

ABB BALDOR RELIANCE III

Customer information packet

ZDWNM3707T

5HP, 1770RPM, 3PH, 60HZ, 213TC, 3734M, TENV, F1

Class - None

Division - Not Applicable

Specifications

Enclosure	TENV
Frame	213TC
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	UR CSA
Ambient Temperature	40 °C
Auxiliary Box	NO AUXILLARY BOX
Auxiliary Box Lead Termination	None
Base Indicator	Rigid
Bearing Grease Type	Polyrex EM (-20F +300F)
Blower	None
Current @ Voltage	12.400 A @ 230.0 V 6.200 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	ENCODER
Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	6.2 a
Insulation Class	H

Part Detail

Revision	B
Type	AC
Mech. spec.	37H311
Base	
Status	PRD/A
Elec. spec.	37WGR177
Layout	37LYH311
Eff. date	12-03-2025
CD Diagram	CD0005
Poles	04
Leads	9#14
Proprietary	False
Created date	11-19-2020

Inverter Code	Inverter Duty
KVA Code	J
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Max Speed	4000 rpm
Motor Lead Quantity/Wire Size	9 @ 14 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3734M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	19.84 IN
Power Factor	82
Product Family	Wash Down
Pulley End Bearing Type	Sealed Bearing
Pulley Face Code	C-Face
Pulley Shaft Indicator	Standard
Rodent Screen	None
RoHS Status	ROHS COMPLIANT
Service Factor	1.00
Shaft Diameter	1.375 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	Shaft Slinger
Speed	1770 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

NP1609L									
CAT NO	ZDWNM3707T								
SPEC.	37H311R177Z2								
FRAME	213TC			HP	5 TE				
VOLTS	230/460								
MAG CUR	5.8/2.9			FLA		12.4/6.2			
RPM	1770		RPM MAX			4000			
HZ	60		PH	3	CLASS			H	
SER.F.	1.00		DES	B	SL HZ			1.2	
NEMA-NOM-EFF	89.5		WK2	0.836					
BLWR V	PH		HZ		A				
RATING	40C AMB-CONT								
DE BRG	6307		ODE BRG			6206			
CC	010A		SER.NO						

AC Induction Motor Performance Data

Record # 85505

Typical performance - not guaranteed values

Winding: 37WGR177-R007				Type: 3734M		Enclosure: TENV	
Nameplate Data				460 V, 60 Hz: High Voltage Connection			
Rated Output (HP)		5		Full Load Torque		14.76 LB-FT	
Volts		230/460		Start Configuration		direct on line	
Full Load Amps		12.4/6.2		Breakdown Torque		47.48 LB-FT	
R.P.M.		1770		Pull-up Torque		22.38 LB-FT	
Hz		60		Phase		3	
NEMA Design Code		B		KVA Code		J	
Service Factor (S.F.)		1		No-load Current		2.83 A	
NEMA Nom. Eff.		89.5		Power Factor		82	
Rating - Duty		40C		AMB-CONT			
				Line-line Res. @ 25°C		2.12 Ω	
				Temp. Rise @ Rated Load		56°C	
				Locked-rotor Power Factor		37.5	
				Rotor inertia		0.836 lb-ft²	

Load Characteristics 460 V, 60 Hz, 5 HP

% of Rated Load	25	50	75	100	125	150
Power Factor	41	64	77	83	85	85
Efficiency	86.4	90.8	91.4	91.3	90.7	89.3
Speed	1793	1787	1779	1772	1762	1753
Line amperes	3.28	3.99	5	6.18	7.6	9.19

ABB Motors and Mechanical Inc.

WINDING # 37WGR177

Typical performance - not guaranteed values.

5 HP 3 PH 60 HZ 1770 RPM 460 V 3734M

TORQUES (LB-FT) : PO=47.48 PU=22.38 LR=28.3 LRA=49.16





