

ABB BALDOR RELIANCE III

Customer information packet

VDRX141544T

1.5//1HP, 1770//1475RPM, 3PH, 60//50HZ, 145T

Class - CLI GP C,D

Division - Division I

Specifications

Enclosure	XPFC
Frame	145TC
Frame Material	Steel
Frequency	50.00 Hz 60.00 Hz
Haz Area Class and Group	CLI GP C,D
Haz Area Division	Division I
Motor Letter Type	Three Phase
Output @ Frequency	1.500 HP @ 60 HZ 1.000 HP @ 50 HZ
Phase	3
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	190.0 V @ 50 HZ 230.0 V @ 60 HZ 380.0 V @ 50 HZ 460.0 V @ 60 HZ
Agency Approvals	CSA EEV UL
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	4.640 A @ 208.0 V 4.600 A @ 230.0 V 4.000 A @ 190.0 V 2.300 A @ 460.0 V 2.000 A @ 380.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT

Part Detail

Revision	D
Type	AC
Mech. spec.	35X734
Base	
Status	PRD/A
Elec. spec.	35WGL955
Layout	35LYX734
Eff. date	05-05-2026
CD Diagram	CD0005
Poles	04
Leads	9#18
Proprietary	False
Created date	02-23-2023

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	2.0 a
Insulation Class	F
Inverter Code	Inverter Duty
KVA Code	M
Lifting Lugs	No Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Max Speed	2700 rpm
Motor Lead Quantity/Wire Size	9 @ 18 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3526M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	15.21 IN
Power Factor	72
Product Family	Hazardous Location Motor
Pulley End Bearing Type	Ball
Pulley Face Code	C-Face
Pulley Shaft Indicator	Standard
Rodent Screen	None
RoHS Status	ROHS NON-COMPLIANT
Service Factor	1.00
Shaft Diameter	0.875 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Speed	1475 rpm 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

NP1401XPSL											
NO.						CC					
S/N						TEMP CODE	T3C				
SPEC.	35X734L955					INV.TYPE	PWM				
CAT.NO.	VDRX141544T					C HP FR	60	C HP TO	90		
HP	1.5//1					CT HZ FROM	6	CT HZ TO	60		
VOLTS	230/460//190/380					VT HZ FROM	6	VT HZ TO	60		
AMPS	4.6/2.3//4/2				MAG CUR	3/1.5					
RPM	1770//1475				MX RPM	2700					
HZ	60//50	PH	3	CL	F	NOM.EFF.	86.5				
SER.F.	1.00	DES	B	SL HZ	1	WK2	0.174				
FRAME	145TC	RATING		40C AMB-CONT							
	55C AMB @ 1.0 SF										
	1.15 SF SINEWAVE				NEMA MG-1 PT 5,IP55						

AC Induction Motor Performance Data

Record # 73666

Typical performance - not guaranteed values

Winding: 35WGL155-R039			Type: 3526M		Enclosure: XPFC			
Nameplate Data				460 V, 60 Hz: High Voltage Connection				
Rated Output (HP)		1.5//1		Full Load Torque		4.46 LB-FT		
Volts		230/460//190/380		Start Configuration		direct on line		
Full Load Amps		4.4/2.2//4/2		Breakdown Torque		20.6 LB-FT		
R.P.M.		1760//1460		Pull-up Torque		10.1 LB-FT		
Hz		60//50	Phase	3	Locked-rotor Torque		14.4 LB-FT	
NEMA Design Code		B		KVA Code	M	Starting Current		19.3 A
Service Factor (S.F.)		1		No-load Current		1.46 A		
NEMA Nom. Eff.		86.5	Power Factor		71	Line-line Res. @ 25°C		8.81 Ω
Rating - Duty		40C AMB-CONT		Temp. Rise @ Rated Load		42°C		
				Locked-rotor Power Factor		49.6		
				Rotor inertia		0.154 LB-FT2		

Load Characteristics 460 V, 60 Hz, 1.5 HP

% of Rated Load	25	50	75	100	125	150
Power Factor	30	49	63	71	77	82
Efficiency	76.3	84.6	87	87.5	87	86
Speed	1791	1782	1772	1762	1750	1738
Line amperes	1.53	1.68	1.92	2.24	2.62	3

ABB Motors and Mechanical Inc.

WINDING # 35WGL155

Typical performance - not guaranteed values.

1.5 HP 3 PH 60 HZ 1762 RPM 460 V 3526M

TORQUES (LB-FT): PO=20.6 PU=10.1 LR=14.4 LRA=19.3





