

ABB BALDOR RELIANCE III

Customer information packet

SPM31157

2HP, 1770RPM, 3PH, 60HZ, 56H, 3538M, ODP, F1, N

Class - None

Division - Not Applicable

Specifications

Enclosure	ODP
Frame	56H
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 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	2.700 A @ 460.0 V 5.400 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	2.7 a

Part Detail

Revision	E
Type	AC
Mech. spec.	35E6250
Base	
Status	PRD/A
Elec. spec.	35WGZ966
Layout	35LYE6250
Eff. date	11-19-2025
CD Diagram	CD0005
Poles	04
Leads	9#18
Proprietary	False
Created date	09-08-2023

Insulation Class	F
Inverter Code	Inverter Duty
KVA Code	L
Lifting Lugs	No Lifting Lugs
Locked Bearing Indicator	No Locked Bearing
Max Speed	2700 rpm
Motor Lead Quantity/Wire Size	9 @ 18 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3538M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	14.00 IN
Power Factor	75
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	0.625 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No 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 #	SPM31157					WGT	56	LBS					
SPEC	35E6250Z966					ENCL	ODP						
SER #						CC		IP	23				
HP	2	MAG CUR				3/1.5							
VOLTS	230/460					NEMA NOM. EFF					88.5		
AMPS	5.4/2.7						PF	75					
RATING	40C AMB-CONT												
RPM	1770					MAX RPM			2700				
FRAME	56H	HZ	60	CODE			L	CLASS		F			
SER.F.	1.25	SF AMP	6.6/3.3				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	0.188	CT	6	TO	60	10:1						
ID LOGO	SL HZ	1.1	VT	3	TO	60	20:1						
							QR						
YR													

AC Induction Motor Performance Data

Record # 109554

Preliminary Data Sheet

Winding: 35WGZ966-R010			Type: 3538M		Enclosure: OPSB		
Nameplate Data			460 V, 60 Hz: High Voltage Connection				
Rated Output (HP)		2	Full Load Torque		5.96 LB-FT		
Volts		230/460	Start Configuration		direct on line		
Full Load Amps		5.4/2.7	Breakdown Torque		26.9 LB-FT		
R.P.M.		1770	Pull-up Torque		12.6 LB-FT		
Hz	60	Phase	3	Locked-rotor Torque		15.8 LB-FT	
NEMA Design Code		B	KVA Code	L	Starting Current		27.1 A
Service Factor (S.F.)		1.25	No-load Current		1.54 A		
NEMA Nom. Eff.		88.5	Power Factor	75	Line-line Res. @ 25°C		7.41 Ω
Rating - Duty		40C	AMB-CONT		Temp. Rise @ Rated Load		31°C
S.F. Amps		6.6/3.3	Temp. Rise @ S.F. Load		41°C		
			Locked-rotor Power Factor		51.8		
			Rotor inertia		0.274 lb-ft²		

Load Characteristics 460 V, 60 Hz, 2 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	36	57	69	77	81	84	81
Efficiency	81.5	87.9	89.3	89.3	88.7	87.6	88.7
Speed	1792	1785	1778	1771	1763	1754	1763
Line amperes	1.65	1.93	2.31	2.75	3.26	3.82	3.26

ABB Motors and Mechanical Inc.

WINDING # 35WGZ966

Typical performance - not guaranteed values.

2 HP 3 PH 60 HZ 1770 RPM 460 V 3538M

TORQUES (LB-FT): PO=26.9 PU=12.6 LR=15.8 LRA=27.1





