

**BALDOR® • RELIANCE** 

**Product Information Packet**

**ZDVSM2333T**

**15HP, 1765RPM, 3PH, 60HZ, 254TC, 0944M, TEFC, F**

Part Detail							
Revision:	K	Status:	PRD/A	Change #:		Proprietary:	No
Type:	AC	Elec. Spec:	09WGZ910	CD Diagram:	CD0005	Mfg Plant:	
Mech. Spec:	09K343	Layout:	09LYK343	Poles:	04	Created Date:	06-01-2015
Base:	RG	Eff. Date:	04-22-2020	Leads:	9#12		

Specs			
Catalog Number:	ZDVSM2333T	Insulation Class:	F
Enclosure:	TEFC	Inverter Code:	Inverter Duty
Frame:	254TC	KVA Code:	H
Frame Material:	Iron	Lifting Lugs:	Standard Lifting Lugs
Output @ Frequency:	15.000 HP @ 60 HZ	Locked Bearing Indicator:	Locked Bearing
Synchronous Speed @ Frequency:	1800 RPM @ 60 HZ	Motor Lead Quantity/Wire Size:	9 @ 12 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:	0944M
XP Division:	Not Applicable	Mounting Arrangement:	F1
Agency Approvals:	CSA	Power Factor:	83
	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:	Pulley End
Current @ Voltage:	18.100 A @ 460.0 V	Shaft Ground Indicator:	No Shaft Grounding

	36.200 A @ 230.0 V	<b>Shaft Rotation:</b>	Reversible
	38.000 A @ 208.0 V	<b>Shaft Slinger Indicator:</b>	Shaft Slinger
<b>Design Code:</b>	A	<b>Speed Code:</b>	Single Speed
<b>Drip Cover:</b>	No Drip Cover	<b>Motor Standards:</b>	NEMA
<b>Duty Rating:</b>	CONT	<b>Starting Method:</b>	Direct on line
<b>Electrically Isolated Bearing:</b>	Not Electrically Isolated	<b>Thermal Device - Bearing:</b>	None
<b>Feedback Device:</b>	ENCODER	<b>Thermal Device - Winding:</b>	Normally Closed Thermostat
<b>Front Face Code:</b>	Standard	<b>Vibration Sensor Indicator:</b>	No Vibration Sensor
<b>Front Shaft Indicator:</b>	None	<b>Winding Thermal 1:</b>	None
<b>Heater Indicator:</b>	No Heater	<b>Winding Thermal 2:</b>	None

Nameplate NP3304L	
CAT NO	ZDVSM2333T
SPEC.	09K343Z910Z1
FRAME	254TC HP 15 TE
VOLTS	230/460
MAG CUR	15.2/7.6 FLA 36.2/18.1
RPM	1765 RPM MAX 2700
HZ	60 PH 3 CLASS F
SER.F.	1.00 SL HZ 1.2
NEMA-NOM-EFF	92.4 WK2 1.93
RATING	40C AMB-CONT
DE BRG	6309 ODE BRG 6208
CC	010A SER.NO
	1.5:1 CHP PWM

Parts List		
Part Number	Description	Quantity
SA301641	SA 09K343Z910Z1	1.000 EA
RA288717	RA 09K343Z910Z1	1.000 EA
09CB3000SP	CONDUIT BOX CAST	1.000 EA
09GS1000SP	GASKET-CONDUIT BOX, 1/16 THICK LEXIDE	1.000 EA
10XN2520K12	1/4-20 X.75 GRD 5	2.000 EA
HW1001A25	LOCKWASHER 1/4, ZINC PLT .493 OD, .255 I	2.000 EA
WD1000B16	T&B CX70TN OR L70P TERMINAL LUG	1.000 EA
59XW2520G07	.25-20X.44,HEX SER WSHR,TAPTITE 2,GREEN	1.000 EA
09FE1100A14	FREP ASSEMBLY, 09EP1100A14	1.000 EA
HW5100A08	W3118-035 WVY WSHR (WB)	1.000 EA
10XN2520K28	1/4-20 X 1.75" HX HD SCRWGRADE 5, ZINC P	2.000 EA
HW1001A25	LOCKWASHER 1/4, ZINC PLT .493 OD, .255 I	2.000 EA
10XN2520K36	1/4-20 X 2.25" HX HD SCRWGRADE 5, ZINC P	4.000 EA
HW1001A25	LOCKWASHER 1/4, ZINC PLT .493 OD, .255 I	4.000 EA
09EP1300A12	ENDPLATE, MACH	1.000 EA
HW1001A38	LOCKWASHER 3/8, ZINC PLT .688 OD, .382 I	4.000 EA
HW4600B44	V-RING SLINGER 1.500 X 1.810 X .28 VITON	1.000 EA
HA3113A02	THRUBOLT 3/8-16 X 16.750	4.000 EA
HW1001A38	LOCKWASHER 3/8, ZINC PLT .688 OD, .382 I	4.000 EA
XY3816A12	3/8-16 FINISHED NUT	4.000 EA
09FH1000A38	FAN HSG, W/1.75 BORE & ENCODER CVR MTG	1.000 EA
HA2081A05	SPACER TUBE, 309 FAN HSG, 2.00 LONG	4.000 EA
XY3816A12	3/8-16 FINISHED NUT	4.000 EA
HW1001A38	LOCKWASHER 3/8, ZINC PLT .688 OD, .382 I	4.000 EA

Parts List (continued)		
Part Number	Description	Quantity
MG1025N19	WILKOFAS, 778.50, RELIANCE BLUE-GREEN	0.050 GA
HA6881	BEI HS35 THRU SHAFT ENCODER PROTECTIVE C	1.000 EA
10XN1032K12	10-32 X .75 HD, GRADE 5	2.000 EA
HW1001A10	WASHER, #10 SPLT LK, ZN X	2.000 EA
HW1000A10	#10 FLAT WASHER (SAE)	2.000 EA
09CB3500SP	CONDUIT BOX LID, CAST	1.000 EA
09GS1001SP	GASKET-CONDUIT BOX LID, 1/16 THICK LEXID	1.000 EA
51XW2520A12	.25-20 X .75, TAPTITE II, HEX WSHR SLTD	2.000 EA
HW2501G25	KEY, 3/8 SQ X 2.875	1.000 EA
LB1115N	LABEL,LIFTING DEVICE (ON ROLLS)	1.000 EA
HW4500A05	1669B ALEM/UNIV860 GR FTG X	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	0.080 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
09FN3001D01SP	EXTERNAL FAN, PLASTIC	1.000 EA
HW2500A25	WOODRUFF KEY USA #1008 #BLOW CARBON STEE	1.000 EA
51XB1214A20	12-14X1.25 HXWSSLD SERTYB	1.000 EA
OE5001A80SP	ENCDR KIT TENV W/OEHS35A10 W/BLIND SHAFT	1.000 EA
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	2.000 EA

Product Information Packet: ZDVSM2333T - 15HP,1765RPM,3PH,60HZ,254TC,0944M,TEFC,F

LB1119N	WARNING LABEL	1.000 EA
LC0005	CONN.DIA.,TY M,9-LD,DUAL VOLT,REVERSING	1.000 EA
NP3304L	ALUM VEC UL CSA CC (W/OUT DESIGN FIELD)	1.000 EA
40PA1005	PACKAGING GROUP, 09 STD	1.000 EA
MN416A01	TAG-INSTAL-MAINT no wire (1200/bx) 3/19	1.000 EA

Catalog	ZDVSM2333T	NP VOLTS	230/460	ENCLOSURE	TEFC	WYE CONN EQ.CKT OHMS PER PHASE (BASE RATING, 200)			
FRAME	254TC	NP AMPS	36.2/18.1	MAX SAFE RPM	2700	R1	0.296	X1	1.130
HP	15	DUTY	Cont	NL AMPS	7.56	R2	0.238	X2	1.330
BASE SPEED	1765	S.F.	1.00	P.F. @NL/FL	5.5/84			XM	33.900
PHASE/HZ	3/60	AMIB <sup>8</sup> C/INSUL	40/F	WK <sup>2</sup> (lb-ft <sup>2</sup> )	1.92				

**Rated Full Load Data**


	RPM	HP	Torque	Volts	Freq-Hz	Amps
Base Speed	1765	15.0	44.5	460	60	18.1
Max Speed	2645	15.0	29.7	460	90	17.2
Min Speed	0	0.0	44.5	23.08	1.17	18.1

**Load Performance at Base Speed**

	RPM	HP	Torque	Volts	Freq-Hz	Amps
No Load	1799	0.0	0.0	460	60	7.6
1/4	1791	3.7	10.8	460	60	8.6
1/2	1783	7.5	22.1	460	60	11.0
3/4	1774	11.3	33.3	460	60	14.5
Full Load	1765	15.0	44.5	460	60	18.1
O/L	1730	29.9	90.8	460	60	36.1

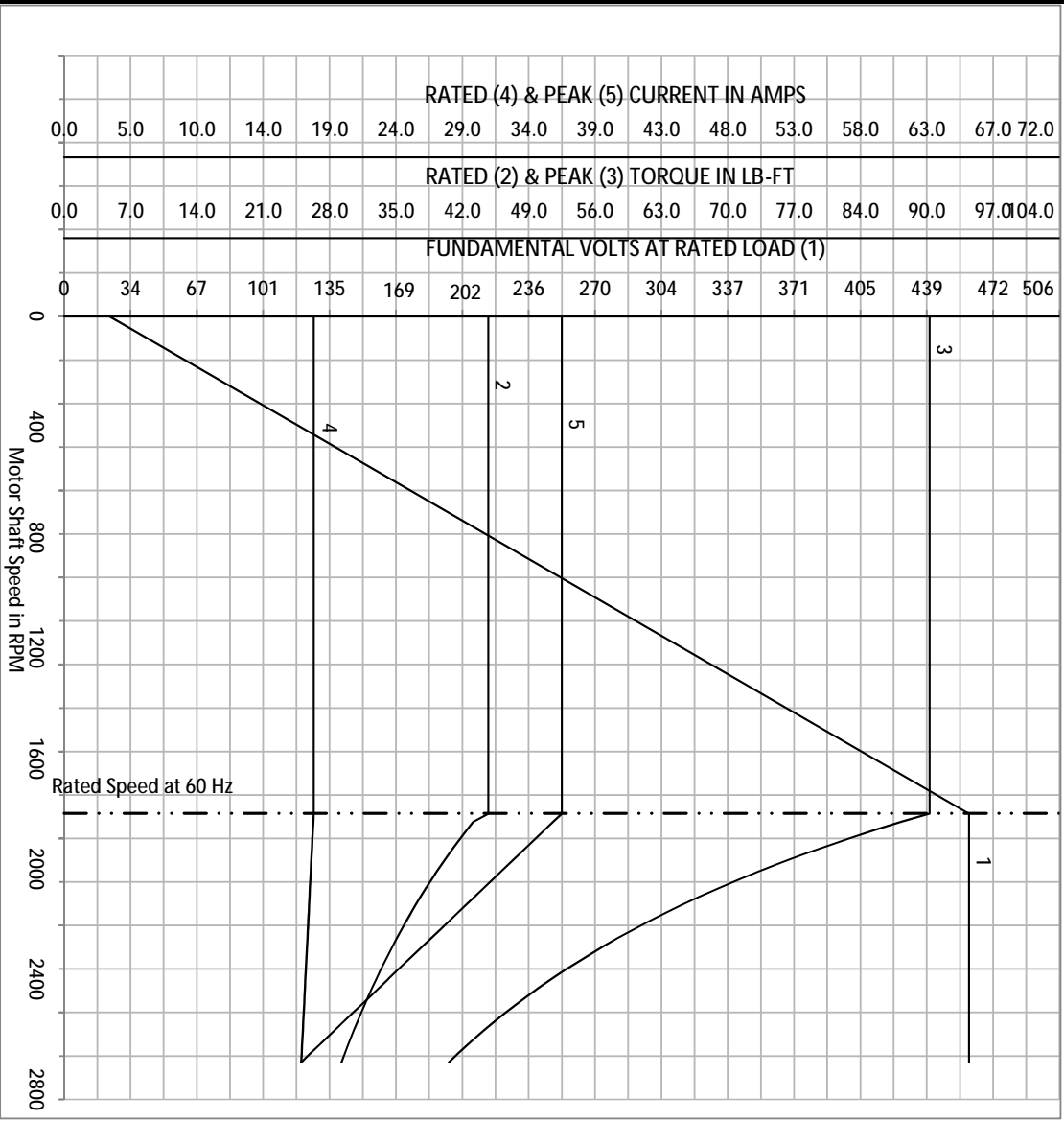
Blower Data	Volts	Pn/Hz	FL Amps	LR Amps	Frame	CFM

Remarks: Calculated Data  
Vector PWM Inverter Duty

 <b>A MEMBER OF THE ABB GROUP</b>	DR BY	BR	<b>A-C MOTOR PERFORMANCE CURVES</b>	<b>09K343Z910Z1</b>
	CK BY	BR		
	APP BY	BR		
	DATE	6/2/2015		

Catalog	ZDVSM2333T	VOLTS	230/460	ENCLOSURE	TEFC	WVE CONN	EQ.CKT	OHMS PER PHASE (BASE RATING, 200)
FRAME	254TC	AMPS	36.2/18.1	MAX SAFE RPM	2700	R1	0.296	X1 1.13
HP	15	DUTY	Cont	In (AMPS)	7.56	R2	0.238	X2 1.33
BASE SPEED	1765	S.F.	1.00	P.F. @NL/FL	5.5/84			XM 33.9000
PHASE/HZ	3/60	AMB °C/INS	40/F	WK <sup>2</sup> (lb-ft <sup>2</sup> )	1.92			

Vector PWM Inverter Duty  
Variable Speed AC Motor Curves



Calculated Data

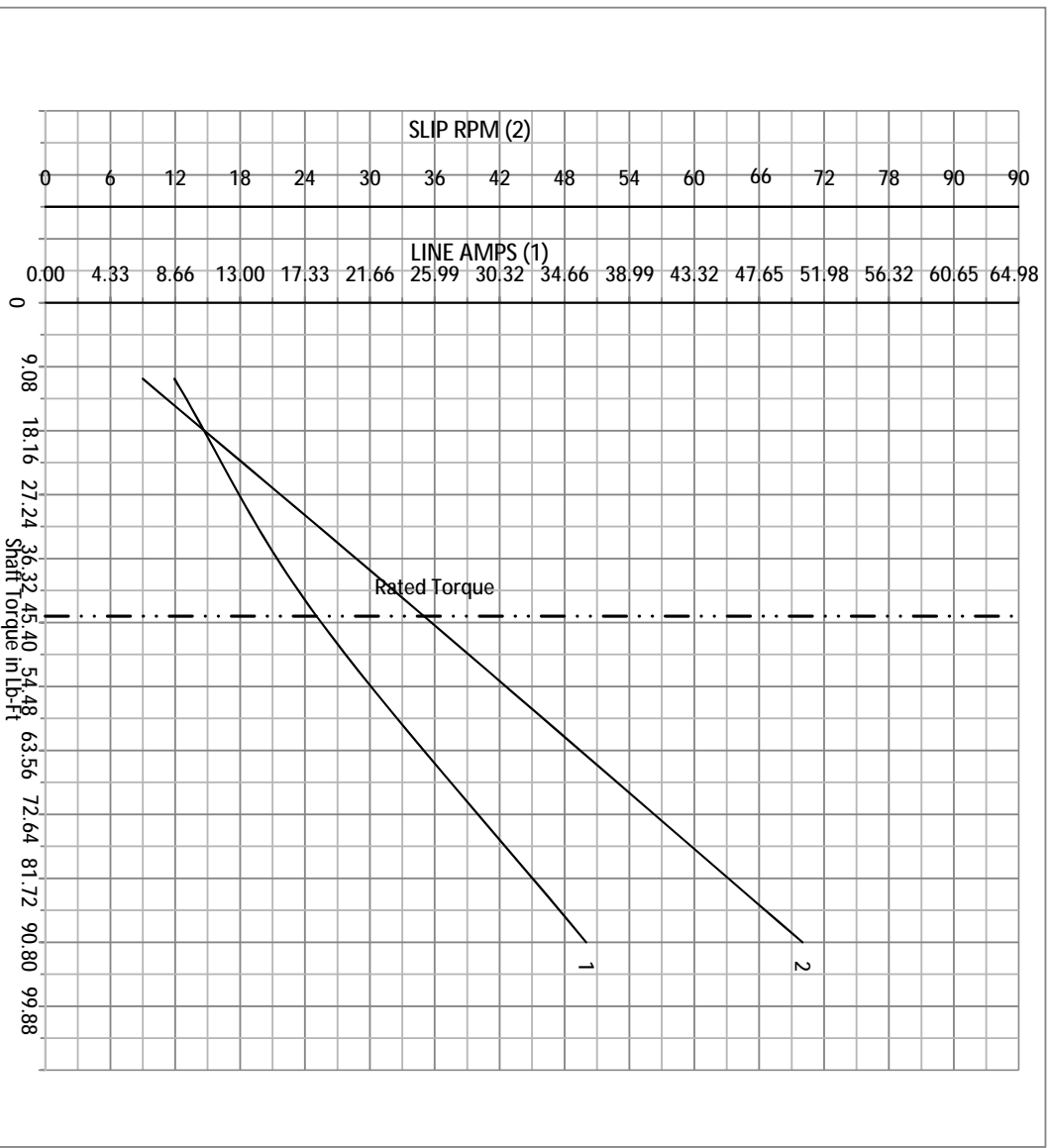
Data Valid For Nameplate Speed Range only

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DR BY	BR	A-C MOTOR	09K343Z910Z1
CK BY		PERFORMANCE	
APP BY	BR	CURVES	
DATE	6/2/2015	ISSUE DATE	6/2/2015

Catalog	ZDVSM2333T	NP VOLTS	230/460	ENCLOSURE	TEFC	WYE CONN	EQ.CKT	OHMS PER PHASE (BASE RATING, 200)
FRAME	254TC	NP AMPS	36.2/18.1	MAX SAFE RPM	2700	R1	0.296	X1
HP	15	DUTY	Cont	NL AMPS	7.56	R2	0.238	X2
BASE SPEED	1765	S.F.	1.00	P.F. @NL/FL	5.5/84			XM
PHASE/HZ	3/60	AMB <sup>3</sup> /C/NS/UL	40/F	WK <sup>2</sup> (lb-ft <sup>2</sup> )	1.92			33.9

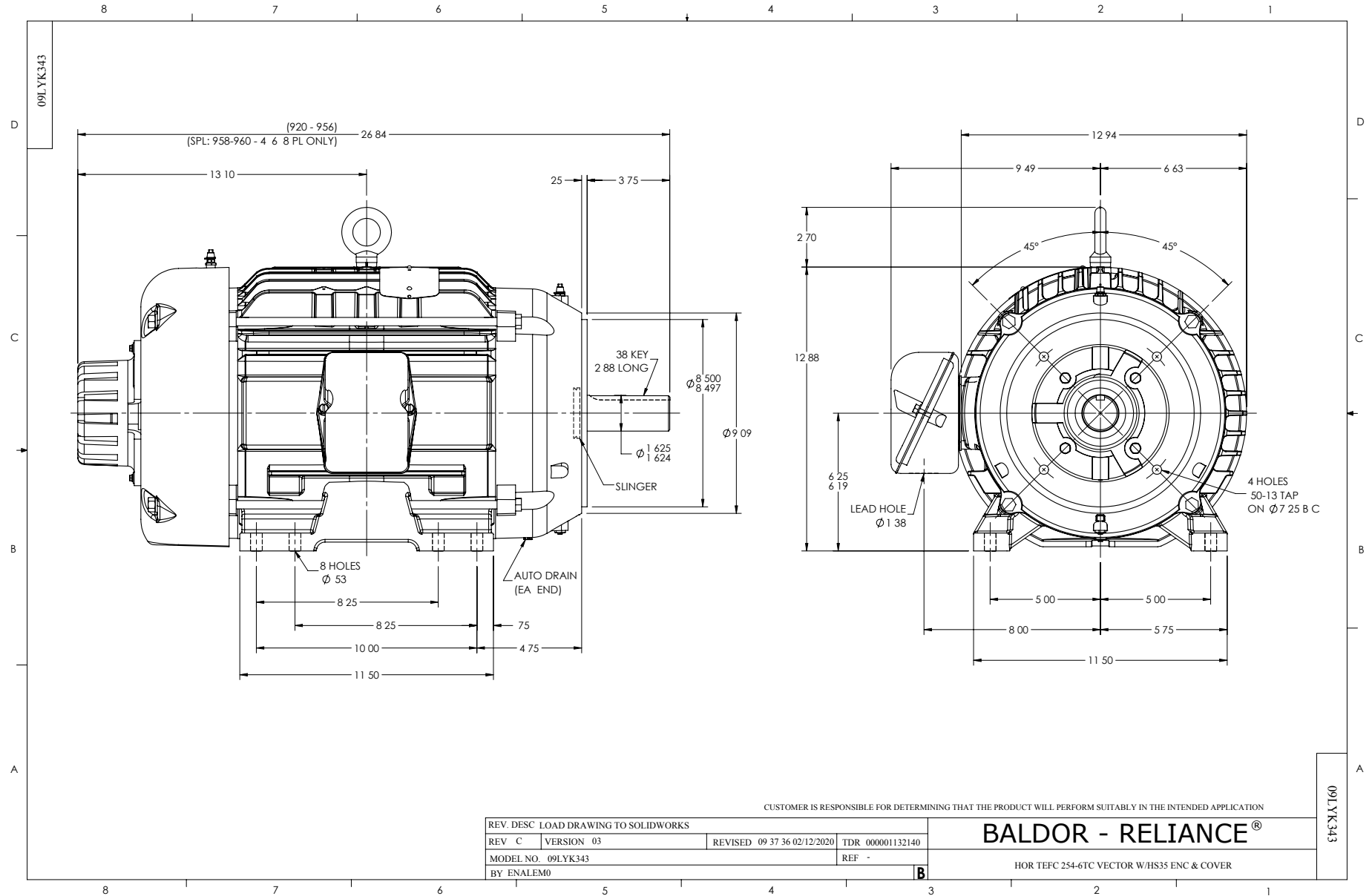
Vector PWM Inverter Duty  
Variable Speed AC Motor Curves



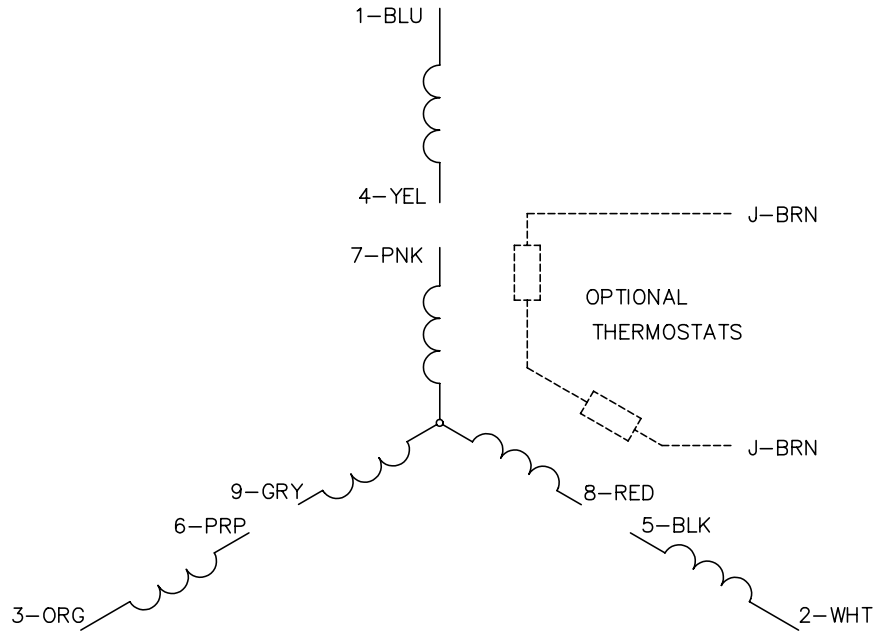
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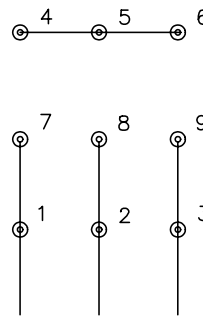
DR BY	BR	A-C MOTOR	09K343Z910Z1
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CD0005

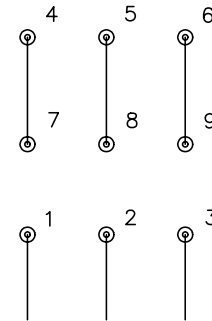


LOW VOLTAGE  
(2Y)



LINE

HIGH VOLTAGE  
(1Y)



LINE

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.

REV. DESC: REVISE TO SHOW OPTIONAL COLORS			
REV. LTR: E	BY: JLP	REVISED: 01/19/99 10:15	TDR: 0171435
900000		FILE: AAA00005140	MDL: -
		MTL: -	

**BALDOR ELECTRIC Co.**

3PH, DV, 9 LEADS

CD0005

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