

ABB BALDOR RELIANCE III

Customer information packet EM3545-G

1HP, 3450RPM, 3PH, 60HZ, 56, 3516M, TEFC, F1, N

Class - None

Division - Not Applicable

Specifications

Enclosure	TEFC
Frame	56
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	1.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	3600 RPM @ 60 HZ
Voltage @ Frequency	460.0 V @ 60 HZ 230.0 V @ 60 HZ
Agency Approvals	CSA CSA EEV 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	2.800 A @ 230.0 V 3.000 A @ 208.0 V 1.400 A @ 460.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	77.0 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Face Code	Standard
Front Shaft Indicator	None

Part Detail

Revision	X
Type	AC
Mech. spec.	35Z951
Base	
Status	PRD/A
Elec. spec.	35WGY474
Layout	35LYZ951
Eff. date	01-05-2026
CD Diagram	CD0005
Poles	02
Leads	9#18
Proprietary	False
Created date	11-18-2011

Heater Indicator	No Heater
High Voltage Full Load Amps	1.4 a
Insulation Class	H
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	9 @ 18 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3516M
Mounting Arrangement	F1
Number of Poles	2
Overall Length	12.23 IN
Power Factor	87
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	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

NP3441LUA									
CAT.NO.	EM3545-G								
SPEC	35Z951Y474G1								
HP	1								
VOLTS	230/460								
AMPS	2.8/1.4								
RPM	3450								
FRAME	56		HZ	60		PH	3		
SF	1.25	CODE	K	DES	B	CLASS	H		
NEMA NOM. EFF	77	PF	87						
RATING	40C AMB-CONT								
CC	010A								
ENCL	TEFC	SER							
DE	6205	ODE	6203						
VPWM INVERTER READY	SFA 3.4/1.7								
CT6-60H(10:1)VT3-60H(20:1									
	50Hz 1HP 190/380V 3.4/1.7A							SF1.0	

Parts List

Part number	Description	Quantity
SA234553	SA 35Z951Y474G1	1.000 ea
RA221525	RA 35Z951Y474G1	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
35EP3122A00	MASTER ODE,203 BRG,.683SH,#26 DRN,GRSR,F	1.000 ea
HW4500A01	1641B(ALEMITE)400 UNIV, GREASE FITT	1.000 ea
HW5100A03	WAVY WASHER (W1543-017)	1.000 ea
35EP3123F05	F00 W/LCK BRG	1.000 ea
HW4500A01	1641B(ALEMITE)400 UNIV, GREASE FITT	1.000 ea
51XN1032A18	10-32 X 1 1/8 HX WS SL SR (ESKAY)	2.000 ea
XY1032A02	10-32 HEX NUT DIRECTIONAL SERRATION	4.000 ea
35FH4005A84SP	IEC FH W/GRSR, NO DIMPLES 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
LB1459	AEGIS SGR LABEL "AEGISLBL-100"	1.000 ea
MJ1000A02	GREASE, POLYREX EM EXXON	0.050 lb
MG1050Y01	CELEROL BALDOR GOLD *5 GALLON BUCKET*	0.017 ga
35FN3002A05SP	EXFN, PLASTIC, 6.376 OD, .638 ID	1.000 ea
51XB1214A16	12-14X1.00 HXWSSLD SERTYB	1.000 ea
HA3100A15	THRUBOLT 10-32 X 8.375	4.000 ea
LC0005	CONN.DIA.,TY M,9-LD,DUAL VOLT,REVERSING	1.000 ea
LB1624	COMBINED WARNING LABEL, ISO/ANSI PICTOGR	1.000 ea
MN416A01	TAG-INSTAL-MAINT no wire (2500 bx)11/25	1.000 ea
NP3441LUA	AL SUPER-E VPWM INV RDY,UL EEV,NEMA PREM	1.000 ea

LB1350	BAR CODE LABEL FOR YORK	1.000 ea
35PA1066	PKG GRP, PRINT PK1008A07	1.000 ea
PE-0000001	ZRTG PE ASSEMBLY	1.000 ea
FE-0000001	ZRTG FE ASSEMBLY	1.000 ea

AC Induction Motor Performance Data

Record # 36063

Typical performance - not guaranteed values

Winding: 35WGY474-R015			Type: 3516M		Enclosure: TEFC	
Nameplate Data			460 V, 60 Hz: High Voltage Connection			
Rated Output (HP)		1	Full Load Torque		1.5 LB-FT	
Volts		230/460	Start Configuration		direct on line	
Full Load Amps		2.8/1.4	Breakdown Torque		5.6 LB-FT	
R.P.M.		3450	Pull-up Torque		3.91 LB-FT	
Hz		60	Phase		3	
NEMA Design Code		B	KVA Code		K	
Service Factor (S.F.)		1.25	Starting Current		8.99 A	
NEMA Nom. Eff.		77	Power Factor		87	
Rating - Duty		40C	AMB-CONT		Temp. Rise @ Rated Load	
S.F. Amps		3.4/1.7	Temp. Rise @ S.F. Load		60°C	
			Locked-rotor Power Factor		64	
			Rotor inertia		0.0443 LB-FT2	

Load Characteristics 460 V, 60 Hz, 1 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	57	74	82	85	87	87	87
Efficiency	53.9	67.9	73.4	75.1	75.6	74.5	75.6
Speed	3549	3513	3473	3431	3383	3329	3383
Line amperes	0.769	0.939	1.17	1.43	1.72	2.06	1.72

ABB Motors and Mechanical Inc.

WINDING # 35WGY474

Typical performance - not guaranteed values.

1 HP 3 PH 60 HZ 3450 RPM 460 V 3516M

TORQUES (LB-FT) : PO=5.6 PU=3.91 LR=4.01 LRA=8.99





