

ABB BALDOR RELIANCE III

Customer information packet

GDL1615T

16HP, 1760RPM, 1PH, 60HZ, 256TZ, 3956LC, OPSB

Class -

Division - Not Applicable

Specifications

Enclosure	OPSB
Frame	256TZ
Frame Material	Steel
Frequency	60.00 Hz
Haz Area Division	Not Applicable
Motor Letter Type	Cap Start, Cap Run
Output @ Frequency	16.000 HP @ 60 HZ
Phase	1
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	230.0 V @ 60 HZ 208.0 V @ 60 HZ
Agency Approvals	CSA UR
Ambient Temperature	40 °C
Auxiliary Box	NO AUXILLARY BOX
Auxiliary Box Lead Termination	None
Base Indicator	Rigid
Bearing Grease Type	Polyrex EM (-20F +300F)
Blower	None
Current @ Voltage	62.000 A @ 230.0 V 71.000 A @ 208.0 V
Design Code	L
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	86.5 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Face Code	Standard
Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	62.0 a
Insulation Class	F

Part Detail

Revision	AD
Type	AC
Mech. spec.	39T017
Base	
Status	PRD/A
Elec. spec.	39WGX522
Layout	39LYT017
Eff. date	06-26-2024
CD Diagram	CD1084
Poles	04
Leads	2#6 A PH,2#12 B PH
Proprietary	False
Created date	10-03-2005

Inverter Code	Not Inverter
KVA Code	L
Lifting Lugs	No Lifting Lugs
Locked Bearing Indicator	No Locked Bearing
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	2 @ 6 AWG, A PH
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3956LC
Mounting Arrangement	F1
Number of Poles	4
Overall Length	24.19 IN
Power Factor	96
Product Family	General Purpose
Pulley End Bearing Type	Ball
Pulley Face Code	Standard
Pulley Shaft Indicator	Standard
Rodent Screen	Included
Service Factor	1.00
Shaft Diameter	1.625 IN
Shaft Extension Location	Pulley End
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	1760 rpm
Speed Code	Single Speed
Starting Method	Direct on line
Thermal Device - Bearing	None
Thermal Device - Winding	Normally Closed Thermostat
Vibration Sensor Indicator	No Vibration Sensor

Nameplate

NP1256L									
CAT.NO.	GDL1615T								
SPEC.	39T017X522								
HP	16								
VOLTS	208-230								
AMP	71-62								
RPM	1760								
FRAME	256TZ		HZ	60			PH	1	
SER.F.	1.00	CODE	E	DES	L	CLASS	F		
NEMA-NOM-EFF	86.5	PF	96						
RATING	40C AMB-CONT								
CC									
DE	6309		ODE	6307					
ENCL	OPSB	SN							

Parts List

Part number	Description	Quantity
SA133990	SA 39T017X522	1.000 ea
RA123832	RA 39T017X522	1.000 ea
OC3050F09SP	CAPACITOR 50 MFD 370 VAC	2.000 ea
RE0045A12	CONTACTOR, 40 AMP, 2 POLE, 208-240 VAC	1.000 ea
EC1216D06	ELEC CAP, 216-259MFD, 330V, 2.06D X 4.38	4.000 ea
HA6361A01	LIFTING LUG FOR 37, 39 & 40 FRAME ZINC	2.000 ea
37CB3804A67	SPL CAPAC. BX 37 MOTORS FOR 6-7 CAPAC. W	1.000 ea
37GS3015	GASKET, CAPAC BOX	1.000 ea
51XW2520A12	.25-20 X .75, TAPTITE II, HEX WSHR SLTD	4.000 ea
HA6003A47	CAPAC CLAMP	1.000 ea
HA7419	SPL BRACKET FOR MTG. CONTACT TO SINGLE P	1.000 ea
51XW1032A06	10-32 X .38, TAPTITE II, HEX WSHR SLTD S	7.000 ea
HA6003A45	CAPAC CLAMP - CLIP (WHITE ZINC PLATED)	2.000 ea
51XB1016A08	10-16X 1/2HXWSSLD SERTYB	2.000 ea
WD1000D90	T&B RC2577FM,90 DEG INSUL. FLAG TERMINAL	2.000 ea
11XW1032G06	10-32 X .38, TAPTITE II, HEX WSHR SLTD U	1.000 ea
WD1000A03	41531 AMP FLG.TERM,4M/REEL(2.5MIL)	30.000 ea
WD1000D90	T&B RC2577FM,90 DEG INSUL. FLAG TERMINAL	1.000 ea
HW1001A10	WASHER, #10 SPLT LK, ZN X	1.000 ea
39EP3200A53	FREP 307 BRG, NO GREASER W/STATIONARY SW	1.000 ea
HA1101A03	RODENT SCREEN, 39 FACE MTD.E.P.	1.000 ea
51XW1032A06	10-32 X .38, TAPTITE II, HEX WSHR SLTD S	4.000 ea
SP5165	MODEL 39 DOUBLE ARM STATIONARY SWITCH	1.000 ea
NS2557	SWITCH INSULATOR 39 FRAME	1.000 ea
51XW0832A07	8-32 X .44, TAPTITE II, HEX WSHR SLTD SE	2.000 ea
HW5100A08	W3118-035 WVY WSHR (WB)	1.000 ea
39EP3201A14	PU ENDPLATE, MACH	1.000 ea
HA1101A03	RODENT SCREEN, 39 FACE MTD.E.P.	1.000 ea
51XW1032A06	10-32 X .38, TAPTITE II, HEX WSHR SLTD S	4.000 ea
XY3816A12	3/8-16 FINISHED NUT W/SERRATIONS	8.000 ea
37CB4509	CAPAC BOX LID, STAMPED	1.000 ea

37GS3016	GASKET, CAPAC BOX LID	1.000 ea
HW2501G25	KEY, 3/8 SQ X 2.875	1.000 ea
MN416A01	TAG-INSTAL-MAINT no wire (2500 bx)11/25	1.000 ea
39AD2002A01	BAFFLE PLATE 39 OPEN, SLOTTED BAND MTRS	1.000 ea
MJ1000A02	GREASE, POLYREX EM EXXON	0.030 lb
39AD2002A01	BAFFLE PLATE 39 OPEN, SLOTTED BAND MTRS	1.000 ea
HA3154A03	STUD, 3/8-16 X 17.75	4.000 ea
51XW0832A07	8-32 X .44, TAPTITE II, HEX WSHR SLTD SE	6.000 ea
MG1025G05	WILKOFAS, 789.227, MED. GRAY CHAR. MET.	0.050 ga
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	2.000 ea
LB1624	COMBINED WARNING LABEL, ISO/ANSI PICTOGR	1.000 ea
LC0017	CONN LABEL-1 PHASE-SINGLE VOLT-REV ROTNO	1.000 ea
NP1256L	ALUM UL CC INDUSTRIAL MOTOR A60	1.000 ea
40PA1000	PACKAGING GROUP	1.000 ea

Accessories

Part number	Description	Multiplier
39-3400	C FACE KIT	A8

AC Induction Motor Performance Data

Record # 37180

Typical performance - not guaranteed values

Winding: 39WGX522-R006			Type: 3956LC		Enclosure: OPSB	
Nameplate Data			230 V, 60 Hz: Single Voltage Motor			
Rated Output (HP)		16	Full Load Torque		48.7 LB-FT	
Volts		208-230	Start Configuration		direct on line	
Full Load Amps		71-62	Breakdown Torque		122 LB-FT	
R.P.M.		1760	Pull-up Torque		64.6 LB-FT	
Hz	60	Phase	1	Locked-rotor Torque		82.1 LB-FT
NEMA Design Code		L	KVA Code	E	Starting Current	
Service Factor (S.F.)		1	No-load Current		7.42 A	
NEMA Nom. Eff.		86.5	Power Factor	96	Line-line Res. @ 25°C	
					0.11 Ω A Ph 0.419 Ω B Ph	
Rating - Duty		40C	AMB-CONT		Temp. Rise @ Rated Load	
					54°C	

Load Characteristics 230 V, 60 Hz, 16 HP

% of Rated Load	25	50	75	100	125	150
Power Factor	91	96	96	96	95	93
Efficiency	82.9	78.7	89.1	87.3	84.2	78.8
Speed	1785	1771	1753	1734	1710	1672
Line amperes	17.5	34.6	45.6	62.4	81.4	107

ABB Motors and Mechanical Inc.

WINDING # 39WG522

Typical performance - not guaranteed values.

16 HP 1 PH 60 HZ 1760 RPM 230 V 3956LC

TORQUES (LB-FT): PO=122 PU=64.6 LR=82.1 LRA=331





