

ABB BALDOR RELIANCE III

Customer information packet

IDWNM22938T

10HP, 1765RPM, 3PH, 60HZ, 254TC, 3956M, TENV

Class -

Division - Not Applicable

Specifications

Enclosure	TENV
Frame	254TC
Frame Material	Steel
Frequency	60.00 Hz
Haz Area Division	Not Applicable
Motor Letter Type	Three Phase
Output @ Frequency	10.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1800 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	12.000 A @ 460.0 V 24.000 A @ 230.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	91.7 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Face Code	Encoder/Feedback Device
Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	12.0 a
Insulation Class	H

Part Detail

Revision	AN
Type	AC
Mech. spec.	39R099
Base	
Status	PRD/A
Elec. spec.	39WGW632
Layout	39LYR099
Eff. date	11-14-2023
CD Diagram	CD0005
Poles	04
Leads	9#12
Proprietary	False
Created date	01-01-0001

Inverter Code	Inverter Duty
KVA Code	H
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Max Speed	5000 rpm
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	9 @ 12 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3956M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	23.92 IN
Power Factor	85
Product Family	Wash Down
Pulley End Bearing Type	Sealed Bearing
Pulley Face Code	C-Face
Pulley Shaft Indicator	Standard
Rodent Screen	None
Service Factor	1.00
Shaft Diameter	1.625 IN
Shaft Extension Location	Pulley End
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	Shaft Slinger
Speed	1765 rpm
Speed Code	Single Speed
Starting Method	Direct on line
Thermal Device - Bearing	None
Thermal Device - Winding	Normally Closed Thermostat
Vibration Sensor Indicator	No Vibration Sensor

Nameplate

NP1162L									
CAT NO	IDWNM22938T								
SPEC.	39R099W632G1								
FRAME	254TC		HP	10	TE				
VOLTS	230/460								
MAG CUR	8.8/4.4		FLA	24/12					
RPM	1765		RPM MAX	5000					
HZ	60	PH	3	CLASS	H				
SER.F.	1.00	DES	B	SL HZ	1.22				
NEMA-NOM-EFF	91.7	WK2	2.44						
BLWR V		PH		HZ		A			
RATING	40C AMB-CONT								
DE BRG	6309	ODE BRG	6208						
CC	010A	SN							

AC Induction Motor Performance Data

Record # 12831

Typical performance - not guaranteed values

Winding: 39WGW632-R001				Type: 3956M		Enclosure: TENV					
Nameplate Data				460 V, 60 Hz: High Voltage Connection							
Rated Output (HP)		10		Full Load Torque		30 LB-FT					
Volts		230/460		Start Configuration		direct on line					
Full Load Amps		24/12		Breakdown Torque		114 LB-FT					
R.P.M.		1765		Pull-up Torque		41.5 LB-FT					
Hz		60 Phase		3		Locked-rotor Torque		58 LB-FT			
NEMA Design Code		B		KVA Code		H		Starting Current		87 A	
Service Factor (S.F.)		1						No-load Current		4.4 A	
NEMA Nom. Eff.		91.7		Power Factor		85		Line-line Res. @ 25°C		0.744 Ω	
Rating - Duty		40C AMB-CONT						Temp. Rise @ Rated Load		89°C	
								Locked-rotor Power Factor		31.9	
								Rotor inertia		2.45 LB-FT2	

Load Characteristics 460 V, 60 Hz, 10 HP

% of Rated Load	25	50	75	100	125	150
Power Factor	52	72	81	85	86	87
Efficiency	87.7	91.7	92.4	92	91.2	90.1
Speed	1791	1783	1774	1764	1753	1741
Line amperes	5.3	7.2	9.5	12	14.9	17.9

ABB Motors and Mechanical Inc.

WINDING # 39WGW632

Typical performance - not guaranteed values.

10 HP 3 PH 60 HZ 1765 RPM 460 V 3956M

TORQUES (LB-FT): PO=114 PU=41.5 LR=58 LRA=87





