

ABB BALDOR RELIANCE III

Customer information packet

IDVSWDM3554T

1.5HP, 1770RPM, 3PH, 60HZ, 145TC, 3524M, TEFC

Class - None

Division - Not Applicable

Specifications

Enclosure	TEFC
Frame	145TC
Frame Material	Stainless Steel
Frequency	60.00 Hz
Haz Area Class and Group	None
Haz Area Division	Not Applicable
Motor Letter Type	Three Phase
Output @ Frequency	1.500 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	230.0 V @ 60 HZ 460.0 V @ 60 HZ
Agency Approvals	CSA UR
Ambient Temperature	40 °C
Auxiliary Box	NO AUXILLARY BOX
Auxiliary Box Lead Termination	None
Base Indicator	No Mounting
Bearing Grease Type	Polyrex EM (-20F +300F)
Blower	None
Current @ Voltage	2.300 A @ 460.0 V 4.600 A @ 230.0 V 4.640 A @ 208.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	86.5 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	2.3 a

Part Detail

Revision	B
Type	AC
Mech. spec.	35SS636
Base	
Status	PRD/A
Elec. spec.	35WGL955
Layout	35LYSS636
Eff. date	08-23-2023
CD Diagram	CD0005
Poles	04
Leads	9#18 Y
Proprietary	False
Created date	03-11-2022

Insulation Class	H
Inverter Code	Inverter Ready
KVA Code	M
Lifting Lugs	No Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Max Speed	4000 rpm
Motor Lead Quantity/Wire Size	9 @ 18 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3524M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	13.29 IN
Power Factor	72
Product Family	Wash Down Paint Free
Pulley End Bearing Type	Sealed Bearing
Pulley Face Code	C-Face
Pulley Shaft Indicator	Standard
Rodent Screen	None
Service Factor	1.00
Shaft Diameter	0.875 IN
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
Winding Thermal 1	None
Winding Thermal 2	None

Nameplate

NP3956L									
CAT.NO.	IDVSWDM3554T								
SPEC.	35SS636L955G1								
FRAME	145TC		H.P.		1.5 TE				
VOLTS	230/460								
MAG. CUR.	3/1.5			F.L. AMPS			4.6/2.3		
R.P.M.	1770		R.P.M. MAX			2700			
HZ.	60		PH.	3	CLASS		H		
SER.F.	1.00		DES.	B	SL HZ		1		
NEMA NOM. EFF.	86.5		WK2	0.174					
BLWR V		PH		HZ		AMPS			
RATING	40C AMB-CONT								
DE BRG	6205		ODE BRG			6203			
CC	010A	SN							

AC Induction Motor Performance Data

Record # 95394

Typical performance - not guaranteed values

Winding: 35WGL955-R008			Type: 3524M		Enclosure: TEFC	
Nameplate Data				460 V, 60 Hz: High Voltage Connection		
Rated Output (HP)		1.5		Full Load Torque		4.48 LB-FT
Volts		230/460		Start Configuration		direct on line
Full Load Amps		4.6/2.3		Breakdown Torque		18.8 LB-FT
R.P.M.		1770		Pull-up Torque		9.6 LB-FT
Hz	60	Phase	3	Locked-rotor Torque		12.6 LB-FT
NEMA Design Code		B	KVA Code	Starting Current		19.7 A
Service Factor (S.F.)		1		No-load Current		1.51 A
NEMA Nom. Eff.		86.5	Power Factor	Line-line Res. @ 25°C		11.8 Ω
Rating - Duty		40C AMB-CONT		Temp. Rise @ Rated Load		48°C
				Locked-rotor Power Factor		58.4
				Rotor inertia		0.173 lb-ft²

Load Characteristics 460 V, 60 Hz, 1.5 HP

% of Rated Load	25	50	75	100	125	150
Power Factor	31	49	63	72	78	81
Efficiency	75.1	83.5	86	86.5	85.8	84.8
Speed	1792	1785	1777	1769	1760	1750
Line amperes	1.56	1.72	1.97	2.28	2.65	3.06

ABB Motors and Mechanical Inc.

WINDING # 35WGL955

Typical performance - not guaranteed values.

1.5 HP 3 PH 60 HZ 1770 RPM 460 V 3524M

TORQUES (LB-FT): PO=18.8 PU=9.6 LR=12.6 LRA=19.7





