

ABB BALDOR RELIANCE III

Customer information packet

CEM3613T

5HP, 3480RPM, 3PH, 60HZ, 184TC, 3628M, TEFC, F1

Class - None

Division - Not Applicable

Specifications

Enclosure	TEFC
Frame	184TC
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	5.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	3600 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	11.500 A @ 230.0 V 13.000 A @ 208.0 V 5.730 A @ 460.0 V
Design Code	A
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	88.5 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	5.7 a

Part Detail

Revision	A
Type	AC
Mech. spec.	36A002
Base	
Status	PRD/A
Elec. spec.	36WGZ651
Layout	36LYA002
Eff. date	01-08-2026
CD Diagram	CD0005
Poles	02
Leads	9#16
Proprietary	False
Created date	11-07-2025

Insulation Class	F
Inverter Code	Inverter Ready
KVA Code	L
Lifting Lugs	No Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Motor Lead Quantity/Wire Size	9 @ 16 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3628M
Mounting Arrangement	F1
Number of Poles	2
Overall Length	16.54 IN
Power Factor	92
Product Family	General Purpose
Pulley End Bearing Type	Ball
Pulley Face Code	C-Face
Pulley Shaft Indicator	Standard
Rodent Screen	None
RoHS Status	ROHS COMPLIANT
Service Factor	1.15
Shaft Diameter	1.125 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	3480 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.	CEM3613T								
SPEC	36A002Z651								
HP	5								
VOLTS	230/460								
AMPS	11.5/5.73								
RPM	3480								
FRAME	184TC		HZ	60		PH	3		
SF	1.15	CODE	L	DES	A	CLASS	F		
NEMA NOM. EFF	88.5	PF	92						
RATING	40C AMB-CONT								
CC	010A								
ENCL	TEFC	SER							
DE	6206		ODE	6205					
VPWM INVERTER READY		SFA 13.2/6.61							
CT6-60H(10:1)VT3-60H(20:1									
	50HZ 5HP 190/380V 14.2/7.1A							SF1.0	

Parts List

Part number	Description	Quantity
SA443030	SA 36A002Z651	1.000 ea
RA435526	RA 36A002Z651	1.000 ea
34FN3002B02	EXTERNAL FAN, PLASTIC, .905/.907 HUB W/	1.000 ea
36CB3004	36 CB CASTING W/1.09 DIA LEAD HOLE @ 6:0	1.000 ea
36GS1000SP	GASKET-CONDUIT BOX, .06 THICK #SV-330 LE	1.000 ea
51XB1016A08	10-16X 1/2HXWSSLD SERTYB	2.000 ea
11XW1032G06	10-32 X .38, TAPTITE II, HEX WSHR SLTD U	1.000 ea
HW3001B01	BRASS CUP WASHER, FOR #10 SCREW	1.000 ea
36EP3104A01	FREP MACH W/GRSR, RAISED FH PADS	1.000 ea
HW4500A01	1641B(ALEMITE)400 UNIV, GREASE FITT	1.000 ea
HW5100A05	WVY WSHR F/205 & 304 BRGS	1.000 ea
36EP3301A23	PUEP ASSEMBLY FOR ROUTING PURPOSES	1.000 ea
HW4500A01	1641B(ALEMITE)400 UNIV, GREASE FITT	1.000 ea
10XN2520A28	1/4-20X 1 3/4 HEX HD	4.000 ea
HW1001A25	LOCKWASHER 1/4, ZINC PLT .493 OD, .255 I	4.000 ea
51XB1214A16	12-14X1.00 HXWSSLD SERTYB	1.000 ea
36FH4009A102	IEC FH GREASER PRIMED	1.000 ea
51XW1032A06	10-32 X .38, TAPTITE II, HEX WSHR SLTD S	3.000 ea
36CB4516	750LIPPED CB LID - GALVANNEAL	1.000 ea
37GS1001SP	GASKET, CONDUIT BOX LID, .06 THICK LEXID	1.000 ea
51XW0832A07	8-32 X .44, TAPTITE II, HEX WSHR SLTD SE	4.000 ea
HW2501E16	KEY, 1/4 SQ X 1.750	1.000 ea
HA7000A02	KEY RETAINER RING, 1 1/8 DIA, 1 3/8 DIA	1.000 ea
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	2.000 ea
MJ1000A02	GREASE, POLYREX EM EXXON	0.050 lb
MG1050Y01	CELEROL BALDOR GOLD *5 GALLON BUCKET*	0.022 ga
HA3101A25	THRUBOLT 1/4-20 X 11.000 OHIO ROD	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
NP3441LUA	AL SUPER-E VPWM INV RDY,UL EEV,NEMA PREM	1.000 ea
36PA1001	PKG GRP, PRINT PK1017A07	1.000 ea



MN416A01	TAG-INSTAL-MAINT no wire (2500 bx)11/25	1.000 ea
FE-0000001	ZRTG FE ASSEMBLY	1.000 ea

AC Induction Motor Performance Data

Record # 115761

Typical performance - not guaranteed values

Winding: 36WGZ651-R001			Type: 3628M		Enclosure: TEFC		
Nameplate Data			460 V, 60 Hz: High Voltage Connection				
Rated Output (HP)		5	Full Load Torque		7.602 LB-FT		
Volts		230/460	Start Configuration		direct on line		
Full Load Amps		11.5/5.73	Breakdown Torque		32.1 LB-FT		
R.P.M.		3480	Pull-up Torque		21.3 LB-FT		
Hz	60	Phase	3	Locked-rotor Torque		26.2 LB-FT	
NEMA Design Code		A	KVA Code	L	Starting Current		54.1 A
Service Factor (S.F.)		1.15	No-load Current		1.66 A		
NEMA Nom. Eff.		88.5	Power Factor	92	Line-line Res. @ 25°C		2.821 Ω
Rating - Duty		40C	AMB-CONT		Temp. Rise @ Rated Load		74°C
S.F. Amps		13.2/6.61	Temp. Rise @ S.F. Load		95°C		
			Locked-rotor Power Factor		48.1		

Load Characteristics 460 V, 60 Hz, 5 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	63	82	89	92	93	94	93
Efficiency	86.4	90	89.9	88.6	86.8	84.7	87.5
Speed	3566.6	3534.1	3499.1	3460.2	3417.5	3371.4	3435
Line amperes	2.16	3.16	4.37	5.75	7.25	8.84	6.65

ABB Motors and Mechanical Inc.

WINDING # 36WGZ651

Typical performance - not guaranteed values.

5 HP 3 PH 60 HZ 3480 RPM 460 V 3628M

TORQUES (LB-FT): PO=32.1 PU=21.3 LR=26.2 LRA=54.1





