

ABB BALDOR RELIANCE III

Customer information packet

VEM3314T

15HP, 3475RPM, 3PH, 60HZ, 215TC, 3734M, ODP, F1

Class - None

Division - Not Applicable

Specifications

Enclosure	ODP
Frame	215TC
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	15.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	3600 RPM @ 60 HZ
Voltage @ Frequency	460.0 V @ 60 HZ 230.0 V @ 60 HZ
Agency Approvals	CURUSEEV NEMA PREMIUM NEMA PREMIUM (OLD LOGO)
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	35.000 A @ 230.0 V 36.000 A @ 208.0 V 17.500 A @ 460.0 V
Design Code	B
Drip Cover	Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	90.2 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Face Code	Standard
Front Shaft Indicator	None

Part Detail

Revision	T
Type	AC
Mech. spec.	37K446
Base	
Status	PRD/A
Elec. spec.	37WGS867
Layout	37LYK446
Eff. date	06-11-2024
CD Diagram	CD0005
Poles	02
Leads	9#12
Proprietary	False
Created date	04-29-2015

Heater Indicator	No Heater
High Voltage Full Load Amps	17.5 a
Insulation Class	F
Inverter Code	Inverter Ready
KVA Code	G
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	9 @ 12 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3734M
Mounting Arrangement	F1
Number of Poles	2
Overall Length	18.91 IN
Power Factor	89
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	1.375 IN
Shaft Extension Location	Pulley End
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	3475 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

NP3553LUA									
CAT.NO.	VEM3314T								
SPEC.	37K446S867G1								
HP	15								
VOLTS	230/460								
AMPS	35/17.5								
RPM	3475								
FRAME	215TC		HZ	60			PH	3	
SF	1.15	CODE	G	DES	B	CLASS	F		
NEMA NOM. EFF	90.2	PF	89						
RATING	40C AMB-CONT								
CC	010A								
ENCL	ODP	SN							
DE	6307		ODE	6206					
VPWM INVERTER READY									
CT30-60(2:1) VT3-60(20:1)									
USABLE AT	50HZ 15HP 190/380V 41.6/20.8A							SF1.0	

AC Induction Motor Performance Data

Record # 53403

Typical performance - not guaranteed values

Winding: 37WGS867-R013			Type: 3734M		Enclosure: OPSB	
Nameplate Data			460 V, 60 Hz: High Voltage Connection			
Rated Output (HP)		15	Full Load Torque		22.6 LB-FT	
Volts		230/460	Start Configuration		direct on line	
Full Load Amps		35/17.5	Breakdown Torque		92 LB-FT	
R.P.M.		3500	Pull-up Torque		28.5 LB-FT	
Hz	60 Phase	3	Locked-rotor Torque		37.5 LB-FT	
NEMA Design Code		B KVA Code	Starting Current		109.3 A	
Service Factor (S.F.)		1.15	No-load Current		5.49 A	
NEMA Nom. Eff.		90.2 Power Factor	Line-line Res. @ 25°C		0.7163 Ω	
Rating - Duty		40C AMB-CONT	Temp. Rise @ Rated Load		46°C	
S.F. Amps			Temp. Rise @ S.F. Load		59°C	
			Locked-rotor Power Factor		33	
			Rotor inertia		0.31 LB-FT2	

Load Characteristics 460 V, 60 Hz, 15 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	58	78	86	89	89	88	89
Efficiency	90.3	92.5	92.2	90.9	89.2	87.1	89.9
Speed	3572	3545.3	3514.9	3479.7	3441.4	3398.7	3457
Line amperes	6.69	9.59	13.2	17.3	22	27.3	20.1

ABB Motors and Mechanical Inc.

WINDING # 37WGS867

Typical performance - not guaranteed values.

15 HP 3 PH 60 HZ 3500 RPM 460 V 3734M

TORQUES (LB-FT): PO=92 PU=28.5 LR=37.5 LRA=109.3





