

ABB BALDOR RELIANCE III

Customer information packet

SPM3158T

3HP, 3465RPM, 3PH, 60HZ, 145T, 3540M, OPSB, F1

Class - None

Division - Not Applicable

Specifications

Enclosure	OPSB
Frame	145T
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	3.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	3600 RPM @ 60 HZ
Voltage @ Frequency	230.0 V @ 60 HZ 460.0 V @ 60 HZ
Agency Approvals	NEMA PREMIUM 4 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	3.450 A @ 460.0 V 6.900 A @ 230.0 V 7.900 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	3.5 a

Part Detail

Revision	E
Type	AC
Mech. spec.	35E6247
Base	
Status	PRD/A
Elec. spec.	35WGZ969
Layout	35LYE6247
Eff. date	11-19-2025
CD Diagram	CD0005
Poles	02
Leads	9#18
Proprietary	False
Created date	09-08-2023

Insulation Class	F
Inverter Code	Inverter Duty
KVA Code	K
Lifting Lugs	No Lifting Lugs
Locked Bearing Indicator	No Locked Bearing
Max Speed	5400 rpm
Motor Lead Quantity/Wire Size	9 @ 18 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3540M
Mounting Arrangement	F1
Number of Poles	2
Overall Length	14.38 IN
Power Factor	92
Product Family	General Purpose
Pulley End Bearing Type	Ball
Pulley Face Code	Standard
Pulley Shaft Indicator	Standard
Rodent Screen	None
RoHS Status	ROHS COMPLIANT
Service Factor	1.25
Shaft Diameter	0.875 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	3465 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

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CAT #	SPM3158T					WGT	64	LBS							
SPEC	35E6247Z969					ENCL	OPSB								
SER #						CC	010A	IP	23						
HP	3	MAG CUR				2.6/1.3									
VOLTS	230/460					NEMA NOM. EFF				88.5					
AMPS	6.9/3.45					PF	92								
RATING	40C AMB-CONT														
RPM	3465					MAX RPM		5400							
FRAME	145T	HZ	60	CODE		K	CLASS		F						
SER.F.	1.25	SF AMP	9/4.5		PH		3	DES	B						
DE	6205		ODE		6203										
LUBRICATION	POLYREX EM														
ID LOGO	INVERTER TYPE			VPWM		CHP	60	TO		90	1.5:1				
ID LOGO	WK2	0.11	CT	6	TO		60	10:1							
ID LOGO	SL HZ	2.25	VT	3	TO		60	20:1							
							QR								
YR															

AC Induction Motor Performance Data

Record # 109557

Preliminary Data Sheet

Winding: 35WGZ969-R003			Type: 3540M		Enclosure: ODP		
Nameplate Data			460 V, 60 Hz: High Voltage Connection				
Rated Output (HP)		3	Full Load Torque		4.53 LB-FT		
Volts		230/460	Start Configuration		direct on line		
Full Load Amps		6.9/3.45	Breakdown Torque		21.4 LB-FT		
R.P.M.		3465	Pull-up Torque		12.2 LB-FT		
Hz	60	Phase	3	Locked-rotor Torque		19.3 LB-FT	
NEMA Design Code		B	KVA Code	K	Starting Current		34.6 A
Service Factor (S.F.)		1.25	No-load Current		1.29 A		
NEMA Nom. Eff.		88.5	Power Factor	92	Line-line Res. @ 25°C		3.62 Ω
Rating - Duty		40C	AMB-CONT		Temp. Rise @ Rated Load		32°C
S.F. Amps		9/4.5	Temp. Rise @ S.F. Load		42°C		
			Locked-rotor Power Factor		42.1		
			Rotor inertia		0.111 lb-ft²		

Load Characteristics 460 V, 60 Hz, 3 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	59	79	86	90	92	92	92
Efficiency	74.3	82.9	85.4	86	85.6	84.8	85.6
Speed	3568	3541	3513	3483	3450	3414	3450
Line amperes	1.6	2.16	2.86	3.63	4.48	5.39	4.48

ABB Motors and Mechanical Inc.

WINDING # 35WGZ969

Typical performance - not guaranteed values.

3 HP 3 PH 60 HZ 3465 RPM 460 V 3540M

TORQUES (LB-FT): PO=21.4 PU=12.2 LR=19.3 LRA=34.6





