

ABB BALDOR RELIANCE III

Customer information packet

VZDNM3615T

5HP, 1755RPM, 3PH, 60HZ, 184TC, 3648M, TENV, F1

Class - None

Division - Not Applicable

Specifications

Enclosure	TENV
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	CSA EEV NEMA PREMIUM UR
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	13.200 A @ 230.0 V 6.600 A @ 460.0 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	ENCODER
Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	6.6 a

Part Detail

Revision	A
Type	AC
Mech. spec.	36T622
Base	
Status	PRD/A
Elec. spec.	36WGZ629
Layout	36LYT622
Eff. date	08-05-2026
CD Diagram	CD0005
Poles	04
Leads	9#16
Proprietary	False
Created date	05-13-2025

Insulation Class	H
Inverter Code	Inverter Duty
KVA Code	K
Lifting Lugs	No Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Max Speed	2700 rpm
Motor Lead Quantity/Wire Size	9 @ 16 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3648M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	19.71 IN
Power Factor	79
Product Family	General Purpose
Pulley End Bearing Type	Sealed Bearing
Pulley Face Code	C-Face
Pulley Shaft Indicator	Standard
Rodent Screen	None
Service Factor	1.00
Shaft Diameter	1.125 IN
Shaft Ground Indicator	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	Normally Closed Thermostat
Vibration Sensor Indicator	No Vibration Sensor
Winding Thermal 1	None
Winding Thermal 2	None

Nameplate

NP3943L									
CAT.NO.	VZDNM3615T								
SPEC.	36T622Z629Z1								
FRAME	184TC			H.P.	5 TE				
VOLTS	230/460 ENCL TENV								
MAG. CUR.	6.6/3.3				F.L. AMPS			13.2/6.6	
R.P.M.	1755		R.P.M. MAX			2700			
HZ.	60		PH.	3	CLASS		H		
SER.F.	1.00			SL HZ		1.5			
NEMA NOM. EFF.	89.5			WK2		0.447			
RATING	40C AMB-CONT								
DE	6206	ODE		6205					
CC	010A	SN							
	1000:1 CT 1.5:1 CHP								

AC Induction Motor Performance Data

Record # 111582

Typical performance - not guaranteed values

Winding: 36WGZ629-R005			Type: 3648M		Enclosure: TENV			
Nameplate Data				460 V, 60 Hz: High Voltage Connection				
Rated Output (HP)		5		Full Load Torque		15.16 LB-FT		
Volts		230/460		Start Configuration		direct on line		
Full Load Amps		13.2/6.6		Breakdown Torque		56.6 LB-FT		
R.P.M.		1755		Pull-up Torque		31.6 LB-FT		
Hz	60	Phase	3	Locked-rotor Torque		35.4 LB-FT		
NEMA Design Code		A	KVA Code	K	Starting Current		53.4 A	
Service Factor (S.F.)		1		No-load Current		3.29 A		
NEMA Nom. Eff.		89.5	Power Factor	79	Line-line Res. @ 25°C		2.0924 Ω	
Rating - Duty		40C		AMB-CONT		Temp. Rise @ Rated Load		119°C
				Locked-rotor Power Factor		38.4		
				Rotor inertia		0.447 lb-ft²		

Load Characteristics 460 V, 60 Hz, 5 HP

% of Rated Load	25	50	75	100	125	150
Power Factor	39	60	73	79	83	84
Efficiency	86.2	90.2	90.6	89.9	88.6	86.8
Speed	1788.1	1776.4	1763.7	1749.9	1735	1718.1
Line amperes	3.62	4.37	5.41	6.66	8.06	9.63

ABB Motors and Mechanical Inc.

WINDING # 36WGZ629

Typical performance - not guaranteed values.

5 HP 3 PH 60 HZ 1755 RPM 460 V 3648M

TORQUES (LB-FT) : PO=56.6 PU=31.6 LR=35.4 LRA=53.4





