

ABB BALDOR RELIANCE III

Customer information packet

EM4115T-12

50HP, 1775RPM, 3PH, 60HZ, 326T, 1272M, TEFC, F1

Class - None

Division - Not Applicable

Specifications

Enclosure	TEFC
Frame	326T
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	50.000 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	116.000 A @ 230.0 V 58.000 A @ 460.0 V
Design Code	A
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	94.5 %
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.	12WGY340
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	58.0 a
Insulation Class	F
Inverter Code	Inverter Ready
IP Rating	NONE
KVA Code	G
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	1272M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	30.28 IN
Power Factor	85
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	1775 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.	EM4115T-12				CUST. P/N				ENCL				TEFC
SPEC.	12C051Y340G1	CC	010A	FRAME	326T	SER.NO.							
HP	50			CLASS	F	HZ	60						
R.P.M.	1775			PH	3	DES	A						
VOLTS	230/460			CODE	G	ODE BRG	6311	DE BRG	6312				
AMPS	116/58												
RATING	40C AMB-CONT			NEMA NOM. EFF.			94.5	GREASE	POLYREX EM				
P.F.	85	SER.F.	1.15	VPWM INVERTER READY									
HTR-VOLTS	HTR-AMPS			HTR-WATTS									

AC Induction Motor Performance Data

Record # 32034

Typical performance - not guaranteed values

Winding: 12WGY340-R001			Type: 1272M		Enclosure: TEFC	
Nameplate Data			460 V, 60 Hz: High Voltage Connection			
Rated Output (HP)		50	Full Load Torque		147 LB-FT	
Volts		230/460	Start Configuration		direct on line	
Full Load Amps		116/58	Breakdown Torque		396 LB-FT	
R.P.M.		1775	Pull-up Torque		183 LB-FT	
Hz	60	Phase	3	Locked-rotor Torque		254 LB-FT
NEMA Design Code		A	KVA Code	Starting Current		397 A
Service Factor (S.F.)		1.15	No-load Current		19.8 A	
NEMA Nom. Eff.		94.5	Power Factor	Line-line Res. @ 25°C		0.10889 Ω
Rating - Duty		40C	AMB-CONT	Temp. Rise @ Rated Load		64°C
S.F. Amps				Temp. Rise @ S.F. Load		79°C
				Locked-rotor Power Factor		26
				Rotor inertia		9.59 LB-FT2

Load Characteristics 460 V, 60 Hz, 50 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	53	74	83	86	87	87	87
Efficiency	91.3	94.3	94.8	94.6	94	93.1	94.2
Speed	1794.5	1789.3	1783.5	1777.5	1770.7	1761.5	1773
Line amperes	24.2	33.5	44.7	57.6	71.5	90	65.9

ABB Motors and Mechanical Inc.

WINDING # 12WGY340

Typical performance - not guaranteed values.

50 HP 3 PH 60 HZ 1775 RPM 460 V 1272M

TORQUES (LB-FT): PO=396 PU=183 LR=254 LRA=397





