

ABB BALDOR RELIANCE III

Customer information packet

HBAO3769T

7.5AOHP, 3515RPM, 3PH, 60HZ, 213T, 0736M, 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	3600 RPM @ 60 HZ
Voltage @ Frequency	460.0 V @ 60 HZ 230.0 V @ 60 HZ
Agency Approvals	CSA CURUSEEV NEMA PREMIUM 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	8.600 A @ 460.0 V 18.600 A @ 208.0 V 17.200 A @ 230.0 V
Design Code	A
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	91.0 %
Electrically Isolated Bearing	Electrically Isolated Bearings
Feedback Device	NO FEEDBACK

Part Detail

Revision	G
Type	AC
Mech. spec.	07M778
Base	
Status	PRD/A
Elec. spec.	07WGW280
Layout	07LYM778
Eff. date	10-09-2023
CD Diagram	CD0005
Poles	02
Leads	9#14
Proprietary	False
Created date	09-21-2021

Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	8.6 a
Insulation Class	F
Inverter Code	Inverter Ready
KVA Code	K
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Max Speed	5400 rpm
Motor Lead Quantity/Wire Size	9 @ 14 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	0736M
Mounting Arrangement	F1
Number of Poles	2
Overall Length	16.88 IN
Power Factor	90
Product Family	General Purpose
Pulley End Bearing Type	Sealed Bearing
Pulley Face Code	Standard
Pulley Shaft Indicator	No Key Or Flat
Rodent Screen	None
RoHS Status	ROHS COMPLIANT
Service Factor	1.15
Shaft Diameter	1.375 IN
Shaft Ground Indicator	Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	3525 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 #		HBAO3769T					SER #						CC				WGT		173		LBS	
SPEC		07M778W280G3					RATING		40C AMB-CONT													
HP		VOLTS			AMPS			MAG CUR				CODE		RPM		DES		PF		NEMA NOM. EFF		
7.5 AO		230/460			17.2/8.6			5.6/2.8				K		3525		A		90		91		
8 AO		230/460			18.2/9.1			5.6/2.8				K		3515		-		90		91		
8.5AO		230/460			19.2/9.6			5.6/2.8				H		3500		-		89		91		
9 AO		230/460			20.2/10.1			5.6/2.8				H		3500		-		90		91		
9.5AO		230/460			21.2/10.6			5.6/2.8				G		3475		-		90		91		
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		1.25		CHP		60	TO		90	1.5:1								
WK2	0.329		LB FT2		MAX RPM		5400		CT	6	TO		60	10:1								
							VT	3	TO		60	20:1										
SFA 19.4/9.7																						
YR:																						

AC Induction Motor Performance Data

Record # 95861

Typical performance - not guaranteed values

Winding: 07WGW280-R061			Type: 0736M		Enclosure: TEAO	
Nameplate Data			460 V, 60 Hz: High Voltage Connection			
Rated Output (HP)		7.5 AIR OVER	Full Load Torque		11.21 LB-FT	
Volts		230/460	Start Configuration		direct on line	
Full Load Amps		17.2/8.6	Breakdown Torque		48.14 LB-FT	
R.P.M.		3525	Pull-up Torque		23.2 LB-FT	
Hz	60 Phase	3	Locked-rotor Torque		27.2 LB-FT	
NEMA Design Code		A KVA Code	K	Starting Current		86.6 A
Service Factor (S.F.)		1.15	No-load Current		2.76 A	
NEMA Nom. Eff.		91 Power Factor	90	Line-line Res. @ 25°C		1.03 Ω
Rating - Duty		40C AMB-CONT	Temp. Rise @ Rated Load		30°C	
S.F. Amps		19.4/9.7	Temp. Rise @ S.F. Load		33°C	
			Locked-rotor Power Factor		33.5	
			Rotor inertia		0.329 lb-ft²	

Load Characteristics 460 V, 60 Hz, 7.5 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	67	82	88	91	93	92	92
Efficiency	70.8	81.4	85.2	86.5	87.1	86.9	86.9
Speed	3576	3559	3541	3518	3499	3474	3507
Line amperes	3.75	5.36	7.12	8.96	10.84	13.07	10.1

ABB Motors and Mechanical Inc.

WINDING # 07WGW280

Typical performance - not guaranteed values.

7.5 HP 3 PH 60 HZ 3525 RPM 460 V 0736M

TORQUES (LB-FT) : PO=48.14 PU=23.2 LR=27.2 LRA=86.6





