

ABB BALDOR RELIANCE III

Customer information packet

EM2539T-12

40HP, 1770RPM, 3PH, 60HZ, 324T, 4064M, OPSB, F1

Specifications

Enclosure	OPSB
Frame	324T
Frame Material	Steel
Frequency	60.00 Hz
Motor Letter Type	Three Phase
Output @ Frequency	40.000 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	CURUSEEV NEMA PREMIUM 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	47.000 A @ 460.0 V 94.000 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
High Voltage Full Load Amps	47.0 a
Insulation Class	F

Part Detail

Revision	U
Type	AC
Mech. spec.	40E212
Base	
Status	PRD/A
Elec. spec.	40WGX189
Layout	40LYE212
Eff. date	06-27-2024
CD Diagram	CD0104
Poles	04
Leads	12#8
Proprietary	False
Created date	08-03-2010

Inverter Code	Inverter Ready
IP Rating	NONE
KVA Code	G
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	No 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	4064M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	27.19 IN
Power Factor	82
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	No 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

NP3554LUA											
CAT.NO.	EM2539T-12			P/N						ENCL	OPSE
SPEC.	40E212X189	CC	010A	FRAME		324T	SER.NO.				
HP	40		CLASS		F	HZ	60				
RPM	1770		PH	3	DES		A				
VOLTS	230/460			CODE		G	ODE BRG	6309	DE BRG	6312	
AMPS	94/47										
RATING	40C AMB-CONT		NEMA-NOM-EFF			94.1	GREASE	POLYREX EM			
PF	82	SER.F.	1.15		CT30-60(2:1) VT3-60(20:1)						
USABLE AT	50HZ 40HP 190/380V 114/57A				SF 1.0						
HTR-VOLTS	HTR-AMPS	MAX. SPACE HEATER TEMP.									

AC Induction Motor Performance Data

Record # 32039

Typical performance - not guaranteed values

Winding: 40WGX189-R001			Type: 4064M		Enclosure: OPSB	
Nameplate Data				460 V, 60 Hz: High Voltage Connection		
Rated Output (HP)		40		Full Load Torque		119 LB-FT
Volts		230/460		Start Configuration		direct on line
Full Load Amps		94/47		Breakdown Torque		421 LB-FT
R.P.M.		1770		Pull-up Torque		179 LB-FT
Hz	60	Phase	3	Locked-rotor Torque		235 LB-FT
NEMA Design Code		A	KVA Code	Starting Current		316 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		0.155 Ω
Rating - Duty		40C AMB-CONT		Temp. Rise @ Rated Load		41°C
S.F. Amps				Temp. Rise @ S.F. Load		50°C
				Locked-rotor Power Factor		32
				Rotor inertia		5.09 LB-FT2

Load Characteristics 460 V, 60 Hz, 40 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	45	68	79	84	86	86	85
Efficiency	92.7	94.6	94.8	94.4	93.6	92.9	93.9
Speed	1792	1785	1777	1770	1761	1751	1765
Line amperes	22.3	29	37.7	47.4	58.2	70.4	53.9

ABB Motors and Mechanical Inc.

WINDING # 40WGx189

Typical performance - not guaranteed values.

40 HP 3 PH 60 HZ 1770 RPM 460 V 4064M

TORQUES (LB-FT): PO=421 PU=179 LR=235 LRA=316





