

ABB BALDOR RELIANCE III

Customer information packet

CEM3156T-G

1HP, 1170RPM, 3PH, 60HZ, 145TC, 3526M, OPSB, F1

Class - None

Division - Not Applicable

Specifications

Enclosure	OPSB
Frame	145TC
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	1200 RPM @ 60 HZ
Voltage @ Frequency	230.0 V @ 60 HZ 460.0 V @ 60 HZ
Agency Approvals	CSA EEV NEMA PREMIUM 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	1.500 A @ 460.0 V 3.000 A @ 230.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	82.5 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	1.5 a

Part Detail

Revision	F
Type	AC
Mech. spec.	35E2907
Base	
Status	PRD/A
Elec. spec.	35WGG019
Layout	35LY-000-271
Eff. date	01-05-2026
CD Diagram	CD0005
Poles	06
Leads	9#18
Proprietary	False
Created date	02-23-2023

Insulation Class	H
Inverter Code	Inverter Ready
KVA Code	J
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	3524M
Mounting Arrangement	F1
Number of Poles	6
Overall Length	12.12 IN
Power Factor	67
Product Family	General Purpose
Pulley End Bearing Type	Ball
Pulley Face Code	Standard
Pulley Shaft Indicator	Standard
Rodent Screen	None
Service Factor	1.15
Shaft Diameter	0.875 IN
Shaft Ground Indicator	Shaft Grounding
Shaft Rotation	Reversible
Speed	1170 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

NP3553LUA									
CAT.NO.	CEM3156T-G								
SPEC.	35E2907G019								
HP	1								
VOLTS	230/460								
AMPS	3/1.5								
RPM	1170								
FRAME	145TC		HZ	60			PH	3	
SF	1.15	CODE	J	DES	B	CLASS	H		
NEMA NOM. EFF	82.5	PF	67						
RATING	40C AMB-CONT								
CC									
ENCL	OPSB	SN							
DE	6205		ODE	6203					
VPWM INVERTER READY		SFA 3.7/1.85							
CT30-60(2:1) VT3-60(20:1)									
USABLE AT	50HZ 1HP 190/380V 4/2A								SF1.0

Parts List

Part number	Description	Quantity
SA415008	SA 35E2907G019	1.000 ea
RA406777	RA 35E2907G019	1.000 ea
34FN3002B01	EXTERNAL FAN, PLASTIC, .637/.639 HUB W/	1.000 ea
NS2512A01	INSULATOR, CONDUIT BOX X	1.000 ea
35CB3009	35 CB W/1.09 DIA. LEAD HOLE @ 6:	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
35EP3209G00	MASTER ODE,203 BRG	1.000 ea
HW5100A03	WAVY WASHER (W1543-017)	1.000 ea
35EP3402C00	MASTER DE,205 BRG,OPEN	1.000 ea
51XN1032A18	10-32 X 1 1/8 HX WS SL SR (ESKAY)	2.000 ea
35CB4521	35 LIPPED CB LID (GALV & PHOSPH)	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
HA7000A01	KEY RETAINER 7/8" DIA SHAFT	1.000 ea
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	2.000 ea
LB1459	AEGIS SGR LABEL "AEGISLBL-100"	1.000 ea
LC0005	CONN.DIA.,TY M,9-LD,DUAL VOLT,REVERSING	1.000 ea
NP3553LUA	ALUM SUPER-E VPWM INV READY UL CC NEMA P	1.000 ea
MN416A01	TAG-INSTAL-MAINT no wire (2500 bx)11/25	1.000 ea
LB1624	COMBINED WARNING LABEL, ISO/ANSI PICTOGR	1.000 ea
MJ1000A02	GREASE, POLYREX EM EXXON	0.050 lb
HA3100A15	THRUBOLT 10-32 X 8.375	4.000 ea
35AD2005A01	BAFFLE PLATE,MOD 35-SLTD BAND MTRS TDR	1.000 ea
MG1050Y01	CELEROL BALDOR GOLD *5 GALLON BUCKET*	0.022 ga
35AD2005A01	BAFFLE PLATE,MOD 35-SLTD BAND MTRS TDR	1.000 ea
36PA1000	PKG GRP, PRINT PK1016A08	1.000 ea
FE-0000001	ZRTG FE ASSEMBLY	1.000 ea
PE-0000001	ZRTG PE ASSEMBLY	1.000 ea

AC Induction Motor Performance Data

Record # 53337

Typical performance - not guaranteed values

Winding: 35WGM850-R016			Type: 3524M		Enclosure: OPSB	
Nameplate Data			460 V, 60 Hz: High Voltage Connection			
Rated Output (HP)		1	Full Load Torque			4.5 LB-FT
Volts		230/460	Start Configuration			direct on line
Full Load Amps		3.6/1.8	Breakdown Torque			14 LB-FT
R.P.M.		1155	Pull-up Torque			9.71 LB-FT
Hz	60	Phase	3	Locked-rotor Torque		10.2 LB-FT
NEMA Design Code	B	KVA Code	J	Starting Current		9.83 A
Service Factor (S.F.)		1.15	No-load Current			1.16 A
NEMA Nom. Eff.	82.5	Power Factor	64	Line-line Res. @ 25°C		16.2 Ω
Rating - Duty		40C AMB-CONT	Temp. Rise @ Rated Load			34°C
S.F. Amps			Temp. Rise @ S.F. Load			41°C
			Locked-rotor Power Factor			41.9
			Rotor inertia			0.143 LB-FT2

Load Characteristics 460 V, 60 Hz, 1 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	27	44	56	64	70	73	68
Efficiency	70.8	80.3	82.9	82.8	81.8	80	82.2
Speed	1189	1179	1169	1156	1142	1126	1148
Line amperes	1.21	1.33	1.51	1.76	2.04	2.38	1.93

ABB Motors and Mechanical Inc.

WINDING # 35WGM850

Typical performance - not guaranteed values.

1 HP 3 PH 60 HZ 1155 RPM 460 V 3524M

TORQUES (LB-FT): PO=14 PU=9.71 LR=10.2 LRA=9.83







