

ABB BALDOR RELIANCE III

Customer information packet

ZDWNM3554T

1.5HP, 1770RPM, 3PH, 60HZ, 145TC, 3530M, TENV

Class - None

Division - Not Applicable

Specifications

Enclosure	TENV
Frame	145TC
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	1800 RPM @ 60 HZ
Voltage @ Frequency	230.0 V @ 60 HZ 460.0 V @ 60 HZ
Agency Approvals	CSA UR
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	4.600 A @ 230.0 V 2.300 A @ 460.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	86.5 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	ENCODER
Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	2.3 a
Insulation Class	H

Part Detail

Revision	C
Type	AC
Mech. spec.	35RR179
Base	
Status	PRD/A
Elec. spec.	35WGG178
Layout	35LYRR179
Eff. date	06-22-2023
CD Diagram	CD0005
Poles	04
Leads	9#18
Proprietary	False
Created date	01-10-2022

Inverter Code	Not Inverter
KVA Code	M
Lifting Lugs	No Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Max Speed	4500 rpm
Motor Lead Quantity/Wire Size	9 @ 18 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3530M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	14.90 IN
Power Factor	72
Product Family	Wash Down
Pulley End Bearing Type	Sealed Bearing
Pulley Face Code	C-Face
Pulley Shaft Indicator	Standard
Rodent Screen	None
Service Factor	1.00
Shaft Diameter	0.875 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	ZDWNM3554T								
SPEC.	35RR179G178G1								
FRAME	145TC			HP	1.5 TE				
VOLTS	230/460								
MAG CUR	2.6/1.3			FLA	4.6/2.3				
RPM	1770		RPM MAX			4500			
HZ	60	PH	3	CLASS			H		
SER.F.	1.00	DES	B	SL HZ			1		
NEMA-NOM-EFF	86.5	WK2		0.217					
BLWR V		PH		HZ		A			
RATING	40C AMB-CONT								
DE BRG	6205	ODE BRG			6203				
CC	010A	SER.NO							

AC Induction Motor Performance Data

Record # 87056

Typical performance - not guaranteed values

Winding: 35WGG178-R003			Type: 3530M		Enclosure: TENV		
Nameplate Data				460 V, 60 Hz: High Voltage Connection			
Rated Output (HP)		1.5		Full Load Torque		4.48 LB-FT	
Volts		230/460		Start Configuration		direct on line	
Full Load Amps		4.6/2.3		Breakdown Torque		21.02 LB-FT	
R.P.M.		1770		Pull-up Torque		12.29 LB-FT	
Hz	60	Phase	3	Locked-rotor Torque		14.9 LB-FT	
NEMA Design Code		B	KVA Code	M	Starting Current		21.32 A
Service Factor (S.F.)		1		No-load Current		1.29 A	
NEMA Nom. Eff.		86.5	Power Factor	72	Line-line Res. @ 25°C		10.1 Ω
Rating - Duty		40C AMB-CONT		Temp. Rise @ Rated Load		80°C	
				Locked-rotor Power Factor		55.5	
				Rotor inertia		0.217 lb-ft²	

Load Characteristics 460 V, 60 Hz, 1.5 HP

% of Rated Load	25	50	75	100	125	150
Power Factor	33	54	68	76	81	84
Efficiency	79.1	86.3	88.1	88.3	87.6	86.6
Speed	1790	1783	1776	1769	1761	1752
Line amperes	1.35	1.52	1.78	2.11	2.47	2.89

ABB Motors and Mechanical Inc.

WINDING # 35WGG178

Typical performance - not guaranteed values.

1.5 HP 3 PH 60 HZ 1770 RPM 460 V 3530M

TORQUES (LB-FT): PO=21.02 PU=12.29 LR=14.9 LRA=21.32





