

ABB BALDOR RELIANCE III

Customer information packet

VZDNM3607T

1.5HP, 1170RPM, 3PH, 60HZ, 182TC, 3642M, TENV

Class - None

Division - Not Applicable

Specifications

Enclosure	TENV
Frame	182TC
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	1.500 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1200 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	2.500 A @ 460.0 V 5.000 A @ 230.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	87.5 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	ENCODER
Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	2.5 a

Part Detail

Revision	A
Type	AC
Mech. spec.	36T622
Base	
Status	PRD/A
Elec. spec.	36WGZ642
Layout	36LYT622
Eff. date	08-05-2026
CD Diagram	CD0005
Poles	06
Leads	9#16
Proprietary	False
Created date	05-13-2025

Insulation Class	H
Inverter Code	Inverter Duty
KVA Code	L
Lifting Lugs	No Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Max Speed	1800 rpm
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	6
Overall Length	19.28 IN
Power Factor	65
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	1170 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.	VZDNM3607T			
SPEC.	36T622Z642Z1			
FRAME	182TC	H.P.	1.5 TE	
VOLTS	230/460 ENCL TENV			
MAG. CUR.	3.2/1.6	F.L. AMPS		5/2.5
R.P.M.	1170	R.P.M. MAX		1800
HZ.	60	PH.	3	CLASS H
SER.F.	1.00	SL HZ	1.5	
NEMA NOM. EFF.	87.5	WK2	0.395	
RATING	40C AMB-CONT			
DE	6206	ODE	6205	
CC	010A	SN		
	1000:1 CT 1.5:1 CHP			
	1.15 SF ON SINEWAVE			

AC Induction Motor Performance Data

Record # 108020

Typical performance - not guaranteed values

Winding: 36WGZ642-R001			Type: 3642M		Enclosure: TENV	
Nameplate Data				460 V, 60 Hz: High Voltage Connection		
Rated Output (HP)		1.5		Full Load Torque		6.84 LB-FT
Volts		230/460		Start Configuration		direct on line
Full Load Amps		5/2.5		Breakdown Torque		26.6 LB-FT
R.P.M.		1170		Pull-up Torque		13.7 LB-FT
Hz	60	Phase	3	Locked-rotor Torque		16.8 LB-FT
NEMA Design Code		B	KVA Code	Starting Current		17.5 A
Service Factor (S.F.)		1.15		No-load Current		1.6 A
NEMA Nom. Eff.		87.5	Power Factor	Line-line Res. @ 25°C		5.99 Ω
Rating - Duty		40C AMB-CONT		Temp. Rise @ Rated Load		32°C
S.F. Amps				Temp. Rise @ S.F. Load		38°C
				Locked-rotor Power Factor		29
				Rotor inertia		0.395 lb-ft²

Load Characteristics 460 V, 60 Hz, 1.5 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	28	45	57	65	70	73	68
Efficiency	78.4	85.7	87.6	87.9	87.2	86.2	87.5
Speed	1193	1186	1179	1172	1163	1154	1167
Line amperes	1.69	1.88	2.16	2.5	2.92	3.37	2.75

ABB Motors and Mechanical Inc.

WINDING # 36WGZ642

Typical performance - not guaranteed values.

1.5 HP 3 PH 60 HZ 1170 RPM 460 V 3642M

TORQUES (LB-FT): PO=26.6 PU=13.7 LR=16.8 LRA=17.5





