

ABB BALDOR RELIANCE III

Customer information packet

VHECP3770T

7.5HP, 1770RPM, 3PH, 60HZ, 213HP, 0738M, TEFC

Class - None

Division - Not Applicable

Specifications

Enclosure	TEFC
Frame	213HP
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	7.500 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	CSA EEV UR CSA
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	19.000 A @ 230.0 V 20.000 A @ 208.0 V 9.500 A @ 460.0 V
Design Code	A
Drip Cover	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	D
Type	AC
Mech. spec.	07K215
Base	
Status	PRD/A
Elec. spec.	07WGT510
Layout	07LYK215
Eff. date	07-25-2024
CD Diagram	CD0005
Poles	04
Leads	9#14
Proprietary	False
Created date	02-08-2021

High Voltage Full Load Amps	9.5 a
Insulation Class	F
Inverter Code	Inverter Ready
KVA Code	J
Lifting Lugs	Vertical 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	0738M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	22.51 IN
Power Factor	81
Product Family	Chemical Processing (Not DC)
Pulley End Bearing Type	Ball
Pulley Face Code	P-Base
Pulley Shaft Indicator	Standard
Rodent Screen	None
Service Factor	1.15
Shaft Diameter	1.125 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	1770 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

NP1260									
CAT.NO.	VHECP3770T								
SPEC.	07K215T510								
HP	7.5								
VOLTS	230/460								
AMP	19/9.5								
RPM	1770								
FRAME	213HP		HZ	60		PH		3	
SER.F.	1.15		CODE	J	DES	A		CL	F
NEMA-NOM-EFF	91.7		PF	81					
RATING	40C AMB-CONT								
CC	010A								
DE	6309		ODE	6206					
ENCL	TEFC		SN						
	SFA 21.4/10.7								

Parts List

Part number	Description	Quantity
SA390723	SA 07K215T510	1.000 ea
RA381181	RA 07K215T510	1.000 ea
37FN3002C01	EXFN, PLASTIC, 6.00 OD, 1.155 ID	1.000 ea
HA6283A01	SP'L EYE BOLT BRACKET FOR 306 & 307 MTRS	2.000 ea
10XN3816K12	3/8-16 X 3/4 HEX HD CAP GRADE 5	2.000 ea
HW1001A38	LOCKWASHER 3/8, ZINC PLT .688 OD, .382 I	2.000 ea
10XN2520A06	1/4 20X3/8 HX HD CAP	2.000 ea
HW1001A25	LOCKWASHER 1/4, ZINC PLT .493 OD, .255 I	2.000 ea
WD1000B16	T&B CX70TN OR L70P TERMINAL LUG	1.000 ea
09CB1001A26G	CONDUIT BOX, MACH W/GRAY EPOXY, W/1.50 N	1.000 ea
RM1017	LEAD SEPERATOR GASKET MODEL 307 1/8" THK	1.000 ea
19XW2520A16	SCREW,1/4-20X1 TAPTITE-II OR ROLOC 91	4.000 ea
11XW1032G06	10-32 X .38, TAPTITE II, HEX WSHR SLTD U	1.000 ea
HW1001A10	WASHER, #10 SPLT LK, ZN X	1.000 ea
WD1000B17	T&B CX35TN OR L35P TERMINAL LUG	1.000 ea
37EP1100B16G	FR EP 37L TEFC W/GRSR-RELIEF, NO DRAIN (	1.000 ea
HW4500A32	FIT./EXT 1698-B (ALEMITE)GREASE FITTING	1.000 ea
HW4500A17	317400 ALEMITE GREASE RELIEF	1.000 ea
HW5100A06	W2420-025 WVY WSHR (WB)	1.000 ea
37EP1504A12G	PULLEY 213-5LP 254LP ENCL 309 BRG W/ SEA	1.000 ea
HW4600B53	SEAL 1.688 X 2.275 X 0.312 SINGLE LIP DB	1.000 ea
HW4500A01	1641B(ALEMITE)400 UNIV, GREASE FITT	1.000 ea
HW4500A17	317400 ALEMITE GREASE RELIEF	1.000 ea
10XN2520A52	1/4-20X 3 .25 HEX HD CAP ZN	2.000 ea
HW1001A25	LOCKWASHER 1/4, ZINC PLT .493 OD, .255 I	2.000 ea
51XB1214A20	12-14X1.25 HXWSSLD SERTYB	1.000 ea
07FH1001A06G	307 FH FOR MTG TO FR E.P. W/GREASER & DR	1.000 ea
10XN2520A24	1/4-20X 1 1/2 HEX HD X	3.000 ea
WD4100A02	DP-1000 HEYCO PLUG OR 62MP1000 MICRO PL	1.000 ea
HW1001A25	LOCKWASHER 1/4, ZINC PLT .493 OD, .255 I	3.000 ea
40FH2500A04G	P'L DRIP COVER MODEL 40- OPEN MACH, GRA	1.000 ea

HA2086A03	.375 X 1.0 HVY-FT SPACER SPIRAL # 62434	4.000 ea
10XN3816A32	3/8-16 X 2 HEX HD CAP SCREW	4.000 ea
HW1001A38	LOCKWASHER 3/8, ZINC PLT .688 OD, .382 I	4.000 ea
HW4600B36SP	V-RING SLINGER 1.188 X 1.380 X .24 VITON	1.000 ea
HW4600B44	V-RING SLINGER 1.500 X 1.810 X .28 VITON	1.000 ea
09CB1504A01G	LIPPED CONDUIT BOX LID, MACH GRAY EPOXY	1.000 ea
09GS1001A01	GASKET, BOX LID, 1/8 THICK BLACK NEOPREN	1.000 ea
10XN2520A12	1/4-20 X 3/4 HEX HEAD CAP	2.000 ea
HW1001A25	LOCKWASHER 1/4, ZINC PLT .493 OD, .255 I	2.000 ea
MJ5001A27	32220KN GRAY SEALER *MIN BUY 4 QTS=1GAL	0.001 qt
MJ5001A14	DYNAPRO SEALANT, CP MTR VC#2508050 (603	0.001 ea
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	2.000 ea
LB1624	COMBINED WARNING LABEL, ISO/ANSI PICTOGR	1.000 ea
HW2501E18	KEY, 1/4 SQ X 2.000	1.000 ea
HA7000A02	KEY RETAINER RING, 1 1/8 DIA, 1 3/8 DIA	1.000 ea
MJ1000A02	GREASE, POLYREX EM EXXON	0.050 lb
HA3104A13	THRUBOLT 5/16-18 X 11.750 OHIO ROD	4.000 ea
MG1025N19	WILKOFAS, 778.50, RELIANCE BLUE-GREEN 8	0.036 ga
LC0005	CONN.DIA.,TY M,9-LD,DUAL VOLT,REVERSING	1.000 ea
LB1002N	LABEL,MARINE DUTY (ON ROLLS)	1.000 ea
NP1260	SS CP SUPER-E, CURUS-E, NEMA PREM, CC	1.000 ea
07PA1097	PKG GRP, 07 CAST IRON 2X4 RISERS 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

AC Induction Motor Performance Data

Record # 85534

Preliminary Data Sheet

Winding: 07WGT510-R001			Type: 0738M		Enclosure: TEFC	
Nameplate Data			460 V, 60 Hz: High Voltage Connection			
Rated Output (HP)		7.5	Full Load Torque		22.3 LB-FT	
Volts		230/460	Start Configuration		direct on line	
Full Load Amps		19/9.5	Breakdown Torque		69.1 LB-FT	
R.P.M.		1770	Pull-up Torque		28.7 LB-FT	
Hz	60	Phase	3	Locked-rotor Torque		39.1 LB-FT
NEMA Design Code		A	KVA Code		J	Starting Current
Service Factor (S.F.)		1.15	No-load Current		4.07 A	
NEMA Nom. Eff.		91.7	Power Factor		81	Line-line Res. @ 25°C
Rating - Duty		40C	AMB-CONT		Temp. Rise @ Rated Load	
S.F. Amps		21.4/10.7	Temp. Rise @ S.F. Load		62°C	
			Locked-rotor Power Factor		41.2	
			Rotor inertia		0.934 lb-ft²	

Load Characteristics 460 V, 60 Hz, 7.5 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	44	66	76	81	84	85	83
Efficiency	88	91.7	92.2	91.7	90.7	89.3	90.9
Speed	1792	1785	1777	1769	1759	1749	1761
Line amperes	4.61	5.85	7.48	9.43	11.6	13.9	10.7

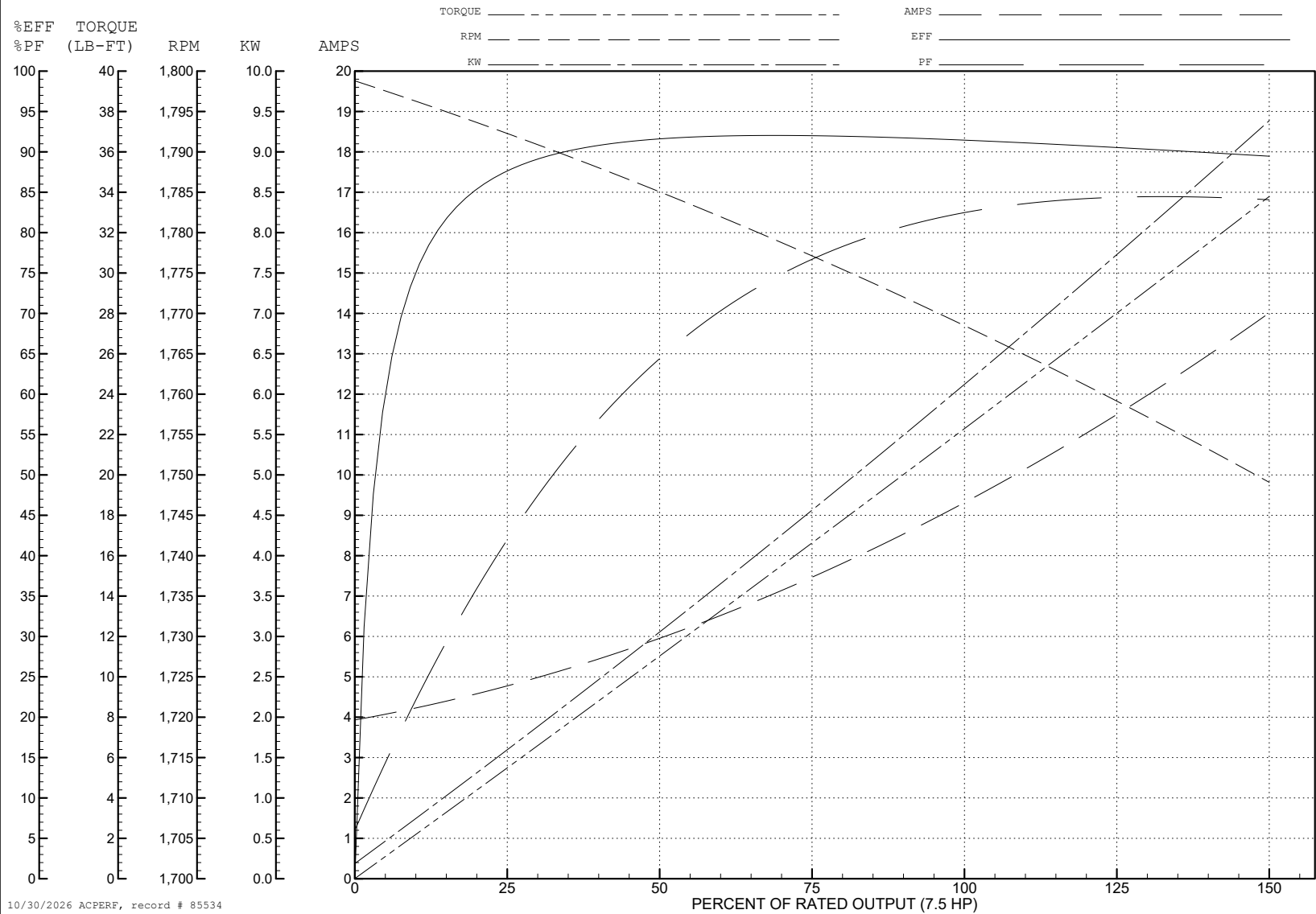
ABB Motors and Mechanical Inc.

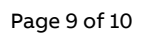
WINDING # 07WGT510

Typical performance - not guaranteed values.

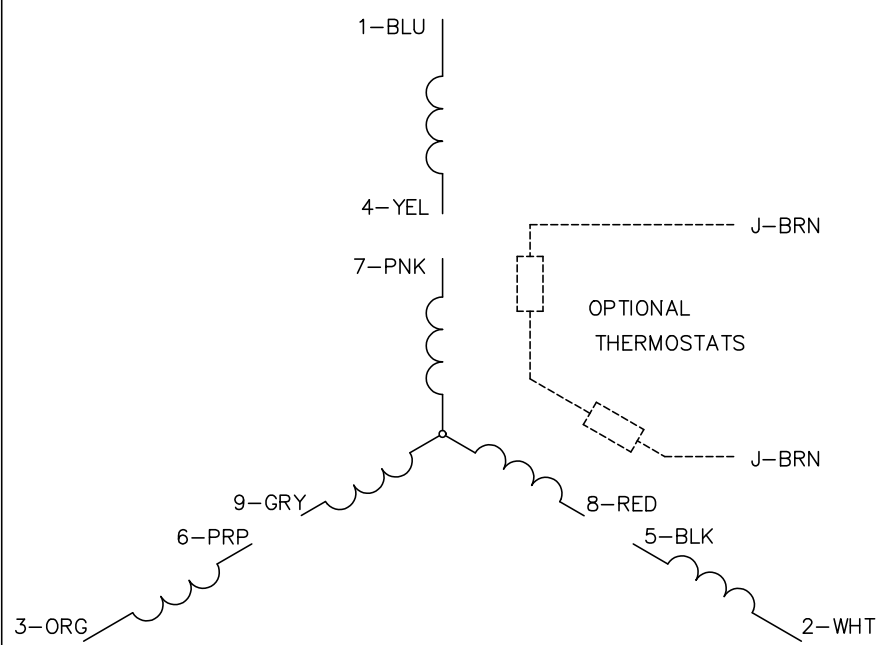
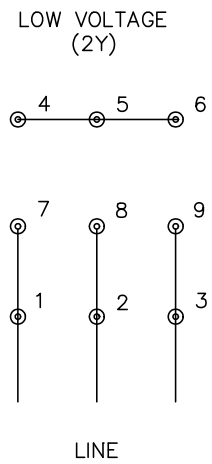
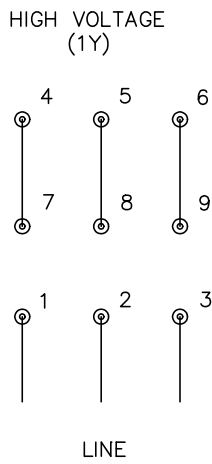
7.5 HP 3 PH 60 HZ 1770 RPM 460 V 0738M

TORQUES (LB-FT): PO=69.1 PU=28.7 LR=39.1 LRA=67.4





CD0005



- NOTES:
- 1. INTERCHANGE ANY TWO LINE LEADS TO REVERSE ROTATION.
 - 2. OPTIONAL THERMOSTATS ARE PROVIDED WHEN SPECIFIED.
 - 3. ACTUAL NUMBER OF INTERNAL PARALLEL CIRCUITS MAY BE A MULTIPLE OF THOSE SHOWN ABOVE.
 - 4. LEAD COLORS ARE OPTIONAL. LEADS MUST ALWAYS BE NUMBERED AS SHOWN.

REV. DESC: REVISE TO SHOW OPTIONAL COLORS			
REV. LTR: E	BY: JLP	REVISED: 01/19/99 10:15	TDR: 0171435
900000		FILE: AAA00005140	MDL: -
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BALDOR ELECTRIC Co.

3PH, DV, 9 LEADS

CD0005