

ABB BALDOR RELIANCE III

Customer information packet

VEM4106T

20HP, 3520RPM, 3PH, 60HZ, 256TC, 0936M, TEFC, F

Class - None

Division - Not Applicable

Specifications

Enclosure	TEFC
Frame	256TC
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	20.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	3600 RPM @ 60 HZ
Voltage @ Frequency	208.0 V @ 60 HZ 230.0 V @ 60 HZ 460.0 V @ 60 HZ
Agency Approvals	NEMA PREMIUM CURUSEEV NEMA PREMIUM (OLD LOGO)
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	23.000 A @ 460.0 V 46.000 A @ 230.0 V 50.000 A @ 208.0 V
Design Code	A
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	91.0 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Face Code	Standard

Part Detail

Revision	AF
Type	AC
Mech. spec.	09C103
Base	
Status	PRD/A
Elec. spec.	09WZ601
Layout	09LYC103
Eff. date	04-07-2026
CD Diagram	CD0005
Poles	02
Leads	9#10
Proprietary	False
Created date	04-22-2015

Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	23.0 a
Insulation Class	F
Inverter Code	Inverter Ready
IP Rating	NONE
KVA Code	H
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	9 @ 12 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	0936M
Mounting Arrangement	F1
Number of Poles	2
Overall Length	23.86 IN
Power Factor	89
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 Extension Location	Pulley End
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

NP3441LUA									
CAT.NO.	VEM4106T								
SPEC	09C103Z601G2								
HP	20								
VOLTS	208-230/460								
AMPS	50-46/23								
RPM	3520								
FRAME	256TC		HZ	60			PH	3	
SF	1.15		CODE	H	DES	A	CLASS	F	
NEMA NOM. EFF	91		PF	89					
RATING	40C AMB-CONT								
CC	010A								
ENCL	TEFC	SER							
DE	6309		ODE	6208					
VPWM INVERTER READY									
CT6-60H(10:1)VT3-60H(20:1									
50Hz 20HP 190/380V 56/28A									SF1.0

Parts List

Part number	Description	Quantity
SA299745	SA 09C103Z601G2	1.000 ea
RA286775	RA 09C103Z601G2	1.000 ea
37FN3002C02	EXFN, PLASTIC, 6.00 OD, 1.503 ID	1.000 ea
HW3201A01	1/2-13 EYEBOLT	1.000 ea
HW1002A63	WASHER, 5/8 HI-COLLAR SPRICKWASHER	1.000 ea
09CB3003	CB W/1.75" DIA LD HL - 37, 39, 307 & 309	1.000 ea
09GS1000	GASKET-CONDUIT BOX, 1/16 THICK LEXIDE	1.000 ea
51XW2520A12	.25-20 X .75, TAPTITE II, HEX WSHR SLTD	4.000 ea
WD1000B16	T&B CX70TN OR L70P TERMINAL LUG	1.000 ea
59XW2520G07	.25-20X.44,HEX SER WSHR,TAPTITE 2,GREEN	1.000 ea
09EP1100A208	ENDPLATE, MACH	1.000 ea
HA3400A33	STUD- 3/8-16 X 4.96 HEX	4.000 ea
XY3816A12	3/8-16 FINISHED NUT W/SERRATIONS	4.000 ea
HW1001A38	LOCKWASHER 3/8, ZINC PLT .688 OD, .382 I	4.000 ea
HW5100A08	W3118-035 WVY WSHR (WB)	1.000 ea
10XN2520K36	1/4-20 X 2.25" HX HD SCRWGRADE 5, ZINC P	4.000 ea
HW1001A25	LOCKWASHER 1/4, ZINC PLT .493 OD, .255 I	4.000 ea
09EP1300A155	PUEP MACH W/309 BRG & "O" DRAIN, SLINGER	1.000 ea
10XN3816K28	3/8-16 X 1.75 HEX HD CAP SCREW, GRADE 5	4.000 ea
HW4600B44	V-RING SLINGER 1.500 X 1.810 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
09CB3501SP	CONDUIT BOX LID FOR 09CB3001 & 09CB3002	1.000 ea
09GS1013SP	GS FOR 09CB3501, 12CB1500 & 12CB1503 LID	1.000 ea
51XW2520A12	.25-20 X .75, TAPTITE II, HEX WSHR SLTD	2.000 ea
HW2501G25	KEY, 3/8 SQ X 2.875	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

HA4051A00	PLASTIC CAP FOR GREASE FITTING	1.000 ea
HA4066A01	PUSH IN T-DRAIN FITTING (BLACK)	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
HA4051A00	PLASTIC CAP FOR GREASE FITTING	1.000 ea
HA4066A01	PUSH IN T-DRAIN FITTING (BLACK)	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	2.000 ea
LB1624	COMBINED WARNING LABEL, ISO/ANSI PICTOGR	1.000 ea
LC0005	CONN.DIA.,TY M,9-LD,DUAL VOLT,REVERSING	1.000 ea
NP3441LUA	AL SUPER-E VPWM INV RDY,UL EEV,NEMA PREM	1.000 ea
40PA1014	PACKAGING GROUP, 09 NO BASE	1.000 ea
MN416A01	TAG-INSTAL-MAINT no wire (2500 bx)11/25	1.000 ea
FE-0000013	ZRTG FE ASSEMBLY	1.000 ea
LD7020E09	LEAD SET, 10AWG, 9 LEAD, 20" LONG LEADS	1.000 ea

AC Induction Motor Performance Data

Record # 57538

Typical performance - not guaranteed values

Winding: 09WGZ601-R004			Type: 0936M		Enclosure: TEFC		
Nameplate Data			460 V, 60 Hz: High Voltage Connection				
Rated Output (HP)		20	Full Load Torque		29.6 LB-FT		
Volts		208-230/460	Start Configuration		direct on line		
Full Load Amps		50-46/23	Breakdown Torque		111 LB-FT		
R.P.M.		3520	Pull-up Torque		39.1 LB-FT		
Hz	60	Phase	3	Locked-rotor Torque		49.6 LB-FT	
NEMA Design Code		A	KVA Code		H		
Service Factor (S.F.)		1.15	Starting Current		161 A		
NEMA Nom. Eff.		91	Power Factor		89		
Rating - Duty		40C	AMB-CONT		Temp. Rise @ Rated Load		76°C
S.F. Amps					Temp. Rise @ S.F. Load		95°C
					Locked-rotor Power Factor		29
					Rotor inertia		0.92 lb-ft²

Load Characteristics 460 V, 60 Hz, 20 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	58	78	86	89	90	90	90
Efficiency	88.9	92.2	92.4	91.7	90.7	89.2	91.1
Speed	3579.6	3561.5	3541.3	3519.5	3495.4	3467.8	3505
Line amperes	9	13	17.7	22.9	28.6	35	26.3

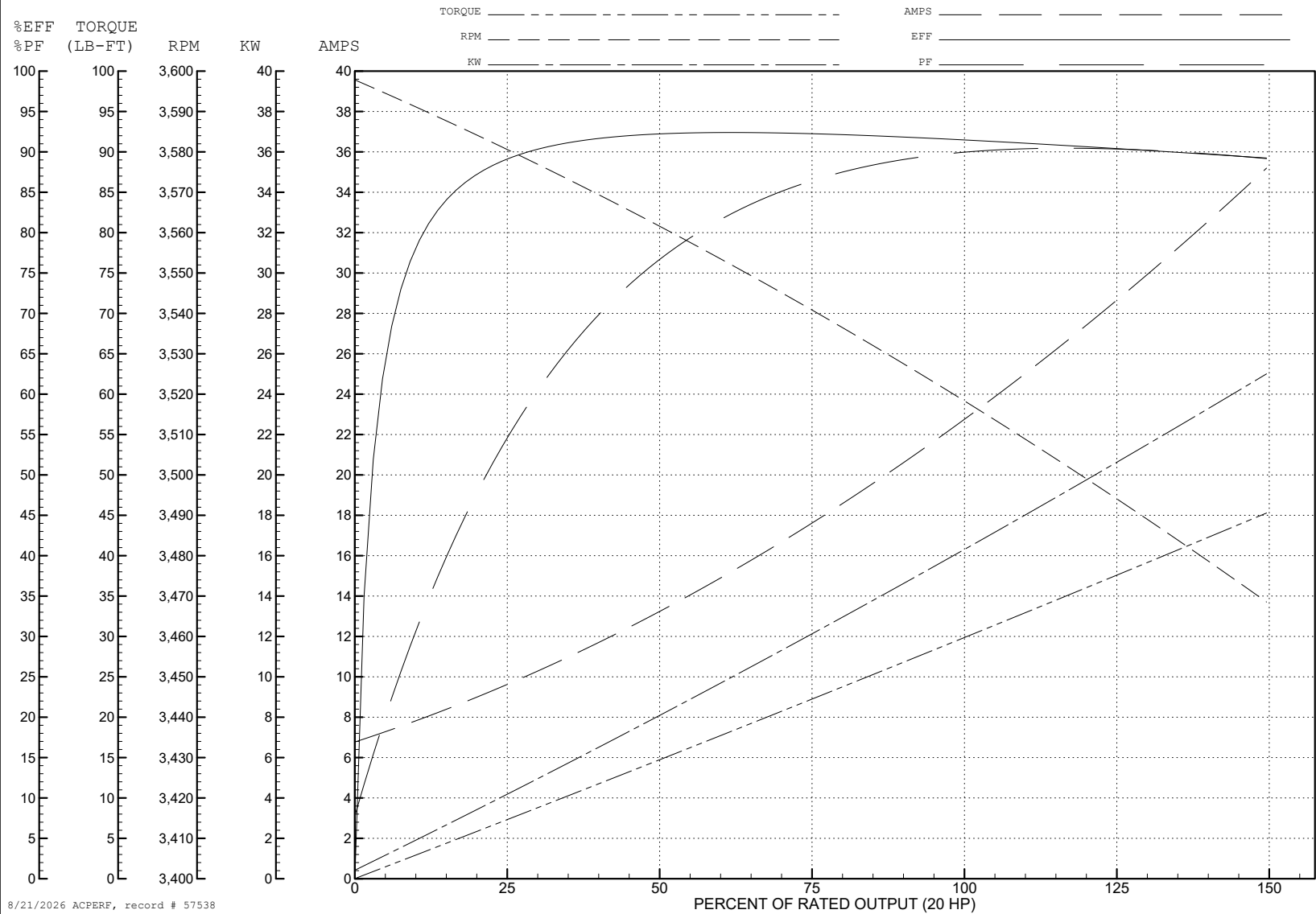
ABB Motors and Mechanical Inc.

WINDING # 09WZ601

Typical performance - not guaranteed values.

20 HP 3 PH 60 HZ 3520 RPM 460 V 0936M

TORQUES (LB-FT): PO=111 PU=39.1 LR=49.6 LRA=161



8/21/2026 ACPERF, record # 57538

