

ABB BALDOR RELIANCE III

Customer information packet

EM4111T-BG

25HP, 1180RPM, 3PH, 60HZ, 324T, 1072M, TEFC, F1

Class - None

Division - Not Applicable

Specifications

Enclosure	TEFC
Frame	324T
Frame Material	Iron
Frequency	60.00 Hz
Haz Area Class and Group	None
Haz Area Division	Not Applicable
Motor Letter Type	Three Phase
Output @ Frequency	25.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1200 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	64.000 A @ 230.0 V 70.000 A @ 208.0 V 32.000 A @ 460.0 V
Design Code	A
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	93.0 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Face Code	Standard
Front Shaft Indicator	None

Part Detail

Revision	Q
Type	AC
Mech. spec.	10J469
Base	
Status	PRD/A
Elec. spec.	10WGX979
Layout	10LYJ469
Eff. date	06-27-2024
CD Diagram	CD0180
Poles	06
Leads	9#10
Proprietary	False
Created date	10-10-2013

Heater Indicator	No Heater
High Voltage Full Load Amps	32.0 a
Insulation Class	H
Inverter Code	Inverter Ready
KVA Code	H
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	9 @ 10 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	1072M
Mounting Arrangement	F1
Number of Poles	6
Overall Length	30.39 IN
Power Factor	79
Product Family	General Purpose
Pulley End Bearing Type	Ball
Pulley Face Code	Standard
Pulley Shaft Indicator	Standard
Rodent Screen	None
Service Factor	1.15
Shaft Diameter	2.125 IN
Shaft Extension Location	Pulley End
Shaft Ground Indicator	Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	Shaft Slinger
Speed	1180 rpm
Speed Code	Single Speed
Starting Method	Direct on line
Thermal Device - Bearing	NONE (OLD)
Thermal Device - Winding	None
Vibration Sensor Indicator	No Vibration Sensor
Winding Thermal 1	None

Winding Thermal 2

None

Nameplate

NP3443L													
CAT.NO.	EM4111T-BG				CUST. P/N				ENCL				TEFC
SPEC.	10J469X979G1		CC	010A		FRAME	324T		SER.NO.				
HP	25			CLASS	H		HZ	60					
R.P.M.	1180			PH	3		DES	A					
VOLTS	230/460				CODE	H		ODE BRG	6309	DE BRG	6312		
AMPS	64/32												
RATING	40C AMB-CONT			NEMA NOM. EFF.				93		GREASE	POLYREX EM		
P.F.	79	SER.F.	1.15		VPWM INVERTER READY								
HTR-VOLTS	HTR-AMPS			HTR-WATTS									

Parts List

Part number	Description	Quantity
SA270536	SA 10J469X979G1	1.000 ea
RA257170	RA 10J469X979G1	1.000 ea
10CB3001	CONDUIT BOX CAST W/2.500 LEAD HOLE	1.000 ea
09GS1000	GASKET-CONDUIT BOX, 1/16 THICK LEXIDE	1.000 ea
10XN3118K12	5/16-18 X .75 GRADE 5, ZINC PLATED	4.000 ea
HW1001A31	LOCKWASHER 5/16, ZINC PLT.591 OD, .319 I	4.000 ea
WD1000B16	T&B CX70TN OR L70P TERMINAL LUG	1.000 ea
51XF2520A08	SCREW, HEX SER SLT HD, ZN 1/4-20 X .50 L	1.000 ea
10EP1106A53	FR ENDPLATE, MACH	1.000 ea
10XN3816K32	BOLT, 3/8-16X2 HH YZ(5)	4.000 ea
HW1001A38	LOCKWASHER 3/8, ZINC PLT .688 OD, .382 I	4.000 ea
HA4017A01	1/8 X 4 GREASE EXT (F/S)	1.000 ea
10XN2520K36	1/4-20 X 2.00 HX HD SCRW GRADE 5, ZINC P	2.000 ea
HW1001A25	LOCKWASHER 1/4, ZINC PLT .493 OD, .255 I	2.000 ea
HW5100A11	W3917-042 WVY WSHR (WB)	1.000 ea
10EP1108A16	PULLEY ENDPLATE - 312 BRG.- ENCL.	1.000 ea
HW4600B41	V-RING SLINGER 2.125 X 2.880 X 0.280	1.000 ea
10XN3816K28	3/8-16 X 1.75 HEX HD CAP SCREW, GRADE 5	4.000 ea
HW1001A38	LOCKWASHER 3/8, ZINC PLT .688 OD, .382 I	4.000 ea
10XN3118K40	5/16-18 X 2.75" HEX HD, GRADE 5	4.000 ea
HW1001A31	LOCKWASHER 5/16, ZINC PLT.591 OD, .319 I	4.000 ea
10FH4000	310 FAN HOUSING STAMPED, PRIMED W/O P SU	1.000 ea
51XF2520A08	SCREW, HEX SER SLT HD, ZN 1/4-20 X .50 L	4.000 ea
10CB3500SP	CONDUIT BOX LID, CAST	1.000 ea
10GS1000	GASKET, CONDUIT BOX LID	1.000 ea
51XW2520A12	.25-20 X .75, TAPTITE II, HEX WSHR SLTD	4.000 ea
HW2501H33	KEY, 1/2 SQ X 3.875	1.000 ea
MN416A01	TAG-INSTAL-MAINT no wire (2500 bx)11/25	1.000 ea
LB1508	LABEL "SHAFT GROUNDING BRUSH" 1.50 X .81	1.000 ea
HW4500A21	1618BALEMITE FITTING 825 UNIVERSAL	1.000 ea
HW4500A17	317400 ALEMITE GREASE RELIEF	1.000 ea

HA4066A01	PUSH IN T-DRAIN FITTING (BLACK)	1.000 ea
HA4051A00	PLASTIC CAP FOR GREASE FITTING	1.000 ea
MJ1000A02	GREASE, POLYREX EM EXXON	0.130 lb
HW4500A03	GREASE FITTING, .125 NPT 1610(ALEMITE) 8	1.000 ea
HW4500A17	317400 ALEMITE GREASE RELIEF	1.000 ea
HA4066A01	PUSH IN T-DRAIN FITTING (BLACK)	1.000 ea
HA4051A00	PLASTIC CAP FOR GREASE FITTING	1.000 ea
09FN3001C02	EXTERNAL FAN, PLASTIC (COMES W/SCREW FRO	1.000 ea
HW2500A25	WOODRUFF KEY USA #1008 #BLOW CARBON STEE	1.000 ea
MG1050Y01	CELEROL BALDOR GOLD *5 GALLON BUCKET*	0.070 ga
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	4.000 ea
LB1624	COMBINED WARNING LABEL, ISO/ANSI PICTOGR	1.000 ea
LC0181	CONNECTION LABEL	1.000 ea
NP3443L	SS SUPER-E,INV RED,CURUS EEV,NEMA PREM,C	1.000 ea
12PA1000	PACKAGING GROUP PRINT PK1024A07	1.000 ea

AC Induction Motor Performance Data

Record # 48203

Typical performance - not guaranteed values

Winding: 10WGX979-R006				Type: 1072M		Enclosure: TEFC	
Nameplate Data				460 V, 60 Hz: High Voltage Connection			
Rated Output (HP)		25		Full Load Torque		112 LB-FT	
Volts		230/460		Start Configuration		direct on line	
Full Load Amps		64/32		Breakdown Torque		357 LB-FT	
R.P.M.		1180		Pull-up Torque		165 LB-FT	
Hz	60	Phase	3	Locked-rotor Torque		220 LB-FT	
NEMA Design Code		A	KVA Code	H	Starting Current		220 A
Service Factor (S.F.)		1.15		No-load Current		14.9 A	
NEMA Nom. Eff.		93	Power Factor	79	Line-line Res. @ 25°C		0.279 Ω
Rating - Duty		40C AMB-CONT		Temp. Rise @ Rated Load		50°C	
S.F. Amps				Temp. Rise @ S.F. Load		62°C	
				Locked-rotor Power Factor		30.3	
				Rotor inertia		8.82 lb-ft²	

Load Characteristics 460 V, 60 Hz, 25 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	42	63	73	79	81	82	80
Efficiency	89	92.6	93.3	93	92.5	91.5	92.7
Speed	1195	1191	1187	1182	1178	1172	1180
Line amperes	16.3	20.1	25.4	32	39.1	46.7	36.3

ABB Motors and Mechanical Inc.

WINDING # 10WGX979

Typical performance - not guaranteed values.

25 HP 3 PH 60 HZ 1180 RPM 460 V 1072M

TORQUES (LB-FT): PO=357 PU=165 LR=220 LRA=220





