

ABB BALDOR RELIANCE III

Customer information packet

ECR9104T

10HP, 1775RPM, 3PH, 60HZ, 215T, 0748M, TEFC, F1

Class - None

Division - Not Applicable

Specifications

Enclosure	TEFC
Frame	215T
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	10.000 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	CCSA US CSA EEV 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	27.800 A @ 230.0 V 13.900 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
Enclosure Modification	Severe Duty Features
Feedback Device	NO FEEDBACK

Part Detail

Revision	A
Type	AC
Mech. spec.	07N167
Base	
Status	PRD/A
Elec. spec.	07WGZ114
Layout	07LYN167
Eff. date	12-01-2023
CD Diagram	CD0005
Poles	04
Leads	9#14
Proprietary	False
Created date	03-28-2023

Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	13.9 a
Insulation Class	F
Inverter Code	Inverter Duty
KVA Code	L
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	0748M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	19.58 IN
Power Factor	73
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	1770 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	ECR9104T										
SPEC.	07N167Z114G1					ENCL	TEFC				
FRAME	215T	HP		10							
VOLTS	230/460										
FLA	28/14			I.P.		55					
RPM	1775	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 32/16										

AC Induction Motor Performance Data

Record # 102668

Typical performance - not guaranteed values

Winding: 07WGZ114-R001				Type: 0748M		Enclosure: TEFC	
Nameplate Data				460 V, 60 Hz: High Voltage Connection			
Rated Output (HP)		10		Full Load Torque		29.64 LB-FT	
Volts		230/460		Start Configuration		direct on line	
Full Load Amps		28/14		Breakdown Torque		129 LB-FT	
R.P.M.		1775		Pull-up Torque		52.5 LB-FT	
Hz	60	Phase	3	Locked-rotor Torque		78.1 LB-FT	
NEMA Design Code		A	KVA Code	L	Starting Current		123 A
Service Factor (S.F.)		1.25		No-load Current		7.83 A	
NEMA Nom. Eff.		91.7	Power Factor	74	Line-line Res. @ 25°C		0.83288 Ω
Rating - Duty		40C AMB-CONT		Temp. Rise @ Rated Load		58°C	
S.F. Amps		32/16		Temp. Rise @ S.F. Load		76°C	
				Locked-rotor Power Factor		37.1	
				Rotor inertia		1.18 lb-ft²	

Load Characteristics 460 V, 60 Hz, 10 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	33	54	67	74	79	82	79
Efficiency	84.8	90.5	91.9	92.1	91.7	91	91.7
Speed	1792.8	1786.7	1780.1	1773.2	1766.1	1757.9	1766
Line amperes	8.33	9.63	11.5	13.7	16.2	18.9	16.2

ABB Motors and Mechanical Inc.

WINDING # 07WGZ114

Typical performance - not guaranteed values.

10 HP 3 PH 60 HZ 1775 RPM 460 V 0748M

TORQUES (LB-FT): PO=129 PU=52.5 LR=78.1 LRA=123





