ABB BALDOR RELIANCE

Customer information packet

ZDM4104T

56M 4P TEBC HOR 286T T'STATS VECTOR
Class - None
Division - Not Applicable

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Specifications

Enclosure	TEBC
Frame	286T
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	30.000 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	BLOWER
Current @ Voltage	38.000 A @ 460.0 V
	76.000 A @ 230.0 V
	78.000 A @ 208.0 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 Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	38.0 a

Part Detail

Revision	K
Type	AC
Mech. spec.	10T004
Base	
Status	PRD/A
Elec. spec.	10WGY538
Layout	10LYT004
Eff. date	06-05-2026
CD Diagram	CD0180
Poles	04
Leads	9#8
Proprietary	False
Created date	03-14-2019

Insulation Class	H
Inverter Code	Inverter Duty
KVA Code	J
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Max Speed	4000 rpm
Motor Lead Quantity/Wire Size	9 @ 8 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	1056M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	34.48 IN
Power Factor	80
Product Family	General Purpose
Pulley End Bearing Type	Ball
Pulley Face Code	Standard
Pulley Shaft Indicator	Standard
Rodent Screen	None
Service Factor	1.00
Shaft Diameter	1.875 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	Shaft Slinger
Speed	1760 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	ZDM4104T						
SPEC.	10T004Y538Z1						
FRAME	286T		**HP**	30 TE			
VOLTS	230/460						
MAG CUR	39.6/19.8			**FLA**	76/38		
RPM	1760		**RPM MAX**	2700			
HZ	60	**PH**	3	**CLASS**	H		
SER.F.	1.00	**DES**	A	**SL HZ**	1.3		
NEMA-NOM-EFF	93.6	**WK2**	4.46				
BLWR V		**PH**		**HZ**		**A**	
RATING	40C AMB-CONT						
DE BRG	6311		**ODE BRG**	6309			
CC	010A	**SER.NO**					
	1000:1 CT, 1000:1 VT						

INP AMPS	76/38	MAX SAFE RPM	2700	WYE CONN EQ CKT OHMS PER PHASE (BASE RATING, 20C)			
HP	30 HP	Base Volt	460	R1	0.107	X1	0.492
BASE SPEED	1777	NL AMPS	17.90	R2	0.515	X2	0.443
PHASE/HZ	3/60	Slips(HZ)	0.78	R2B	0.075	X2B	0.692
		WK2 (LB-FT2)	4.470	R2E	0.022	XM	12.800

Rated Full Load Data

	RPM	HP	Torque	Volts	Freq-Hz	Amps
Base Speed	1776.5	30.0	88.7	460	60	37.6
Max Speed	2664	30.0	59.1	460	90	33.4
Min Speed	0	0.0	88.7	16.78	0.78	37.6

Load Performance at Base Speed

	RPM	HP	Torque	Volts	Freq-Hz	Amps
No Load	1798.9	0.0	0.0	460	60	17.9
1/4	1792.2	7.5	22.1	460	60	19.8
1/2	1787.6	15.0	44.1	460	60	24.3
3/4	1782.4	22.5	66.2	460	60	30.7
Full Load	1776.5	30.0	88.7	460	60	37.6
O/L	1749	60.0	180.0	460	60	73.0

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

Remarks: Calculated Data
Vector PWM Inverter Duty

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A-C MOTOR PERFORMANCE CURVES

10WGY538

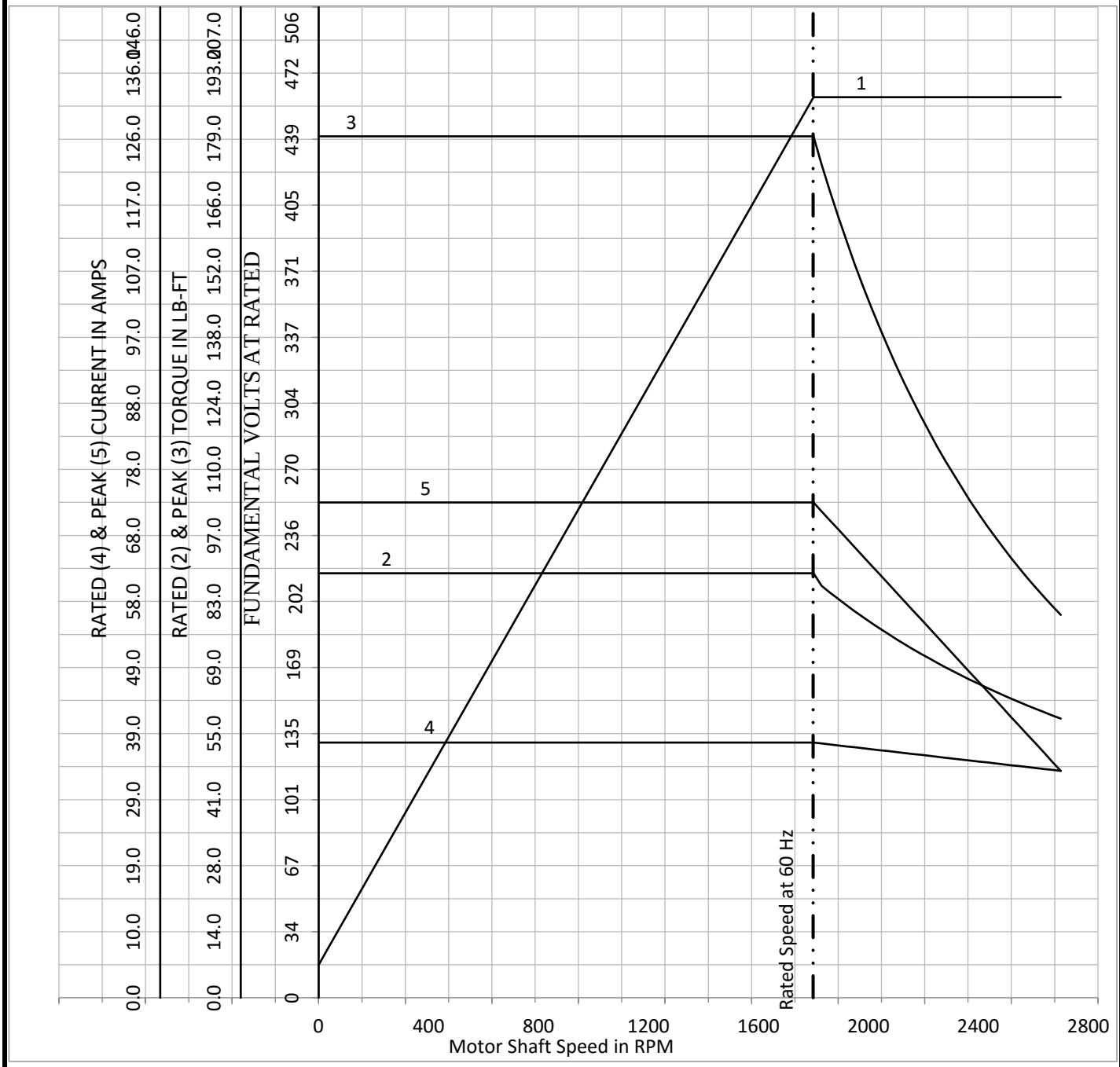
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INP AMPS	39/38	MAX SAFE RPM	2700	WYE CONN EQ CKT OHMS PER PHASE (BASE RATING, 20C)			
HP	30 HP	Base Volt	460	R1	0.107	X1	0.492
BASE SPEED	1776.5	NL AMPS	17.90	R2	0.515	X2	0.443
PHASE/HZ	3/60	Slips(HZ)	0.78	R2B	0.075	X2B	0.692
		WK2 (LB-FT2)	4.470	R2E	0.022	XM	12.800

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Vector PWM Inverer Duty

Variable Speed AC Motor Curves



Calculated Data

Data Valid For Nameplate Speed Range only

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A-C MOTOR PERFORMANCE CURVES

10WGY538

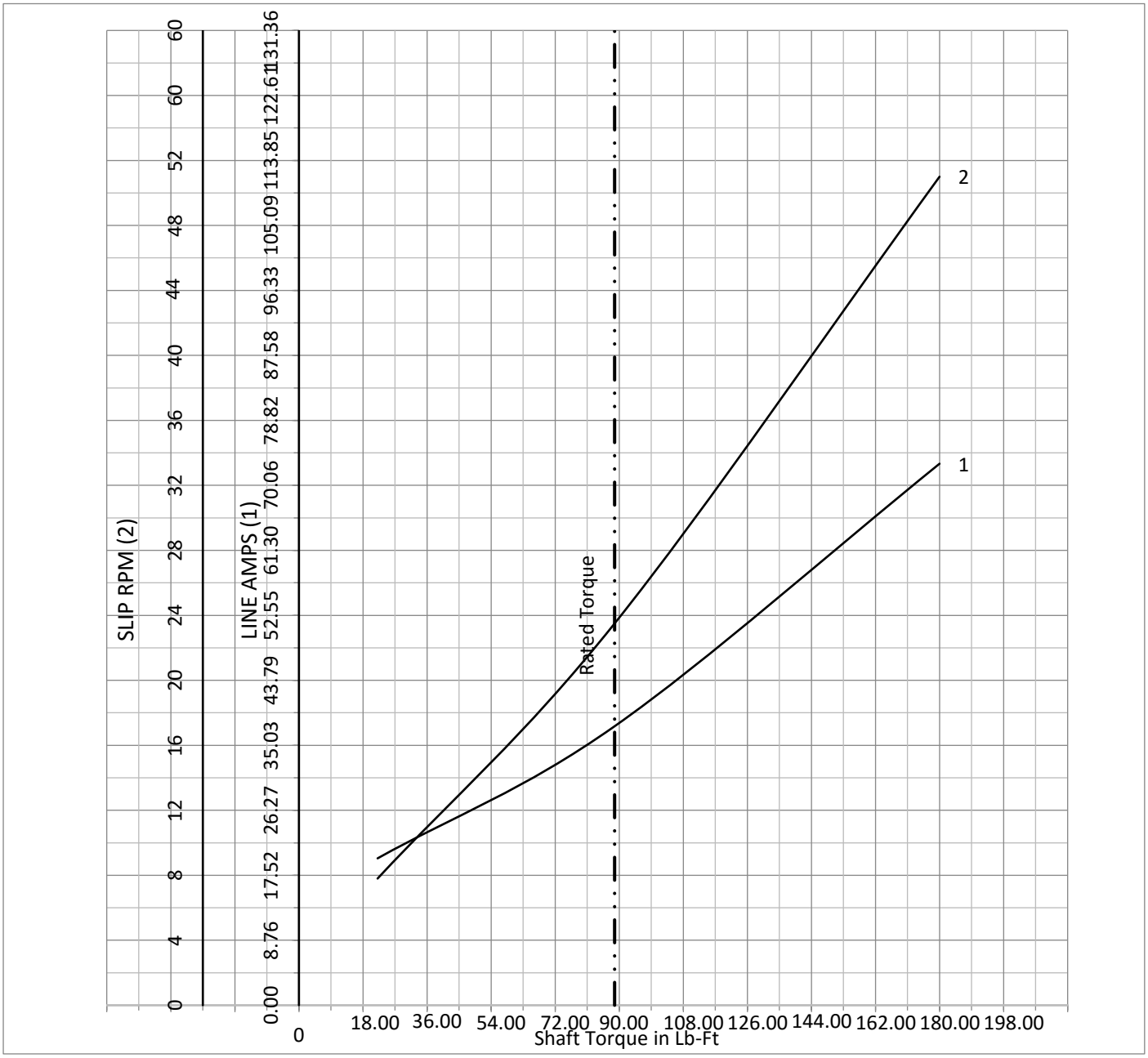
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VOLTS	208/460	MAX SAFE RPM	2700	WYE CONN EQ CKT OHMS PER PHASE (BASE RATING, 20C)			
FULL AMPS	79.38	Base Volt	460	R1	0.107	X1	0.492
HP	30 HP	NL AMPS	17.90	R2	0.515	X2	0.443
BASE SPEED	1776.5	Slips(HZ)	0.78	R2B	0.075	X2B	0.692
PHASE/HZ	3/60	WK2 (LB-FT2)	4.470	R2E	0.022	XM	12.800

Vector PWM Inverer Duty

Vaiable Speed AC Motor Curves



Calculated Data

Data Valid For Nameplate Speed Range only

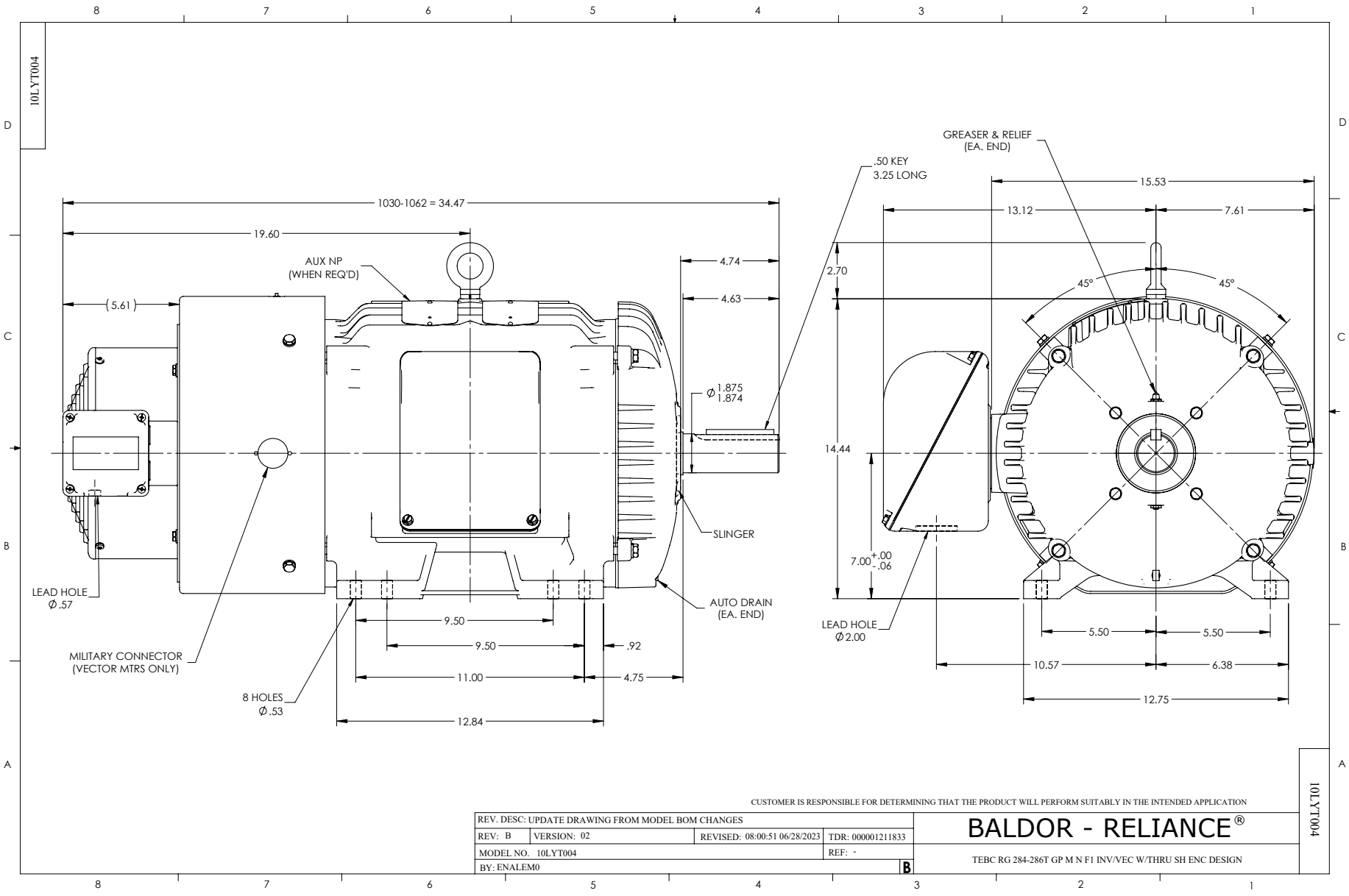
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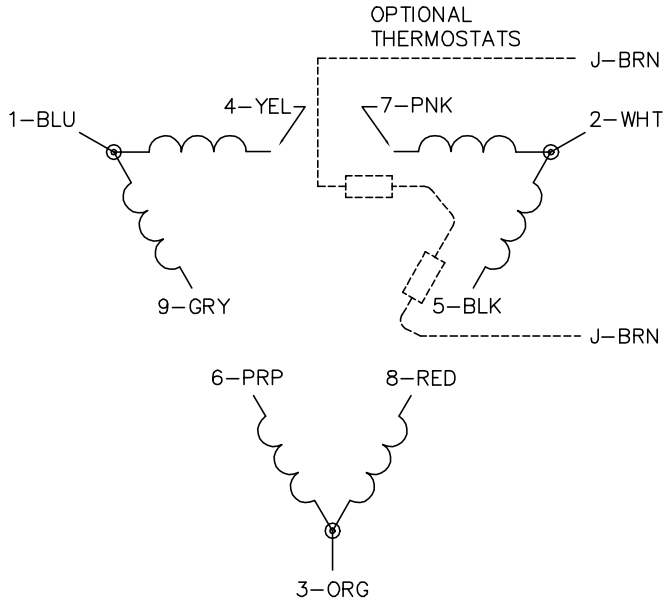
A-C MOTOR PERFORMANCE CURVES

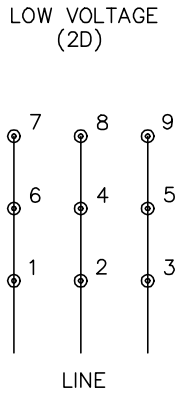
10WGY538

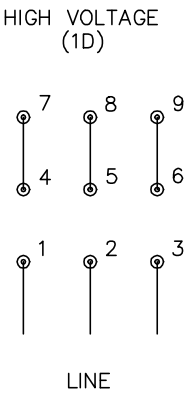
Record: 52925


10LYT004
1030-1062 = 34.47
19.60
AUX NP
(WHEN REQ'D)
(5.61)
4.74
4.63
Ø 1.875
1.874
LEAD HOLE
Ø .57
MILITARY CONNECTOR
(VECTOR MTRS ONLY)
8 HOLES
Ø .53
9.50
9.50
.92
11.00
4.75
12.84
SLINGER
AUTO DRAIN
(EA. END)
GREASER & RELIEF
(EA. END)
.50 KEY
3.25 LONG
15.53
13.12
7.61
2.70
45°
45°
14.44
7.00 +.00 -.06
LEAD HOLE
Ø 2.00
5.50
5.50
10.57
6.38
12.75
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT THE PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION
REV. DESC: UPDATE DRAWING FROM MODEL BOM CHANGES
REV: B
VERSION: 02
REVISED: 08:00:51 06/28/2023
TDR: 000001211833
MODEL NO. 10LYT004
REF: -
BY: ENALEM0
B
BALDOR - RELIANCE®
TEBC RG 284-286T GP M N F1 INV/VEC W/THRU SH ENC DESIGN
10LYT004

CD0180







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: ENBRIR0
MTL: –		

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3PH, DV, 9 LEADS, DELTA CONNECTION

SH 1 of 1