

ABB BALDOR RELIANCE III

Customer information packet

CL3509

1HP, 3450RPM, 1PH, 60HZ, 56C, 3520L, TEFC, F1

Class - None

Division - Not Applicable

Specifications

Enclosure	TEFC
Frame	56C
Frame Material	Steel
Frequency	60.00 Hz
Haz Area Class and Group	None
Haz Area Division	Not Applicable
Motor Letter Type	Cap Start, Induction Run
Output @ Frequency	1.000 HP @ 60 HZ
Phase	1
Synchronous Speed @ Frequency	3600 RPM @ 60 HZ
Voltage @ Frequency	230.0 V @ 60 HZ 208.0 V @ 60 HZ 115.0 V @ 60 HZ
Agency Approvals	C UR US CURUS
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	6.100 A @ 208.0 V 5.900 A @ 230.0 V 11.800 A @ 115.0 V
Design Code	N
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	68.0 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Face Code	Standard
Front Shaft Indicator	None

Part Detail

Revision	AB
Type	AC
Mech. spec.	35T946
Base	
Status	PRD/A
Elec. spec.	35WGX964
Layout	35LYT946
Eff. date	05-07-2024
CD Diagram	CD0001
Poles	02
Leads	4#16 A PH,2#18 B PH
Proprietary	False
Created date	06-22-2007

Heater Indicator	No Heater
High Voltage Full Load Amps	5.9 a
Insulation Class	B
Inverter Code	Not Inverter
KVA Code	K
Lifting Lugs	No Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	4 @ 16 AWG, A PH
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3520L
Mounting Arrangement	F1
Number of Poles	2
Overall Length	12.23 IN
Power Factor	82
Product Family	General Purpose
Pulley End Bearing Type	Ball
Pulley Face Code	C-Face
Pulley Shaft Indicator	Standard
Rodent Screen	None
RoHS Status	ROHS COMPLIANT
Service Factor	1.25
Shaft Diameter	0.625 IN
Shaft Extension Location	Pulley End
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	3450 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.	CL3509										
SPEC.	35T946X964										
HP	1										
VOLTS	115/208-230										
AMP	11.8/6.1-5.9										
RPM	3450										
FRAME	56C		HZ	60				PH	1		
SER.F.	1.25	CODE	K	DES	N	CLASS		B			
NEMA-NOM-EFF	68	PF	82								
RATING	40C AMB-CONT										
CC											
DE	6205		ODE	6203							
ENCL	TEFC	SN									
	SFA 14/7.3-7										

AC Induction Motor Performance Data

Record # 93536

Typical performance - not guaranteed values

Winding: 35WGX964-R011			Type: 3520L		Enclosure: TEFC	
Nameplate Data			115 V, 60 Hz: High Voltage Connection			
Rated Output (HP)		1	Full Load Torque		1.5 LB-FT	
Volts		115/208-230	Start Configuration		direct on line	
Full Load Amps		11.8/6.1-5.9	Breakdown Torque		4.2 LB-FT	
R.P.M.		3450	Pull-up Torque		3.5 LB-FT	
Hz	60 Phase	1	Locked-rotor Torque		4.8 LB-FT	
NEMA Design Code		N	KVA Code		K	
Starting Current		76 A	No-load Current		6.4 A	
Service Factor (S.F.)		1.25	Line-line Res. @ 25°C		0.498 Ω A Ph 1.77 Ω B Ph	
NEMA Nom. Eff.		68	Power Factor		82	
Rating - Duty		40C AMB-CONT	Temp. Rise @ Rated Load		72°C	
S.F. Amps		14/7.3-7	Temp. Rise @ S.F. Load		88°C	
			Locked-rotor Power Factor		91.9	
			Rotor inertia		0.043 lb-ft²	

Load Characteristics 115 V, 60 Hz, 1 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	47	64	72	80	84	86	84
Efficiency	50	60.9	67	68	66.9	64.5	66.9
Speed	3560	3525	3485	3450	3400	3340	3400
Line amperes	7	8.4	10	11.8	14	16.8	14

ABB Motors and Mechanical Inc.

WINDING # 35WGX964

Typical performance - not guaranteed values.

1 HP 1 PH 60 HZ 3450 RPM 115 V 3520L

TORQUES (LB-FT) : PO=4.2 PU=3.5 LR=4.8 LRA=76





