

ABB BALDOR RELIANCE III

Customer information packet

HBAO3770T

7.5AOHP, 1765RPM, 3PH, 60HZ, 213T, 0738M, TEAO

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 CURUSEEV NEMA_PREMIUM WEEE
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 19.800 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	Electrically Isolated Bearings
Feedback Device	NO FEEDBACK
Front Shaft Indicator	None

Part Detail

Revision	L
Type	AC
Mech. spec.	07D097
Base	
Status	PRD/A
Elec. spec.	07WGX790
Layout	07LYD097
Eff. date	07-21-2026
CD Diagram	CD0005
Poles	04
Leads	9#14
Proprietary	False
Created date	09-21-2021

Heater Indicator	No Heater
High Voltage Full Load Amps	9.5 a
Insulation Class	H
Inverter Code	Inverter Ready
KVA Code	J
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Max Speed	2700 rpm
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	16.88 IN
Power Factor	81
Product Family	General Purpose
Pulley End Bearing Type	Ball
Pulley Face Code	Standard
Pulley Shaft Indicator	Standard
Rodent Screen	None
RoHS Status	ROHS COMPLIANT
Service Factor	1.15
Shaft Diameter	1.375 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
NP4312A01M05L

CAT #										HBAO3770T										SER #										CC										WGT										198										LBS																																							
SPEC										07D097X790G2										RATING										40C AMB-CONT																																																																					
HP										VOLTS										AMPS										MAG CUR										CODE										RPM										DES										PF										NEMA NOM. EFF																			
7.5 AO										230/460										19/9.5										8.6/4.3										J										1770										A										81										91.7																			
8 AO										230/460										20/10										8.6/4.3										H										1765										-										82										91																			
8.5AO										230/460										21/10.5										8.6/4.3										H										1765										-										83										91																			
9 AO										230/460										22/11										8.6/4.3										G										1760										-										85										90.2																			
9.5 AO										230/460										23/11.5										8.6/4.3										G										1755										-										86										89.5																			
PH 3										CL H										HZ 60										ENCL										TEAO										IP 54										SF 1.15										AIR OVER																													
DE BRG										6307										ODE BRG										6206										FRAME										213T																																																	
INV TYPE:										VPWM										SL HZ										1										CHP										60										TO										90										1.5:1																			
WK2										0.934										LB FT2										MAX RPM										2700										CT										6										TO										60										10:1									
																														VT										3										TO										60										20:1																													
SFA 21.6/10.8																																																																																																			
YR:																																																																																																			

AC Induction Motor Performance Data

Record # 95864

Typical performance - not guaranteed values

Winding: 07WGX790-R073				Type: 0738M		Enclosure: TEAO					
Nameplate Data				460 V, 60 Hz: High Voltage Connection							
Rated Output (HP)		7.5 AIR OVER		Full Load Torque		22.2 LB-FT					
Volts		230/460		Start Configuration		direct on line					
Full Load Amps		19/9.5		Breakdown Torque		70.9 LB-FT					
R.P.M.		1770		Pull-up Torque		32.7 LB-FT					
Hz		60 Phase		3		Locked-rotor Torque		43 LB-FT			
NEMA Design Code		A		KVA Code		J		Starting Current		70.8 A	
Service Factor (S.F.)		1.15		No-load Current		4.3 A					
NEMA Nom. Eff.		91.7		Power Factor		81		Line-line Res. @ 25°C		1.41 Ω	
Rating - Duty		40C AMB-CONT		Temp. Rise @ Rated Load		41°C					
S.F. Amps		21.6/10.8		Temp. Rise @ S.F. Load		50°C					
				Locked-rotor Power Factor		37.2					
				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	42	64	75	80	83	84	82
Efficiency	87.5	91.6	92.5	92	91.1	90.1	91.3
Speed	1793	1786	1778	1770	1760	1750	1764
Line amperes	4.83	6.02	7.6	9.5	11.6	13.9	10.7

ABB Motors and Mechanical Inc.

WINDING # 07WGX790

Typical performance - not guaranteed values.

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

TORQUES (LB-FT): PO=70.9 PU=32.7 LR=43 LRA=70.8





