

ABB BALDOR RELIANCE III

Customer information packet

ZDVSM4103T

25HP, 1775RPM, 3PH, 60HZ, 284TC, 1054M, TEFC, F

Class - None

Division - Not Applicable

Specifications

Enclosure	TEFC
Frame	284TC
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	25.000 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	64.000 A @ 208.0 V 62.000 A @ 230.0 V 31.000 A @ 460.0 V
Design Code	A
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	93.6 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	ENCODER
Front Face Code	Standard
Front Shaft Indicator	Standard
Heater Indicator	No Heater

Part Detail

Revision	N
Type	AC
Mech. spec.	10H955
Base	
Status	PRD/A
Elec. spec.	10WGZ651
Layout	10LYH955
Eff. date	08-18-2025
CD Diagram	CD0180
Poles	04
Leads	9#10
Proprietary	False
Created date	12-13-2017

High Voltage Full Load Amps	31.0 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	1054M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	30.42 IN
Power Factor	81
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	1.875 IN
Shaft Extension Location	Double Shaft
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	Shaft Slinger
Speed	1775 rpm
Speed Code	Single Speed
Starting Method	Direct on line
Thermal Device - Bearing	NONE (OLD)
Thermal Device - Winding	Normally Closed Thermostat
Vibration Sensor Indicator	No Vibration Sensor
Winding Thermal 1	None

Winding Thermal 2

None

Nameplate

NP3304L				
CAT NO	ZDVSM4103T			
SPEC.	10H955Z651Z1			
FRAME	284TC	HP	25 TE	
VOLTS	230/460			
MAG CUR	27.2/13.6		FLA	62/31
RPM	1775	RPM MAX		2700
HZ	60	PH	3	CLASS F
SER.F.	1.00		SL HZ	0.8
NEMA-NOM-EFF	93.6	WK2	4.13	
RATING	40C AMB-CONT			
DE BRG	6311	ODE BRG		6309
CC	010A	SER.NO		
	1.5:1 CHP PWM			
	1000:1 CT, 1000:1 VT			

ABB BALDOR/460		CUSTOMER INFORMATION PACKET		MAX SAFE RPM 2700		WYE CONN. EQ. CKT. OHMS PER PHASE (BASE RATING, 20C)			
RELIANCE III		ZDVSM4103T - 25HP, 1775RPM,		8PH, 60HZ, 284TC, 1054M, TEFC, F					
HP AMP	02/31	Base Volt	460	R1	0.121	X1	0.578		
HP	25 HP	NL AMPS	13.60	R2	0.588	X2	0.512		
BASE SPEED	1778	Slips(HZ)	0.74	R2B	0.086	X2B	0.790		
PHASE/HZ	3/60	WK2 ()	0.000	R2E	0.025	XM	16.600		

Rated Full Load Data

	RPM	HP	Torque	Volts	Freq-Hz	Amps
Base Speed	1777.8	25.1	74.0	460	60	30.6
Max Speed	2666	25.1	49.4	460	90	27.9
Min Speed	0	0.0	74.0	15.59	0.74	30.6

Load Performance at Base Speed

	RPM	HP	Torque	Volts	Freq-Hz	Amps
No Load	1798.9	0.0	0.0	460	60	13.6
1/4	1794.1	6.2	18.2	460	60	15.3
1/2	1789.3	12.6	36.9	460	60	19.3
3/4	1783.5	18.8	55.3	460	60	24.6
Full Load	1777.8	25.1	74.0	460	60	30.6
O/L	1753	50.1	150.0	460	60	59.4

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 12/13/2017

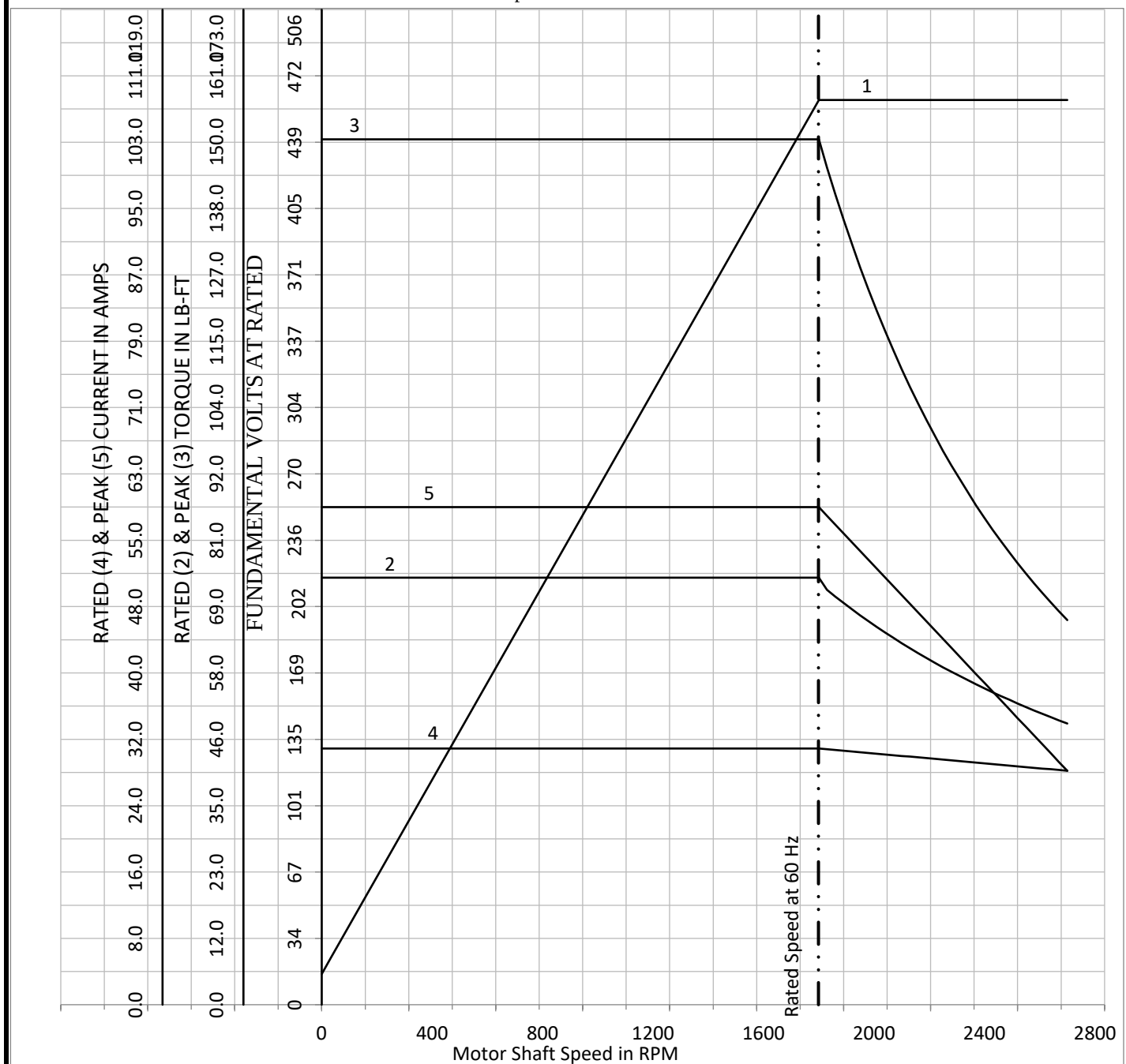
**A-C MOTOR
PERFORMANCE
CURVES**
10WGZ651
Record: 68462

HP 25 HP
 BASE SPEED 1777.80005
 PHASE/HZ 3/60

MAX SAFE RPM 2700
 ZDVSM4103T - 25HP, 1775RPM, 3PH, 60HZ, 284TC, 1054M, TEFC, F
 Base Volt 460
 NL AMPS 13.60
 Slips(HZ) 0.74
 WK2 () 0.000

WYE CONN EQ CKT OHMS PER PHASE (BASE RATING, 20C)
 R1 0.121 X1 0.578
 R2 0.588 X2 0.512
 R2B 0.086 X2B 0.790
 R2E 0.025 XM 16.600

Vector PWM Inverter Duty
 Variable Speed AC Motor Curves



Calculated Data

Data Valid For Nameplate Speed Range only

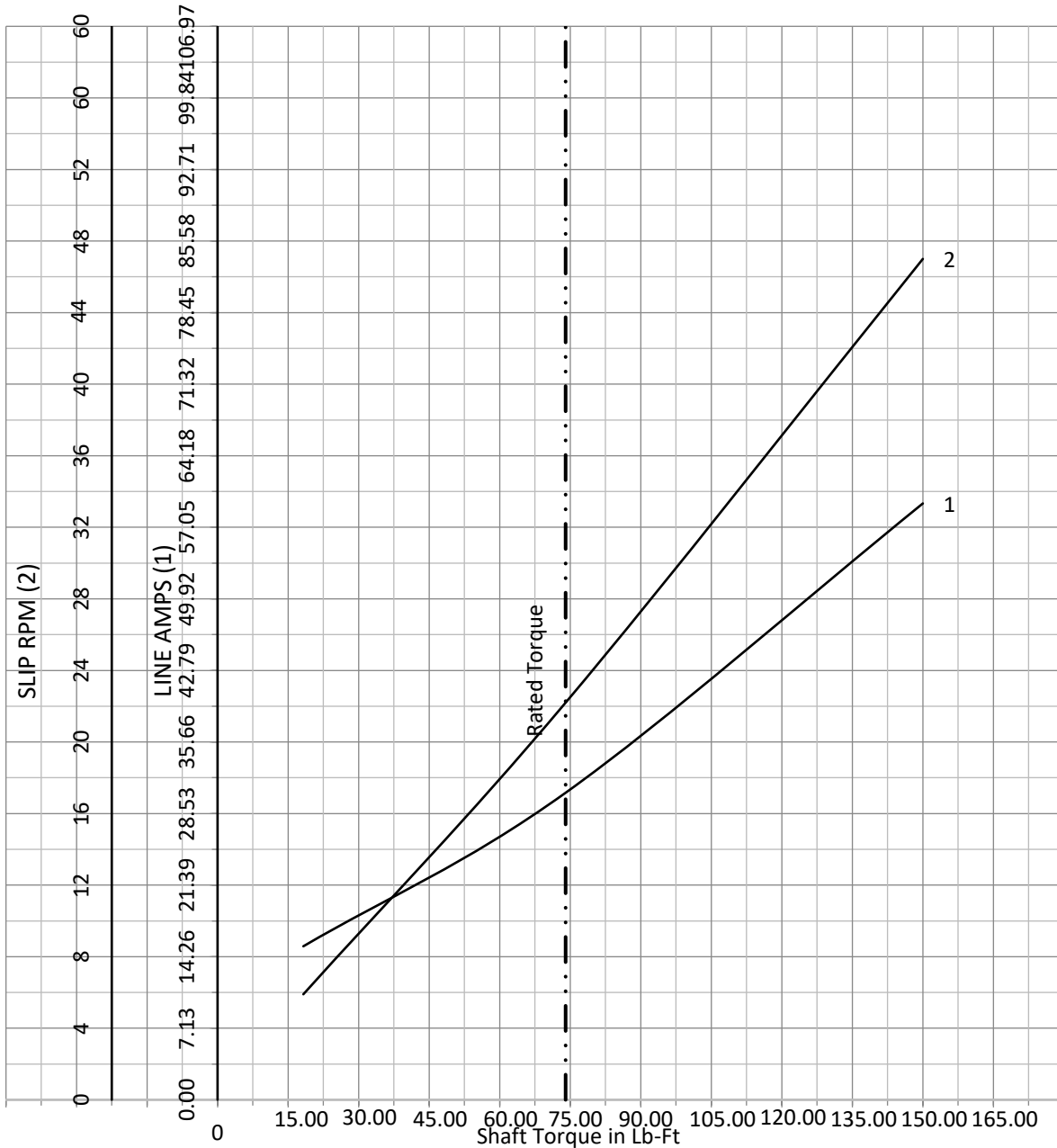


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**A-C MOTOR
 PERFORMANCE
 CURVES**
10WGZ651
 Record: 68462

ABB BALDOR RELIANCE		333/460 62/1131	CUSTOMER INFORMATION PACKET		MAX SAFE RPM 2700 ZDVSM4103T - 25HP, 1775RPM, 3PH, 60HZ, 284TC, 1054M, TEFC, F	WYE CONN EQ CKT OHMS PER PHASE (BASE RATING, 20C)			
HP	25 HP		Base Volt	460		R1	0.121	X1	0.578
BASE SPEED	1777.800049		NL AMPS	13.60		R2	0.588	X2	0.512
PHASE/HZ	3/60		Slips(HZ)	0.74		R2B	0.086	X2B	0.790
			WK2 ()	0.000		R2E	0.025	XM	16.600

Vector PWM Inverer Duty
Vaiable Speed AC Motor Curves



Calculated Data

Data Valid For Nameplate Speed Range only

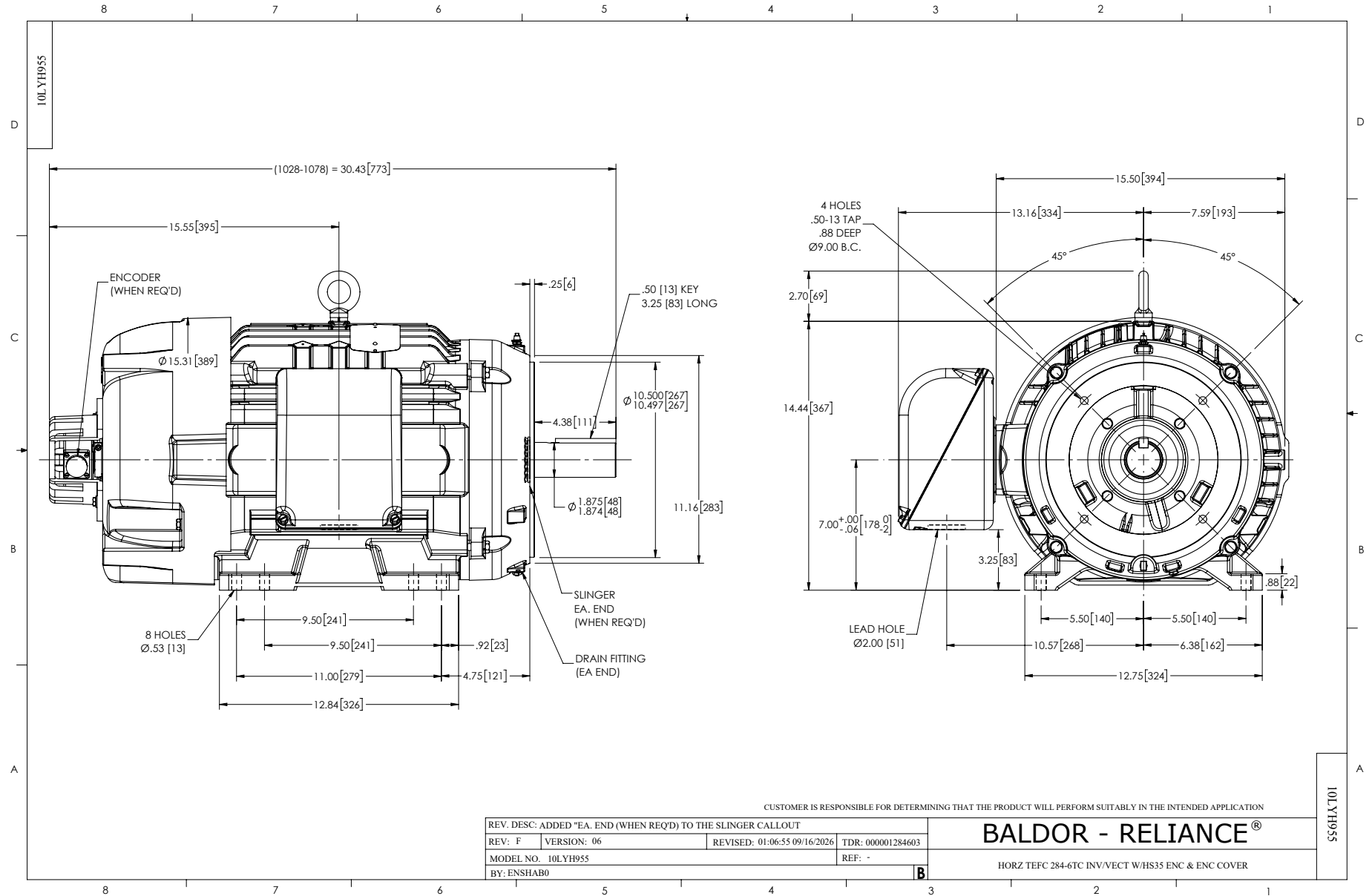


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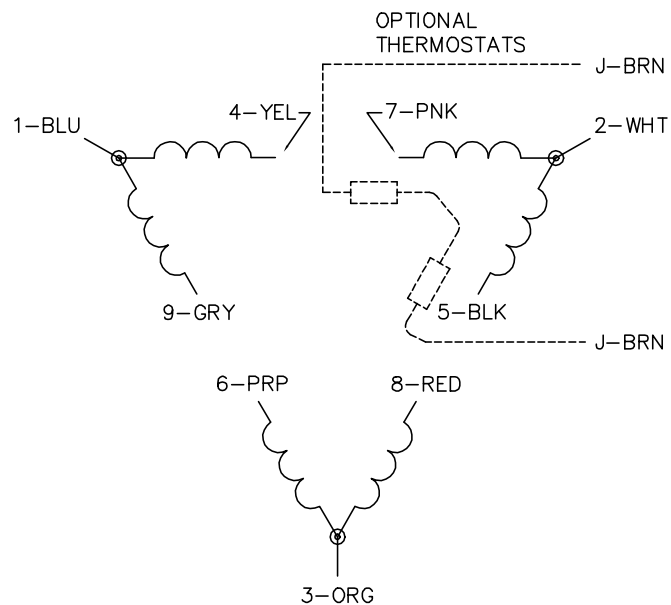
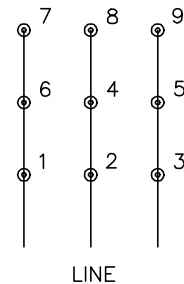
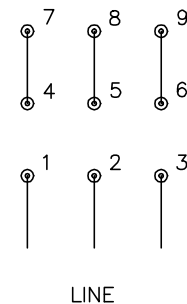
**A-C MOTOR
PERFORMANCE
CURVES**

10WGZ651

Record: 68462



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.

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

SH 1 of 1

CD0180