

ABB BALDOR RELIANCE III

Customer information packet

HBAO3663T

5.0 AOHP, 3480RPM, 3PH, 60HZ, 184T, 0632M, TEA

Class - None

Division - Not Applicable

Specifications

Enclosure	TEAO
Frame	184T
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	5.000 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 UR 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	5.700 A @ 460.0 V 12.000 A @ 208.0 V 11.400 A @ 230.0 V
Design Code	A
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	90.2 %
Electrically Isolated Bearing	Electrically Isolated Bearings
Feedback Device	NO FEEDBACK

Part Detail

Revision	H
Type	AC
Mech. spec.	06K933
Base	
Status	PRD/A
Elec. spec.	06WGW730
Layout	06LYK933
Eff. date	10-09-2023
CD Diagram	CD0005
Poles	02
Leads	9#16
Proprietary	False
Created date	09-21-2021

Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	5.7 a
Insulation Class	H
Inverter Code	Inverter Ready
KVA Code	M
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Max Speed	5400 rpm
Motor Lead Quantity/Wire Size	9 @ 16 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	0632M
Mounting Arrangement	F1
Number of Poles	2
Overall Length	13.89 IN
Power Factor	90
Product Family	General Purpose
Pulley End Bearing Type	Sealed Bearing
Pulley Face Code	Standard
Pulley Shaft Indicator	Standard
Rodent Screen	None
RoHS Status	ROHS COMPLIANT
Service Factor	1.15
Shaft Diameter	1.125 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	3490 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 #		HBAO3663T						SER #						CC				WGT		105	LBS				
SPEC		06K933W730G2						RATING		40C AMB-CONT															
HP		VOLTS				AMPS				MAG CUR				CODE		RPM		DES		PF	NEMA NOM. EFF				
5 AO		230/460				11.4/5.7				4.2/2.1				M		3490		A		90	90.2				
5.5AO		230/460				12.6/6.3				4.2/2.1				L		3480		-		91	90.2				
6 AO		230/460				13.6/6.8				4.2/2.1				K		3470		-		91	90.2				
6.5AO		230/460				14.8/7.4				4.2/2.1				J		3460		-		92	89.5				
7 AO		230/460				15.8/7.9				4.2/2.1				J		3450		-		92	89.5				
PH	3	CL	H	HZ	60	ENCL		TEAO	IP	54	SF	1.15	AIR OVER												
DE BRG		6206				ODE BRG		6206		FRAME		184T													
INV TYPE:		VPWM		SL HZ		1.83		CHP		60		TO		90		1.5:1									
WK2		0.15		LB FT2		MAX RPM		5400		CT		6		TO		60		10:1							
								VT		3		TO		60		20:1									
SFA 13/6.5																									
YR:																									

AC Induction Motor Performance Data

Record # 95857

Typical performance - not guaranteed values

Winding: 06WGW730-R037			Type: 0632M		Enclosure: TEAO		
Nameplate Data			460 V, 60 Hz: High Voltage Connection				
Rated Output (HP)		5 AIR OVER	Full Load Torque		7.54 LB-FT		
Volts		230/460	Start Configuration		direct on line		
Full Load Amps		11.4/5.7	Breakdown Torque		40.1 LB-FT		
R.P.M.		3490	Pull-up Torque		30.6 LB-FT		
Hz	60	Phase	3	Locked-rotor Torque		36.9 LB-FT	
NEMA Design Code		A	KVA Code	M	Starting Current		64.8 A
Service Factor (S.F.)		1.15		No-load Current		2.08 A	
NEMA Nom. Eff.		90.2	Power Factor	90	Line-line Res. @ 25°C		2.08 Ω
Rating - Duty		40C AMB-CONT		Temp. Rise @ Rated Load		51°C	
S.F. Amps		13/6.5		Temp. Rise @ S.F. Load		62°C	
				Locked-rotor Power Factor		44.9	
				Rotor inertia		0.143 lb-ft²	

Load Characteristics 460 V, 60 Hz, 5 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	55	76	85	90	93	93	92
Efficiency	84.4	89.4	90.7	90.6	90	89	90.2
Speed	3570	3544	3517	3489	3458	3426	3470
Line amperes	2.54	3.47	4.6	5.76	7.03	8.46	6.52

ABB Motors and Mechanical Inc.

WINDING # 06WGW730

Typical performance - not guaranteed values.

5 HP 3 PH 60 HZ 3490 RPM 460 V 0632M

TORQUES (LB-FT) : PO=40.1 PU=30.6 LR=36.9 LRA=64.8





