

ABB BALDOR RELIANCE III

Customer information packet

VNM3541

.75HP, 3480RPM, 3PH, 60HZ, 56C, 3520M, TENV, F1

Class - None

Division - Not Applicable

Specifications

Enclosure	TENV
Frame	56C
Frame Material	Steel
Frequency	60.00 Hz
Haz Area Class and Group	None
Haz Area Division	Not Applicable
Motor Letter Type	Three Phase
Output @ Frequency	.750 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	3600 RPM @ 60 HZ
Voltage @ Frequency	460.0 V @ 60 HZ 230.0 V @ 60 HZ 208.0 V @ 60 HZ
Agency Approvals	C UR US CURUS
Ambient Temperature	40 °C
Auxiliary Box	NO AUXILLARY BOX
Auxiliary Box Lead Termination	None
Base Indicator	No Mounting
Bearing Grease Type	Polyrex EM (-20F +300F)
Blower	None
Current @ Voltage	2.200 A @ 208.0 V 2.000 A @ 230.0 V 1.000 A @ 460.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	84.0 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Face Code	Standard
Front Shaft Indicator	None

Part Detail

Revision	Y
Type	AC
Mech. spec.	35E010
Base	
Status	PRD/A
Elec. spec.	35WGR090
Layout	35LYE010
Eff. date	01-05-2026
CD Diagram	CD0005
Poles	02
Leads	9#18
Proprietary	False
Created date	01-08-2008

Heater Indicator	No Heater
High Voltage Full Load Amps	1.0 a
Insulation Class	H
Inverter Code	Inverter Ready
KVA Code	N
Lifting Lugs	No Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	9 @ 18 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3520M
Mounting Arrangement	F1
Number of Poles	2
Overall Length	11.06 IN
Power Factor	82
Product Family	General Purpose
Pulley End Bearing Type	Ball
Pulley Face Code	C-Face
Pulley Shaft Indicator	Standard
Rodent Screen	None
Service Factor	1.25
Shaft Diameter	0.625 IN
Shaft Extension Location	Pulley End
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	3480 rpm
Speed Code	Single Speed
Starting Method	Direct on line
Thermal Device - Bearing	None
Thermal Device - Winding	None
Vibration Sensor Indicator	No Vibration Sensor
Winding Thermal 1	None

Winding Thermal 2

None

Nameplate

NP1256L											
CAT.NO.	VNM3541										
SPEC.	35E010R090G2										
HP	.75										
VOLTS	208-230/460										
AMP	2.2-2/1										
RPM	3480										
FRAME	56C		HZ	60				PH	3		
SER.F.	1.25		CODE	N	DES	B		CLASS	H		
NEMA-NOM-EFF	84		PF	82							
RATING	40C AMB-CONT										
CC											
DE	6205		ODE	6203							
ENCL	TENV		SN								
	SFA 2.6-2.4/1.2										

Parts List

Part number	Description	Quantity
SA166778	SA 35E010R090G2	1.000 ea
RA155140	RA 35E010R090G2	1.000 ea
S/P111-000-002	CORONA TEST, SUPER E MOTORS - FT. SMITH	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
35EP3122F00	MASTER ODE,203 BRG,#26 DRN	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
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
HA7000A04	KEY RETAINER 0.625 DIA SHAFTS	1.000 ea
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	2.000 ea
MJ1000A02	GREASE, POLYREX EM EXXON	0.050 lb
HW2501D13	KEY, 3/16 SQ X 1.375	1.000 ea
MG1050G01	CELEROL MEDIUM CHARCOAL METALLIC GRAY	0.017 ga
HA3100A12	THRUBOLT 10-32 X 7.375	4.000 ea
LB1624	COMBINED WARNING LABEL, ISO/ANSI PICTOGR	1.000 ea
LC0005	CONN.DIA.,TY M,9-LD,DUAL VOLT,REVERSING	1.000 ea
NP1256L	ALUM UL CC INDUSTRIAL MOTOR A60	1.000 ea
35PA1066	PKG GRP, PRINT PK1008A07	1.000 ea
PK3083	STYROFOAM PACKING CRADLE	1.000 ea
MN416A01	TAG-INSTAL-MAINT no wire (2500 bx)11/25	1.000 ea
PE-0000001	ZRTG PE ASSEMBLY	1.000 ea
PK3088	MICROFOAM, 8"X"8 PERF. SHEETS	1.000 ea
FE-0000001	ZRTG FE ASSEMBLY	1.000 ea

AC Induction Motor Performance Data

Record # 37297

Typical performance - not guaranteed values

Winding: 35WGR090-R016			Type: 3520M		Enclosure: TENV	
Nameplate Data			460 V, 60 Hz: High Voltage Connection			
Rated Output (HP)		.75	Full Load Torque		1.12 LB-FT	
Volts		208-230/460	Start Configuration		direct on line	
Full Load Amps		2.2-2/1	Breakdown Torque		6.1 LB-FT	
R.P.M.		3480	Pull-up Torque		4.3 LB-FT	
Hz	60 Phase	3	Locked-rotor Torque		5.1 LB-FT	
NEMA Design Code		B KVA Code	Starting Current		11.3 A	
Service Factor (S.F.)		1.25	No-load Current		0.545 A	
NEMA Nom. Eff.		84 Power Factor	Line-line Res. @ 25°C		15.4 Ω	
Rating - Duty		40C AMB-CONT	Temp. Rise @ Rated Load		52°C	
S.F. Amps		2.6-2.4/1.2	Temp. Rise @ S.F. Load		63°C	
			Locked-rotor Power Factor		53	
			Rotor inertia		0.0553 LB-FT2	

Load Characteristics 460 V, 60 Hz, 0.75 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	45	65	77	82	87	86	87
Efficiency	65	77.1	81.7	83.6	84.5	83.9	84.5
Speed	3573	3550	3528	3503	3478	3451	3478
Line amperes	0.599	0.71	0.848	1.02	1.18	1.41	1.18

ABB Motors and Mechanical Inc.

WINDING # 35WGR090

Typical performance - not guaranteed values.

0.75 HP 3 PH 60 HZ 3480 RPM 460 V 3520M

TORQUES (LB-FT) : PO=6.1 PU=4.3 LR=5.1 LRA=11.3





