

ABB BALDOR RELIANCE III

Customer information packet

VEM3774T

10HP, 1765RPM, 3PH, 60HZ, 215TC, 0748M, TEFC, F

Class - None

Division - Not Applicable

Specifications

Enclosure	TEFC
Frame	215TC
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	10.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	230.0 V @ 60 HZ 460.0 V @ 60 HZ
Agency Approvals	CURUSEEV NEMA PREMIUM
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	12.300 A @ 460.0 V 24.600 A @ 230.0 V 27.000 A @ 208.0 V
Design Code	B
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
High Voltage Full Load Amps	12.3 a

Part Detail

Revision	H
Type	AC
Mech. spec.	07G082
Base	
Status	PRD/A
Elec. spec.	07WGT511
Layout	07LYG082
Eff. date	05-28-2025
CD Diagram	CD0005
Poles	04
Leads	9#14
Proprietary	False
Created date	02-08-2021

Insulation Class	F
Inverter Code	Inverter Ready
KVA Code	H
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Motor Lead Quantity/Wire Size	9 @ 14 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	0748M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	19.20 IN
Power Factor	83
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	1.375 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	1765 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.	VEM3774T								
SPEC	07G082T511G1								
HP	10								
VOLTS	230/460								
AMPS	24.6/12.3								
RPM	1765								
FRAME	215TC		HZ	60			PH	3	
SF	1.15		CODE	H	DES	B	CLASS	F	
NEMA NOM. EFF	91.7		PF	83					
RATING	40C AMB-CONT								
CC	010A								
ENCL	TEFC		SER						
DE	6307		ODE	6206					
VPWM INVERTER READY			SFA 28.2/14.1						
CT6-60H(10:1)VT3-60H(20:1									
	50HZ 10HP 190/380V 29.8/14.9A							SF1.0	

Parts List

Part number	Description	Quantity
SA390868	SA 07G082T511G1	1.000 ea
RA381336	RA 07G082T511G1	1.000 ea
37FN3002C01	EXFN, PLASTIC, 6.00 OD, 1.155 ID	1.000 ea
HW3201A05	3/8-16 EYEBOLT	1.000 ea
09CB3002SP	CB W/1.38 LEAD HOLE FOR 37, 39, 307 & 30	1.000 ea
09GS1000	GASKET-CONDUIT BOX, 1/16 THICK LEXIDE	1.000 ea
51XW2520A12	.25-20 X .75, TAPTITE II, HEX WSHR SLTD	2.000 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
37EP1100A41	FR ENDPLATE MACH FOR GREASER & RELIEF	1.000 ea
HW4500A17	317400 ALEMITE GREASE RELIEF	1.000 ea
HW4500A01	1641B(ALEMITE)400 UNIV, GREASE FITT	1.000 ea
HW5100A06	W2420-025 WVY WSHR (WB)	1.000 ea
37EP1300A10	FACE MTD EP,307BRG,213-5TC,GRSR,RELIEF &	1.000 ea
HW4500A17	317400 ALEMITE GREASE RELIEF	1.000 ea
HW4500A01	1641B(ALEMITE)400 UNIV, GREASE FITT	1.000 ea
10XN2520A30	HEX HD CAP SCREW-STD THD-.25 X 20 THD PE	4.000 ea
HW1001A25	LOCKWASHER 1/4, ZINC PLT .493 OD, .255 I	4.000 ea
XY3118A12	5/16-18 HEX NUT DIRECTIONAL SERRATION	4.000 ea
51XB1214A20	12-14X1.25 HXWSSLD SERTYB	1.000 ea
07FH4007SP	PRIMED	1.000 ea
51XW1032A06	10-32 X .38, TAPTITE II, HEX WSHR SLTD S	3.000 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
HW2501F21	KEY, 5/16 SQ X 2.375	1.000 ea
HA7000A02	KEY RETAINER RING, 1 1/8 DIA, 1 3/8 DIA	1.000 ea
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	2.000 ea
LB1624	COMBINED WARNING LABEL, ISO/ANSI PICTOGR	1.000 ea
MJ1000A02	GREASE, POLYREX EM EXXON	0.050 lb
HA3104A32	THRUBOLT- 5/16-18 X12.750	4.000 ea

MG1050Y01	CELEROL BALDOR GOLD *5 GALLON BUCKET*	0.036 ga
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
07PA1011	PKG GRP, 07 CAST IRON PK1181	1.000 ea
07PA1095	PKG GRP, VER 07 CAST IRON	1.000 ea
MN416A01	TAG-INSTAL-MAINT no wire (2500 bx)11/25	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 # 85502

Preliminary Data Sheet

Winding: 07WGT511-R001				Type: 0748M		Enclosure: TEFC	
Nameplate Data				460 V, 60 Hz: High Voltage Connection			
Rated Output (HP)		10		Full Load Torque		29.8 LB-FT	
Volts		230/460		Start Configuration		direct on line	
Full Load Amps		24.6/12.3		Breakdown Torque		84.1 LB-FT	
R.P.M.		1765		Pull-up Torque		39.8 LB-FT	
Hz	60	Phase	3	Locked-rotor Torque		50.9 LB-FT	
NEMA Design Code		B		KVA Code		H	
Service Factor (S.F.)		1.15		Starting Current		85.9 A	
NEMA Nom. Eff.		91.7		Power Factor		83	
Rating - Duty		40C		AMB-CONT		Temp. Rise @ Rated Load	
S.F. Amps		28.3/14.15		Temp. Rise @ S.F. Load		93°C	
				Locked-rotor Power Factor		40.4	
				Rotor inertia		1.18 lb-ft²	

Load Characteristics 460 V, 60 Hz, 10 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	48	70	79	83	85	85	84
Efficiency	89.8	92.6	92.6	91.7	90.4	88.8	90.7
Speed	1791	1783	1774	1763	1752	1739	1753
Line amperes	5.44	7.24	9.6	12.3	15.3	18.6	14.1

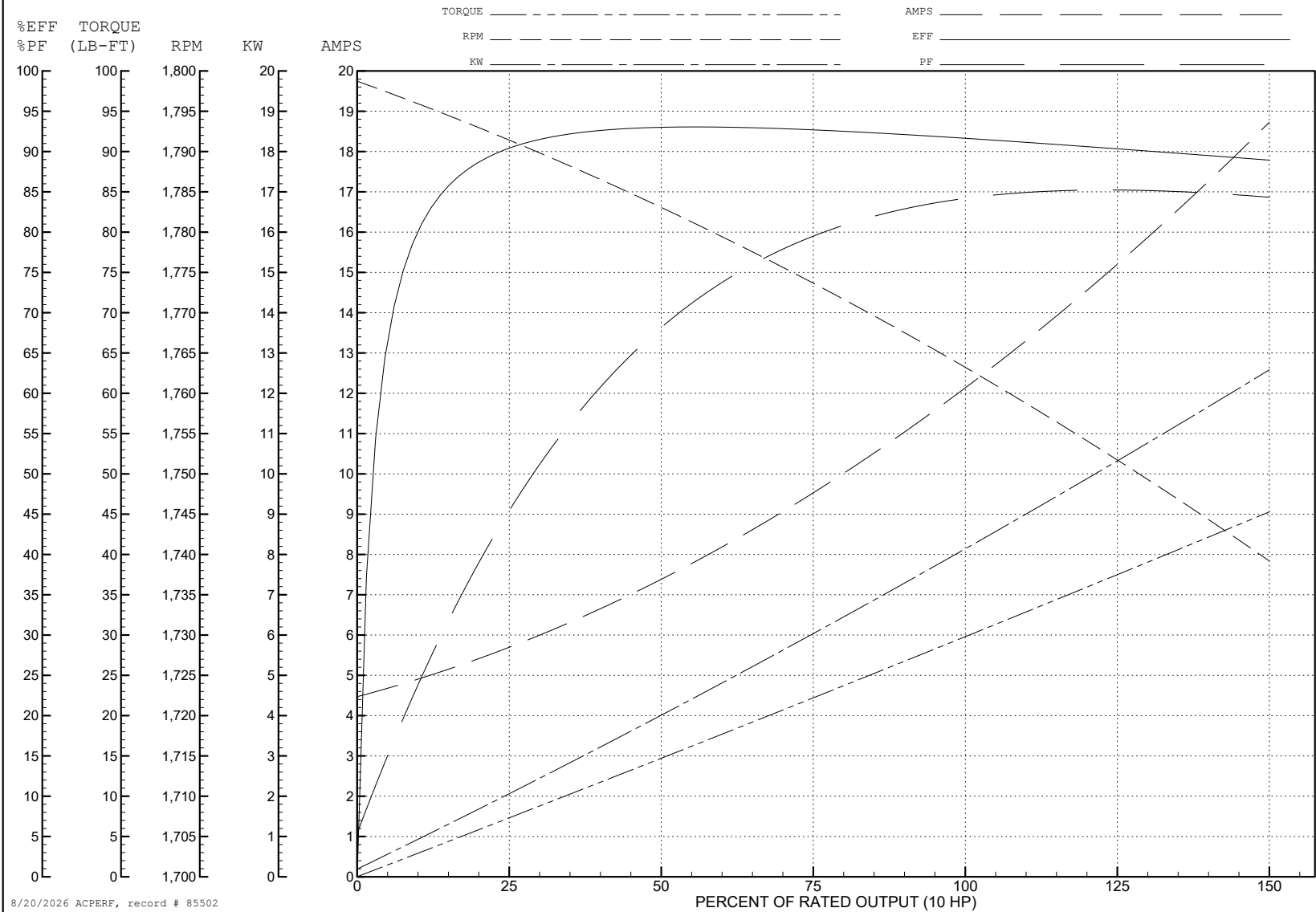
ABB Motors and Mechanical Inc.

WINDING # 07WGT511

Typical performance - not guaranteed values.

10 HP 3 PH 60 HZ 1765 RPM 460 V 0748M

TORQUES (LB-FT) : PO=84.1 PU=39.8 LR=50.9 LRA=85.9



AC Induction Motor Performance Data

Record # 88389

Typical performance - not guaranteed values

Winding: 07WGT511-R001				Type: 0748M		Enclosure: TEFC	
Nameplate Data				400 V, 50 Hz: High Voltage Connection			
Rated Output (HP)		10		Full Load Torque		35.99 LB-FT	
Volts		230/460		Start Configuration		direct on line	
Full Load Amps		24.6/12.3		Breakdown Torque		89.52 LB-FT	
R.P.M.		1765		Pull-up Torque		46.23 LB-FT	
Hz	60	Phase	3	Locked-rotor Torque		59.13 LB-FT	
NEMA Design Code		B	KVA Code	Starting Current		88.53 A	
Service Factor (S.F.)		1.15		No-load Current		5.03 A	
NEMA Nom. Eff.		91.7	Power Factor	83		Line-line Res. @ 25°C	
Rating - Duty		40C AMB-CONT		Temp. Rise @ Rated Load		91°C	
S.F. Amps				Temp. Rise @ S.F. Load		117°C	
				Locked-rotor Power Factor		35.2	
				Rotor inertia		1.18 lb-ft²	

Load Characteristics 400 V, 50 Hz, 10 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	50	71	80	84	85	85	85
Efficiency	90	92.4	91.9	90.4	88.9	86.5	89.5
Speed	1491	1482	1472	1460	1448	1433	1453
Line amperes	5.96	8.13	10.95	14.22	17.88	21.98	16.4

ABB Motors and Mechanical Inc.

WINDING # 07WGT511

Typical performance - not guaranteed values.

10 HP 3 PH 50 HZ 1765 RPM 400 V 0748M

TORQUES (LB-FT) : PO=89.52 PU=46.23 LR=59.13 LRA=88.53

