



Customer information packet

L3509-50

1/.75KW, 2890RPM, 1PH, 50HZ, TEFC, 3524LC, 56

ABB Ltd Drives

Class - None

Division - Not Applicable

Specifications

Enclosure	TEFC
Frame	56
Frame Material	Steel
Frequency	50.00 Hz
Haz Area Class and Group	None
Haz Area Division	Not Applicable
Motor Letter Type	Cap Start, Cap Run
Output @ Frequency	.750 KW @ 50 HZ
Phase	1
Synchronous Speed @ Frequency	3000 RPM @ 50 HZ
Voltage @ Frequency	220.0 V @ 50 HZ 110.0 V @ 50 HZ
Agency Approvals	CE CURUS UKCA WEEE 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	4.700 A @ 220.0 V 9.400 A @ 110.0 V
Design Code	-
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	77.4 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Shaft Indicator	None

Part detail

Revision	F
Type	AC
Mech. spec.	35E008
Base	
Status	PRD/A
Elec. spec.	35WGG630
Layout	35LYE008
Eff. date	05-07-2024
CD Diagram	CD0055
Poles	02
Leads	4#16 A PH,2#18 B PH Y
Proprietary	False
Created date	02-27-2023

Heater Indicator	No Heater
High Voltage Full Load Amps	4.7 a
Insulation Class	B
Inverter Code	Not Inverter
KVA Code	J
Lifting Lugs	No Lifting Lugs
Locked Bearing Indicator	No Locked Bearing
Motor Finish	CLEAR COAT
Motor Lead Quantity/Wire Size	4 @ 16 AWG, A PH
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3524LC
Mounting Arrangement	F1
Number of Poles	2
Overall Length	13.23 IN
Power Factor	95
Product Family	General Purpose
Pulley End Bearing Type	Ball
Pulley Face Code	Standard
Pulley Shaft Indicator	Standard
Rodent Screen	None
RoHS Status	ROHS NON-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	2890 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
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Nameplate

NP1372L									
CAT.NO.	L3509-50								
SPEC.	35E008G630								
HP	1/.75KW								
VOLTS	110/220								
AMP	9.4/4.7								
R.P.M. (1/MIN)	2890								
FRAME	56		HZ	50		PH	1		
SER.F.	1.25	CODE	J	DES	-	CL	B		
NEMA-NOM-EFF	77.4	PF	95						
RATING	40C AMB-S1 CONT								
CC			IP44 KG19 IC411						
DE	6205		ODE	6203					
ENCL	TEFC	SN							
	IE2-50HZ 76.7(75%),72.9(50%)								

Parts list

Part number	Description	Quantity
SA412200	SA 35E008G630	1.000 ea
RA403884	RA 35E008G630	1.000 ea
OC3035F09SP	CYL OIL CAP 35MFD/370V	1.000 ea
EC1400A03SP	ELEC CAP, 400-480 MFD, 125V, 1.81D X 3.	1.000 ea
WD3006A01	RSS-2-103JT 2W 10K RES. METAL OXIDE 5%	1.000 ea
NS2512A01	INSULATOR, CONDUIT BOX X	1.000 ea
35CB3007	35 CB CASTING W/.88 DIA. LEAD HOLE	1.000 ea
36GS1000SP	GASKET-CONDUIT BOX, .06 THICK #SV-330 LE	1.000 ea
51XB1016A07	10-16 X 7/16 HXWSSLD SERTYB	2.000 ea
11XW1032G06	10-32 X .38, TAPTITE II, HEX WSHR SLTD U	1.000 ea
35EP3122K00	MASTER ODE,203 BRG,.683SH,#26 DRN,FH MTG	1.000 ea
51XW0832A07	8-32 X .44, TAPTITE II, HEX WSHR SLTD SE	2.000 ea
35CB3801	CAPACITOR COVER, CAST	1.000 ea
NS2501A02	INSULATOR, CAPACITOR BOX	1.000 ea
HA7010	CAPACITOR RETENTION CLAMP	1.000 ea
34GS3002	GASKET, CAPACITOR BOX	1.000 ea
51XB1016A08	10-16X 1/2HXWSSLD SERTYB	2.000 ea
HW5100A03	WAVY WASHER (W1543-017)	1.000 ea
35EP3123A00	MASTER DE,205 BRG,.998SH,#26 DRN	1.000 ea
XY1032A02	10-32 HEX NUT DIRECTIONAL SERRATION	4.000 ea
51XB1214A16	12-14X1.00 HXWSSLD SERTYB	1.000 ea
35FH4005A32	IEC FH NO GRSR W/3 HOLES - PRIMED	1.000 ea
51XW1032A06	10-32 X .38, TAPTITE II, HEX WSHR SLTD S	3.000 ea
35CB4521GX	CONDUIT BOX LID KIT **ORDER INDIV PARTS	1.000 ea
51XW0832A07	8-32 X .44, TAPTITE II, HEX WSHR SLTD SE	4.000 ea
HW2501D13	KEY, 3/16 SQ X 1.375	1.000 ea
HA7000A04	KEY RETAINER 0.625 DIA SHAFTS	1.000 ea
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	2.000 ea
WD1000A15	3-520132-2 AMP FLAG (4M/RL NON-CANC/NON-	4.000 ea
MJ1000A02	GREASE, POLYREX EM EXXON	0.050 lb
35FN3002A01SP	EXFN, PLASTIC, 6.376 OD, .625 ID W/FLAT	1.000 ea

MG1050G01	CELEROL MEDIUM CHARCOAL METALLIC GRAY	0.017 ga
HA3100A38	THRUBOLT 10-32 X 9.375	4.000 ea
SP5181A01	MODEL 35 LC TORQ STAT SWITCH LEAD ASSY	1.000 ea
NP1372L	ALUM UL CE UKCA WEEE CC, A60	1.000 ea
LC0001A01	CONN LABEL / WARNING LABEL (LC0001 / LB1	1.000 ea
35PA1066	PKG GRP, PRINT PK1008A06	1.000 ea
MN416A01	TAG-INSTAL-MAINT no wire (2500 bx)11/22	1.000 ea
FE-0000001	ZRTG FE ASSEMBLY	1.000 ea
PE-0000001	ZRTG PE ASSEMBLY	1.000 ea

Accessories

Part number	Description	Multiplier
35-8762	C FACE KIT	A8
35EP1506A01SP	D-FLANGE KIT	A8

AC Induction Motor Performance Data

Record # 101537

Typical performance - not guaranteed values

Winding: 35WGG630-R001			Type: 3524LC		Enclosure: TEFC	
Nameplate Data			220 V, 50 Hz: High Voltage Connection			
Rated Output (KW)		.75	Full Load Torque		1.851 LB-FT	
Volts		110/220	Start Configuration		direct on line	
Full Load Amps		9.4/4.7	Breakdown Torque		4.41 LB-FT	
R.P.M.		2890	Pull-up Torque		3.89 LB-FT	
Hz	50 Phase	1	Locked-rotor Torque		5.54 LB-FT	
NEMA Design Code		- KVA Code	Starting Current		34.1 A	
Service Factor (S.F.)		1.25	No-load Current		1.22 A	
NEMA Nom. Eff.		77.4	Power Factor		0	
			Line-line Res. @ 25°C		2.0032 Ω A Ph 1.7472 Ω B Ph	
Rating - Duty		40C AMB-CONT	Temp. Rise @ Rated Load		47°C	
S.F. Amps		11.6/5.8	Temp. Rise @ S.F. Load		63°C	

Load Characteristics 220 V, 50 Hz, 0.75 KW

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	82	90	94	95	95	95	95
Efficiency	59.8	72.9	76.7	78	76.7	74.6	76.7
Speed	2969.7	2947.7	2923.2	2894.6	2863.5	2822.9	2864
Line amperes	1.85	2.68	3.61	4.68	5.85	7.19	5.85

ABB Motors and Mechanical Inc.

WINDING # 35WGG630

Typical performance - not guaranteed values.

0.75 KW 1 PH 50 HZ 2890 RPM 220 V 3524LC

TORQUES (LB-FT): PO=4.41 PU=3.89 LR=5.54 LRA=34.1





