

ABB BALDOR RELIANCE III

Customer information packet

SPJMM3154T

1.5HP, 1770RPM, 3PH, 60HZ, 145JM, 3528M, OPSB

Class - None

Division - Not Applicable

Specifications

Enclosure	OPSB
Frame	145JM
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	NEMA PREMIUM WEEE
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	4.500 A @ 230.0 V 2.250 A @ 460.0 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	NO FEEDBACK
Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	2.3 a
Insulation Class	F

Part Detail

Revision	A
Type	AC
Mech. spec.	35EE453
Base	
Status	PRD/A
Elec. spec.	35WGZ964
Layout	35LYEE453
Eff. date	11-19-2025
CD Diagram	CD0005
Poles	04
Leads	9#18
Proprietary	False
Created date	08-07-2025

Inverter Code	Inverter Duty
KVA Code	M
Lifting Lugs	No Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Max Speed	2700 rpm
Motor Lead Quantity/Wire Size	9 @ 18 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3528M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	14.25 IN
Power Factor	72
Product Family	General Purpose
Pulley End Bearing Type	Ball
Pulley Face Code	C-Face
Pulley Shaft Indicator	Tapped & Key
Rodent Screen	Included
Service Factor	1.25
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	None
Vibration Sensor Indicator	No Vibration Sensor
Winding Thermal 1	None
Winding Thermal 2	None

Nameplate

NP4423A01A01L													
CAT #	SPJMM3154T					WGT	45	LBS					
SPEC	35EE453Z964					ENCL	OPSB						
SER #						CC	010A	IP	23				
HP	1.5	MAG CUR				1.45							
VOLTS	230/460					NEMA NOM. EFF					87.5		
AMPS	4.5/2.25						PF	72					
RATING	40C AMB-CONT												
RPM	1770					MAX RPM			2700				
FRAME	145JM	HZ	60		CODE	M	CLASS		F				
SER.F.	1.25	SF AMP	5.62/2.81				PH	3	DES	B			
DE	6206		ODE		6203								
LUBRICATION	POLYREX EM												
ID LOGO	INVERTER TYPE				VPWM		CHP	60	TO	90	1.5:1		
ID LOGO	WK2	0.202	CT	6	TO	60	10:1						
ID LOGO	SL HZ	1	VT	3	TO	60	20:1						
							QR						
YR													

AC Induction Motor Performance Data

Record # 96330

Preliminary Data Sheet

Winding: 35WGZ964-R001			Type: 3528M		Enclosure: ODP		
Nameplate Data				460 V, 60 Hz: High Voltage Connection			
Rated Output (HP)		1.5		Full Load Torque		4.47 LB-FT	
Volts		230/460		Start Configuration		direct on line	
Full Load Amps		4.5/2.25		Breakdown Torque		20.2 LB-FT	
R.P.M.		1770		Pull-up Torque		10.1 LB-FT	
Hz	60	Phase	3	Locked-rotor Torque		13.3 LB-FT	
NEMA Design Code		B	KVA Code	M	Starting Current		20.7 A
Service Factor (S.F.)		1.15		No-load Current		1.45 A	
NEMA Nom. Eff.		87.5	Power Factor	72	Line-line Res. @ 25°C		10.2 Ω
Rating - Duty		40C AMB-CONT		Temp. Rise @ Rated Load		44°C	
S.F. Amps		4.9/2.45		Temp. Rise @ S.F. Load		50°C	
				Locked-rotor Power Factor		55.3	
				Rotor inertia		0.202 lb-ft²	

Load Characteristics 460 V, 60 Hz, 1.5 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	31	50	63	72	78	82	76
Efficiency	76.4	84.6	87	87.5	86.9	86	87.1
Speed	1793	1786	1778	1771	1763	1754	1766
Line amperes	1.51	1.67	1.92	2.23	2.6	3	2.45

ABB Motors and Mechanical Inc.

WINDING # 35WGZ964

Typical performance - not guaranteed values.

1.5 HP 3 PH 60 HZ 1770 RPM 460 V 3528M

TORQUES (LB-FT): PO=20.2 PU=10.1 LR=13.3 LRA=20.7





