Curves



Calculated Data

Data Valid For Nameplate Speed Range only

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**A-C MOTOR
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09WGX827

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