

ABB BALDOR RELIANCE III

Customer information packet

ECR9074T

7.5HP, 1780RPM, 3PH, 60HZ, 213T, 0744M, TEFC, F

Class - None

Division - Not Applicable

Specifications

Enclosure	TEFC
Frame	213T
Frame Material	Iron
Frequency	60.00 Hz
Haz Area Class and Group	None
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	CCSA US CSA EEV NEMA PREMIUM NEMA_PREMIUM 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
Constant Torque Speed Range	6
Current @ Voltage	21.000 A @ 230.0 V 10.500 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
Enclosure Modification	Severe Duty Features

Part Detail

Revision	B
Type	AC
Mech. spec.	07N167
Base	
Status	PRD/A
Elec. spec.	07WGZ113
Layout	07LYN167
Eff. date	10-27-2023
CD Diagram	CD0005
Poles	04
Leads	9#14
Proprietary	False
Created date	03-28-2023

Feedback Device	NO FEEDBACK
Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	10.5 a
Insulation Class	F
Inverter Code	Inverter Duty
KVA Code	M
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Max Speed	2700 rpm
Motor Lead Quantity/Wire Size	9 @ 14 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	0744M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	19.58 IN
Power Factor	72
Product Family	Super-E Chemical Processing
Pulley End Bearing Type	Ball
Pulley Face Code	Standard
Pulley Shaft Indicator	Standard
Rodent Screen	None
Service Factor	1.25
Shaft Diameter	1.375 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	Shaft Slinger
Speed	1780 rpm
Speed Code	Single Speed
Starting Method	Direct on line
Thermal Device - Bearing	None
Thermal Device - Winding	None
Vibration Sensor Indicator	No Vibration Sensor



Winding Thermal 1	None
Winding Thermal 2	None

Nameplate

NP3294											
CAT NO	ECR9074T										
SPEC.	07N167Z113G1					ENCL	TEFC				
FRAME	213T	HP		7.5							
VOLTS	230/460										
FLA	21/10.5			I.P.		55					
RPM	1780	RPM MAX			2700						
HZ	60	PH	3	CLASS		F					
SER.F.	1.25	DES	A	CC	010A						
NEMA-NOM-EFF	91.7										
RATING	40C AMB-CONT										
DE BRG	6309	ODE BRG			6307						
GREASE	POLYREX EM										
INV.TYPE	PWM	C HP FR		60	C HP TO		90				
CT HZ FROM	6	CT HZ TO		60	VT HZ FROM		6	VT HZ TO		60	
SER.NO	SFA 24.6/12.3										

AC Induction Motor Performance Data

Record # 102263

Typical performance - not guaranteed values

Winding: 07WGZ113-R001			Type: 0744M		Enclosure: TEFC	
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		21/10.5	Breakdown Torque		105 LB-FT	
R.P.M.		1780	Pull-up Torque		59.8 LB-FT	
Hz	60	Phase	3	Locked-rotor Torque		61.7 LB-FT
NEMA Design Code		A	KVA Code	M	Starting Current	
Service Factor (S.F.)		1.25	No-load Current		6.34 A	
NEMA Nom. Eff.		91.7	Power Factor	72	Line-line Res. @ 25°C	
Rating - Duty		40C	AMB-CONT		Temp. Rise @ Rated Load	
S.F. Amps		24.6/12.3			Temp. Rise @ S.F. Load	
					Locked-rotor Power Factor	
					Rotor inertia	
					1.08 lb-ft²	

Load Characteristics 460 V, 60 Hz, 7.5 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	31	51	64	72	77	81	77
Efficiency	83.6	89.9	91.6	92.1	92	91.5	92
Speed	1794.1	1788.5	1782.9	1777.1	1770.9	1764.3	1771
Line amperes	6.69	7.61	8.9	10.5	12.3	14.2	12.3

ABB Motors and Mechanical Inc.

WINDING # 07WGZ113

Typical performance - not guaranteed values.

7.5 HP 3 PH 60 HZ 1780 RPM 460 V 0744M

TORQUES (LB-FT): PO=105 PU=59.8 LR=61.7 LRA=97.8





