

ABB BALDOR RELIANCE III

Customer information packet

VEM3614T

2HP, 1170RPM, 3PH, 60HZ, 184TC, 3646M, TEFC, F1

Class - None

Division - Not Applicable

Specifications

Enclosure	TEFC
Frame	184TC
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	2.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1200 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	6.600 A @ 230.0 V 6.800 A @ 208.0 V 3.300 A @ 460.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	88.5 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Face Code	Standard
Front Shaft Indicator	None

Part Detail

Revision	M
Type	AC
Mech. spec.	36A003
Base	
Status	PRD/A
Elec. spec.	36WGR900
Layout	36LYA003
Eff. date	05-21-2025
CD Diagram	CD0005
Poles	06
Leads	9#16
Proprietary	False
Created date	04-22-2015

Heater Indicator	No Heater
High Voltage Full Load Amps	3.3 a
Insulation Class	F
Inverter Code	Inverter Ready
IP Rating	NONE
KVA Code	L
Lifting Lugs	No Lifting Lugs
Locked Bearing Indicator	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	3646M
Mounting Arrangement	F1
Number of Poles	6
Overall Length	18.04 IN
Power Factor	64
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	1.125 IN
Shaft Extension Location	Pulley End
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	1170 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

NP3441LUA									
CAT.NO.	VEM3614T								
SPEC	36A003R900G1								
HP	2								
VOLTS	230/460								
AMPS	6.6/3.3								
RPM	1170								
FRAME	184TC		HZ	60			PH	3	
SF	1.15		CODE	L	DES	B	CLASS	F	
NEMA NOM. EFF	88.5		PF	64					
RATING	40C AMB-CONT								
CC	010A								
ENCL	TEFC		SER						
DE	6206		ODE	6205					
VPWM INVERTER READY									
CT6-60H(10:1)VT3-60H(20:1									
	50Hz 2HP 190/380V 7.6/3.8A							SF1.0	

AC Induction Motor Performance Data

Record # 53353

Typical performance - not guaranteed values

Winding: 36WGR900-R002			Type: 3646M		Enclosure: TEFC	
Nameplate Data			460 V, 60 Hz: High Voltage Connection			
Rated Output (HP)		2	Full Load Torque		8.92 LB-FT	
Volts		230/460	Start Configuration		direct on line	
Full Load Amps		6.6/3.3	Breakdown Torque		36.4 LB-FT	
R.P.M.		1170	Pull-up Torque		19.5 LB-FT	
Hz	60	Phase	3	Locked-rotor Torque		25.4 LB-FT
NEMA Design Code		B	KVA Code	L	Starting Current	
Service Factor (S.F.)		1.15	No-load Current		2.19 A	
NEMA Nom. Eff.		88.5	Power Factor	64	Line-line Res. @ 25°C	
Rating - Duty		40C AMB-CONT		Temp. Rise @ Rated Load		34°C
S.F. Amps				Temp. Rise @ S.F. Load		40°C
				Locked-rotor Power Factor		29.2
				Rotor inertia		0.432 LB-FT ²

Load Characteristics 460 V, 60 Hz, 2 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	26	43	55	64	69	72	67
Efficiency	77.9	86.1	88.2	88.8	88.5	87.5	88.6
Speed	1196	1190	1184	1177	1170	1162	1173
Line amperes	2.28	2.53	2.89	3.32	3.83	4.42	3.63

ABB Motors and Mechanical Inc.

WINDING # 36WGR900

Typical performance - not guaranteed values.

2 HP 3 PH 60 HZ 1170 RPM 460 V 3646M

TORQUES (LB-FT): PO=36.4 PU=19.5 LR=25.4 LRA=25



