

ABB BALDOR RELIANCE III

Customer information packet

CNM3539

.5HP, 1175RPM, 3PH, 60HZ, 56C, 3522M, TENV, F1

Class - None

Division - Not Applicable

Specifications

Enclosure	TENV
Frame	56C
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	1200 RPM @ 60 HZ
Voltage @ Frequency	230.0 V @ 60 HZ 460.0 V @ 60 HZ
Agency Approvals	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	2.000 A @ 230.0 V 2.000 A @ 208.0 V 1.000 A @ 460.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	78.5 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	1.0 a
Insulation Class	F

Part Detail

Revision	D
Type	AC
Mech. spec.	35E012
Base	
Status	PRD/A
Elec. spec.	35WGG338
Layout	35LYE012
Eff. date	01-05-2026
CD Diagram	CD0005
Poles	06
Leads	9#18
Proprietary	False
Created date	02-23-2023

Inverter Code	Inverter Ready
KVA Code	M
Lifting Lugs	No Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Motor Lead Quantity/Wire Size	9 @ 18 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3522M
Mounting Arrangement	F1
Number of Poles	6
Overall Length	12.06 IN
Power Factor	57
Product Family	General Purpose
Pulley End Bearing Type	Ball
Pulley Face Code	C-Face
Pulley Shaft Indicator	Standard
Rodent Screen	None
Service Factor	1.15
Shaft Diameter	0.625 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	1175 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

NP1256L											
CAT.NO.	CNM3539										
SPEC.	35E012G338G2										
HP	.5										
VOLTS	230/460										
AMP	2/1										
RPM	1175										
FRAME	56C		HZ	60			PH	3			
SER.F.	1.15	CODE	M	DES	B		CLASS	F			
NEMA-NOM-EFF	78.5	PF	57								
RATING	40C AMB-CONT										
CC											
DE	6205		ODE	6203							
ENCL	TENV	SN									
	SFA 2.2/1.1										

AC Induction Motor Performance Data

Record # 87759

Preliminary Data Sheet

Winding: 35WGG338-R001			Type: 3522M		Enclosure: TENV		
Nameplate Data				460 V, 60 Hz: High Voltage Connection			
Rated Output (HP)		.5		Full Load Torque		2.23 LB-FT	
Volts		230/460		Start Configuration		direct on line	
Full Load Amps		2/1		Breakdown Torque		8.81 LB-FT	
R.P.M.		1175		Pull-up Torque		4.83 LB-FT	
Hz	60	Phase	3	Locked-rotor Torque		5.16 LB-FT	
NEMA Design Code		B	KVA Code	M		Starting Current	6.64 A
Service Factor (S.F.)		1.15		No-load Current		0.789 A	
NEMA Nom. Eff.		78.5	Power Factor	57	Line-line Res. @ 25°C		30 Ω
Rating - Duty		40C AMB-CONT		Temp. Rise @ Rated Load		70°C	
S.F. Amps		2.2/1.1		Temp. Rise @ S.F. Load		79°C	
				Locked-rotor Power Factor		50.7	
				Rotor inertia		0.16 lb-ft²	

Load Characteristics 460 V, 60 Hz, 0.5 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	23	36	48	56	63	68	60
Efficiency	63.7	75.6	79.4	81.4	81.5	80.6	81.5
Speed	1194	1190	1185	1180	1174	1167	1176
Line amperes	0.802	0.855	0.929	1.02	1.14	1.29	1.09

ABB Motors and Mechanical Inc.

WINDING # 35WGG338

Typical performance - not guaranteed values.

0.5 HP 3 PH 60 HZ 1175 RPM 460 V 3522M

TORQUES (LB-FT): PO=8.81 PU=4.83 LR=5.16 LRA=6.64



