

ABB BALDOR RELIANCE III

Customer information packet

ECTM3770T

7.5HP, 1770RPM, 3PH, 60HZ, 213T, 0738M, TEAO, F

Class - None

Division - Not Applicable

Specifications

Enclosure	TEAO
Frame	213T
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 UR
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	9.500 A @ 460.0 V 19.000 A @ 230.0 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
High Voltage Full Load Amps	9.5 a
Insulation Class	F

Part Detail

Revision	E
Type	AC
Mech. spec.	07N391
Base	
Status	PRD/A
Elec. spec.	07WGT510
Layout	07LYN391
Eff. date	06-06-2024
CD Diagram	CD0005
Poles	04
Leads	9#14
Proprietary	False
Created date	01-28-2021

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	19.54 IN
Power Factor	81
Product Family	Chemical Processing (Not DC)
Pulley End Bearing Type	Sealed Bearing
Pulley Face Code	Standard
Pulley Shaft Indicator	Tapped & Key
Rodent Screen	None
Service Factor	1.15
Shaft Diameter	1.375 IN
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	None
Vibration Sensor Indicator	No Vibration Sensor
Winding Thermal 1	None
Winding Thermal 2	None

Nameplate

NP2134									
CAT.NO.	ECTM3770T								
SPEC.	07N391T510G1								
HP	7.5 AIR OVER								
VOLTS	230/460								
AMP	19/9.5								
RPM	1770								
FRAME	213T		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									
DE	6307		ODE	6206					
ENCL	TEAO	SN							
	1700 FPM 170 CFM								

Parts List

Part number	Description	Quantity
SA390707	SA 07N391T510G1	1.000 ea
RA381165	RA 07N391T510G1	1.000 ea
HW3201A05	3/8-16 EYEBOLT	1.000 ea
HA7205	"L" SHAPE LIFTING LUG FOR 37,39 & 40 FRA	2.000 ea
09CB1002A26G	KOBX W/1.00 NPT LD HL .25-20 TAP FOR LID	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	2.000 ea
11XW1032G06	10-32 X .38, TAPTITE II, HEX WSHR SLTD U	1.000 ea
HW3001B01	BRASS CUP WASHER, FOR #10 SCREW	1.000 ea
HA4044A00	PLUG,PIPE 1/8 NPT PLASTIC SQUARE HEAD	2.000 ea
10XN2520S06	1/4 20X3/8 HX HD CAP S.S.	1.000 ea
WD1000B16	T&B CX70TN OR L70P TERMINAL LUG	1.000 ea
37EP1100D74G	FRONT TENV 37M 206 BRG COOLING TOWER W/O	1.000 ea
HA4054	SHORT T-DRAIN FITTING, .125" N.P.T.	1.000 ea
HA4044A00	PLUG,PIPE 1/8 NPT PLASTIC SQUARE HEAD	2.000 ea
51XN1032A22	10-32 X 1 3/8 HX WS SL SR	2.000 ea
HW5100A06	W2420-025 WVY WSHR (WB)	1.000 ea
37EP1101C77G	PULLEY 213-5T ENCL 307 BRG COOLING TOWER	1.000 ea
HW4600B51	SEAL 1.375 X 2.125 X 0.313 SINGLE LIP DB	1.000 ea
HA4054	SHORT T-DRAIN FITTING, .125" N.P.T.	1.000 ea
HA4044A00	PLUG,PIPE 1/8 NPT PLASTIC SQUARE HEAD	2.000 ea
10XN2520A28	1/4-20X 1 3/4 HEX HD	4.000 ea
XY3118A12	5/16-18 HEX NUT DIRECTIONAL SERRATION	4.000 ea
12CB1503G	CONDUIT BOX CAST. (GRAY)	1.000 ea
12GS1002	GASKET, CONDUIT BOX LID, NEOP	1.000 ea
10XN2520A24	1/4-20X 1 1/2 HEX HD X	2.000 ea
HW1001A25	LOCKWASHER 1/4, ZINC PLT .493 OD, .255 I	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
HW4600B33	V-RING SLINGER 1.375 X 1.890 X .35 VITON	1.000 ea
HW4600G52	DOME SLINGER, 5.438 OD X 1.370/1.320 ID	1.000 ea

MJ5001A27	32220KN GRAY SEALER *MIN BUY 4 QTS=1GAL	0.001 qt
MJ5001A02	732 CL SEALANT 3 OZ DIXIE BEARING 289100	1.000 ea
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	2.000 ea
HA5027A04	HA4054 T-DRAIN X2 BAGGED	1.000 ea
LB1624	COMBINED WARNING LABEL, ISO/ANSI PICTOGR	1.000 ea
LB1182	WARNING LABEL FOR MOTORS WITH EYENUTS	1.000 ea
MJ1000A02	GREASE, POLYREX EM EXXON	0.050 lb
HA3104A28	THRUBOLT .31-18 X 13.062	4.000 ea
MG1025G29	WILKOFAS, 789.229, DARK CHARCOAL GRAY	0.036 ga
LC0005	CONN.DIA.,TY M,9-LD,DUAL VOLT,REVERSING	1.000 ea
NP2134	SS CP SUPER-E UL ENERGY CC REV MTG	1.000 ea
07PA1011	PKG GRP, 07 CAST IRON PK1181	1.000 ea
10XL3807A28	3/8-7 X 1 3/4" LAG SCREW	2.000 ea
MN416A01	TAG-INSTAL-MAINT no wire (2500 bx)11/25	1.000 ea

AC Induction Motor Performance Data

Record # 86625

Preliminary Data Sheet

Winding: 07WGT510-R002				Type: 0738M		Enclosure: TEAO	
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		67.4 A
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		1.55 Ω
Rating - Duty		40C AMB-CONT		Temp. Rise @ Rated Load		48°C	
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





