

ABB BALDOR RELIANCE III

Customer information packet

VL1321T

1.5HP, 1730RPM, 1PH, 60HZ, 145TC, 3536L, OPEN

Class - None

Division - Not Applicable

Specifications

Enclosure	OPEN
Frame	145TC
Frame Material	Steel
Frequency	60.00 Hz
Haz Area Class and Group	None
Haz Area Division	Not Applicable
Motor Letter Type	Cap Start, Induction Run
Output @ Frequency	1.500 HP @ 60 HZ
Phase	1
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	115.0 V @ 60 HZ 230.0 V @ 60 HZ
Agency Approvals	C UR US
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	8.300 A @ 208.0 V 7.800 A @ 230.0 V 15.500 A @ 115.0 V
Design Code	L
Drip Cover	Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	75.5 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	7.8 a
Insulation Class	F

Part Detail

Revision	D
Type	AC
Mech. spec.	35DD005
Base	
Status	PRD/A
Elec. spec.	35WGG406
Layout	35LYDD005
Eff. date	07-02-2024
CD Diagram	CD0001
Poles	04
Leads	4#14 A PH,2#18 B PH
Proprietary	False
Created date	08-01-2022

Inverter Code	Not Inverter
KVA Code	M
Lifting Lugs	No Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Motor Lead Quantity/Wire Size	4 @ 14 AWG, A PH
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3536L
Mounting Arrangement	F1
Number of Poles	4
Overall Length	15.54 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	1.15
Shaft Diameter	0.875 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	1730 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.	VL1321T								
SPEC.	35DD00G406								
HP	1.5								
VOLTS	115/230								
AMP	15.5/7.8								
RPM	1730								
FRAME	145TC		HZ	60			PH	1	
SER.F.	1.15		CODE	M	DES	L	CLASS	F	
NEMA-NOM-EFF	75.5		PF	80					
RATING	40C AMB-CONT								
CC									
DE	6205		ODE	6203					
ENCL	OPEN		SN						

Parts List

Part number	Description	Quantity
SA407297	SA 35DD00G406	1.000 ea
RA398796	RA 35DD00G406	1.000 ea
EC1645A06SP	ELEC CAP, 645-774 MFD, 125V, 2.06D X 4.	1.000 ea
NS2512A01	INSULATOR, CONDUIT BOX X	1.000 ea
35CB3009	35 CB W/1.09 DIA. LEAD HOLE @ 6:	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
35EP3209C00	MASTER ODE,203 BRG,.683SH,GRSR@6,DRIP CV	1.000 ea
HW4500A01	1641B(ALEMITE)400 UNIV, GREASE FITT	1.000 ea
51XW0832A07	8-32 X .44, TAPTITE II, HEX WSHR SLTD SE	2.000 ea
35CB4802A02SP	CAPACITOR COVER, STAMPED X	1.000 ea
51XB1016A05	10-16X5/16HX WA SL SR TYB (F/S)	2.000 ea
HW5100A03	WAVY WASHER (W1543-017)	1.000 ea
35EP3402B00	MASTER DE,205 BRG,OPEN,W/GREASER	1.000 ea
35AD2000	AIR BAFFLE - GALVANNEAL	1.000 ea
60XW0632A06	6-32 X 3/8 TORX HEAD SCREW TAPTITE II	4.000 ea
HW4500A01	1641B(ALEMITE)400 UNIV, GREASE FITT	1.000 ea
51XN1032A20	10-32 X 1 1/4 HX WS SL SR	2.000 ea
35FN3002A05SP	EXFN, PLASTIC, 6.376 OD, .638 ID	1.000 ea
51XB1214A16	12-14X1.00 HXWSSLD SERTYB	1.000 ea
35FH4006A04	DRIP COVER SPECIAL, W/ PRIMER	1.000 ea
51XW1032A06	10-32 X .38, TAPTITE II, HEX WSHR SLTD S	3.000 ea
35CB4521	35 LIPPED CB LID (GALV & PHOSPH)	1.000 ea
51XW0832A07	8-32 X .44, TAPTITE II, HEX WSHR SLTD SE	4.000 ea
HW2501D13	KEY, 3/16 SQ X 1.375	1.000 ea
HA7000A01	KEY RETAINER 7/8" DIA SHAFT	1.000 ea
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	2.000 ea
WD1000A15	3-520132-2 AMP FLAG (4M/RL NON-CANC/NON-	1.000 ea
MJ1000A02	GREASE, POLYREX EM EXXON	0.050 lb
MG1050G01	CELEROL MEDIUM CHARCOAL METALLIC GRAY	0.017 ga
SP5051A24	MODEL 35 TORQ STATIONARY SWITCH FOR "L"	1.000 ea

HA3100A24	THRUBOLT 10-32 X 10.625	4.000 ea
LC0001A01	CONN LABEL / WARNING LABEL (LC0001 / LB1	1.000 ea
NP1256L	ALUM UL CC INDUSTRIAL MOTOR A60	1.000 ea
35PA1066	PKG GRP, PRINT PK1008A07	1.000 ea
PK3082	STYROFOAM CRADLE	1.000 ea
MN416A01	TAG-INSTAL-MAINT no wire (2500 bx)11/25	1.000 ea
FE-0000001	ZRTG FE ASSEMBLY	1.000 ea
PE-0000003	ZRTG PE ASSEMBLY	1.000 ea

AC Induction Motor Performance Data

Record # 89156

Typical performance - not guaranteed values

Winding: 35WGG406-R001			Type: 3536L		Enclosure: OPEN			
Nameplate Data			115 V, 60 Hz: Low Voltage Connection					
Rated Output (HP)		1.5	Full Load Torque		4.56 LB-FT			
Volts		115/230	Start Configuration		direct on line			
Full Load Amps		15.5/7.8	Breakdown Torque		9.82 LB-FT			
R.P.M.		1730	Pull-up Torque		9.83 LB-FT			
Hz	60	Phase	1	Locked-rotor Torque		14.77 LB-FT		
NEMA Design Code		L	KVA Code	M	Starting Current		100 A	
Service Factor (S.F.)		1.15	No-load Current		10.35 A			
NEMA Nom. Eff.		75.5	Power Factor		80	Line-line Res. @ 25°C		0.446 Ω A Ph 1.18 Ω B Ph
Rating - Duty		40C	AMB-CONT		Temp. Rise @ Rated Load		82°C	
S.F. Amps					Temp. Rise @ S.F. Load		101°C	
					Locked-rotor Power Factor		90.9	
					Rotor inertia		0.261 lb-ft²	

Load Characteristics 115 V, 60 Hz, 1.5 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	42	62	73	81	83	85	82
Efficiency	66.2	75.9	78.2	77.1	73.2	67.7	74.8
Speed	1782	1767	1748	1728	1697	1658	1709
Line amperes	8.89	10.27	12.73	15.64	19.99	25.47	18.2

ABB Motors and Mechanical Inc.

WINDING # 35WGG406

Typical performance - not guaranteed values.

1.5 HP 1 PH 60 HZ 1730 RPM 115 V 3536L

TORQUES (LB-FT): PO=9.82 PU=9.83 LR=14.77 LRA=100





