

ABB BALDOR RELIANCE III

Customer information packet

CEBM3546T

1HP, 1770RPM, 3PH, 60HZ, 143TC, 3522M, 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	CURUSEEV 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	3.400 A @ 230.0 V 1.700 A @ 460.0 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
Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	1.7 a
Insulation Class	F

Part Detail

Revision	F
Type	AC
Mech. spec.	35E567
Base	
Status	PRD/A
Elec. spec.	35WGZ805
Layout	35LYE567
Eff. date	01-05-2026
CD Diagram	CD0005
Poles	04
Leads	9#18
Proprietary	False
Created date	03-11-2022

Inverter Code	Inverter Ready
KVA Code	N
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	3522M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	17.86 IN
Power Factor	66
Product Family	General Purpose
Pulley End Bearing Type	Ball
Pulley Face Code	C-Face
Pulley Shaft Indicator	Standard
Rodent Screen	None
Service Factor	1.15
Shaft Diameter	0.875 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
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

NP1259L											
CAT.NO.	CEBM3546T										
SPEC.	35E567Z805G1										
HP	1										
VOLTS	230/460										
AMP	3.4/1.7										
RPM	1770										
FRAME	143TC		HZ	60				PH	3		
SER.F.	1.15	CODE	N	DES	B	CL	F				
NEMA-NOM-EFF	85.5	PF	66								
RATING	40C AMB-CONT										
CC	010A										
DE	6205		ODE	6203							
ENCL	TEFC	SN									

Parts List

Part number	Description	Quantity
SA411299	SA 35E567Z805G1	1.000 ea
RA402939	RA 35E567Z805G1	1.000 ea
34FN3002B01	EXTERNAL FAN, PLASTIC, .637/.639 HUB W/	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
35EP3900T02	SPL FACE MTD FR EP-ENCL-W/STEARNS BRAKE	1.000 ea
HW5100A03	WAVY WASHER (W1543-017)	1.000 ea
35EP3307D00	MASTER DE,205 BRG,.998SH,#26 DRN,GRSR	1.000 ea
HW4500A01	1641B(ALEMITE)400 UNIV, GREASE FITT	1.000 ea
51XN1032A20	10-32 X 1 1/4 HX WS SL SR	2.000 ea
HA1014A02SP	SPL SPACER FOR FAN COVER MTD ON BRAKE	3.000 ea
51XB1016A07	10-16 X 7/16 HXWSSLD SERTYB	3.000 ea
BR1003A01	BRAKE RELEASE LEVER	1.000 ea
HW2501D08	KEY, 3/16 SQ X .875 AUTO	1.000 ea
51XB1214A16	12-14X1.00 HXWSSLD SERTYB	1.000 ea
35FH5000A08	FAN COVER ASSY FOR BRAKE MTRS,W/ PRIMER	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
HA7000A01	KEY RETAINER 7/8" DIA SHAFT	1.000 ea
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	2.000 ea
MJ1000A02	GREASE, POLYREX EM EXXON	0.050 lb
35FN3002A01SP	EXFN, PLASTIC, 6.376 OD, .625 ID W/FLAT	1.000 ea
MG1050Y01	CELEROL BALDOR GOLD *5 GALLON BUCKET*	0.017 ga
HA3100A15	THRUBOLT 10-32 X 8.375	4.000 ea
76BK2100BQF	1-056-021-00-BQF BRAKE TDR# 79345	1.000 ea
LB1624	COMBINED WARNING LABEL, ISO/ANSI PICTOGR	1.000 ea

LB1404	BRAKE CONNECTION LABEL	1.000 ea
LC0005	CONN.DIA.,TY M,9-LD,DUAL VOLT,REVERSING	1.000 ea
84XN3816J28	HEX SOC HD, 3/8-16 X 1.75 LONG	2.000 ea
NP1259L	ALUM SUPER-E UL CC NEMA PREMIUM A60	1.000 ea
G7PA1000	PKG GRP, PRINT PK1034A07	1.000 ea
MN416A01	TAG-INSTAL-MAINT no wire (2500 bx)11/25	1.000 ea
HW4500A01	1641B(ALEMITE)400 UNIV, GREASE FITT	1.000 ea
PE-0000001	ZRTG PE ASSEMBLY	1.000 ea

AC Induction Motor Performance Data

Record # 99097

Typical performance - not guaranteed values

Winding: 35WGZ805-R023			Type: 3522M		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		3.4/1.7	Breakdown Torque		15.85 LB-FT	
R.P.M.		1770	Pull-up Torque		9.1 LB-FT	
Hz	60	Phase	3	Locked-rotor Torque		10.45 LB-FT
NEMA Design Code		B	KVA Code		N	
Service Factor (S.F.)		1.15	Starting Current		15.67 A	
NEMA Nom. Eff.		85.5	Power Factor		65	
Rating - Duty		40C AMB-CONT		Temp. Rise @ Rated Load		24°C
S.F. Amps				Temp. Rise @ S.F. Load		28°C
				Locked-rotor Power Factor		60.1
				Rotor inertia		0.159 lb-ft²

Load Characteristics 460 V, 60 Hz, 1 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	27	43	56	65	72	76	69
Efficiency	70.7	81	84.4	85.8	85.9	85.5	85.9
Speed	1792	1785	1778	1771	1763	1755	1766
Line amperes	1.23	1.34	1.49	1.68	1.89	2.15	1.81

ABB Motors and Mechanical Inc.

WINDING # 35WGZ805

Typical performance - not guaranteed values.

1 HP 3 PH 60 HZ 1770 RPM 460 V 3522M

TORQUES (LB-FT): PO=15.85 PU=9.1 LR=10.45 LRA=15.67





