ABB BALDOR RELIANCE

Customer information packet

IDM2276T

54M 6P TEBC HOR 254TC T'STATS INV DUTY
Class - None
Division - Not Applicable

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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	NO FEEDBACK
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	09-30-2025
CD Diagram	CD0005
Poles	06
Leads	9#12
Proprietary	False
Created date	03-19-2019

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

NP3855L										
CAT.NO.	IDM2276T									
SPEC.	09T110X827G1									
FRAME	254TC		**H.P.**	7.5 TE						
VOLTS	230/460									
MAG. CUR.	11/5.5			**F.L. AMPS**	21.4/10.7					
R.P.M.	1180			**R.P.M. MAX**	5000					
HZ.	60	**PH.**	3	**CLASS**	H					
SER.F.	1.00	**DES.**	A	**SL HZ**	1					
NEMA NOM. EFF.	91	**WK2**	4.34							
BLOWER		**V**		**PH**		**HZ**		**AMPS**		
RATING	40C AMB-CONT									
DE	6309	**ODE**	6208							
CC	010A	**SN**								
	1000:1 CT/VT									

				WYE CONN EQ CKT OHMS PER PHASE (BASE RATING, 20C)			
NP AMPS	230/460 21.4/10.7	Base Volt	460	R1	0.473	X1	2.600
HP	7.5	NL AMPS	5.84	R2	0.384	X2	2.660
BASE SPEED	1184	Slip (HZ)	0.80			XM	43.300
PHASE/HZ	3/60	WK^2 (lb-ft^2)	4.340				

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

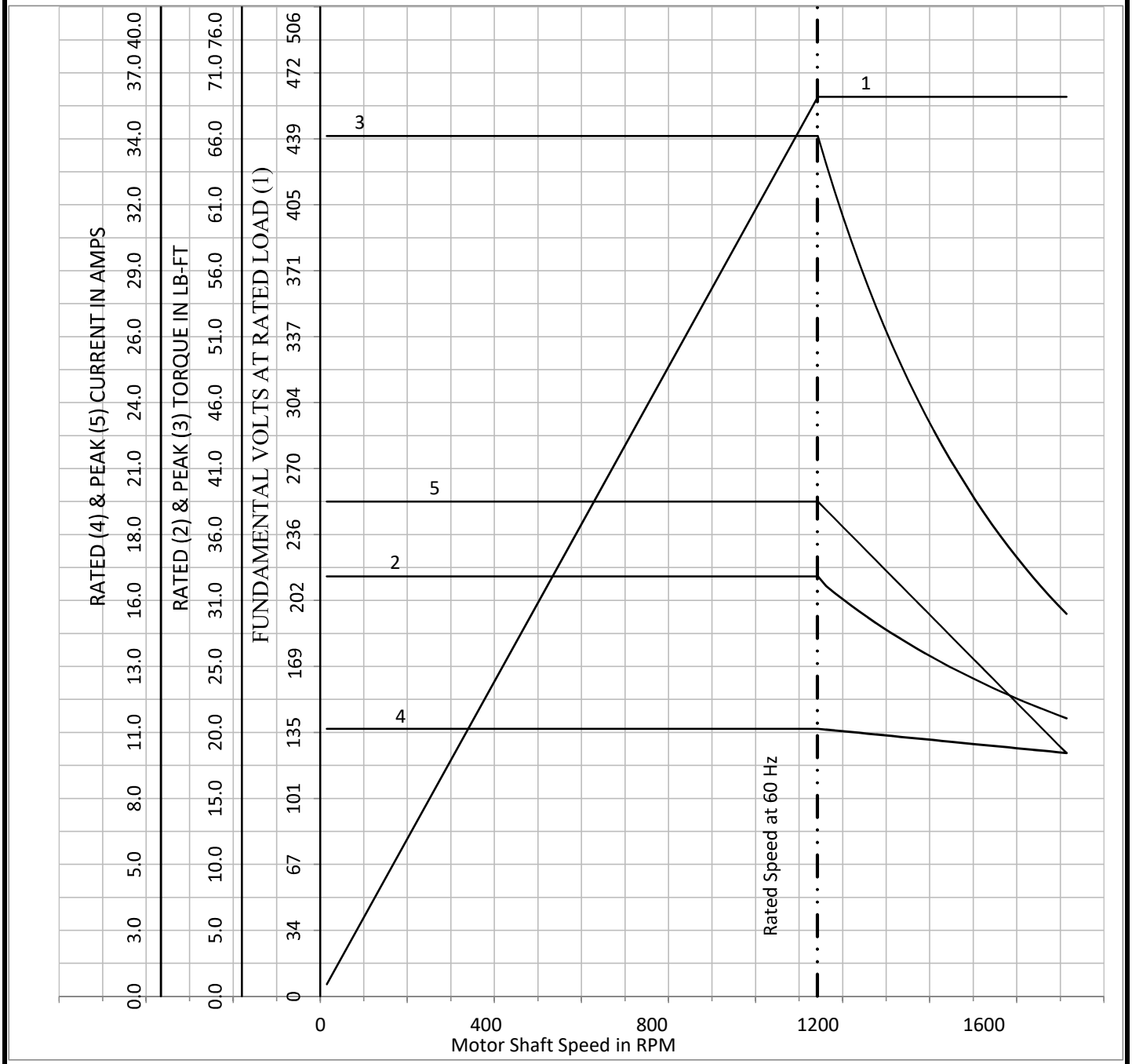
Load Performance at Base Speed

	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

VOLTS	230/460	Base Volt	460	WYE CONN EQ CKT OHMS PER PHASE (BASE RATING, 20C)			
NP AMPS	21.4/10.7	NL AMPS	5.84	R1	0.473	X1	2.600
HP	7.5	Slip (HZ)	0.80	R2	0.384	X2	2.660
BASE SPEED	1184	WK^2 (lb-ft^2)	4.340			XM	43.300
PHASE/HZ	3/60						

Variable Speed AC Motor Curves



Calculated Data

Data Valid For Nameplate Speed Range only

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DR BY USBRRAN1
CK BY CD
APP BY USBRRAN1
DATE 7/21/2026

A-C MOTOR PERFORMANCE CURVES

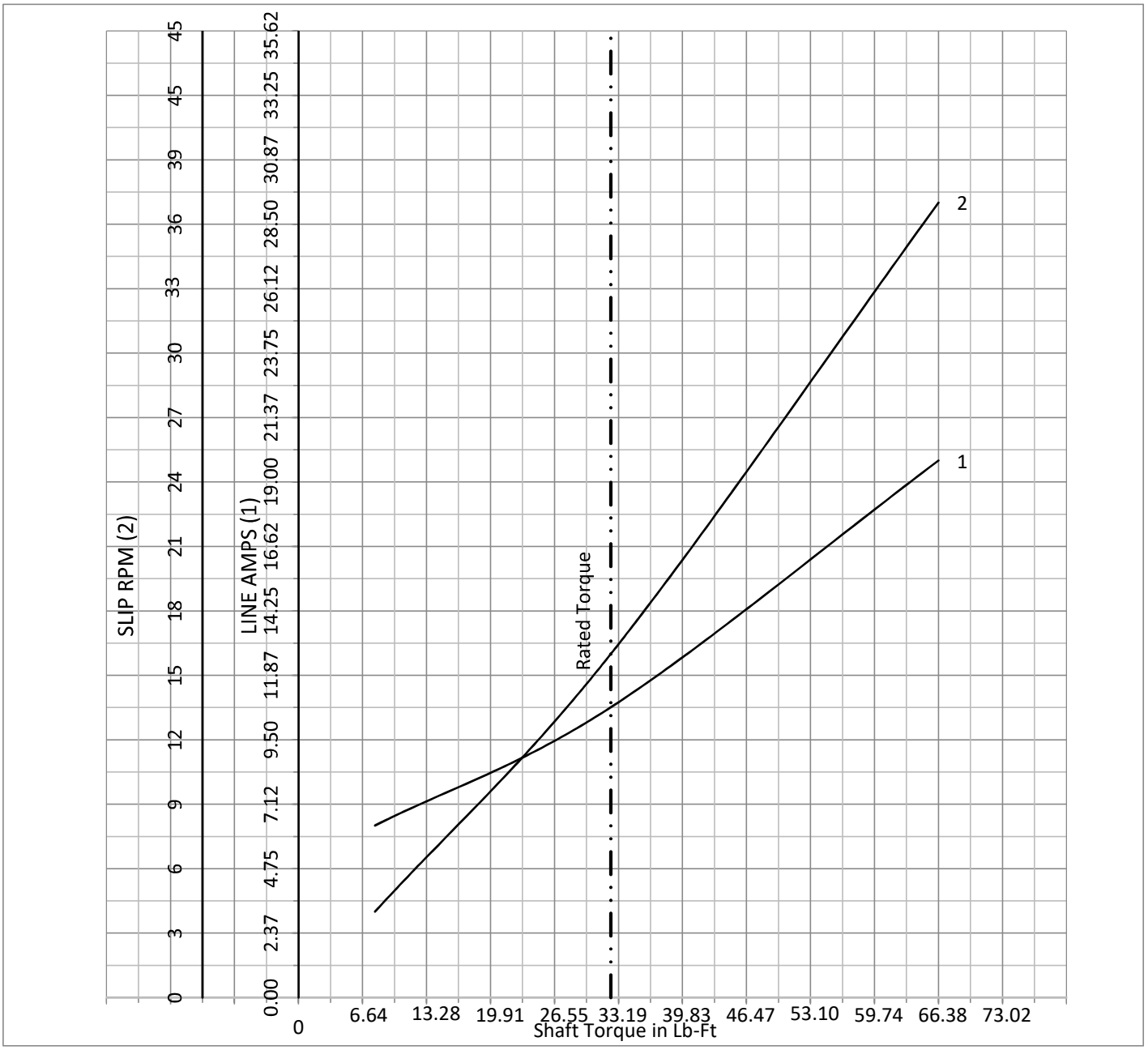
09WGX827

Record: 20707

VOLTS	230/460	0	0	WYE CONN EQ CKT OHMS PER PHASE (BASE RATING, 20C)			
NP AMPS	21.4/10.7	Base Volt	460	R1	0.473	X1	2.600
HP	7.5	NL AMPS	5.84	R2	0.384	X2	2.660
BASE SPEED	1184	Slip (HZ)	0.80			XM	43.300
PHASE/HZ	3/60	WK2 (lb-ft2)	4.340				

Vector PWM Inverer Duty

Vaiable Speed AC Motor Curves



Calculated Data

Data Valid For Nameplate Speed Range only

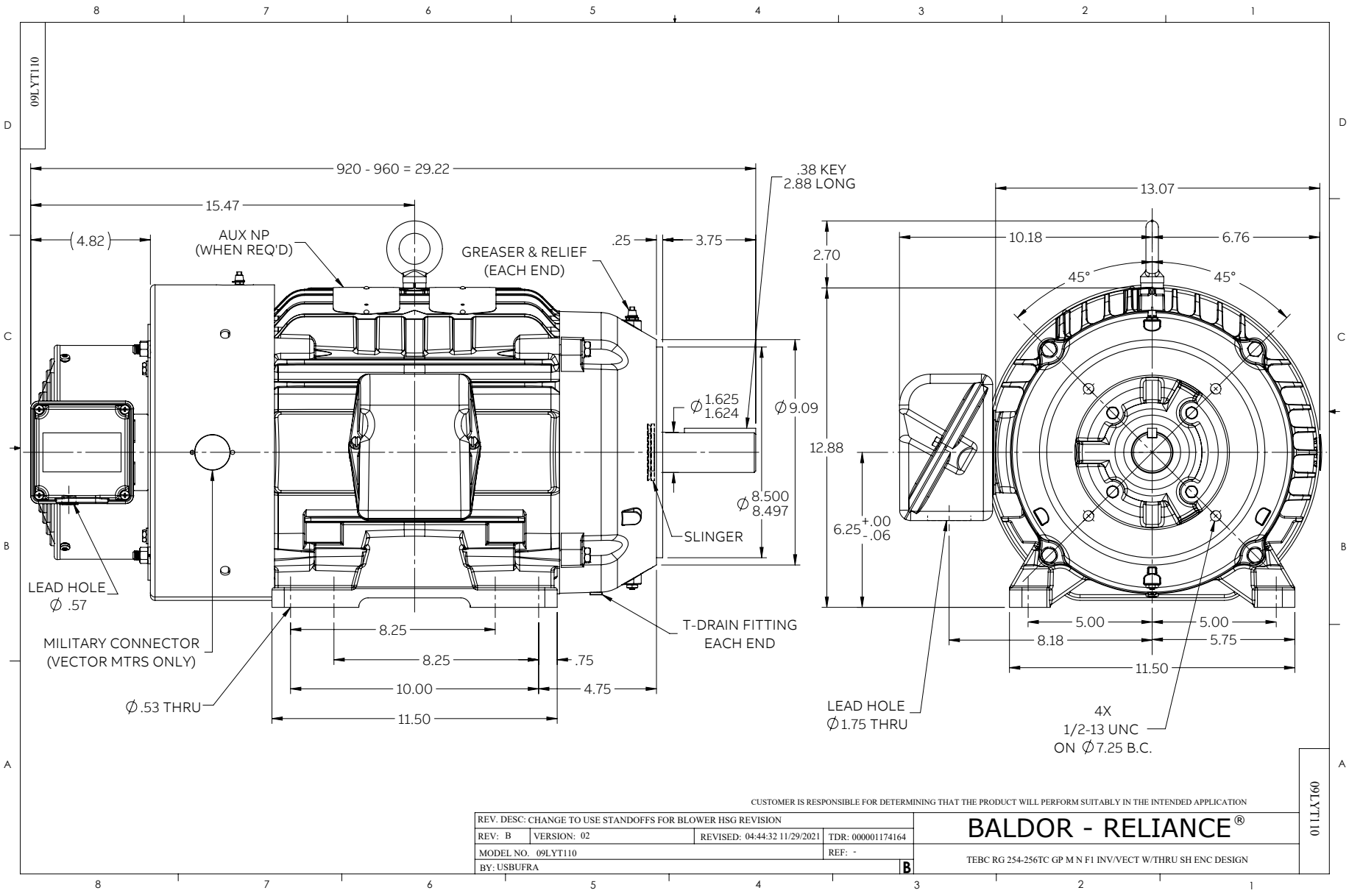
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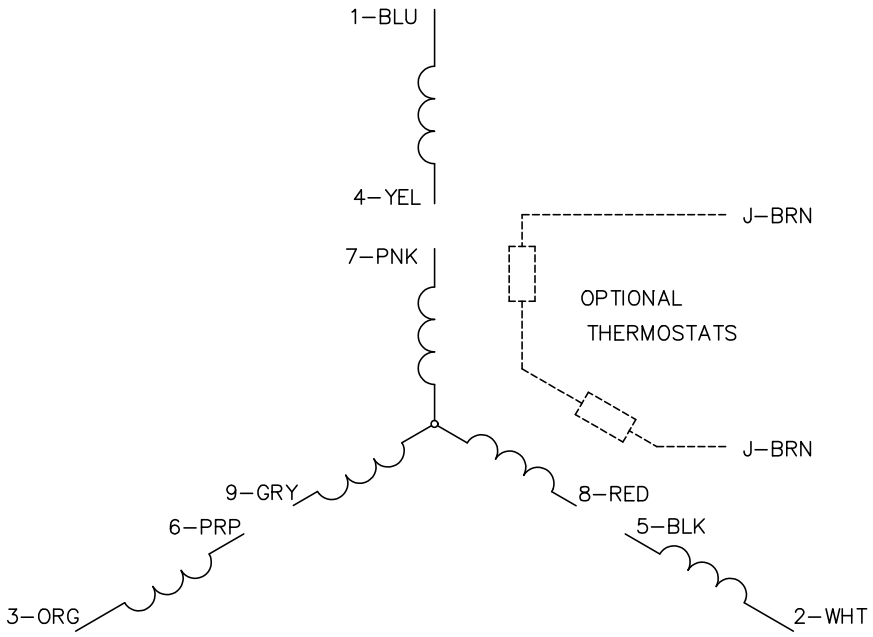
A-C MOTOR PERFORMANCE CURVES

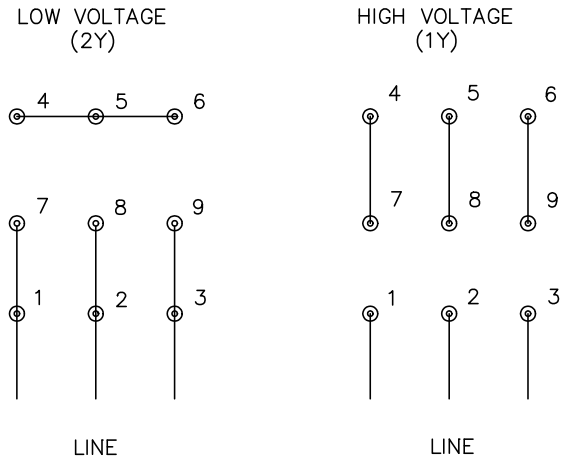
09WGX827

Record: 20707


09LYT110
920 - 960 = 29.22
15.47
4.82
AUX NP
(WHEN REQ'D)
GREASER & RELIEF
(EACH END)
.25
3.75
.38 KEY
2.88 LONG
Ø1.625
1.624
Ø9.09
Ø8.500
8.497
SLINGER
LEAD HOLE
Ø .57
MILITARY CONNECTOR
(VECTOR MTRS ONLY)
Ø.53 THRU
8.25
8.25
.75
10.00
4.75
11.50
T-DRAIN FITTING
EACH END
13.07
10.18
6.76
2.70
45°
45°
12.88
6.25 +.00 -.06
5.00
5.00
8.18
5.75
11.50
LEAD HOLE
Ø1.75 THRU
4X
1/2-13 UNC
ON Ø7.25 B.C.
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT THE PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION
REV. DESC: CHANGE TO USE STANDOFFS FOR BLOWER HSG REVISION
REV: B
VERSION: 02
REVISED: 04:44:32 11/29/2021
TDR: 000001174164
MODEL NO. 09LYT110
REF: -
BY: USBUFRA
B
BALDOR - RELIANCE®
TEBC RG 254-256TC GP M N F1 INV/VECT W/THRU SH ENC DESIGN
09LYT110

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