

ABB BALDOR RELIANCE III

Customer information packet

EM4110T-12

40HP, 1770RPM, 3PH, 60HZ, 324T, 1260M, TEFC, F1

Class - None

Division - Not Applicable

Specifications

Enclosure	TEFC
Frame	324T
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	40.000 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	NEMA PREMIUM CURUSEEV NEMA PREMIUM (OLD LOGO)
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	48.000 A @ 460.0 V 96.000 A @ 230.0 V
Design Code	A
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	94.1 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Face Code	Standard
Front Shaft Indicator	None
Heater Indicator	No Heater

Part Detail

Revision	T
Type	AC
Mech. spec.	12C51
Base	
Status	PRD/A
Elec. spec.	12WGY339
Layout	12LYC051
Eff. date	01-14-2025
CD Diagram	CD0104
Poles	04
Leads	12#8
Proprietary	False
Created date	08-03-2010

High Voltage Full Load Amps	48.0 a
Insulation Class	F
Inverter Code	Inverter Ready
IP Rating	NONE
KVA Code	H
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	12 @ 8 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	1260M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	30.28 IN
Power Factor	83
Product Family	General Purpose
Pulley End Bearing Type	Ball
Pulley Face Code	Standard
Pulley Shaft Indicator	Standard
Rodent Screen	None
Service Factor	1.15
Shaft Diameter	2.125 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	Wye Start - Delta Run
Thermal Device - Bearing	None
Thermal Device - Winding	None
Vibration Sensor Indicator	No Vibration Sensor
Winding Thermal 1	None

Winding Thermal 2

None

Nameplate

NP3443L													
CAT.NO.	EM4110T-12				CUST. P/N				ENCL				TEFC
SPEC.	12C051Y339G1	CC	010A	FRAME	324T	SER.NO.							
HP	40			CLASS	F	HZ	60						
R.P.M.	1770			PH	3	DES	A						
VOLTS	230/460			CODE	H	ODE BRG		6311	DE BRG	6312			
AMPS	96/48												
RATING	40C AMB-CONT			NEMA NOM. EFF.			94.1	GREASE		POLYREX EM			
P.F.	83	SER.F.	1.15	VPWM INVERTER READY									
HTR-VOLTS	HTR-AMPS			HTR-WATTS									

AC Induction Motor Performance Data

Record # 32033

Typical performance - not guaranteed values

Winding: 12WGY339-R001				Type: 1260M		Enclosure: TEFC	
Nameplate Data				460 V, 60 Hz: High Voltage Connection			
Rated Output (HP)		40		Full Load Torque		118 LB-FT	
Volts		208-230/460		Start Configuration		direct on line	
Full Load Amps		102-96/48		Breakdown Torque		430 LB-FT	
R.P.M.		1770		Pull-up Torque		210 LB-FT	
Hz	60	Phase	3	Locked-rotor Torque		199 LB-FT	
NEMA Design Code		A	KVA Code	Starting Current		349 A	
Service Factor (S.F.)		1.15		No-load Current		19.3 A	
NEMA Nom. Eff.		94.1	Power Factor	Line-line Res. @ 25°C		0.13252 Ω	
Rating - Duty		40C AMB-CONT		Temp. Rise @ Rated Load		51°C	
S.F. Amps				Temp. Rise @ S.F. Load		61°C	
				Locked-rotor Power Factor		27	
				Rotor inertia		7.99 LB-FT2	

Load Characteristics 460 V, 60 Hz, 40 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	46	69	79	83	86	86	85
Efficiency	90.1	93.7	94.5	94.5	94.2	93.5	94.3
Speed	1795.1	1790.2	1784.9	1779.7	1774.3	1766.5	1776
Line amperes	22.5	29.1	37.7	47.9	58.1	72.5	54

ABB Motors and Mechanical Inc.

WINDING # 12WGY339

Typical performance - not guaranteed values.

40 HP 3 PH 60 HZ 1770 RPM 460 V 1260M

TORQUES (LB-FT): PO=430 PU=210 LR=199 LRA=349





