

ABB BALDOR RELIANCE III

Customer information packet

ECTM3770T-G-AO

7.5 AIR OVERHP, 1770RPM, 3PH, 60HZ, 215T, 073

Class - None

Division - Not Applicable

Specifications

Enclosure	TEAO
Frame	215T
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 NEMA PREMIUM NEMA_PREMIUM 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 20.200 A @ 208.0 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

Part Detail

Revision	C
Type	AC
Mech. spec.	07D709
Base	
Status	PRD/A
Elec. spec.	07WGT510
Layout	07LYD709
Eff. date	09-08-2023
CD Diagram	CD0005
Poles	04
Leads	9#14
Proprietary	False
Created date	04-05-2022

Heater Indicator	Heater Included, 115 V
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	19.62 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	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

NP2178										
CAT.NO.	ECTM3770T-G-AO									
SPEC.	07D709T510G1									
HP	7.5 AIR OVER									
VOLTS	230/460									
AMP	19/9.5									
RPM	1770									
FRAME	215T	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								
	INV DUT 20:1 VT									

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





