

ABB BALDOR RELIANCE III

Customer information packet

SPM30010

.5HP, 1725RPM, 3PH, 60HZ, 48, 3420M, ODP, F1, N

Class - None

Division - Not Applicable

Specifications

Enclosure	ODP
Frame	48
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	.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	WEEE C UR US
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	.750 A @ 460.0 V 1.500 A @ 230.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	81.5 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	0.8 a
Insulation Class	F

Part Detail

Revision	E
Type	AC
Mech. spec.	34B051
Base	
Status	PRD/A
Elec. spec.	34WGR771
Layout	34LYB051
Eff. date	09-25-2025
CD Diagram	CD0005
Poles	04
Leads	9#18
Proprietary	False
Created date	09-12-2023

Inverter Code	Not Inverter
KVA Code	K
Lifting Lugs	No Lifting Lugs
Locked Bearing Indicator	No Locked Bearing
Motor Lead Quantity/Wire Size	9 @ 18 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3420M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	10.25 IN
Power Factor	76
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	0.500 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	1725 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

NP4558A02LL

CAT #	SPM30010			WGT	27	LBS	
SER #				ENCL	ODP		
SPEC	34B051R771			CC		IP	22
HP	.5			NEMA NOM. EFF			81.5
VOLTS	230/460			PF	76		
AMPS	1.5/.75						
RATING	40C AMB-CONT						
RPM	1725			PH	3	DES	B
FRAME	48	HZ	60	CODE	K	CLASS	F
SER.F.	1.25	SF AMP	1.76/.88				
DE	6203		ODE	6203			
GREASE	POLYREX EM						
					QR		
YR							

AC Induction Motor Performance Data

Record # 100721

Preliminary Data Sheet

Winding: 34WGR771-R003			Type: 3420M		Enclosure: ODP		
Nameplate Data			460 V, 60 Hz: High Voltage Connection				
Rated Output (HP)		.5	Full Load Torque		1.51 LB-FT		
Volts		230/460	Start Configuration		direct on line		
Full Load Amps		1.5/.75	Breakdown Torque		5.3 LB-FT		
R.P.M.		1725	Pull-up Torque		3.5 LB-FT		
Hz	60	Phase	3	Locked-rotor Torque		4.1 LB-FT	
NEMA Design Code		B	KVA Code	K		Starting Current	5.4 A
Service Factor (S.F.)		1.25	No-load Current		0.46 A		
NEMA Nom. Eff.		81.5	Power Factor	76	Line-line Res. @ 25°C		30.4 Ω
Rating - Duty		40C	AMB-CONT		Temp. Rise @ Rated Load		22°C
S.F. Amps		1.76/.88	Temp. Rise @ S.F. Load		67°C		
			Locked-rotor Power Factor		54.5		
			Rotor inertia		0.0476 lb-ft²		

Load Characteristics 460 V, 60 Hz, 0.5 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	37	56	69	76	80	82	80
Efficiency	66.3	77.5	81.1	81.9	81.7	80.6	81.7
Speed	1779	1762	1744	1725	1704	1681	1704
Line amperes	0.48	0.55	0.63	0.75	0.88	1.03	0.88

ABB Motors and Mechanical Inc.

WINDING # 34WGR771

0.5 HP 3 PH 60 HZ 1725 RPM 460 V 3420M

Typical performance - not guaranteed values.

TORQUES (LB-FT): PO=5.3 PU=3.5 LR=4.1 LRA=5.4





