ABB BALDOR RELIANCE

Customer information packet

ZDNM2333T

15HP, 1765RPM, 3PH, 60HZ, 254TC, 0948M, TENV
Class - None
Division - Not Applicable

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Specifications

Enclosure	TENV
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	15.000 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	UR
	CSA
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	18.500 A @ 460.0 V
	37.000 A @ 230.0 V
Design Code	A
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	92.4 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	ENCODER
Front Face Code	Encoder/Feedback Device
Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	18.5 a

Part Detail

Revision	AP
Type	AC
Mech. spec.	09F277
Base	
Status	PRD/A
Elec. spec.	09WGX946
Layout	09LYF277
Eff. date	11-14-2023
CD Diagram	CD0005
Poles	04
Leads	9#12
Proprietary	False
Created date	01-01-0001

Insulation Class	H
Inverter Code	Inverter Duty
KVA Code	K
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Max Speed	5000 rpm
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	9 @ 12 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	0948M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	24.05 IN
Power Factor	80
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	1.625 IN
Shaft Extension Location	Pulley End
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	Shaft Slinger
Speed	1765 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	ZDNM2333T						
SPEC.	09F277X946Z1						
FRAME	254TC		**HP**	15 TE			
VOLTS	230/460						
MAG CUR	17.8/8.9			**FLA**	37/18.5		
RPM	1765		**RPM MAX**	5000			
HZ	60	**PH**	3	**CLASS**	H		
SER.F.	1.00	**DES**	A	**SL HZ**	1		
NEMA-NOM-EFF	92.4	**WK2**	2.1				
BLWR V		**PH**		**HZ**		**A**	
RATING	40C AMB-CONT						
DE BRG	6309		**ODE BRG**	6208			
CC	010A	**SER.NO**					

NP VOLTS	230/460	MAX SAFE RPM	5000	WYE CONN EQ CKT OHMS PER PHASE (BASE RATING, 20C)			
NP AMPS	37/18.5	Base Volt	460	R1	0.231	X1	0.904
HP	15HP	NL AMPS	8.8	R2	0.195	X2	1.090
BASE SPEED	1765	Slips (Hz)	0.93			XM	26.400
PHASE/HZ	3/60	WK^2 (lb-ft^2)	2.1				

Rated Full Load Data

	RPM	HP	Torque	Volts	Freq-Hz	Amps
Base Speed	1772	15.0	44.5	460	60	18.5
Max Speed	2657	15.0	29.7	460	90	16.8
Min Speed	0	0.0	44.5	20.69	0.93	18.5

Load Performance at Base Speed

	RPM	HP	Torque	Volts	Freq-Hz	Amps
No Load	1799	0.0	0.0	460	60	8.8
1/4	1794	3.8	11.1	460	60	9.7
1/2	1787	7.6	22.4	460	60	12.0
3/4	1779	11.4	33.7	460	60	15.1
Full Load	1772	15.0	44.5	460	60	18.5
O/L	1746	30.0	90.3	460	60	34.4

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

Remarks: Calculated Data
Vector PWM Inverter Duty

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DR BY	BR
CK BY	
APP BY	BR
DATE	3/28/2017

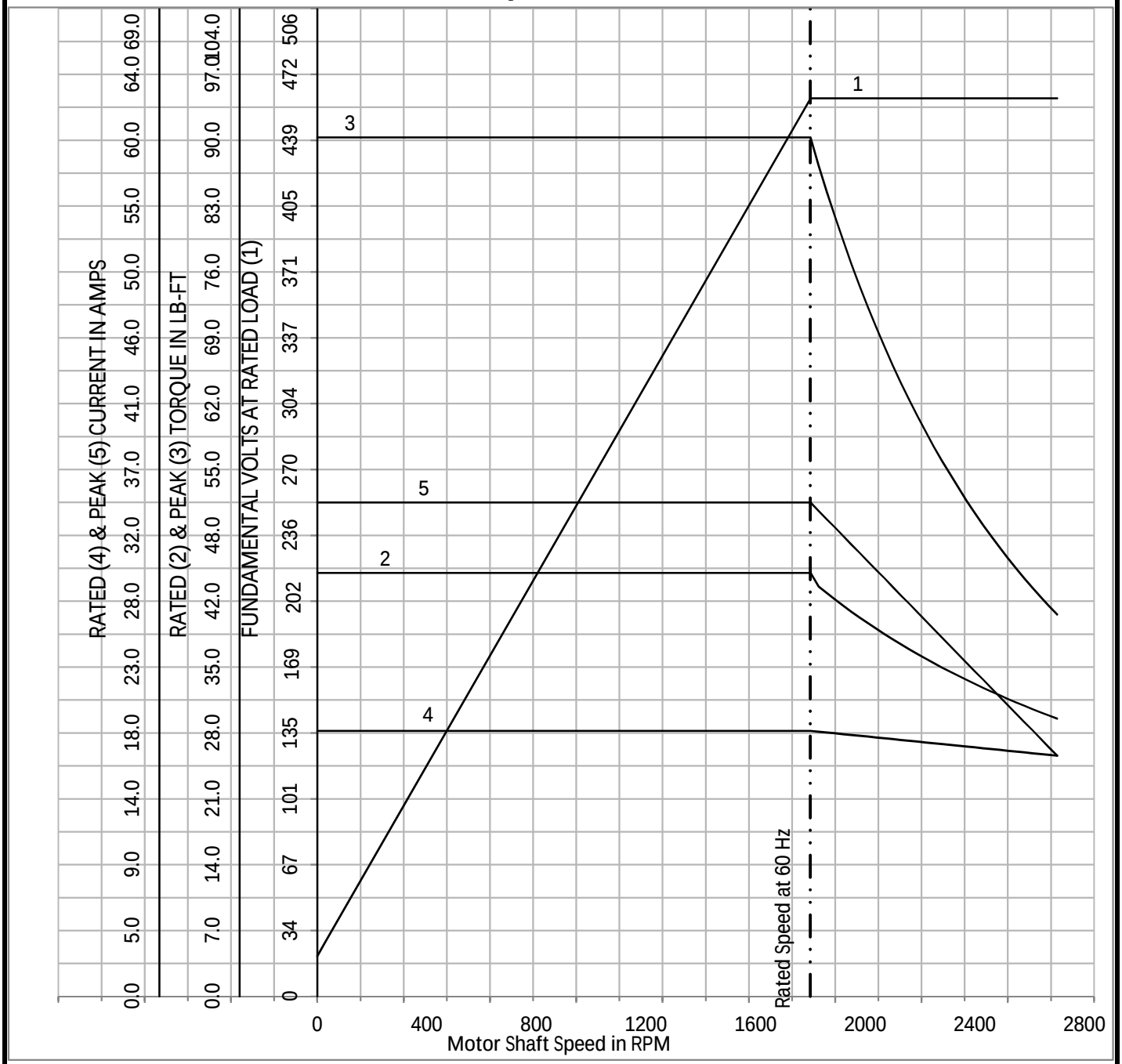
A-C MOTOR PERFORMANCE CURVES

09WGX946

NP VOLTS	230/460	MAX SAFE RPM	5000	WYE CONN EQ CKT OHMS PER PHASE (BASE RATING, 20C)			
NP AMPS	37/18.5	Base Volt	460	R1	0.231	X1	0.904
HP	15HP	NL AMPS	8.75	R2	0.195	X2	1.090
BASE SPEED	1765	Slips (Hz)	0.93			XM	26.400
PHASE/HZ	3/60	WK2 (lb-ft2)	2.1				

Vector PWM Inverer Duty

Variable Speed AC Motor Curves



Calculated Data

Data Valid For Nameplate Speed Range only

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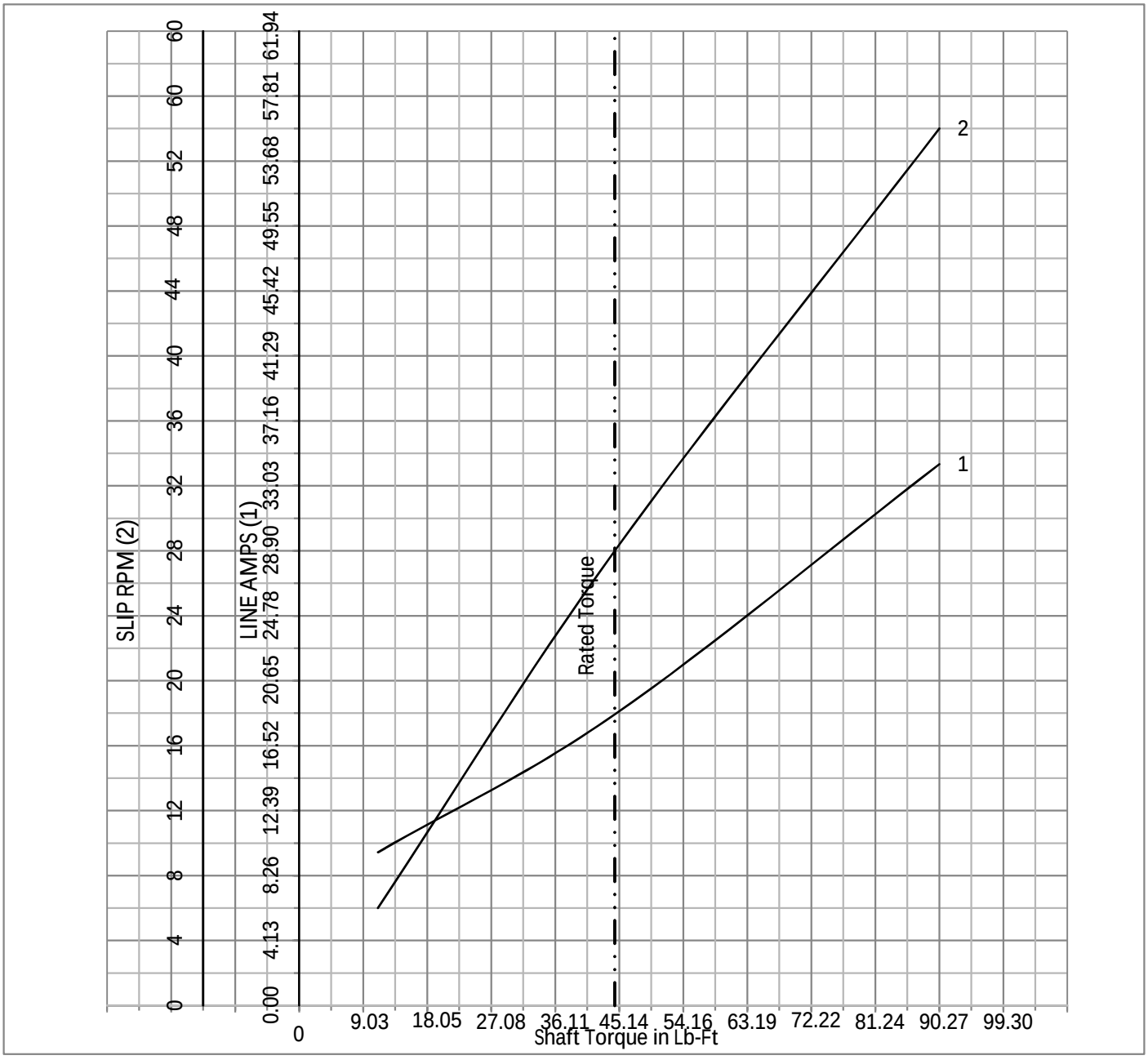
A-C MOTOR PERFORMANCE CURVES

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HP	15HP	NL AMPS	8.75	R2	0.195	X2	1.090
BASE SPEED	1765	Slips (Hz)	0.93			XM	26.400
PHASE/HZ	3/60	WK2 (lb-ft2)	2.1				

Vector PWM Inverer Duty

Vaiable Speed AC Motor Curves



Calculated Data

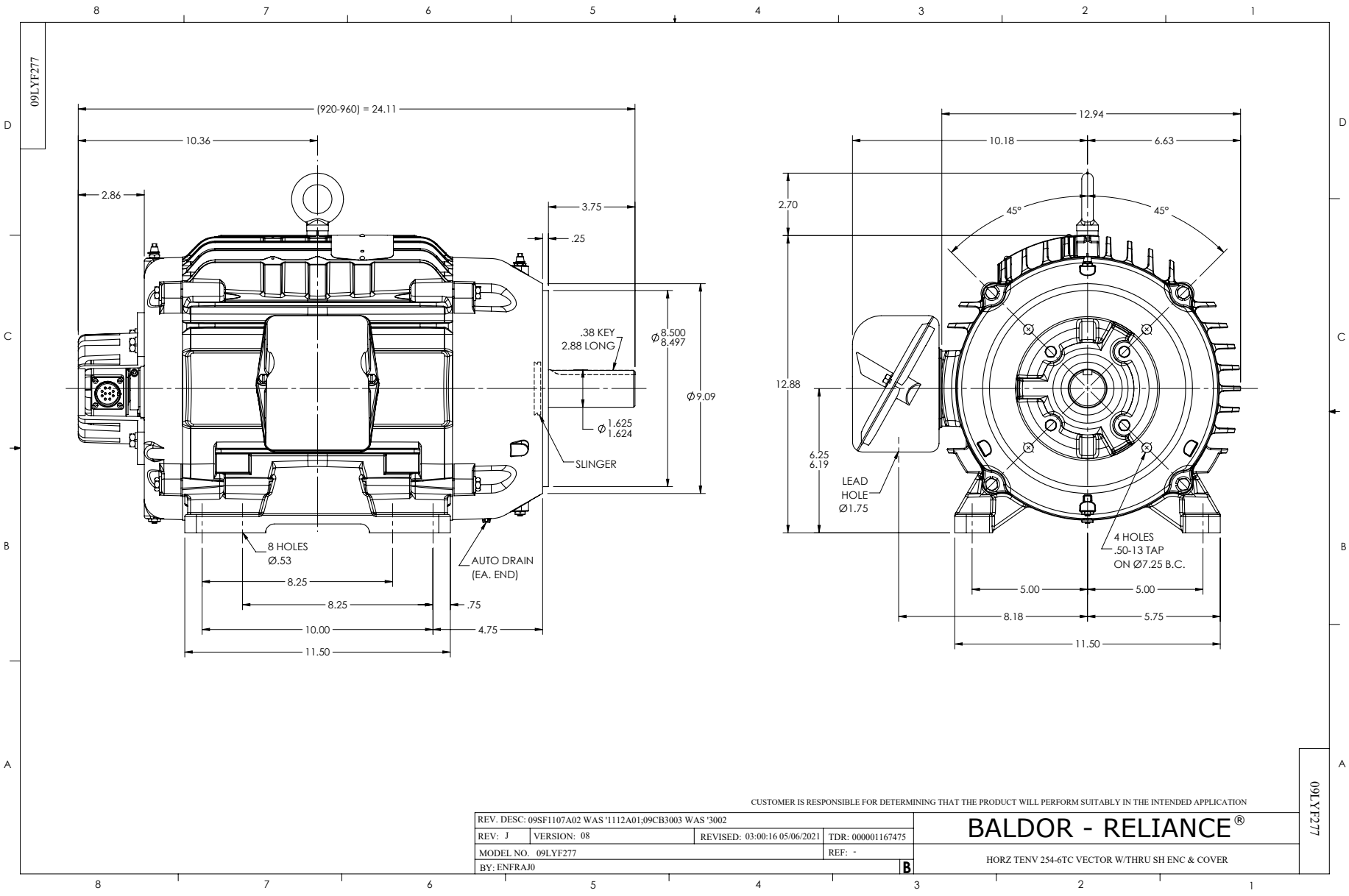
Data Valid For Nameplate Speed Range only

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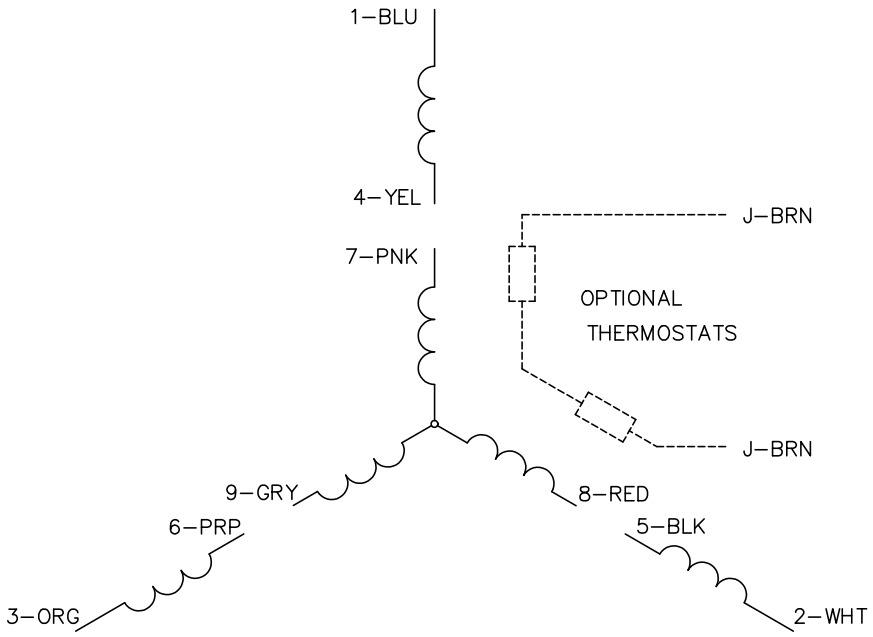
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CK BY	
APP BY	BR
DATE	3/28/2017

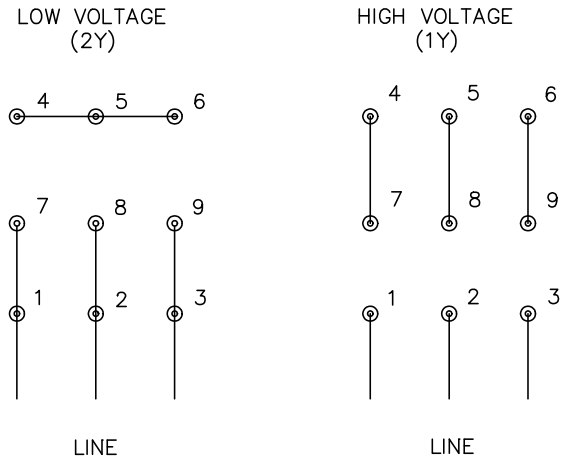
A-C MOTOR PERFORMANCE CURVES

09WGX946


09LYF277
(920-960) = 24.11
10.36
2.86
3.75
.25
.38 KEY
2.88 LONG
Ø 8.500
8.497
Ø 9.09
Ø 1.625
1.624
SLINGER
8 HOLES
Ø.53
AUTO DRAIN
(EA. END)
8.25
8.25
.75
10.00
4.75
11.50
12.94
10.18
6.63
2.70
45°
45°
12.88
6.25
6.19
LEAD
HOLE
Ø1.75
4 HOLES
.50-13 TAP
ON Ø7.25 B.C.
5.00
5.00
8.18
5.75
11.50
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT THE PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION
REV. DESC: 09SF1107A02 WAS '1112A01;09CB3003 WAS '3002
REV: J
VERSION: 08
REVISED: 03:00:16 05/06/2021
TDR: 000001167475
MODEL NO. 09LYF277
REF: -
BY: ENFRAJ0
B
BALDOR - RELIANCE®
HORZ TENV 254-6TC VECTOR W/THRU SH ENC & COVER
09LYF277

CD0005





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.

CD0005

REV. DESC: REVISE TO SHOW OPTIONAL COLORS			BALDOR ELECTRIC Co.
REV. LTR: E	BY: JLP	REVISED: 01/19/99 10:15	TDR: 0171435
CD0005		FILE: AAA00005140	MDL: –
		MTL: –	3PH, DV, 9 LEADS