



Customer information packet

EL3509

1HP, 3450RPM, 1PH, 60HZ, 56/56H, 3520LC, TEFC

Class - None

Division - Not Applicable

Specifications

Enclosure	TEFC
Frame	56H
Frame Material	Steel
Frequency	60.00 Hz
Haz Area Class and Group	None
Haz Area Division	Not Applicable
Motor Letter Type	Cap Start, Cap 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	CSA UR
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	9.400 A @ 115.0 V 5.000 A @ 208.0 V 4.700 A @ 230.0 V
Design Code	N
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	74.0 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Face Code	Standard
Front Shaft Indicator	None

Part detail

Revision	W
Type	AC
Mech. spec.	35J385
Base	
Status	PRD/A
Elec. spec.	35WGM131
Layout	35LYJ385
Eff. date	04-30-2024
CD Diagram	CD0055
Poles	02
Leads	4#16 A PH,2#18 B PH
Proprietary	False
Created date	11-07-2008

Heater Indicator	No Heater
High Voltage Full Load Amps	4.7 a
Insulation Class	B
Inverter Code	Not Inverter
KVA Code	H
Lifting Lugs	No Lifting Lugs
Locked Bearing Indicator	No 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	3520LC
Mounting Arrangement	F1
Number of Poles	2
Overall Length	12.91 IN
Power Factor	94
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 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

NP2116L											
CAT.NO.	EL3509										
SPEC.	35J385M131G1										
HP	1										
VOLTS	115/208-230										
AMP	9.4/5-4.7										
RPM	3450										
FRAME	56H			HZ		60		PH		1	
SER.F.	1.25	CODE	H	DES		N	CL		B		
NEMA-NOM-EFF	74	PF	94								
RATING	40C AMB-CONT										
CC											
DE	6205	ODE		6203							
ENCL	TEFC	SN									
	SFA 11.6/6.9-6.8										

AC Induction Motor Performance Data

Record # 83315

Preliminary Data Sheet

Winding: 35WGM131-R012			Type: 3520LC		Enclosure: TEFC		
Nameplate Data			115 V, 60 Hz: Low 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		9.4/5-4.7	Breakdown Torque		4.12 LB-FT		
R.P.M.		3450	Pull-up Torque		3.55 LB-FT		
Hz	60	Phase	1	Locked-rotor Torque		4.84 LB-FT	
NEMA Design Code		N	KVA Code	H	Starting Current		75.9 A
Service Factor (S.F.)		1	No-load Current		2.98 A		
NEMA Nom. Eff.		74	Power Factor	94	Line-line Res. @ 25°C		0.517 Ω A Ph 1.77 Ω B Ph
Rating - Duty		40C AMB-CONT		Temp. Rise @ Rated Load		45°C	

Load Characteristics 115 V, 60 Hz, 1 HP

% of Rated Load	25	50	75	100	125	150
Power Factor	82	91	94	95	94	93
Efficiency	48.3	63.9	70.8	73.3	74	73.1
Speed	3563	3537	3509	3477	3441	3397
Line amperes	4.16	5.66	7.39	9.29	11.5	13.9

ABB Motors and Mechanical Inc.

WINDING # 35WGM131

Typical performance - not guaranteed values.

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

TORQUES (LB-FT): PO=4.12 PU=3.55 LR=4.84 LRA=75.9





