

ABB BALDOR RELIANCE III

Customer information packet

EFM4104T

30HP, 1770RPM, 3PH, 60HZ, 286T, 1056M, TEFC, F2

Class - None

Division - Not Applicable

Specifications

Enclosure	TEFC
Frame	286T
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	30.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	460.0 V @ 60 HZ 230.0 V @ 60 HZ
Agency Approvals	CURUSEEV NEMA PREMIUM NEMA PREMIUM (OLD LOGO)
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	72.000 A @ 230.0 V 76.000 A @ 208.0 V 36.000 A @ 460.0 V
Design Code	A
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	93.6 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Face Code	Standard
Front Shaft Indicator	None

Part Detail

Revision	Y
Type	AC
Mech. spec.	10C156
Base	
Status	PRD/A
Elec. spec.	10WGY758
Layout	10LYC156
Eff. date	06-27-2024
CD Diagram	CD0005
Poles	04
Leads	9#10
Proprietary	False
Created date	04-29-2010

Heater Indicator	No Heater
High Voltage Full Load Amps	36.0 a
Insulation Class	F
Inverter Code	Inverter Ready
KVA Code	G
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	1056M
Mounting Arrangement	F2
Number of Poles	4
Overall Length	27.81 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 NON-COMPLIANT
Service Factor	1.15
Shaft Diameter	1.875 IN
Shaft Extension Location	Pulley End
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	Shaft Slinger
Speed	1770 rpm
Speed Code	Single Speed
Starting Method	Direct on line
Thermal Device - Bearing	None
Thermal Device - Winding	Normally Closed Thermostat
Vibration Sensor Indicator	No Vibration Sensor



Winding Thermal 1	None
Winding Thermal 2	None

Nameplate

NP3443L													
CAT.NO.	EFM4104T				CUST. P/N				ENCL				TEFC
SPEC.	10C156Y758G1		CC	010A	FRAME	286T		SER.NO.					
HP	30			CLASS	F	HZ	60						
R.P.M.	1770			PH	3	DES	A						
VOLTS	230/460				CODE	G		ODE BRG	6309	DE BRG	6311		
AMPS	72/36												
RATING	40C AMB-CONT			NEMA NOM. EFF.				93.6		GREASE	POLYREX EM		
P.F.	83	SER.F.	1.15		VPWM INVERTER READY								
HTR-VOLTS	HTR-AMPS			HTR-WATTS									

Parts List

Part number	Description	Quantity
SA194229	SA 10C156Y758G1	1.000 ea
RA181817	RA 10C156Y758G1	1.000 ea
09FN3001C02	EXTERNAL FAN, PLASTIC (COMES W/SCREW FRO	1.000 ea
10CB3000SP	KOBX, CAST W/2.00 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
WD1000B25	GND LUG, BURNDY L125HP OR T&B L125HP-BB	1.000 ea
19XW3118G08	.31-18X.50,HEX WSHR HD,TAPTITE 2,GREEN	1.000 ea
10EP1106A01	FR ENDPLATE, MACH	1.000 ea
HA4051A00	PLASTIC CAP FOR GREASE FITTING	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
HW5100A11	W3917-042 WVY WSHR (WB)	1.000 ea
10XN2520K36	1/4-20 X 2.25" HX HD SCRWGRADE 5, ZINC P	2.000 ea
HW1001A25	LOCKWASHER 1/4, ZINC PLT .493 OD, .255 I	2.000 ea
10XN3118K40	5/16-18 X 2.50" HEX HD, GRADE 5	4.000 ea
HW1001A31	LOCKWASHER 5/16, ZINC PLT.591 OD, .319 I	4.000 ea
10EP1105A01	PU ENDPLATE	1.000 ea
HA4051A00	PLASTIC CAP FOR GREASE FITTING	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
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
HW4600B40	V-RING SLINGER 2.000 X 2.680 X .28 VITON	1.000 ea
HW2501H28	KEY, 1/2 SQ X 3.250	1.000 ea
HW4500A21	1618BALEMITE FITTING 825 UNIVERSAL	1.000 ea
HA4017A01	1/8 X 4 GREASE EXT (F/S)	1.000 ea

HW4500A17	317400 ALEMITE GREASE RELIEF	1.000 ea
HA4054	SHORT T-DRAIN FITTING, .125" N.P.T.	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
LB1624	COMBINED WARNING LABEL, ISO/ANSI PICTOGR	1.000 ea
HA4054	SHORT T-DRAIN FITTING, .125" N.P.T.	1.000 ea
HW2500A25	WOODRUFF KEY USA #1008 #BLOW CARBON STEE	1.000 ea
MG1050Y01	CELEROL BALDOR GOLD *5 GALLON BUCKET*	0.125 ga
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	4.000 ea
MN416A01	TAG-INSTAL-MAINT no wire (2500 bx)11/25	1.000 ea
LC0005E01	SPL CONN.DIA./WARN.LABEL(LC0005/LB1119)	1.000 ea
NP3443L	SS SUPER-E,INV RED,CURUS EEV,NEMA PREM,C	1.000 ea
10PA1000	PACKAGING GROUP COMBINED PRINT PK1023A07	1.000 ea
FE-0000022	ZRTG FE ASSEMBLY	1.000 ea
PE-0000013	ZRTG PE ASSEMBLY	1.000 ea

Accessories

Part number	Description	Multiplier
10-1305	C FACE KIT	A8
10EP1502A01SP	D-FLANGE KIT	A8

AC Induction Motor Performance Data

Record # 30986

Typical performance - not guaranteed values

Winding: 10WGY758-R001			Type: 1056M		Enclosure: TEFC		
Nameplate Data			460 V, 60 Hz: High Voltage Connection				
Rated Output (HP)		30	Full Load Torque		89.1 LB-FT		
Volts		230/460	Start Configuration		direct on line		
Full Load Amps		72/36	Breakdown Torque		270 LB-FT		
R.P.M.		1770	Pull-up Torque		128 LB-FT		
Hz	60	Phase	3	Locked-rotor Torque		145 LB-FT	
NEMA Design Code		B	KVA Code	G	Starting Current		235 A
Service Factor (S.F.)		1.15	No-load Current		15.9 A		
NEMA Nom. Eff.		93.6	Power Factor	83	Line-line Res. @ 25°C		0.226 Ω
Rating - Duty		40C	AMB-CONT		Temp. Rise @ Rated Load		57°C
S.F. Amps					Temp. Rise @ S.F. Load		70°C
					Locked-rotor Power Factor		32
					Rotor inertia		4.45 LB-FT2

Load Characteristics 460 V, 60 Hz, 30 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	44	66	75	83	83	83	83
Efficiency	90.6	93.7	94.3	94	93.2	93	93.6
Speed	1794	1787	1781	1774	1766	1757	1769
Line amperes	17.9	23	30.1	36.2	45.3	54.5	41.7

ABB Motors and Mechanical Inc.

WINDING # 10WGY758

Typical performance - not guaranteed values.

30 HP 3 PH 60 HZ 1770 RPM 460 V 1056M

TORQUES (LB-FT): PO=270 PU=128 LR=145 LRA=235





