

ABB BALDOR RELIANCE III

Customer information packet

ZDWNM22937T

7.5HP, 1770RPM, 3PH, 60HZ, 254TC, 3948M, 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	7.500 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	17.800 A @ 230.0 V 8.900 A @ 460.0 V
Design Code	A
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	91.7 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	ENCODER
Front Face Code	Encoder/Feedback Device
Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	8.9 a
Insulation Class	H

Part Detail

Revision	G
Type	AC
Mech. spec.	39S001
Base	
Status	PRD/A
Elec. spec.	39WGX950
Layout	39LYS001
Eff. date	11-14-2023
CD Diagram	CD0005
Poles	04
Leads	9#12
Proprietary	False
Created date	06-30-2016

Inverter Code	Inverter Duty
KVA Code	J
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	3948M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	23.92 IN
Power Factor	84
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	1770 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

NP1167L									
CAT NO	ZDWNM22937T								
SPEC.	39S001X950Z1								
FRAME	254TC		HP	7.5	TE				
VOLTS	230/460								
MAG CUR	7.4/3.7			FLA	17.8/8.9				
RPM	1770			RPM MAX	5000				
HZ	60		PH	3		CLASS		H	
SER.F.	1.00		DES	A		SL HZ		1	
NEMA-NOM-EFF	91.7		WK2	2.1					
BLWR V		PH		HZ		A			
RATING	40C AMB-CONT								
DE BRG	6309			ODE BRG	6208				
CC	010A	SN							

AC Induction Motor Performance Data

Record # 57991

Typical performance - not guaranteed values

Winding: 39WGX950-R001			Type: 3948M		Enclosure: TENV		
Nameplate Data				460 V, 60 Hz: High Voltage Connection			
Rated Output (HP)		7.5		Full Load Torque		22.1 LB-FT	
Volts		230/460		Start Configuration		direct on line	
Full Load Amps		17.8/8.9		Breakdown Torque		86.6 LB-FT	
R.P.M.		1770		Pull-up Torque		32.9 LB-FT	
Hz	60	Phase	3	Locked-rotor Torque		44.4 LB-FT	
NEMA Design Code		A	KVA Code	J	Starting Current		68.7 A
Service Factor (S.F.)		1		No-load Current		3.67 A	
NEMA Nom. Eff.		91.7	Power Factor	84	Line-line Res. @ 25°C		1.05 Ω
Rating - Duty		40C AMB-CONT		Temp. Rise @ Rated Load		51°C	
				Locked-rotor Power Factor		32.9	

Load Characteristics 460 V, 60 Hz, 7.5 HP

% of Rated Load	25	50	75	100	125	150
Power Factor	46	69	79	84	86	87
Efficiency	88.3	92.4	93.1	93	92.4	91.5
Speed	1792.6	1786.1	1779.3	1772.7	1765.1	1756.1
Line amperes	4.27	5.55	7.17	8.94	11	13.2

ABB Motors and Mechanical Inc.

WINDING # 39WGX950

Typical performance - not guaranteed values.

7.5 HP 3 PH 60 HZ 1770 RPM 460 V 3948M

TORQUES (LB-FT): PO=86.6 PU=32.9 LR=44.4 LRA=68.7





