

BALDOR® • RELIANCE 

Product Information Packet

ZDVSNM3538

.5HP, 1765RPM, 3PH, 60HZ, 56C, 3516M, TENV, F1

Part Detail							
Revision:	P	Status:	PRD/A	Change #:		Proprietary:	No
Type:	AC	Elec. Spec:	35WGM303	CD Diagram:	CD0005	Mfg Plant:	
Mech. Spec:	35R457	Layout:	35LYR457	Poles:	04	Created Date:	12-03-2010
Base:	RG	Eff. Date:	05-16-2018	Leads:	9#18		

Specs			
Catalog Number:	ZDVSNM3538	Insulation Class:	H
Enclosure:	TENV	Inverter Code:	Inverter Duty
Frame:	56C	KVA Code:	N
Frame Material:	Steel	Lifting Lugs:	No Lifting Lugs
Output @ Frequency:	.500 HP @ 60 HZ	Locked Bearing Indicator:	Locked Bearing
Synchronous Speed @ Frequency:	1800 RPM @ 60 HZ	Motor Lead Quantity/Wire Size:	9 @ 18 AWG
Voltage @ Frequency:	230.0 V @ 60 HZ	Motor Lead Exit:	Ko Box
	460.0 V @ 60 HZ	Motor Lead Termination:	Flying Leads
XP Class and Group:	None	Motor Type:	3516M
XP Division:	Not Applicable	Mounting Arrangement:	F1
Agency Approvals:	UR	Power Factor:	64
	CSA	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:	.900 A @ 460.0 V	Shaft Ground Indicator:	No Shaft Grounding

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

Nameplate NP3304L	
CAT NO	ZDVSNM3538
SPEC.	35R457M303Z1
FRAME	56C HP .5 TE
VOLTS	230/460
MAG CUR	1.4/.7 FLA 1.8/.9
RPM	1765 RPM MAX 6000
HZ	60 PH 3 CLASS H
SER.F.	1.00 SL HZ 1.2
NEMA-NOM-EFF	84 WK2 0.1
RATING	40C AMB-CONT
DE BRG	6205 ODE BRG 6203
CC	SER.NO

Parts List		
Part Number	Description	Quantity
SA213100	SA 35R457M303Z1	1.000 EA
RA200326	RA 35R457M303Z1	1.000 EA
NS2512A01	INSULATOR, CONDUIT BOX X	1.000 EA
35CB3007	35 CB CASTING W/.88 DIA. LEAD HOLE	1.000 EA
36GS1000SP	GASKET-CONDUIT BOX, .06 THICK #SV-330 LE	1.000 EA
51XB1016A07	10-16 X 7/16 HXWSSLD SERTYB	2.000 EA
11XW1032G06	10-32 X .38, TAPTITE II, HEX WSHR SLTD U	1.000 EA
35EP3122K01	K00 W/SH ENC CVR	1.000 EA
HW5100A03	WAVY WASHER (W1543-017)	1.000 EA
35EP3307F00	MASTER DE,205 BRG,.998SH,#26 DRN	1.000 EA
51XN1032A20	10-32 X 1 1/4 HX WS SL SR	2.000 EA
10XN2520A08	1/4-20X1/2 HEX HEAD CAP	1.000 EA
35FH4801G	THRU-SHAFT ENCODER COVER INV/VECTOR F1 &	1.000 EA
10XN2520A08	1/4-20X1/2 HEX HEAD CAP	4.000 EA
35CB4521GX	CONDUIT BOX LID KIT **ORDER INDIV PARTS	1.000 EA
51XW0832A07	8-32 X .44, TAPTITE II, HEX WSHR SLTD SE	4.000 EA
HA1005A05SP	SLINGER, OD 1.50, ID .659, 203 BRG	1.000 EA
HW2501D13	KEY, 3/16 SQ X 1.375	1.000 EA
HA7000A04	KEY RETAINER 0.625 DIA SHAFTS	1.000 EA
MJ5004A05	#242-21 LOCTITE GENERAL PURPOSE MED. STR	0.005 EA
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	2.000 EA
MJ1000A02	GREASE, POLYREX EM EXXON (Use 4824-15A)	0.050 LB
OE5011A05SP	HS25 ENCODER ASSY - TENV	1.000 EA
MG1025N19	MUNSELL 8.5BG 3.57/2.0, GLOSS 30, B/G,	0.017 GA

Parts List (continued)		
Part Number	Description	Quantity
HA3100A12	THRUBOLT 10-32 X 7.375	4.000 EA
LB1119N	WARNING LABEL	1.000 EA
LC0145B01	CONNECTION LABEL	1.000 EA
NP3304L	ALUM VEC UL CSA CC (W/OUT DESIGN FIELD)	1.000 EA
36PA1000	PKG GRP, PRINT PK1016A06	1.000 EA
MN416A01	TAG-INSTAL-MAINT no wire (1200/bx) 5/18	1.000 EA
PE-0000001	ZRTG PE ASSEMBLY	1.000 EA
FE-0000001	ZRTG FE ASSEMBLY	1.000 EA

Catalog	ZDVSNM3538	NP VOLTS	230/460	ENCLOSURE	TENV	WYE CONN EQ. CKT OHMS PER PHASE (BASE RATING, 200)			
FRAME	56C	NP AMPS	1.8/ .9	MAX SAFE RPM	2700	R1	12.684	X1	19.577
HP	0.5	DUTY	Cont	NL AMPS	0.655	R2	6.943	X2	14.74
BASE SPEED	1765	S.F.	1.00	P.F. @NL/FL	0/64			XM	408.362
PHASE/HZ	3/60	AMIB [®] C/NSUL	40/H	WK ² (lb-ft ²)	0.0946				

Rated Full Load Data

	RPM	HP	Torque	Volts	Freq-Hz	Amps
Base Speed	1765	0.5	1.5	460	60	0.9
Max Speed	2700	0.5	1.0	460	90	0.7
Min Speed	0	0.0	1.5	38.56	1.17	0.9

Load Performance at Base Speed

	RPM	HP	Torque	Volts	Freq-Hz	Amps
No Load	1799	0.0	0.0	460	60	0.7
1/4	1793	0.1	0.4	460	60	0.7
1/2	1783	0.2	0.7	460	60	0.7
3/4	1774	0.4	1.1	460	60	0.8
Full Load	1765	0.5	1.5	460	60	0.9
O/L	1733	1.0	3.0	460	60	1.4

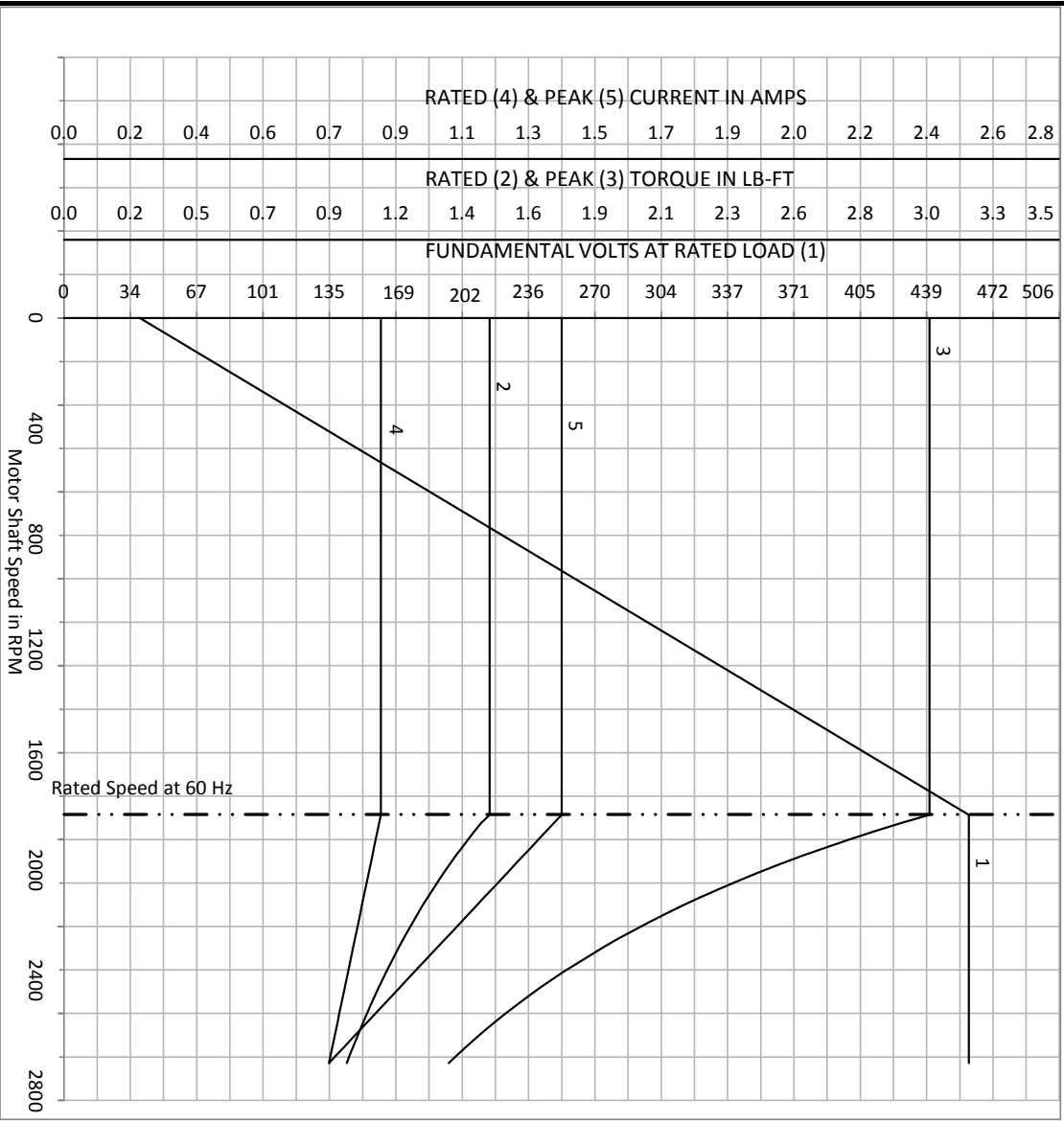
Blower Data	Volts	Pn/Hz	FL Amps	LR Amps	Frame	CFM

Remarks: Calculated Data
Vector PWM Inverter Duty

 A MEMBER OF THE ABB GROUP	DR BY	HDO	A-C MOTOR	35R457M303Z1
	CK BY		PERFORMANCE	
	APP BY	HDO	CURVES	
	DATE	3/17/2015		ISSUE DATE: 3/17/2015

Catalog	ZDVSNM3538	VOLTS	230/460	ENCLOSURE	TENV	WYE CONN. EQ. CKT. OHMS PER PHASE (BASE RATING, 200)
FRAME	56C	AMPS	1.8/9	MAX SAFE RPM	2700	R1 12.684 X1 19.577
HP	0.5	DUTY	Cont	In (AMPS)	0.655	R2 6.943 X2 14.738
BASE SPEED	1765	S.F.	1.00	P.F. @NL/FL	0/64	XM 408.362
PHASE/HZ	3/60	AMB °C/INSI	40/H	WK² (lb-ft²)	0.0946	

Vector PWM Inverter Duty
Variable Speed AC Motor Curves



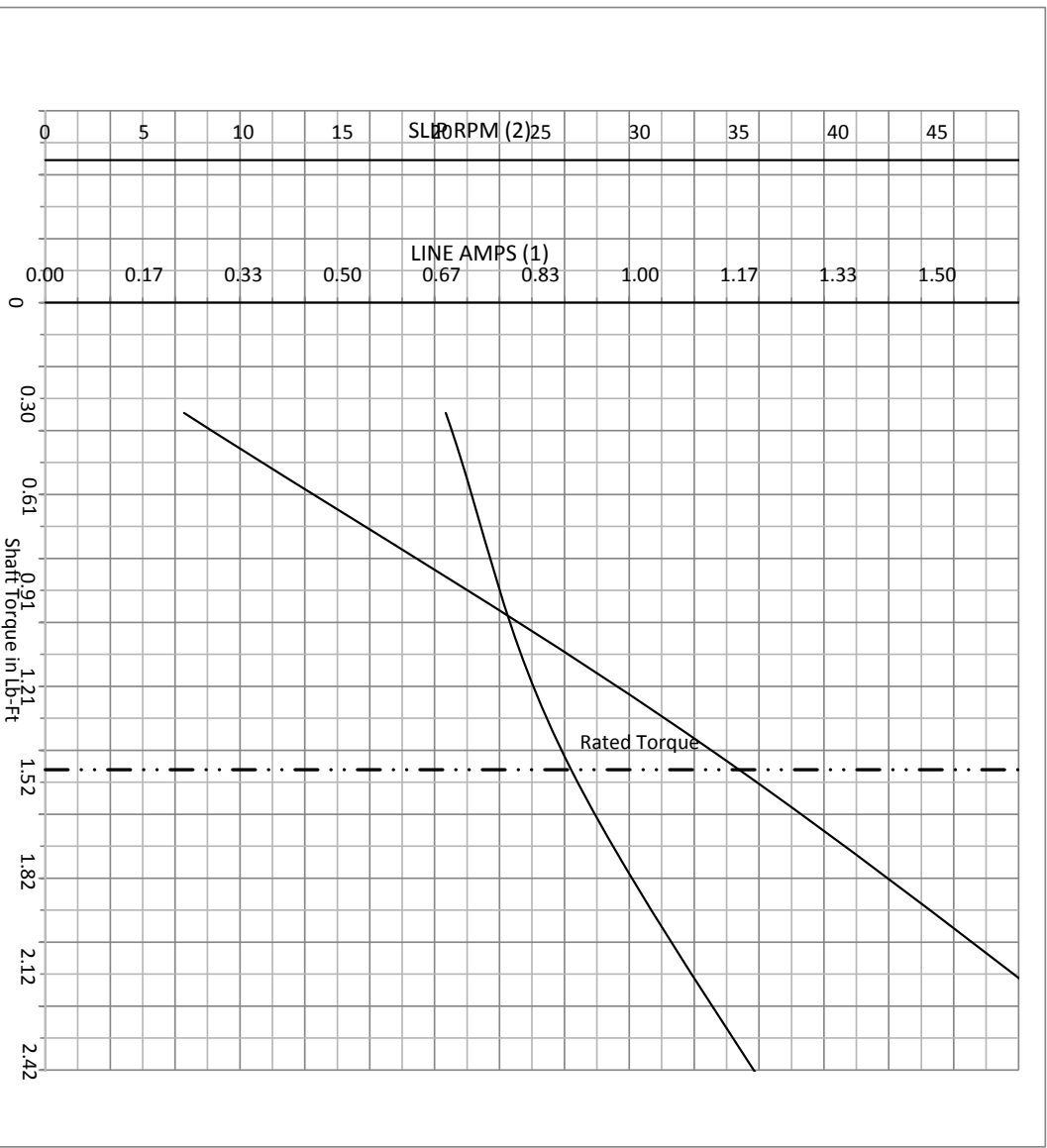
Calculated Data
Data Valid For Nameplate Speed Range only

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DR BY	HDO	A-C MOTOR	35R457M303Z1
CK BY		PERFORMANCE	
APP BY	HDO	CURVES	
DATE	3/17/2015	ISSUE DATE	3/17/2015

Catalog	ZDVSNM3538	NP VOLTS	230/460	ENCLOSURE	TENV	WYE CONN EQ CKT OHMS PER PHASE (BASE RATING, 200)			
FRAME	56C	NP AMPS	1.8/9	MAX SAFE RPM	2700	R1	12.684	X1	19.577
HP	0.5	DUTY	Cont	NL AMPS	0.655	R2	6.943	X2	14.738
BASE SPEED	1765	S.F.	1.00	P.F. @NL/FL	0/64			XM	408.362
PHASE/HZ	3/60	AMB ³ C/INSUL	40/H	WK ² (lb-ft ²)	0.0946				

Vector PWM Inverter Duty
Variable Speed AC Motor Curves



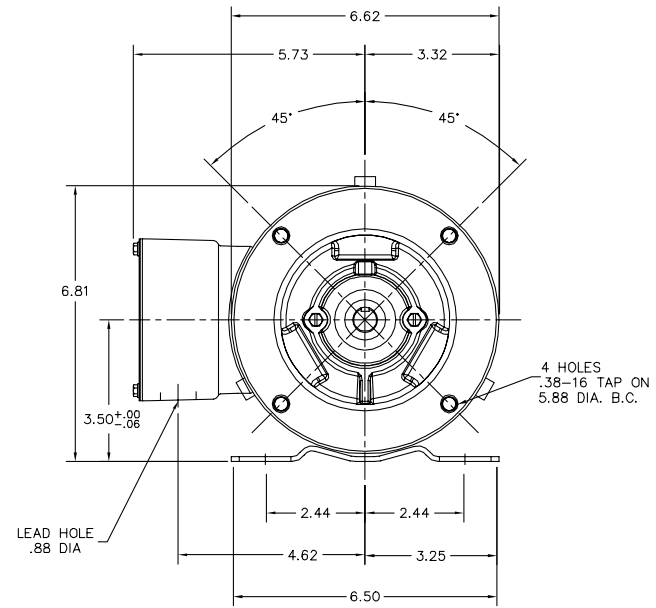
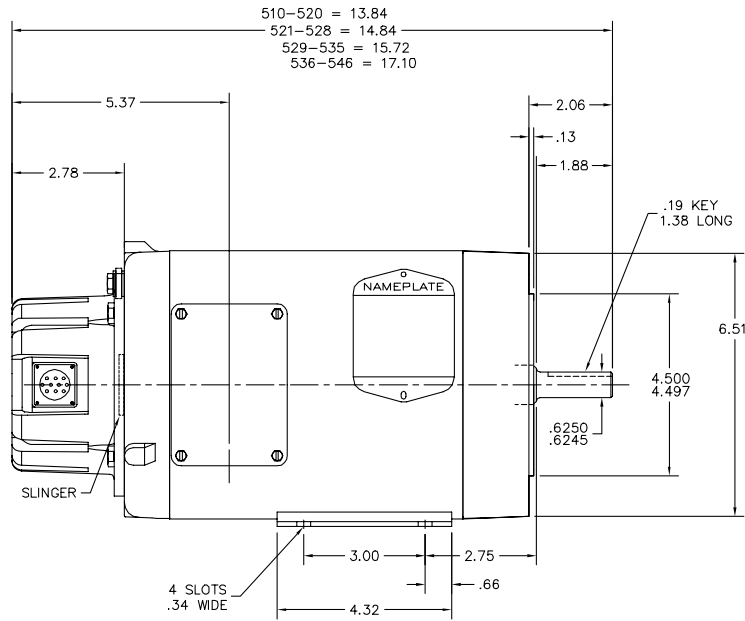
Calculated Data

Data Valid For Nameplate Speed Range only

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DR BY	HDO	A-C MOTOR	35R457M303Z1
CK BY		PERFORMANCE	
APP BY	HDO	CURVES	
DATE	3/17/2015	ISSUE DATE	3/17/2015

35LYR457



35LYR457

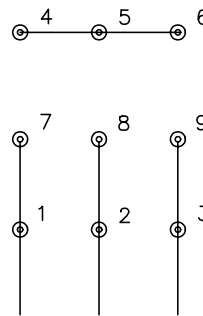
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT BALDOR'S PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION.

REV. DESC: UPDATE ENDPLATES AND NOTES			BALDOR - RELIANCE [®]
REV. LTR: C	VERSION: 02	TDR: 000001069917	
FILE: \AAA\00075\729	REVISED: 02:05:34 05/14/2018	BY: FPJFEG0	
STD HORZ 56C TENV 35M VECTOR W/ THRU-SHAFT ENCODER & COVER			
MTL: -	SH 1 of 1		

CD0005

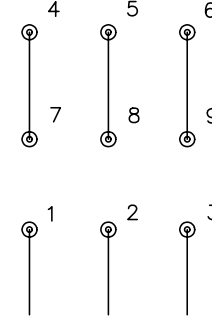


LOW VOLTAGE
(2Y)



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
90000		FILE: AAA00005140	MDL: -
		MTL: -	

BALDOR ELECTRIC Co.

3PH, DV, 9 LEADS

CD0005