

ABB BALDOR RELIANCE III

Customer information packet

AOM25904T

5HP, 870RPM, 3PH, 60HZ, 254T, 3936M, TEAO, F1

Class -

Division - Not Applicable

Specifications

Enclosure	TEAO
Frame	254T
Frame Material	Steel
Frequency	60.00 Hz
Haz Area Division	Not Applicable
Motor Letter Type	Three Phase
Output @ Frequency	5.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	900 RPM @ 60 HZ
Voltage @ Frequency	460.0 V @ 60 HZ 230.0 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	18.400 A @ 230.0 V 18.600 A @ 208.0 V 9.200 A @ 460.0 V
Design Code	A
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	84.0 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Face Code	Standard
Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	9.2 a

Part Detail

Revision	AJ
Type	AC
Mech. spec.	39J95
Base	
Status	PRD/A
Elec. spec.	39WGZ042
Layout	39LYJ095
Eff. date	04-09-2024
CD Diagram	CD0005
Poles	08
Leads	9#12 36" LG Y
Proprietary	False
Created date	01-01-0001

Insulation Class	F
Inverter Code	Not Inverter
KVA Code	H
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	9 @ 12 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3936M
Mounting Arrangement	F1
Number of Poles	8
Overall Length	19.63 IN
Power Factor	60
Product Family	General Purpose
Pulley End Bearing Type	Ball
Pulley Face Code	Standard
Pulley Shaft Indicator	Standard
Rodent Screen	None
Service Factor	1.15
Shaft Extension Location	Pulley End
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	885 rpm
Speed Code	Single Speed
Starting Method	Direct on line
Thermal Device - Bearing	None
Thermal Device - Winding	None
Vibration Sensor Indicator	No Vibration Sensor

Nameplate

NP1256L									
CAT.NO.	AOM25904T								
SPEC.	39J95Z42								
HP	5 AIR OVER								
VOLTS	230/460								
AMP	18.4/9.2								
RPM	885								
FRAME	254T	HZ		60		PH		3	
SER.F.	1.15	CODE		H	DES	A	CLASS	F	
NEMA-NOM-EFF	84	PF		60					
RATING	40C AMB-CONT								
CC									
DE	6309	ODE		6208					
ENCL	TEAO	SN							
	900 FPM AT 250 CFM								

AC Induction Motor Performance Data

Record # 13156

Typical performance - not guaranteed values

Winding: 39WGZ042-R001			Type: 3936M		Enclosure: TEAO		
Nameplate Data			460 V, 60 Hz: High Voltage Connection				
Rated Output (HP)		5 AIR OVER	Full Load Torque		29.96 LB-FT		
Volts		230/460	Start Configuration		direct on line		
Full Load Amps		18.4/9.2	Breakdown Torque		68.97 LB-FT		
R.P.M.		885	Pull-up Torque		42.46 LB-FT		
Hz	60	Phase	3	Locked-rotor Torque		62.1 LB-FT	
NEMA Design Code		A	KVA Code	H	Starting Current		42.25 A
Service Factor (S.F.)		1.15		No-load Current		5.53 A	
NEMA Nom. Eff.		84	Power Factor	60	Line-line Res. @ 25°C		2.02 Ω
Rating - Duty		40C AMB-CONT		Temp. Rise @ Rated Load		63°C	
S.F. Amps				Temp. Rise @ S.F. Load		77°C	
				Locked-rotor Power Factor		31.5	
				Rotor inertia		2.89 LB-FT2	

Load Characteristics 460 V, 60 Hz, 5 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	28	42	54	60	63	67	62
Efficiency	73	82.9	84.5	85.3	83.9	82.3	84.5
Speed	896	893	890	886	880	877	882
Line amperes	5.93	6.83	7.83	9.19	11.05	12.78	10.3

ABB Motors and Mechanical Inc.

WINDING # 39WGZ042

Typical performance - not guaranteed values.

5 HP 3 PH 60 HZ 885 RPM 460 V 3936M

TORQUES (LB-FT) : PO=68.97 PU=42.46 LR=62.1 LRA=42.25





