ABB BALDOR RELIANCE

Customer information packet

IDVSM4104T

30HP, 1760RPM, 3PH, 60HZ, 286TC, 1056M, TEFC, F
Class - None
Division - Not Applicable

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Specifications

Enclosure	TEFC
Frame	286TC
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	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	38.000 A @ 460.0 V
	76.000 A @ 230.0 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
High Voltage Full Load Amps	38.0 a

Part Detail

Revision	K
Type	AC
Mech. spec.	10H810
Base	
Status	PRD/A
Elec. spec.	10WGY538
Layout	10LYH810
Eff. date	06-05-2026
CD Diagram	CD0180
Poles	04
Leads	9#8
Proprietary	False
Created date	08-24-2017

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 @ 8 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	1056M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	30.42 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	1.875 IN
Shaft Extension Location	Double Shaft
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 (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	IDVSM4104T				
SPEC.	10H810Y538G1				
FRAME	286TC	**HP**	30 TE		
VOLTS	230/460				
MAG CUR	36/18	**FLA**	76/38		
RPM	1760	**RPM MAX**	2700		
HZ	60	**PH**	3	**CLASS**	F
SER.F.	1.00	**SL HZ**	1.33		
NEMA-NOM-EFF	93.6	**WK2**	4.46		
RATING	40C AMB-CONT				
DE BRG	6311	**ODE BRG**	6309		
CC	010A	**SN**			
	1.5:1 CHP PWM				
	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

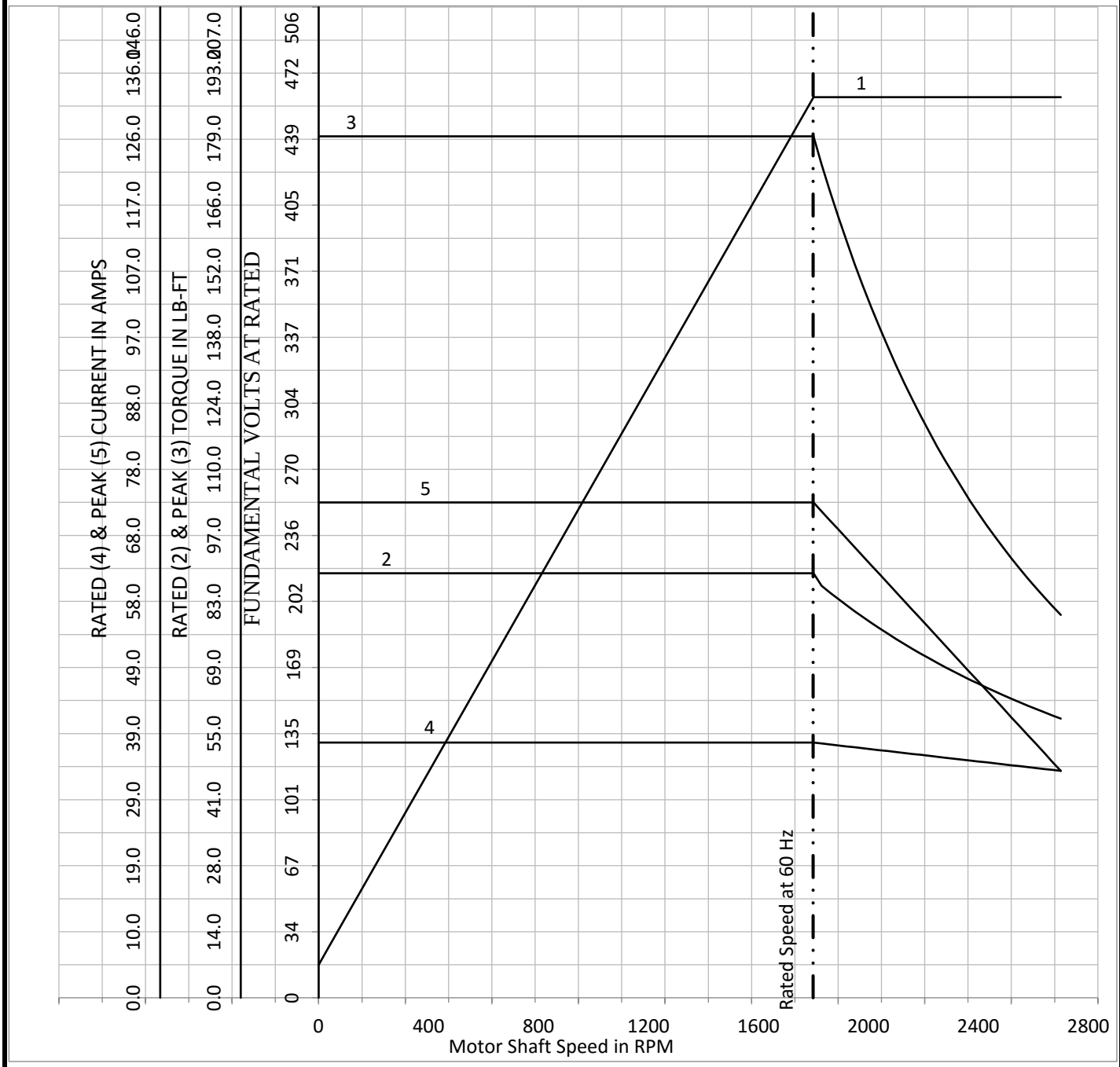
10WGY538
Record: 52925

INT AMPS	79.38	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

IDVSM4104T - 30HP, 1760RPM, 3PH, 60HZ, 286TC, 1056M, TEFC, F

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

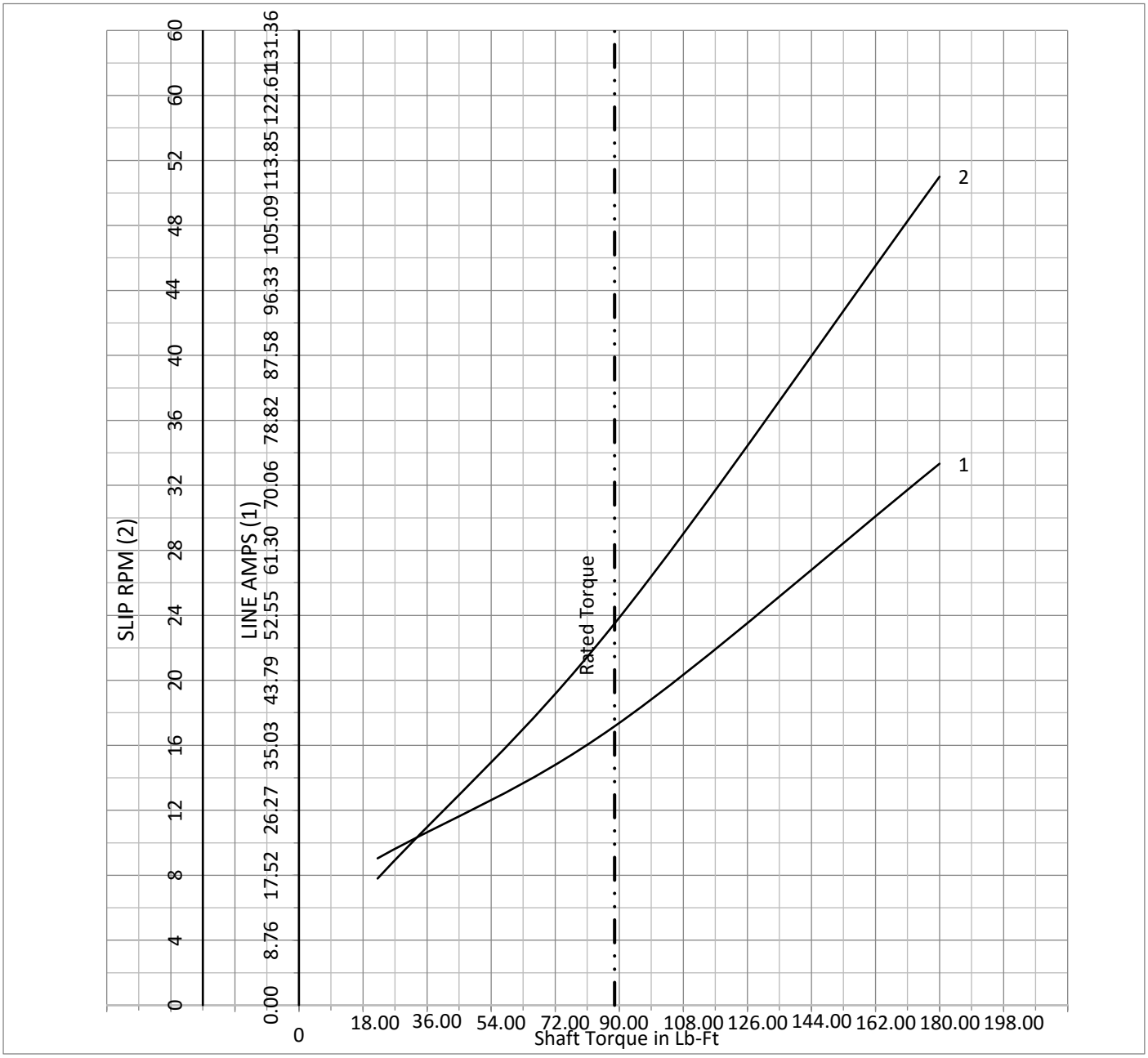
Record: 52925

VOLTS	208/460	MAX SAFE RPM	2700	WYE CONN EQ CKT OHMS PER PHASE (BASE RATING, 20C)			
INT 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

IDVSM4104T - 30HP, 1760RPM, 3PH, 60HZ, 286TC, 1056M, TEFC, F

Vector PWM Inverer Duty

Vaiable Speed AC Motor Curves



Calculated Data

Data Valid For Nameplate Speed Range only

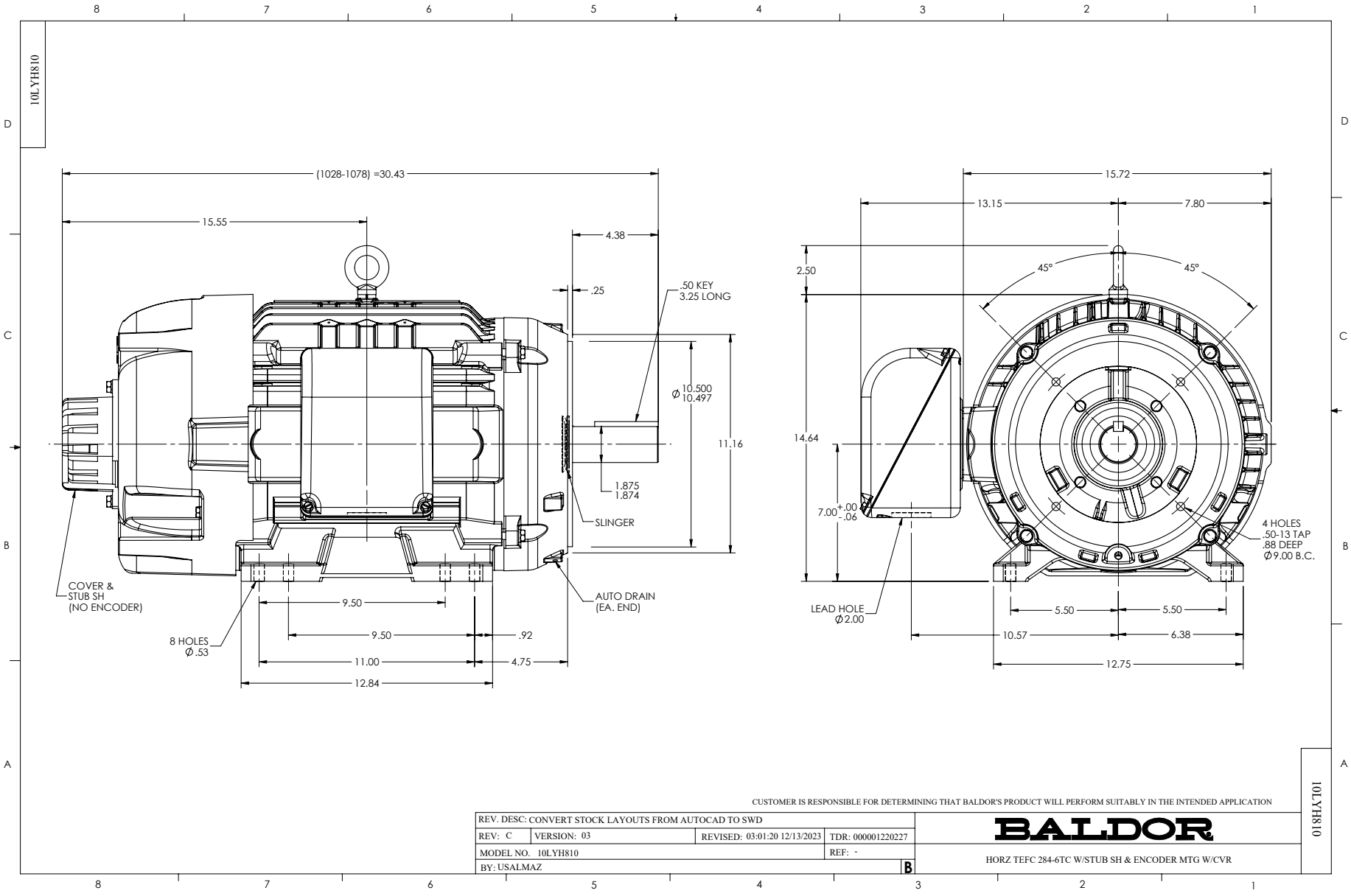
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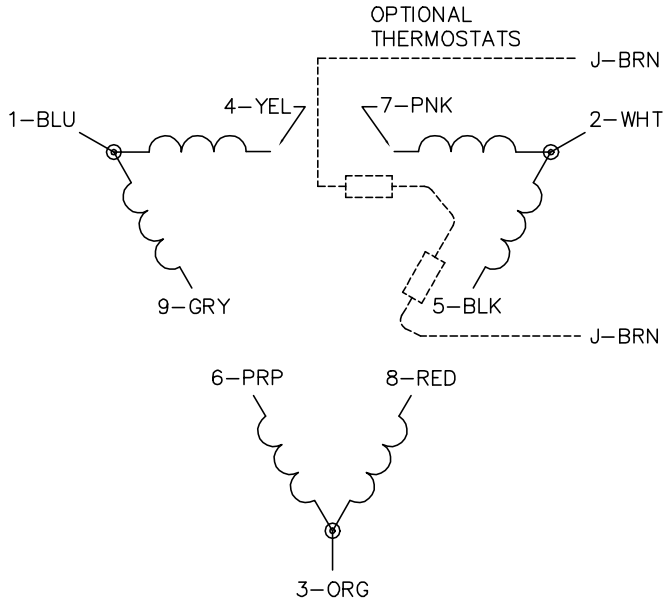
A-C MOTOR PERFORMANCE CURVES

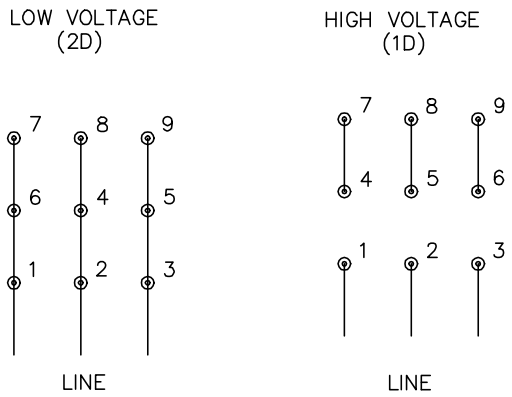
10WGY538

Record: 52925


10LYH810
(1028-1078) =30.43
15.55
4.38
.25
.50 KEY
3.25 LONG
Ø 10.500
10.497
11.16
1.875
1.874
SLINGER
COVER &
STUB SH
(NO ENCODER)
AUTO DRAIN
(EA. END)
9.50
9.50
.92
8 HOLES
Ø.53
11.00
4.75
12.84
15.72
13.15
7.80
2.50
45°
45°
14.64
7.00 +.00 -.06
4 HOLES
.50-13 TAP
.88 DEEP
Ø9.00 B.C.
LEAD HOLE
Ø2.00
5.50
5.50
10.57
6.38
12.75
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT BALDOR'S PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION
REV. DESC: CONVERT STOCK LAYOUTS FROM AUTOCAD TO SWD
REV: C
VERSION: 03
REVISED: 03:01:20 12/13/2023
TDR: 000001220227
MODEL NO. 10LYH810
REF: -
BY: USALMAZ
B
BALDOR
HORZ TEFC 284-6TC W/STUB SH & ENCODER MTG W/CVR
10LYH810

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: –		

BALDOR - RELIANCE®

3PH, DV, 9 LEADS, DELTA CONNECTION

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