

ABB BALDOR RELIANCE III

Customer information packet

IDVSM4103T

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	NO FEEDBACK
Front Face Code	Standard
Front Shaft Indicator	Standard
Heater Indicator	No Heater

Part Detail

Revision	L
Type	AC
Mech. spec.	10H810
Base	
Status	PRD/A
Elec. spec.	10WGZ651
Layout	10LYH810
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

NP3302L			
CAT NO	IDVSM4103T		
SPEC.	10H810Z651G1		
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	SN	
	1.5:1 CHP PWM		
	1000:1 CT, 1000:1 VT		

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



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DATE 12/13/2017

**A-C MOTOR
PERFORMANCE
CURVES**

10WGZ651

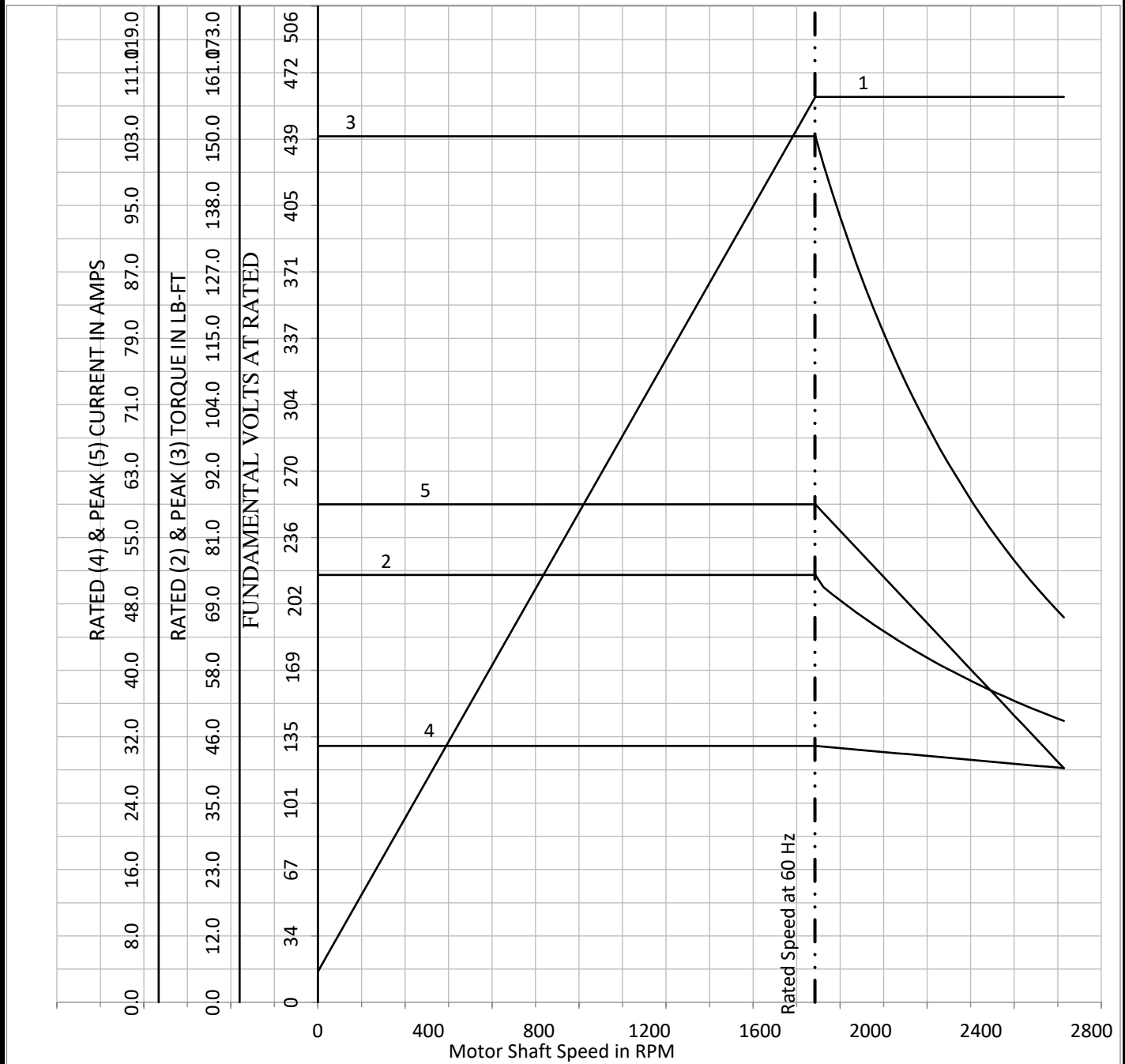
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MAX SAFE RPM **2700**
 IDVSM4103T - 25HP, 1775RPM, 3PH, 60HZ, 284TC, 1054M, TEFC, F
 Base Volt **460**
 NL AMPS **13.60**
 Slips(HZ) **0.74**
 WK2 () **0.000**

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**

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

Vector PWM Inverter Duty
 Variable Speed AC Motor Curves



Calculated Data

Data Valid For Nameplate Speed Range only



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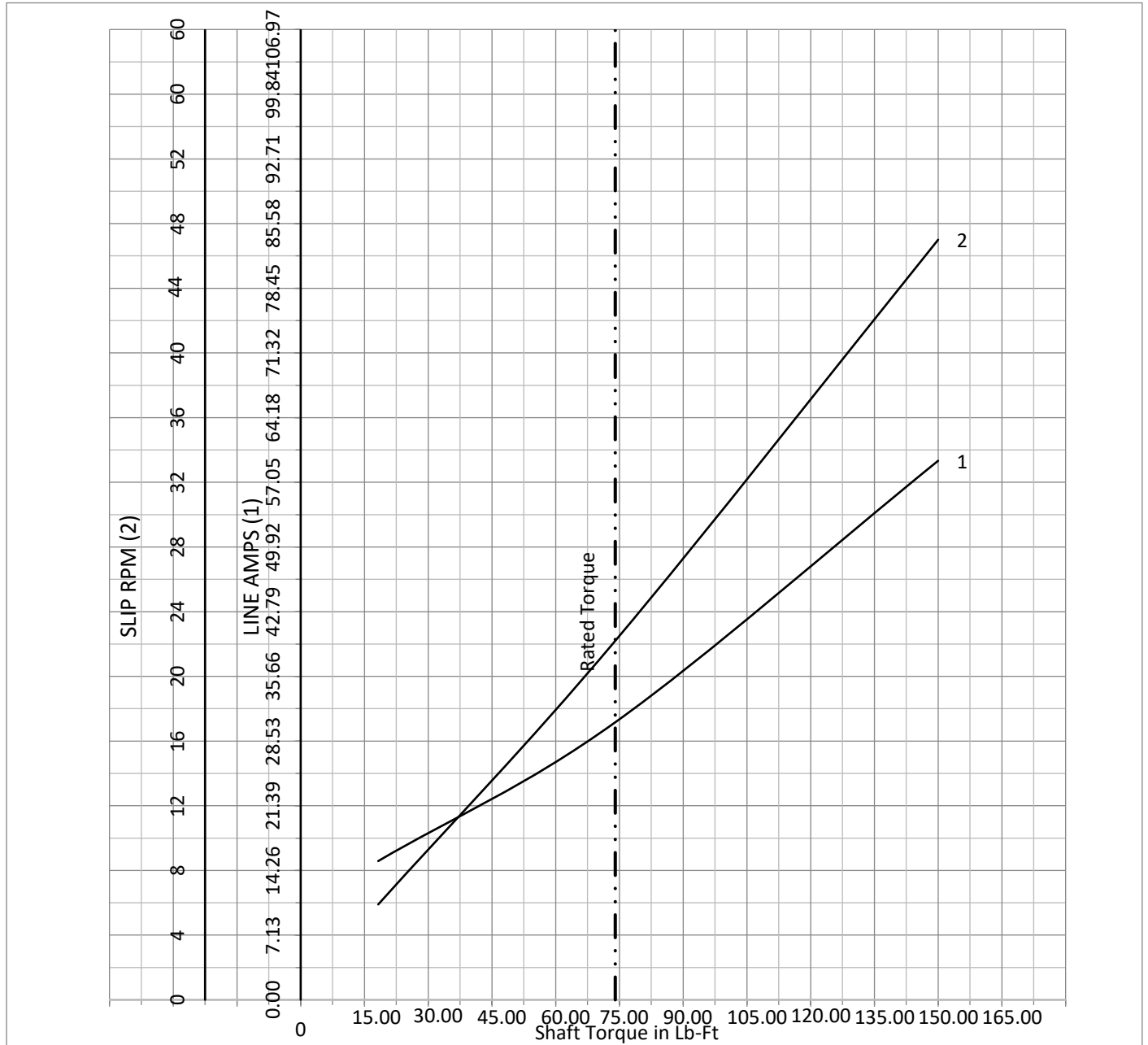
A-C MOTOR PERFORMANCE CURVES
10WGZ651
 Record: 68462

MAX SAFE RPM	2700
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

HP 25 HP
 BASE SPEED 1777.800049
 PHASE/HZ 3/60

Vector PWM Inverter Duty
 Variable Speed AC Motor Curves

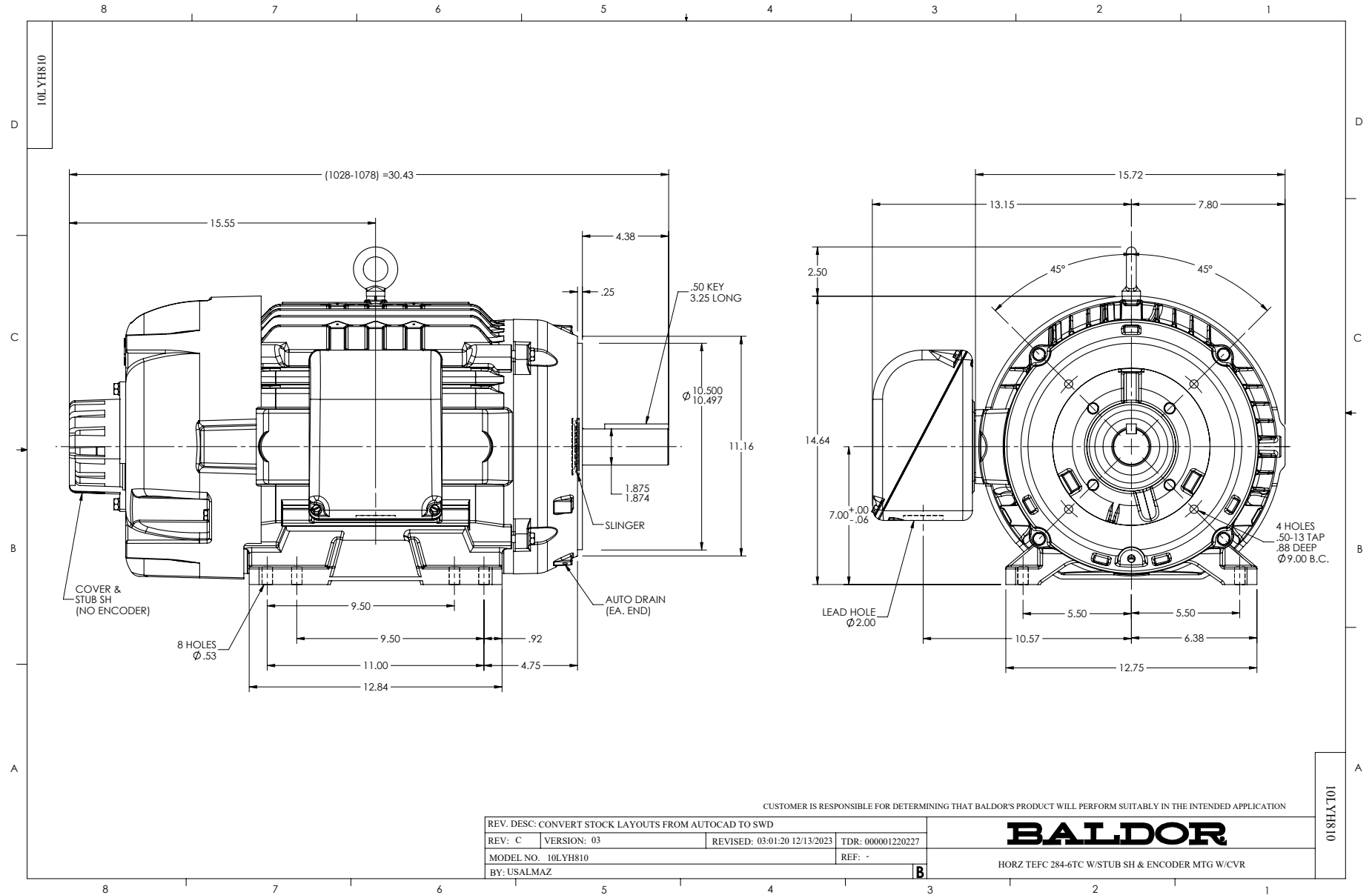


Calculated Data
 Data Valid For Nameplate Speed Range only

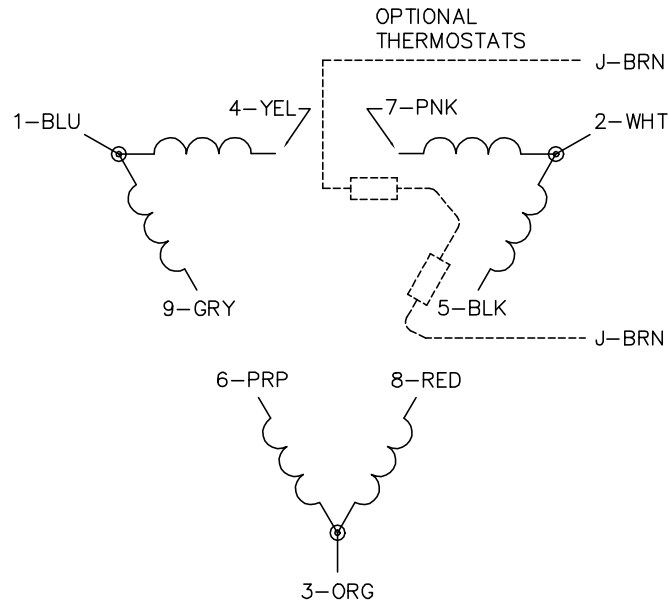


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 DATE 12/13/2017

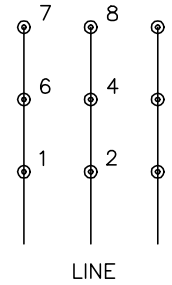
A-C MOTOR PERFORMANCE CURVES
10WGZ651
 Record: 68462



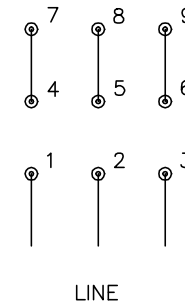
CD0180



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.

CD0180

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

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