

ABB BALDOR RELIANCE III

Customer information packet

SPJMM3558T-G

2HP, 1765RPM, 3PH, 60HZ, 145JM, 3542M, TEFC, F1

Class - None

Division - Not Applicable

Specifications

Enclosure	TEFC
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	2.000 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	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	2.800 A @ 460.0 V 5.600 A @ 230.0 V 5.800 A @ 208.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	88.5 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	2.8 a

Part Detail

Revision	A
Type	AC
Mech. spec.	35EE455
Base	
Status	PRD/A
Elec. spec.	35WGZ965
Layout	35LYEE455
Eff. date	11-19-2025
CD Diagram	CD0005
Poles	04
Leads	9#18
Proprietary	False
Created date	07-30-2025

Insulation Class	H
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	3542M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	17.66 IN
Power Factor	75
Product Family	General Purpose
Pulley End Bearing Type	Ball
Pulley Face Code	C-Face
Pulley Shaft Indicator	Tapped & Key
Rodent Screen	None
RoHS Status	ROHS COMPLIANT
Service Factor	1.25
Shaft Diameter	1.000 IN
Shaft Ground Indicator	Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	Shaft Slinger
Speed	1765 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 #	SPJMM3558T-G					WGT	62	LBS							
SPEC	35EE455Z965					ENCL	TEFC								
SER #						CC	010A	IP	54						
HP	2	MAG CUR				3.6/1.8									
VOLTS	230/460					NEMA NOM. EFF				88.5					
AMPS	5.6/2.8					PF	75								
RATING	40C AMB-CONT														
RPM	1765					MAX RPM		2700							
FRAME	145JM	HZ	60		CODE	M	CLASS	H							
SER.F.	1.25	SF AMP	6.8/3.4				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	0.303	CT	6	TO	60	10:1								
ID LOGO	SL HZ	1.3	VT	3	TO	60	20:1								
							QR								
YR															

AC Induction Motor Performance Data

Record # 112314

Preliminary Data Sheet

Winding: 35WGZ965-R009			Type: 3542M		Enclosure: TEFC		
Nameplate Data			460 V, 60 Hz: High Voltage Connection				
Rated Output (HP)		2	Full Load Torque		5.94 LB-FT		
Volts		230/460	Start Configuration		direct on line		
Full Load Amps		5.6/2.8	Breakdown Torque		30.3 LB-FT		
R.P.M.		1765	Pull-up Torque		17 LB-FT		
Hz	60	Phase	3	Locked-rotor Torque		21.5 LB-FT	
NEMA Design Code		B	KVA Code	M	Starting Current		30.5 A
Service Factor (S.F.)		1.25	No-load Current		1.81 A		
NEMA Nom. Eff.		88.5	Power Factor	75	Line-line Res. @ 25°C		7.04 Ω
Rating - Duty		40C	AMB-CONT		Temp. Rise @ Rated Load		46°C
S.F. Amps		6.8/3.4	Temp. Rise @ S.F. Load		60°C		
			Locked-rotor Power Factor		53.4		
			Rotor inertia		0.303 lb-ft²		

Load Characteristics 460 V, 60 Hz, 2 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	32	51	64	73	78	82	78
Efficiency	78.3	86.1	88.2	88.6	88.2	87.3	88.2
Speed	1793	1787	1781	1774	1767	1760	1767
Line amperes	1.9	2.14	2.49	2.91	3.39	3.91	3.39

ABB Motors and Mechanical Inc.

WINDING # 35WGZ965

Typical performance - not guaranteed values.

2 HP 3 PH 60 HZ 1765 RPM 460 V 3542M

TORQUES (LB-FT): PO=30.3 PU=17 LR=21.5 LRA=30.5





