

ABB BALDOR RELIANCE III

Customer information packet

EM3615T-9

5HP, 1755RPM, 3PH, 60HZ, 184T, 3644M, TEFC, F1

Class - None

Division - Not Applicable

Specifications

Enclosure	TEFC
Frame	184T
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	5.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	230.0 V @ 60 HZ 460.0 V @ 60 HZ
Agency Approvals	CSA EEV NEMA PREMIUM NEMA_PREMIUM 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	7.100 A @ 460.0 V 14.200 A @ 230.0 V 14.000 A @ 208.0 V
Design Code	A
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	89.5 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Face Code	Standard

Part Detail

Revision	F
Type	AC
Mech. spec.	36Q306
Base	
Status	PRD/A
Elec. spec.	36WGR929
Layout	36LYQ306
Eff. date	04-15-2024
CD Diagram	CD0005
Poles	04
Leads	9#16
Proprietary	False
Created date	02-25-2016

Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	7.1 a
Insulation Class	F
Inverter Code	Inverter Ready
KVA Code	L
Lifting Lugs	No Lifting Lugs
Locked Bearing Indicator	No Locked Bearing
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	9 @ 16 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3644M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	18.04 IN
Power Factor	74
Product Family	WP Below Decks Marine Duty
Pulley End Bearing Type	Ball
Pulley Face Code	Standard
Pulley Shaft Indicator	Standard
Rodent Screen	None
RoHS Status	ROHS COMPLIANT
Service Factor	1.15
Shaft Diameter	1.125 IN
Shaft Extension Location	Pulley End
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	Shaft Slinger
Speed	1755 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

NP1267L											
CAT.NO.	EM3615T-9										
SPEC.	36Q306R929G1										
HP	5										
VOLTS	230/460										
AMP	14.2/7.1										
RPM	1755										
FRAME	184T		HZ	60				PH	3		
SER.F.	1.15	CODE	L	DES	A	CL	F				
NEMA-NOM-EFF	89.5	PF	74								
RATING	40C AMB-CONT										
CC	010A										
DE	6206		ODE	6205							
ENCL	TEFC	SN									
	DES C TORQUE										

Parts List

Part number	Description	Quantity
SA315963	SA 36Q306R929G1	1.000 ea
RA303509	RA 36Q306R929G1	1.000 ea
36FN3000C01SP	EXFN, PLASTIC, 5.25 OD, .912 ID	1.000 ea
36CB3005A03	36 CB .75 NPT @ 6	1.000 ea
35GS1022A02	GASKET BOX .06 THK NEOP BLK HDN 30-40 DU	1.000 ea
51XB1016A08	10-16X 1/2HXWSSLD SERTYB	2.000 ea
11XW1032G06	10-32 X .38, TAPTITE II, HEX WSHR SLTD U	1.000 ea
36EP3104A39	FREP MACH W/GRSR,REL, .125 NPT RAISED FH	1.000 ea
HW4500A17	317400 ALEMITE GREASE RELIEF	1.000 ea
HW4500A01	1641B(ALEMITE)400 UNIV, GREASE FITT	1.000 ea
HA4054	SHORT T-DRAIN FITTING, .125" N.P.T.	1.000 ea
HW5100A05	WVY WSHR F/205 & 304 BRGS	1.000 ea
36EP3100B80	PU ENDPLATE, MACH, GRSR, RLF, .125 DRAIN	1.000 ea
HW4500A17	317400 ALEMITE GREASE RELIEF	1.000 ea
HW4500A01	1641B(ALEMITE)400 UNIV, GREASE FITT	1.000 ea
HA4054	SHORT T-DRAIN FITTING, .125" N.P.T.	1.000 ea
XY2520A12	1/4-20 HEX NUT, DIRECTIONAL SERRATIONS	4.000 ea
51XB1214A16	12-14X1.00 HXWSSLD SERTYB	1.000 ea
36FH4009A102	IEC FH GREASER PRIMED	1.000 ea
51XW1032A06	10-32 X .38, TAPTITE II, HEX WSHR SLTD S	3.000 ea
36CB4516	750LIPPED CB LID - GALVANNEAL	1.000 ea
37GS1003	1/16 NEOPRENE GASKET-BLACK, CONDUIT BOX	1.000 ea
51XW0832A07	8-32 X .44, TAPTITE II, HEX WSHR SLTD SE	4.000 ea
HW4600B32SP	V-RING SLINGER 1.000 X 1.540 X .24 VITON	1.000 ea
HW4600B36SP	V-RING SLINGER 1.188 X 1.380 X .24 VITON	1.000 ea
HW2501E16	KEY, 1/4 SQ X 1.750	1.000 ea
HA7000A02	KEY RETAINER RING, 1 1/8 DIA, 1 3/8 DIA	1.000 ea
MJ5001A27	32220KN GRAY SEALER *MIN BUY 4 QTS=1GAL	0.001 qt
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	2.000 ea
HW3200A01	3/8-16X3/4 EYEBOLT WELDED F/S	1.000 ea
MJ1000A02	GREASE, POLYREX EM EXXON	0.050 lb

MG1500Y02	WILKOPON PRIMER YELLOW	0.022 ga
MG1025N19	WILKOFAS, 778.50, RELIANCE BLUE-GREEN 8	0.022 ga
HA3101A28	THRUBOLT 1/4-20 X 12.500 OHIO ROD	4.000 ea
LC0005	CONN.DIA.,TY M,9-LD,DUAL VOLT,REVERSING	1.000 ea
NP1267L	SS SUPER-E UL EEV CC NEMA PREM LASER ETC	1.000 ea
G0PA1000	PKG GRP, PRINT PK1026A06	1.000 ea
MN416A01	TAG-INSTAL-MAINT no wire (2500 bx)11/25	1.000 ea
LB1624	COMBINED WARNING LABEL, ISO/ANSI PICTOGR	1.000 ea

AC Induction Motor Performance Data

Record # 51113

Typical performance - not guaranteed values

Winding: 36WGR929-R001			Type: 3644M		Enclosure: TEFC		
Nameplate Data			460 V, 60 Hz: High Voltage Connection				
Rated Output (HP)		5	Full Load Torque		14.87 LB-FT		
Volts		230/460	Start Configuration		direct on line		
Full Load Amps		14.2/7.1	Breakdown Torque		66.64 LB-FT		
R.P.M.		1755	Pull-up Torque		40.43 LB-FT		
Hz	60	Phase	3	Locked-rotor Torque		44.86 LB-FT	
NEMA Design Code		A	KVA Code	L	Starting Current		61.49 A
Service Factor (S.F.)		1.15	No-load Current		4.27 A		
NEMA Nom. Eff.		89.5	Power Factor	74	Line-line Res. @ 25°C		1.83 Ω
Rating - Duty		40C	AMB-CONT		Temp. Rise @ Rated Load		65°C
S.F. Amps					Temp. Rise @ S.F. Load		77°C
					Locked-rotor Power Factor		40.3
					Rotor inertia		0.41 LB-FT ²

Load Characteristics 460 V, 60 Hz, 5 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	31	52	65	73	78	81	77
Efficiency	81.2	87.9	89.8	89.7	89.5	88.3	89.6
Speed	1787	1777	1768	1757	1745	1732	1749
Line amperes	4.51	5.16	6.02	7.13	8.39	9.83	7.82

ABB Motors and Mechanical Inc.

WINDING # 36WGR929

Typical performance - not guaranteed values.

5 HP 3 PH 60 HZ 1755 RPM 460 V 3644M

TORQUES (LB-FT) : PO=66.64 PU=40.43 LR=44.86 LRA=61.49





