

ABB BALDOR RELIANCE III

Customer information packet

VEM4107T

44M 2P TEFC VER 284TSC SE

Class - None

Division - Not Applicable

Specifications

Enclosure	TEFC
Frame	284TSC
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	3600 RPM @ 60 HZ
Voltage @ Frequency	230.0 V @ 60 HZ 460.0 V @ 60 HZ
Agency Approvals	NEMA PREMIUM NEMA PREMIUM (OLD LOGO) CURUSEEV
Ambient Temperature	40 °C
Auxiliary Box	NO AUXILLARY BOX
Auxiliary Box Lead Termination	None
Base Indicator	No Mounting
Bearing Grease Type	Polyrex EM (-20F +300F)
Blower	None
Current @ Voltage	29.000 A @ 460.0 V 58.000 A @ 230.0 V 62.000 A @ 208.0 V
Design Code	A
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	91.7 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Shaft Indicator	None
Heater Indicator	No Heater

Part Detail

Revision	M
Type	AC
Mech. spec.	09F909
Base	
Status	PRD/A
Elec. spec.	09WGT577
Layout	09LYF909
Eff. date	06-27-2024
CD Diagram	CD0005
Poles	02
Leads	9#10
Proprietary	False
Created date	09-29-2018

High Voltage Full Load Amps	29.0 a
Insulation Class	F
Inverter Code	Inverter Ready
KVA Code	J
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Motor Lead Quantity/Wire Size	9 @ 10 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	0944M
Mounting Arrangement	F1
Number of Poles	2
Overall Length	22.45 IN
Power Factor	88
Product Family	General Purpose
Pulley End Bearing Type	Ball
Pulley Face Code	C-Face
Pulley Shaft Indicator	Standard
Rodent Screen	None
Service Factor	1.15
Shaft Diameter	1.625 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	Shaft Slinger
Speed	3520 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

NP3443LUA											
CAT.NO.	VEM4107T			CUST. P/N				ENCL			TEFC
SPEC.	09F909T577G1	CC	010A	FRAME	284TSC	SER.NO.					
HP	25		CLASS	F	HZ	60					
R.P.M.	3520		PH.	3	DES.	A					
VOLTS	230/460			CODE	J	ODE BRG	6208	DE BRG	6311		
AMPS	58/29										
RATING	40C AMB-CONT		NEMA NOM. EFF.			91.7	GREASE		POLYREX EM		
P.F.	88	SER.F.	1.15	CT6-60H(10:1)VT3-60H(20:1							
USABLE AT	50Hz 20HP 190/380V 56/28A			1.0SF							
VOLTS	AMPS	MAX. SPACE HEATER TEMP.									

Parts List

Part number	Description	Quantity
SA361324	SA 09F909T577G1	1.000 ea
RA350508	RA 09F909T577G1	1.000 ea
37FN3002B02	EXFN, PLASTIC, 7.50 OD, 1.503 ID	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
09EP1100A14	FREP ASSM, (FOR INTRL ROUTING PURPOSE)	1.000 ea
HA3400A33	STUD- 3/8-16 X 4.96 HEX	4.000 ea
HW1001A38	LOCKWASHER 3/8, ZINC PLT .688 OD, .382 I	4.000 ea
XY3816A12	3/8-16 FINISHED NUT W/SERRATIONS	4.000 ea
HW5100A08	W3118-035 WVY WSHR (WB)	1.000 ea
10XN2520K28	1/4-20 X 1.75" 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
09EP1310A08	SPL FACE MTD EP 284-6TC 309 ENCL 311 BRG	1.000 ea
10XN3816K28	3/8-16 X 1.75 HEX HD CAP SCREW, GRADE 5	4.000 ea
HW4600B40	V-RING SLINGER 2.000 X 2.680 X .28 VITON	1.000 ea
HW1001A38	LOCKWASHER 3/8, ZINC PLT .688 OD, .382 I	4.000 ea
09FH4000SP	309 FH - BLACK PRIMER	1.000 ea
HW1001A38	LOCKWASHER 3/8, ZINC PLT .688 OD, .382 I	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
HW2501G17	KEY, 3/8 SQ X 1.875	1.000 ea
PK6014	STEEL STRAP FOR 309-312 BASELESS MOTORS	4.000 ea
19XW3118A08	.31-18 X .50 HEX WASHER HEAD TAPTITE II	4.000 ea
HW4500A05	1669B ALEM/UNIV860 GR FTG X	1.000 ea

HW4500A17	317400 ALEMITE GREASE RELIEF	1.000 ea
HA4054	SHORT T-DRAIN FITTING, .125" N.P.T.	1.000 ea
HA4051A00	PLASTIC CAP FOR GREASE FITTING	1.000 ea
MJ1000A02	GREASE, POLYREX EM EXXON	0.080 lb
HW4500A03	GREASE FITTING, .125 NPT 1610(ALEMITE) 8	1.000 ea
HW4500A17	317400 ALEMITE GREASE RELIEF	1.000 ea
HA4054	SHORT T-DRAIN FITTING, .125" N.P.T.	1.000 ea
HA4051A00	PLASTIC CAP FOR GREASE FITTING	1.000 ea
HW2500A25	WOODRUFF KEY USA #1008 #BLOW CARBON STEE	1.000 ea
MG1050Y01	CELEROL BALDOR GOLD *5 GALLON BUCKET*	0.050 ga
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	4.000 ea
LB1624	COMBINED WARNING LABEL, ISO/ANSI PICTOGR	1.000 ea
LC0005	CONN.DIA.,TY M,9-LD,DUAL VOLT,REVERSING	1.000 ea
NP3443LUA	SS SUPER-E,CURUS-EEV,NEMA PREM, CC	1.000 ea
40PA1017	PACKAGING GROUP, 09 VERT LARGE FLANGE	1.000 ea
MN416A01	TAG-INSTAL-MAINT no wire (2500 bx)11/25	1.000 ea
LD7020E09	LEAD SET, 10AWG, 9 LEAD, 20" LONG LEADS	1.000 ea

AC Induction Motor Performance Data

Record # 72672

Typical performance - not guaranteed values

Winding: 09WGT577-R001				Type: 0944M		Enclosure: TEFC				
Nameplate Data				460 V, 60 Hz: High Voltage Connection						
Rated Output (HP)		25		Full Load Torque		37.39 LB-FT				
Volts		230/460		Start Configuration		direct on line				
Full Load Amps		58/29		Breakdown Torque		153 LB-FT				
R.P.M.		3520		Pull-up Torque		58.5 LB-FT				
Hz		60 Phase		3		Locked-rotor Torque		75 LB-FT		
NEMA Design Code		A		KVA Code		J		Starting Current	223 A	
Service Factor (S.F.)		1.15				No-load Current		10.1 A		
NEMA Nom. Eff.		91.7		Power Factor		88		Line-line Res. @ 25°C		0.3381 Ω
Rating - Duty		40C		AMB-CONT		Temp. Rise @ Rated Load		74°C		
S.F. Amps						Temp. Rise @ S.F. Load		91°C		
						Locked-rotor Power Factor		29.7		

Load Characteristics 460 V, 60 Hz, 25 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	55	76	84	88	89	90	89
Efficiency	87.6	91.6	92.2	91.8	90.9	89.8	91.3
Speed	3580.5	3562.7	3544.2	3524	3501.4	3477.9	3510
Line amperes	12.3	16.9	22.7	29.1	36.1	43.5	33.3

ABB Motors and Mechanical Inc.

WINDING # 09WGT577

Typical performance - not guaranteed values.

25 HP 3 PH 60 HZ 3520 RPM 460 V 0944M

TORQUES (LB-FT): PO=153 PU=58.5 LR=75 LRA=223





