

ABB BALDOR RELIANCE III

Customer information packet

VZDNM3708T

5HP, 1165RPM, 3PH, 60HZ, 215TC, 3756M, TENV, F1

Class - None

Division - Not Applicable

Specifications

Enclosure	TENV
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	5.000 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	14.400 A @ 230.0 V 7.200 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	7.2 a

Part Detail

Revision	A
Type	AC
Mech. spec.	37T707
Base	
Status	PRD/A
Elec. spec.	37WGZ681
Layout	37LYT707
Eff. date	08-05-2026
CD Diagram	CD0005
Poles	06
Leads	9#14
Proprietary	False
Created date	05-13-2025

Insulation Class	H
Inverter Code	Inverter Duty
KVA Code	M
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Max Speed	1800 rpm
Motor Lead Quantity/Wire Size	9 @ 14 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3756M
Mounting Arrangement	F1
Number of Poles	6
Overall Length	22.47 IN
Power Factor	62
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	1.375 IN
Shaft Ground Indicator	Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	1165 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.	VZDNM3708T			
SPEC.	37T707Z681Z1			
FRAME	215TC	H.P.	5 TE	
VOLTS	230/460 ENCL TENV			
MAG. CUR.	11.2/5.6	F.L. AMPS	14.4/7.2	
R.P.M.	1165	R.P.M. MAX	1800	
HZ.	60	PH.	3	CLASS H
SER.F.	1.00	SL HZ	1.75	
NEMA NOM. EFF.	89.5	WK2	1.39	
RATING	40C AMB-CONT			
DE	6307	ODE	6206	
CC	010A	SN		
	1000:1 CT 1.5:1 CHP			

AC Induction Motor Performance Data

Record # 108098

Typical performance - not guaranteed values

Winding: 37WGZ681-R001			Type: 3756M		Enclosure: TENV		
Nameplate Data			460 V, 60 Hz: High Voltage Connection				
Rated Output (HP)		5	Full Load Torque		22.42 LB-FT		
Volts		230/460	Start Configuration		direct on line		
Full Load Amps		14.4/7.2	Breakdown Torque		93.2 LB-FT		
R.P.M.		1165	Pull-up Torque		56.9 LB-FT		
Hz	60	Phase	3	Locked-rotor Torque		74.1 LB-FT	
NEMA Design Code		A	KVA Code	M	Starting Current		68.5 A
Service Factor (S.F.)		1	No-load Current		5.61 A		
NEMA Nom. Eff.		89.5	Power Factor	62	Line-line Res. @ 25°C		1.21 Ω
Rating - Duty		40C	AMB-CONT		Temp. Rise @ Rated Load		56°C
					Locked-rotor Power Factor		22.1
					Rotor inertia		1.39 LB-FT2

Load Characteristics 460 V, 60 Hz, 5 HP

% of Rated Load	25	50	75	100	125	150
Power Factor	25	41	53	62	67	71
Efficiency	81.5	88.1	89.6	89.6	89	87.9
Speed	1193	1186	1179	1170	1162	1152
Line amperes	5.84	6.48	7.38	8.48	9.78	11.19

ABB Motors and Mechanical Inc.

WINDING # 37WGZ681

Typical performance - not guaranteed values.

5 HP 3 PH 60 HZ 1165 RPM 460 V 3756M

TORQUES (LB-FT) : PO=93.2 PU=56.9 LR=74.1 LRA=68.5





