

ABB BALDOR RELIANCE III

Customer information packet

CEM3546T-G

1HP, 1770RPM, 3PH, 60HZ, 143TC, 3520M, TEFC, F1

Class - None

Division - Not Applicable

Specifications

Enclosure	TEFC
Frame	143TC
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	1800 RPM @ 60 HZ
Voltage @ Frequency	230.0 V @ 60 HZ 460.0 V @ 60 HZ
Agency Approvals	CSA EEV UR NEMA_PREMIUM NEMA PREMIUM
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	1.600 A @ 460.0 V 3.200 A @ 208.0 V 3.200 A @ 230.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	85.5 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Heater Indicator	No Heater

Part Detail

Revision	G
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	35WGG004
Layout	35LYE2179
Eff. date	01-02-2026
CD Diagram	CD0005
Poles	04
Leads	9#18
Proprietary	False
Created date	10-28-2021

High Voltage Full Load Amps	1.6 a
Insulation Class	H
Inverter Code	Inverter Ready
KVA Code	N
Lifting Lugs	No Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3520M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	13.29 IN
Power Factor	69
Product Family	General Purpose
Pulley Face Code	C-Face
Rodent Screen	None
Service Factor	1.15
Shaft Diameter	0.875 IN
Shaft Ground Indicator	Shaft Grounding
Shaft Rotation	Reversible
Speed	1770 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.	CEM3546T-G								
SPEC	35-0000-1361								
HP	1								
VOLTS	230/460								
AMPS	3.2/1.6								
RPM	1770								
FRAME	143TC		HZ	60		PH	3		
SF	1.15	CODE	N	DES	B	CLASS	H		
NEMA NOM. EFF	85.5	PF	69						
RATING	40C AMB-CONT								
CC	010A								
ENCL	TEFC	SER							
DE	6205		ODE	6203					
VPWM INVERTER READY	SFA 3.6/1.8								
CT6-60H(10:1)VT3-60H(20:1									
50HZ 1HP 190/380V 3.6/1.8A									
SF1.0									

Parts List

Part number	Description	Quantity
SA400348	SA 35-0000-1361	1.000 ea
RA391503	RA 35-0000-1361	1.000 ea
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	2.000 ea
MN416A01	TAG-INSTAL-MAINT no wire (2500 bx)11/25	1.000 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
34FN3002B01	EXTERNAL FAN, PLASTIC, .637/.639 HUB W/	1.000 ea
51XB0818A12	8-18X3/4 HXWSSLD SERTYB	1.000 ea
MJ1000A02	GREASE, POLYREX EM EXXON	0.050 lb
HA3100A15	THRUBOLT 10-32 X 8.375	4.000 ea
LB1459	AEGIS SGR LABEL "AEGISLBL-100"	1.000 ea
35EP3122A00	MASTER ODE,203 BRG,.683SH,#26 DRN,GRSR,F	1.000 ea
HW5100A03	WAVY WASHER (W1543-017)	1.000 ea
HW4500A01	1641B(ALEMITE)400 UNIV, GREASE FITT	1.000 ea
35EP3307D00	MASTER DE,205 BRG,.998SH,#26 DRN,GRSR	1.000 ea
51XN1032A20	10-32 X 1 1/4 HX WS SL SR	2.000 ea
HW4500A01	1641B(ALEMITE)400 UNIV, GREASE FITT	1.000 ea
35CB3009	35 CB W/1.09 DIA. LEAD HOLE @ 6:	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
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
NS2512A01	INSULATOR, CONDUIT BOX X	1.000 ea
MG1050Y01	CELEROL BALDOR GOLD *5 GALLON BUCKET*	0.022 ga
36PA1000	PKG GRP, PRINT PK1016A08	1.000 ea
HW2501D13	KEY, 3/16 SQ X 1.375	1.000 ea
HA7000A01	KEY RETAINER 7/8" DIA SHAFT	1.000 ea
FE-0000001	ZRTG FE ASSEMBLY	1.000 ea
LB1624	COMBINED WARNING LABEL, ISO/ANSI PICTOGR	1.000 ea
LC0005	CONN.DIA.,TY M,9-LD,DUAL VOLT,REVERSING	1.000 ea

PE-0000001	ZRTG PE ASSEMBLY	1.000 ea
NP3441LUA	AL SUPER-E VPWM INV RDY,UL EEV,NEMA PREM	1.000 ea

AC Induction Motor Performance Data

Record # 86922

Typical performance - not guaranteed values

Winding: 35WGG004-R004			Type: 3520M		Enclosure: TEFC	
Nameplate Data			460 V, 60 Hz: High Voltage Connection			
Rated Output (HP)		1	Full Load Torque		2.97 LB-FT	
Volts		230/460	Start Configuration		direct on line	
Full Load Amps		3.26/1.63	Breakdown Torque		13.68 LB-FT	
R.P.M.		1760	Pull-up Torque		7.85 LB-FT	
Hz	60	Phase	3	Locked-rotor Torque	9.01 LB-FT	
NEMA Design Code	B	KVA Code	N	Starting Current	14.13 A	
Service Factor (S.F.)		1.15	No-load Current		1.08 A	
NEMA Nom. Eff.	85.5	Power Factor	67	Line-line Res. @ 25°C	16.9 Ω	
Rating - Duty		40C AMB-CONT	Temp. Rise @ Rated Load		24°C	
S.F. Amps		3.52/1.76	Temp. Rise @ S.F. Load		27°C	
			Locked-rotor Power Factor		61.5	
			Rotor inertia		0.144 lb-ft²	

Load Characteristics 460 V, 60 Hz, 1 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	30	47	60	69	76	79	73
Efficiency	72.1	81.7	84.7	85.7	85.5	84.7	85.6
Speed	1791	1784	1776	1768	1759	1750	1763
Line amperes	1.11	1.22	1.38	1.59	1.82	2.09	1.73

ABB Motors and Mechanical Inc.

WINDING # 35WGG004

Typical performance - not guaranteed values.

1 HP 3 PH 60 HZ 1760 RPM 460 V 3520M

TORQUES (LB-FT): PO=13.68 PU=7.85 LR=9.01 LRA=14.13





