

ABB BALDOR RELIANCE III

Customer information packet

VEM3615T

5HP, 1755RPM, 3PH, 60HZ, 184TC, 3642M, 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	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	CURUSEEV NEMA PREMIUM
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	13.400 A @ 230.0 V 14.000 A @ 208.0 V 6.700 A @ 460.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	89.5 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	6.7 a

Part Detail

Revision	F
Type	AC
Mech. spec.	36A003
Base	
Status	PRD/A
Elec. spec.	36WGQ032
Layout	36LYA003
Eff. date	05-21-2025
CD Diagram	CD0005
Poles	04
Leads	9#16
Proprietary	False
Created date	12-03-2020

Insulation Class	F
Inverter Code	Inverter Ready
IP Rating	NONE
KVA Code	J
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Motor Lead Quantity/Wire Size	9 @ 16 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3642M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	18.04 IN
Power Factor	78
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 Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No 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

NP3441LUA									
CAT.NO.	VEM3615T								
SPEC	36A003Q032G2								
HP	5								
VOLTS	230/460								
AMPS	13.4/6.7								
RPM	1755								
FRAME	184TC		HZ	60			PH	3	
SF	1.15		CODE	J	DES	B	CLASS	F	
NEMA NOM. EFF	89.5		PF	78					
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 5HP 190/380V 15.6/7.8A									SF1.0

AC Induction Motor Performance Data

Record # 89917

Typical performance - not guaranteed values

Winding: 36WGQ032-R001			Type: 3642M		Enclosure: TEFC	
Nameplate Data			460 V, 60 Hz: High Voltage Connection			
Rated Output (HP)		5	Full Load Torque		15 LB-FT	
Volts		230/460	Start Configuration		direct on line	
Full Load Amps		13.4/6.7	Breakdown Torque		53.1 LB-FT	
R.P.M.		1755	Pull-up Torque		23.4 LB-FT	
Hz	60 Phase	3	Locked-rotor Torque		34.7 LB-FT	
NEMA Design Code		B KVA Code	Starting Current		49.8 A	
Service Factor (S.F.)		1.15	No-load Current		3.31 A	
NEMA Nom. Eff.		89.5 Power Factor	Line-line Res. @ 25°C		2.4 Ω	
Rating - Duty		40C AMB-CONT	Temp. Rise @ Rated Load		71°C	
S.F. Amps			Temp. Rise @ S.F. Load		86°C	
			Locked-rotor Power Factor		40.6635	
			Rotor inertia		0.391 lb-ft²	

Load Characteristics 460 V, 60 Hz, 5 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	38	60	72	79	82	84	81
Efficiency	83.8	88.9	89.8	89.5	88.4	86.8	88.8
Speed	1789	1778	1766	1753	1738	1722	1744
Line amperes	3.64	4.39	5.45	6.66	8.08	9.67	7.51

ABB Motors and Mechanical Inc.

WINDING # 36WGQ032

Typical performance - not guaranteed values.

5 HP 3 PH 60 HZ 1755 RPM 460 V 3642M

TORQUES (LB-FT) : PO=53.1 PU=23.4 LR=34.7 LRA=49.8





