

ABB BALDOR RELIANCE III

Customer information packet

SPJMM3219T

7.5HP, 3500RPM, 3PH, 60HZ, 184JM, 3646M, OPSB

Class - None

Division - Not Applicable

Specifications

Enclosure	OPSB
Frame	184JM
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	7.500 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	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	16.800 A @ 230.0 V 8.400 A @ 460.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	90.2 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	8.4 a
Insulation Class	F
Inverter Code	Inverter Duty

Part Detail

Revision	A
Type	AC
Mech. spec.	36EE002
Base	
Status	PRD/A
Elec. spec.	36WGX419
Layout	36LYEE002
Eff. date	11-19-2025
CD Diagram	CD0005
Poles	02
Leads	9#16
Proprietary	False
Created date	08-11-2025

KVA Code	K
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Max Speed	5400 rpm
Motor Lead Quantity/Wire Size	9 @ 16 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3646M
Mounting Arrangement	F1
Number of Poles	2
Overall Length	18.00 IN
Power Factor	91
Product Family	General Purpose
Pulley End Bearing Type	Ball
Pulley Face Code	C-Face
Pulley Shaft Indicator	Tapped & Key
Rodent Screen	Included
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	3500 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

AC Induction Motor Performance Data

Record # 100920

Typical performance - not guaranteed values

Winding: 36WGX419-R006			Type: 3646M		Enclosure: OPEN	
Nameplate Data			460 V, 60 Hz: High Voltage Connection			
Rated Output (HP)		7.5	Full Load Torque		11.2 LB-FT	
Volts		230/460	Start Configuration		direct on line	
Full Load Amps		16.8/8.4	Breakdown Torque		55 LB-FT	
R.P.M.		3500	Pull-up Torque		40 LB-FT	
Hz	60 Phase	3	Locked-rotor Torque		48 LB-FT	
NEMA Design Code		B KVA Code	Starting Current		87 A	
Service Factor (S.F.)		1.15	No-load Current		2.2 A	
NEMA Nom. Eff.		90.2 Power Factor	Line-line Res. @ 25°C		1.45 Ω	
Rating - Duty		40C AMB-CONT	Temp. Rise @ Rated Load		52°C	
S.F. Amps		19/9.5	Temp. Rise @ S.F. Load		65°C	
			Locked-rotor Power Factor		44.6	
			Rotor inertia		0.205 lb-ft²	

Load Characteristics 460 V, 60 Hz, 7.5 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	65	84	90	91	93	93	92
Efficiency	87.9	91.3	91.6	90.9	89.9	88.6	90.3
Speed	3570	3542	3511	3478	3446	3412	3459
Line amperes	3.1	4.6	6.4	8.4	10.3	12.4	9.54

ABB Motors and Mechanical Inc.

WINDING # 36WGX419

Typical performance - not guaranteed values.

7.5 HP 3 PH 60 HZ 3500 RPM 460 V 3646M

TORQUES (LB-FT) : PO=55 PU=40 LR=48 LRA=87



