

BALDOR® • RELIANCE 

Product Information Packet

IDVSM4103T

25HP, 1775RPM, 3PH, 60HZ, 284TC, 1054M, TEFC, F

Part Detail							
Revision:	D	Status:	PRD/A	Change #:		Proprietary:	No
Type:	AC	Elec. Spec:	10WGZ651	CD Diagram:	CD0180	Mfg Plant:	
Mech. Spec:	10H810	Layout:	10LYH810	Poles:	04	Created Date:	12-13-2017
Base:	RG	Eff. Date:	09-11-2019	Leads:	9#10		

Specs			
Catalog Number:	IDVSM4103T	Insulation Class:	F
Enclosure:	TEFC	Inverter Code:	Inverter Duty
Frame:	284TC	KVA Code:	J
Frame Material:	Iron	Lifting Lugs:	Standard Lifting Lugs
Output @ Frequency:	25.000 HP @ 60 HZ	Locked Bearing Indicator:	Locked Bearing
Synchronous Speed @ Frequency:	1800 RPM @ 60 HZ	Motor Lead Quantity/Wire Size:	9 @ 10 AWG
Voltage @ Frequency:	460.0 V @ 60 HZ	Motor Lead Exit:	Ko Box
	230.0 V @ 60 HZ	Motor Lead Termination:	Flying Leads
XP Class and Group:	None	Motor Type:	1054M
XP Division:	Not Applicable	Mounting Arrangement:	F1
Agency Approvals:	CSA	Power Factor:	81
	UR	Product Family:	General Purpose
Auxillary Box:	No Auxillary Box	Pulley End Bearing Type:	Ball
Auxillary Box Lead Termination:	None	Pulley Face Code:	C-Face
Base Indicator:	Rigid	Pulley Shaft Indicator:	Standard
Bearing Grease Type:	Polyrex EM (-20F +300F)	Rodent Screen:	None
Blower:	None	Shaft Extension Location:	Double Shaft
Current @ Voltage:	31.000 A @ 460.0 V	Shaft Ground Indicator:	No Shaft Grounding

	62.000 A @ 230.0 V	Shaft Rotation:	Reversible
	64.000 A @ 208.0 V	Shaft Slinger Indicator:	Shaft Slinger
Design Code:	A	Speed Code:	Single Speed
Drip Cover:	No Drip Cover	Motor Standards:	NEMA
Duty Rating:	CONT	Starting Method:	Direct on line
Electrically Isolated Bearing:	Not Electrically Isolated	Thermal Device - Bearing:	None
Feedback Device:	NO FEEDBACK	Thermal Device - Winding:	Normally Closed Thermostat
Front Face Code:	Standard	Vibration Sensor Indicator:	No Vibration Sensor
Front Shaft Indicator:	Standard	Winding Thermal 1:	None
Heater Indicator:	No Heater	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

Parts List		
Part Number	Description	Quantity
SA349122	SA 10H810Z651G1	1.000 EA
RA337720	RA 10H810Z651G1	1.000 EA
09FN3001D02	EXTERNAL FAN, PLASTIC	1.000 EA
10CB3000SP	KOBX, CAST W/2.00 LEAD HOLE	1.000 EA
09GS1000SP	GASKET-CONDUIT BOX, 1/16 THICK LEXIDE	1.000 EA
10XN3118K12	5/16-18 X .75 GRADE 5, ZINC PLATED	4.000 EA
HW1001A31	LOCKWASHER 5/16, ZINC PLT.591 OD, .319 I	4.000 EA
WD1000B25	GND LUG, BURNDY L125HP OR T&B L125HP-BB	1.000 EA
19XW3118G08	.31-18X.50,HEX WSHR HD,TAPTITE 2,GREEN	1.000 EA
10EP1104A01	FR ENDPLATE	1.000 EA
HA4017A11	1/8 X 2.75 GREASE EXT (F/S)	1.000 EA
10XN3816K28	3/8-16 X 1.75 HEX HD CAP SCREW, GRADE 5	4.000 EA
HW1001A38	LOCKWASHER 3/8, ZINC PLT .688 OD, .382 I	4.000 EA
HW5100A11	W3917-042 WVY WSHR (WB)	1.000 EA
10XN2520K32	1/4-20 X 2.00 HX HD SCRW GRADE 5, ZINC P	2.000 EA
HW1001A25	LOCKWASHER 1/4, ZINC PLT .493 OD, .255 I	2.000 EA
10EP1305A01	PU ENDPLATE, MACH	1.000 EA
HW4600B40	V-RING SLINGER 2.000 X 2.680 X .28 VITON	1.000 EA
10XN3816K28	3/8-16 X 1.75 HEX HD CAP SCREW, GRADE 5	4.000 EA
HW1001A38	LOCKWASHER 3/8, ZINC PLT .688 OD, .382 I	4.000 EA
10XN3118K40	5/16-18 X 2.50" HEX HD, GRADE 5	4.000 EA
HW1001A31	LOCKWASHER 5/16, ZINC PLT.591 OD, .319 I	4.000 EA
10FH1007A21	FAN COVER, MACH FOR DBL SHF MTRS	1.000 EA
10XN3118K20	5/16-18 X 1 1/4 GRADE 5 STEEL ZC PLATED	3.000 EA

Parts List (continued)		
Part Number	Description	Quantity
HW1001A31	LOCKWASHER 5/16, ZINC PLT.591 OD, .319 I	3.000 EA
HA6881	BEI HS35 THRU SHAFT ENCODER PROTECTIVE C	1.000 EA
10XN2520K12	1/4-20 X.75 GRD 5	2.000 EA
HW1000A25	1/4 SAE FLAT WASHER (FS)	2.000 EA
10CB3500SP	CONDUIT BOX LID, CAST	1.000 EA
10GS1000SP	GASKET, CONDUIT BOX LID	1.000 EA
51XW2520A12	SCREW, HEX SER SLT HD, ZN, 1/4-20 X .75	4.000 EA
HW2501H28	KEY, 1/2 SQ X 3.250	1.000 EA
LB1115N	LABEL,LIFTING DEVICE (ON ROLLS)	1.000 EA
HW4500A21	1618BALEMITE FITTING 825 UNIVERSAL	1.000 EA
HW4500A17	317400 ALEMITE GREASE RELIEF	1.000 EA
HA4054	SHORT T-DRAIN FITTING, .125" N.P.T.	1.000 EA
HA4051A00	PLASTIC CAP FOR GREASE FITTING	1.000 EA
MJ1000A02	GREASE, MOBIL POLYREX EM - 124047	0.130 LB
HW4500A03	GREASE FITTING, .125 NPT 1610(ALEMITE) 8	1.000 EA
HW4500A17	317400 ALEMITE GREASE RELIEF	1.000 EA
HA4054	SHORT T-DRAIN FITTING, .125" N.P.T.	1.000 EA
HA4051A00	PLASTIC CAP FOR GREASE FITTING	1.000 EA
HW2500A25	WOODRUFF KEY USA #1008 #BLOW CARBON STEE	1.000 EA
51XB1214A20	12-14X1.25 HXWSSLD SERTYB	1.000 EA
MG1025N19	MUNSELL 8.5BG 3.57/2.0, GLOSS 30, B/G,	0.070 GA
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	2.000 EA
LB1119N	WARNING LABEL	1.000 EA
LC0181	CONNECTION LABEL	1.000 EA

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NP3302L	ALUM INV UL CSA CC (W/OUT DESIGN FIELD)	1.000 EA
12PA1000	PACKAGING GROUP PRINT PK1024A06	1.000 EA
MN416A01	TAG-INSTAL-MAINT no wire (1200/bx) 3/19	1.000 EA

NP VOLTS	230/460	MAX SAFE RPM	2700	WYE CONN EQ CKT OHMS PER PHASE (BASE RATING, 20C)				
NP AMPS	62/31	Base Volt	460	R1	0.121	X1	0.578	
HP	25 HP	NL AMPS	13.60	R2	0.588	X2	0.512	
BASE SPEED	1778	Slips(Hz)	0.74	R2B	0.086	X2B	0.790	
PHASE/HZ	3/60	Wk2 ()	0.000	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

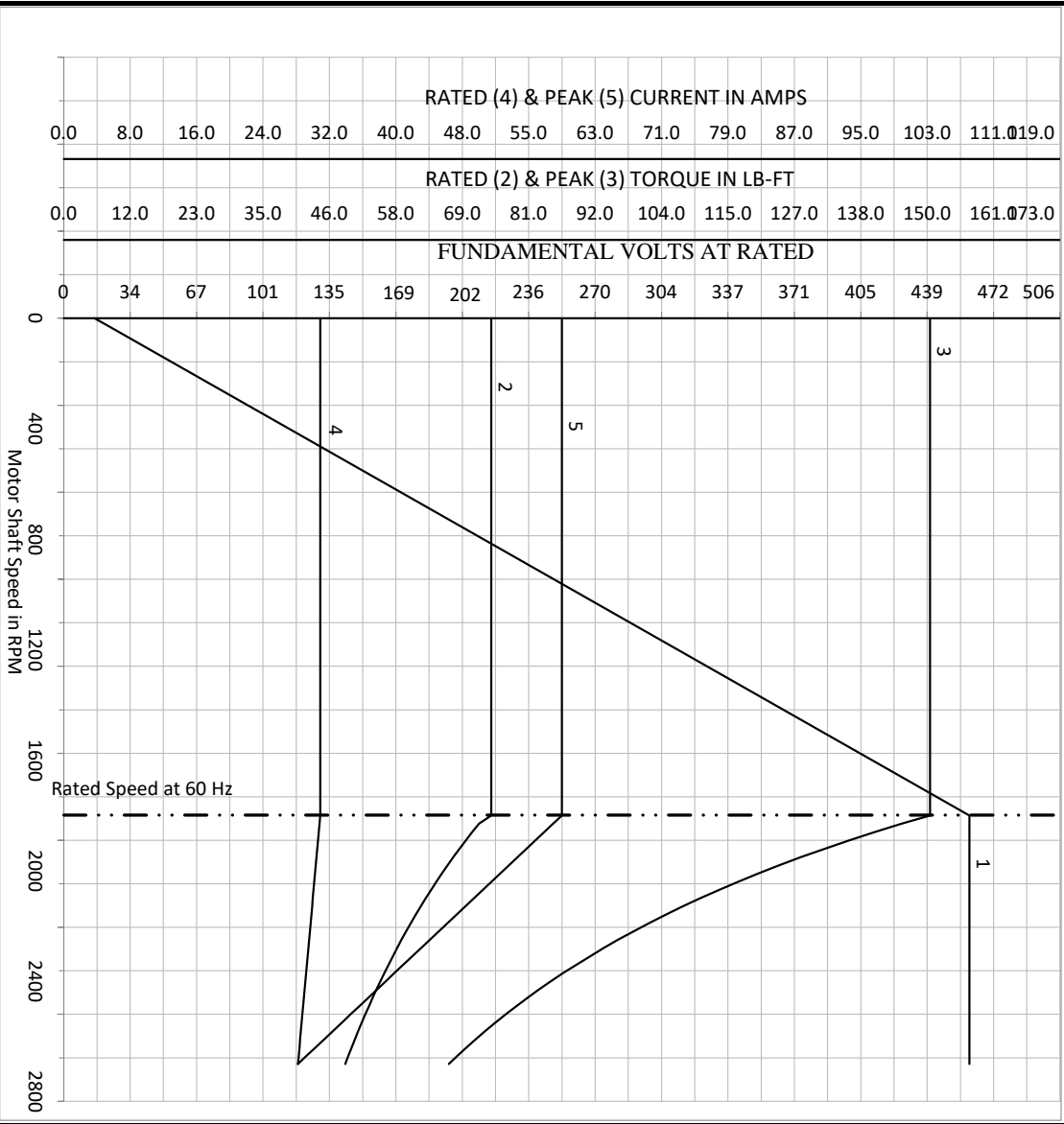
Blower Data	Volts	Ph/Hz	FL Amps	LR Amps	Frame	CFM

Remarks: Calculated Data
Vector PWM Inverter Duty

	DR BY	USBRRANI	A-C MOTOR PERFORMANCE CURVES	10WGZ651
	CK BY	USBRRANI		
A MEMBER OF THE ABB GROUP		APP BY	Record: 68462	
		DATE	12/13/2017	

NP VOLTS	230/460	MAX SAFE RPM	2700	WYE CONN EQ CKT OHMS PER PHASE (BASE RATING, 20C)			
NP AMPS	62/31	Base Volt	460	R1	0.121	X1	0.578
HP	25 HP	NL AMPS	13.60	R2	0.588	X2	0.512
BASE SPEED	1777.80005	Slips(HZ)	0.74	R2B	0.086	X2B	0.790
PHASE/HZ	3/60	WK2 ()	0.000	R2E	0.025	XM	16.600

Variable Speed AC Motor Curves
Vector PWM Inverter Duty



Calculated Data
Data Valid For Nameplate Speed Range only

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CK BY
APP BY USBRRANI
DATE 12/13/2017

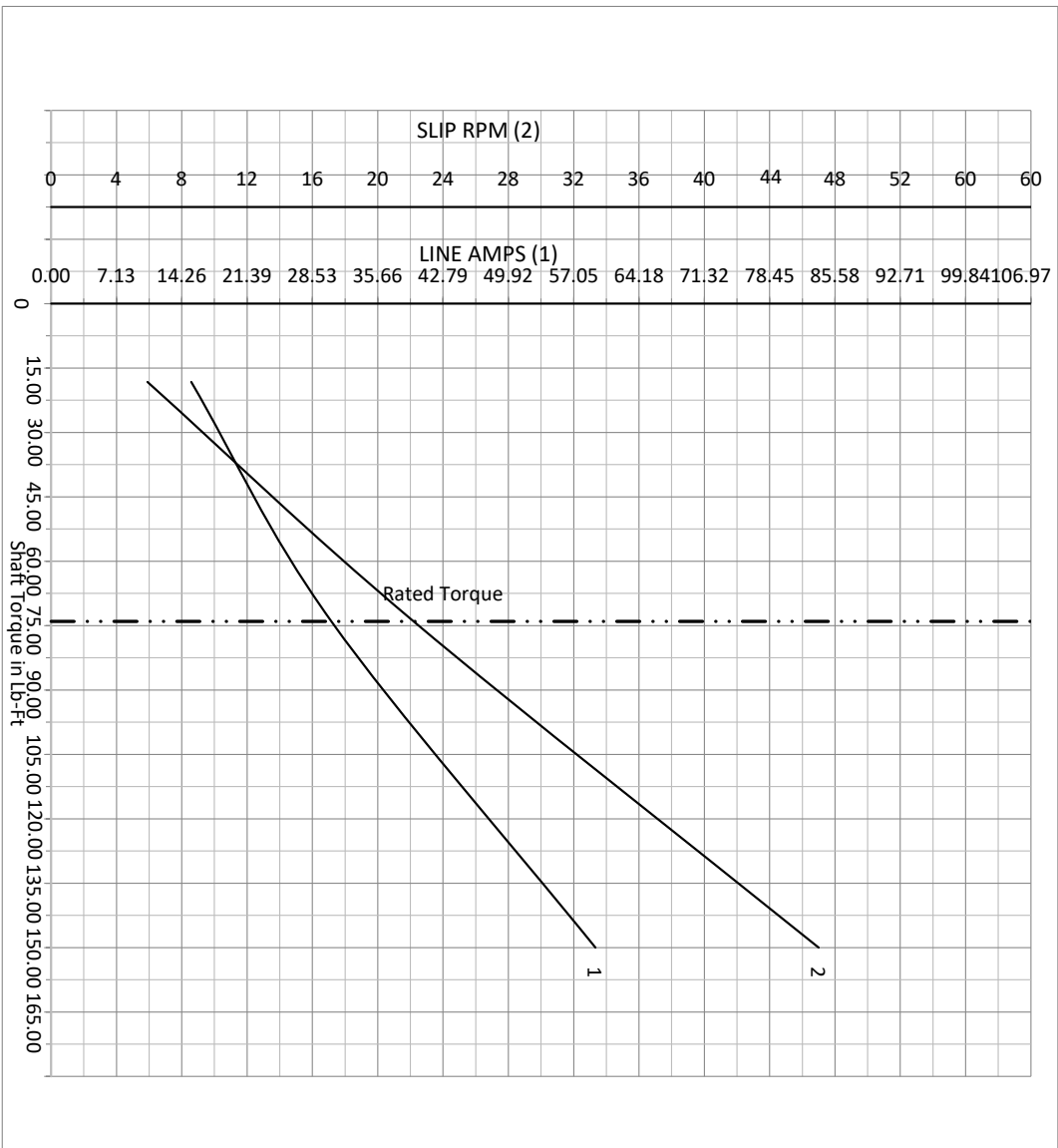
A-C MOTOR PERFORMANCE CURVES

10WGZ651

Record: 68462

NP VOLTS	230/460	MAX SAFE RPM	2700	WYE CONN EQ CKT OHMS PER PHASE (BASE RATING, 20C)			
NP AMPS	62/31	Base Volt	460	R1	0.121	X1	0.578
HP	25 HP	NL AMPS	13.60	R2	0.588	X2	0.512
BASE SPEED	1777.800049	Slips(HZ)	0.74	R2B	0.086	X2B	0.790
PHASE/HZ	3/60	WK2 ()	0.000	R2E	0.025	XM	16.600

Vector PWM Inverter Duty
Variable Speed AC Motor Curves



Calculated Data

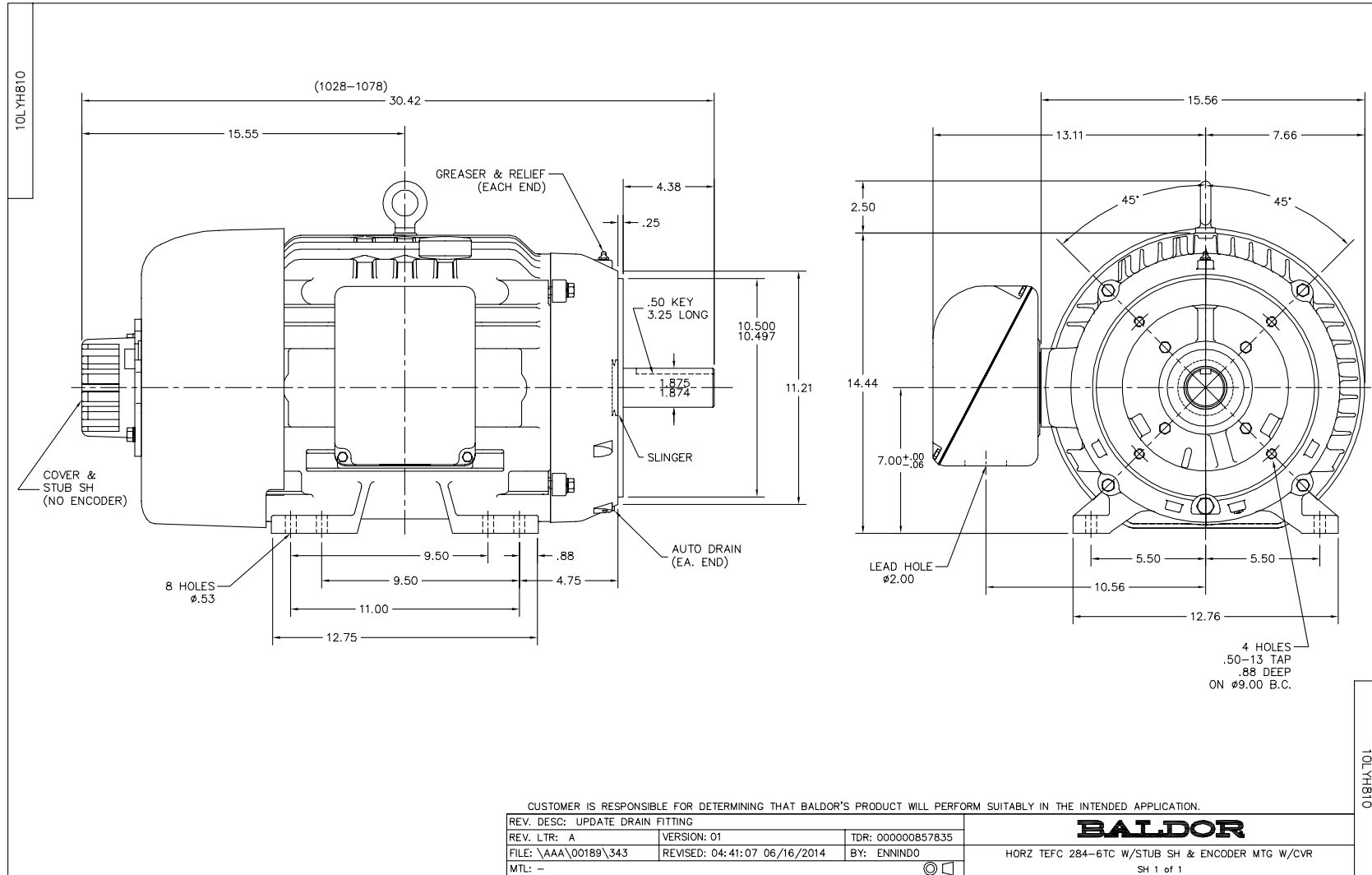
Data Valid For Nameplate Speed Range only

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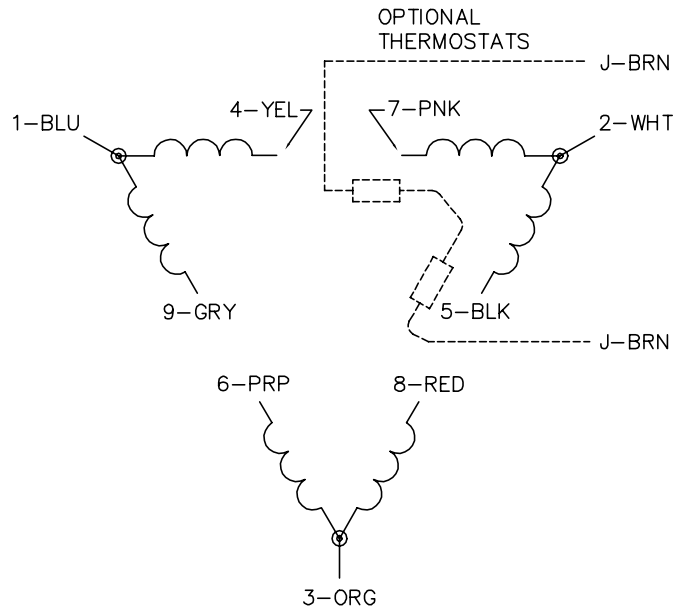
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CK BY
APP BY USBRRANI
DATE: 12/13/2017

A-C MOTOR PERFORMANCE CURVES

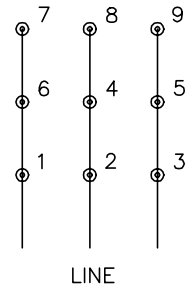
10WGZ651
Record: 68462



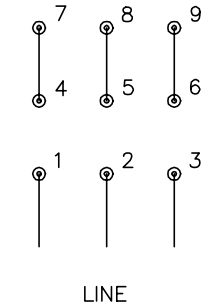
CD0180



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

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REV. LTR: D	VERSION: 01	TDR: 000001099922
FILE: \AAA\00005\148	REVISED: 10:25:29 02/19/2019	BY: ENBRIRO
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3PH, DV, 9 LEADS, DELTA CONNECTION

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