

ABB BALDOR RELIANCE III

Customer information packet

EM3220T

1.5HP, 855RPM, 3PH, 60HZ, 184T, 3642M, OPEN, F1

Class - None

Division - Not Applicable

Specifications

Enclosure	OPEN
Frame	184T
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	1.500 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	900 RPM @ 60 HZ
Voltage @ Frequency	230.0 V @ 60 HZ 460.0 V @ 60 HZ
Agency Approvals	CURUSEEV C UR US CURUS
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	6.000 A @ 230.0 V 6.000 A @ 208.0 V 3.000 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	M
Type	AC
Mech. spec.	36B001
Base	
Status	PRD/A
Elec. spec.	36WGR623
Layout	36LYB001
Eff. date	10-30-2025
CD Diagram	CD0005
Poles	08
Leads	9#16
Proprietary	False
Created date	04-27-2015

Heater Indicator	No Heater
High Voltage Full Load Amps	3.0 a
Insulation Class	F
Inverter Code	Inverter Ready
IP Rating	NONE
KVA Code	K
Lifting Lugs	No Lifting Lugs
Locked Bearing Indicator	No Locked Bearing
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	9 @ 16 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3642M
Mounting Arrangement	F1
Number of Poles	8
Overall Length	16.50 IN
Power Factor	60
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	1.15
Shaft Diameter	1.125 IN
Shaft Extension Location	Pulley End
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	855 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

NP2116L											
CAT.NO.	EM3220T										
SPEC.	36B001R623G1										
HP	1.5										
VOLTS	230/460										
AMP	6/3										
RPM	855										
FRAME	184T			HZ	60			PH	3		
SER.F.	1.15		CODE	K		DES	B	CL	F		
NEMA-NOM-EFF	77		PF	60							
RATING	40C AMB-CONT										
CC	010A										
DE	6206		ODE	6205							
ENCL	OPEN		SN								

Parts List

Part number	Description	Quantity
SA299825	SA 36B001R623G1	1.000 ea
RA286858	RA 36B001R623G1	1.000 ea
36CB3004	36 CB CASTING W/1.09 DIA LEAD HOLE @ 6:0	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
36EP3204B00	MASTER ODE,205 BRG,GRSR	1.000 ea
HW4500A01	1641B(ALEMITE)400 UNIV, GREASE FITT	1.000 ea
HW5100A05	WVY WSHR F/205 & 304 BRGS	1.000 ea
36EP3205D00	MASTER DE,206 BRG,1.197SH,GRSR	1.000 ea
HW4500A01	1641B(ALEMITE)400 UNIV, GREASE FITT	1.000 ea
XY2520A12	1/4-20 HEX NUT, DIRECTIONAL SERRATIONS	4.000 ea
36CB4516	750LIPPED CB LID - GALVANNEAL	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
HW3200A01	3/8-16X3/4 EYEBOLT WELDED F/S	1.000 ea
MJ1000A02	GREASE, POLYREX EM EXXON	0.050 lb
MG1050Y01	CELEROL BALDOR GOLD *5 GALLON BUCKET*	0.022 ga
HA3101A28	THRUBOLT 1/4-20 X 12.500 OHIO ROD	4.000 ea
LC0005	CONN.DIA.,TY M,9-LD,DUAL VOLT,REVERSING	1.000 ea
NP2116L	ALUM SUPER-E UL CC	1.000 ea
36PA1001	PKG GRP, PRINT PK1017A07	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
FE-0000001	ZRTG FE ASSEMBLY	1.000 ea
PE-0000001	ZRTG PE ASSEMBLY	1.000 ea

AC Induction Motor Performance Data

Record # 66592

Typical performance - not guaranteed values

Winding: 36WGR623-R011			Type: 3642M		Enclosure: OPEN		
Nameplate Data			460 V, 60 Hz: High Voltage Connection				
Rated Output (HP)		1.5	Full Load Torque		9.45 LB-FT		
Volts		230/460	Start Configuration		direct on line		
Full Load Amps		6/3	Breakdown Torque		28.64 LB-FT		
R.P.M.		855	Pull-up Torque		20.44 LB-FT		
Hz	60	Phase	3	Locked-rotor Torque		27.45 LB-FT	
NEMA Design Code		B	KVA Code	K	Starting Current		16.03 A
Service Factor (S.F.)		1.15	No-load Current		2.2 A		
NEMA Nom. Eff.		77	Power Factor	60	Line-line Res. @ 25°C		8.07 Ω
Rating - Duty		40C	AMB-CONT		Temp. Rise @ Rated Load		61°C
S.F. Amps					Temp. Rise @ S.F. Load		76°C
					Locked-rotor Power Factor		48.6
					Rotor inertia		0.394 LB-FT2

Load Characteristics 460 V, 60 Hz, 1.5 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	26	40	51	60	67	71	64
Efficiency	66.6	75.6	78.4	78.2	76.9	74.2	77.9
Speed	889	879	868	856	841	823	847
Line amperes	2.24	2.43	2.71	3.06	3.5	4.05	3.31

ABB Motors and Mechanical Inc.

WINDING # 36WGR623

Typical performance - not guaranteed values.

1.5 HP 3 PH 60 HZ 855 RPM 460 V 3642M

TORQUES (LB-FT) : PO=28.64 PU=20.44 LR=27.45 LRA=16.03





