

ABB BALDOR RELIANCE III

Customer information packet

EM3120T-G

1.5HP, 3490RPM, 3PH, 60HZ, 143T, 3518M, OPSB, F

Class - None

Division - Not Applicable

Specifications

Enclosure	OPSB
Frame	143T
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	3600 RPM @ 60 HZ
Voltage @ Frequency	460.0 V @ 60 HZ 230.0 V @ 60 HZ
Agency Approvals	CSA CSA EEV 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	4.000 A @ 230.0 V 4.200 A @ 208.0 V 2.000 A @ 460.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	84.0 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Face Code	Standard
Front Shaft Indicator	None

Part Detail

Revision	X
Type	AC
Mech. spec.	35Z948
Base	
Status	PRD/A
Elec. spec.	35WGM761
Layout	35LYZ948
Eff. date	01-05-2026
CD Diagram	CD0005
Poles	02
Leads	9#18
Proprietary	False
Created date	11-17-2011

Heater Indicator	No Heater
High Voltage Full Load Amps	2.0 a
Insulation Class	H
Inverter Code	Inverter Ready
KVA Code	L
Lifting Lugs	No Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	9 @ 18 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3518M
Mounting Arrangement	F1
Number of Poles	2
Overall Length	11.12 IN
Power Factor	83
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	0.875 IN
Shaft Extension Location	Pulley End
Shaft Ground Indicator	Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	3490 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.		EM3120T-G													
SPEC.		35Z948M761G1													
HP		1.5													
VOLTS		230/460													
AMPS		4/2													
RPM		3490													
FRAME		143T		HZ		60		PH		3					
SF		1.15		CODE		L		DES		B		CLASS		H	
NEMA NOM. EFF		84		PF		83									
RATING		40C AMB-CONT													
CC		010A													
ENCL		OPSB		SN											
DE		6205		ODE		6203									
VPWM INVERTER READY															
CT30-60(2:1) VT3-60(20:1)															
USABLE AT		50HZ 1.5HP 190/380V 4.6/2.3A										SF1.0			

Parts List

Part number	Description	Quantity
SA234356	SA 35Z948M761G1	1.000 ea
RA221329	RA 35Z948M761G1	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
35EP3210C00	MASTER DE,205 BRG,1.000SH,LCK BRG	1.000 ea
51XN1032A18	10-32 X 1 1/8 HX WS SL SR (ESKAY)	2.000 ea
XY1032A02	10-32 HEX NUT DIRECTIONAL SERRATION	4.000 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
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*	0.017 ga
LC0005	CONN.DIA.,TY M,9-LD,DUAL VOLT,REVERSING	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
NP3553LUA	ALUM SUPER-E VPWM INV READY UL CC NEMA P	1.000 ea
35PA1066	PKG GRP, PRINT PK1008A07	1.000 ea
LB1350	BAR CODE LABEL FOR YORK	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 # 53128

Typical performance - not guaranteed values

Winding: 35WGM761-R009			Type: 3518M		Enclosure: OPSB		
Nameplate Data			460 V, 60 Hz: High Voltage Connection				
Rated Output (HP)		1.5	Full Load Torque		2.26 LB-FT		
Volts		230/460	Start Configuration		direct on line		
Full Load Amps		4/2	Breakdown Torque		9.32 LB-FT		
R.P.M.		3490	Pull-up Torque		4.18 LB-FT		
Hz	60	Phase	3	Locked-rotor Torque		6.79 LB-FT	
NEMA Design Code		B	KVA Code	L	Starting Current		17.2 A
Service Factor (S.F.)		1.15	No-load Current		1.05 A		
NEMA Nom. Eff.		84	Power Factor	83	Line-line Res. @ 25°C		12.7 Ω
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		64
					Rotor inertia		0.0493 LB-FT2

Load Characteristics 460 V, 60 Hz, 1.5 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	43	64	77	83	87	89	85
Efficiency	73.9	82.4	85.1	85.1	84.3	83.1	84.6
Speed	3574	3550	3524	3496	3465	3430	3477
Line amperes	1.14	1.35	1.63	1.99	2.41	2.84	2.24

ABB Motors and Mechanical Inc.

WINDING # 35WGM761

Typical performance - not guaranteed values.

1.5 HP 3 PH 60 HZ 3490 RPM 460 V 3518M

TORQUES (LB-FT): PO=9.32 PU=4.18 LR=6.79 LRA=17.2





