

**BALDOR • RELIANCE**

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# 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	230.0 V @ 60 HZ 460.0 V @ 60 HZ
Agency Approvals	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
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

## 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

<b>Insulation Class</b>	F
<b>Inverter Code</b>	Inverter Ready
<b>IP Rating</b>	NONE
<b>KVA Code</b>	G
<b>Lifting Lugs</b>	Standard Lifting Lugs
<b>Locked Bearing Indicator</b>	No Locked Bearing
<b>Motor Lead Exit</b>	Ko Box
<b>Motor Lead Quantity/Wire Size</b>	12 @ 8 AWG
<b>Motor Lead Termination</b>	Flying Leads
<b>Motor Standards</b>	NEMA
<b>Motor Type</b>	4064M
<b>Mounting Arrangement</b>	F1
<b>Number of Poles</b>	4
<b>Overall Length</b>	27.19 IN
<b>Power Factor</b>	82
<b>Product Family</b>	General Purpose
<b>Pulley End Bearing Type</b>	Ball
<b>Pulley Face Code</b>	Standard
<b>Pulley Shaft Indicator</b>	Standard
<b>Rodent Screen</b>	None
<b>Service Factor</b>	1.15
<b>Shaft Diameter</b>	2.125 IN
<b>Shaft Extension Location</b>	Pulley End
<b>Shaft Ground Indicator</b>	No Shaft Grounding
<b>Shaft Rotation</b>	Reversible
<b>Shaft Slinger Indicator</b>	No Slinger
<b>Speed</b>	1770 rpm
<b>Speed Code</b>	Single Speed
<b>Starting Method</b>	Wye Start - Delta Run
<b>Thermal Device - Bearing</b>	None
<b>Thermal Device - Winding</b>	None
<b>Vibration Sensor Indicator</b>	No Vibration Sensor
<b>Winding Thermal 1</b>	None
<b>Winding Thermal 2</b>	None

**Nameplate**

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

**AC Induction Motor Performance Data**

Record # 32039

Typical performance - not guaranteed values

<b>Winding:</b> 40WGX189-R001		<b>Type:</b> 4064M		<b>Enclosure:</b> OPSB	
<b>Nameplate Data</b>			<b>460 V, 60 Hz: High Voltage Connection</b>		
<b>Rated Output (HP)</b>	40	<b>Full Load Torque</b>	119 LB-FT		
<b>Volts</b>	230/460	<b>Start Configuration</b>	direct on line		
<b>Full Load Amps</b>	94/47	<b>Breakdown Torque</b>	421 LB-FT		
<b>R.P.M.</b>	1770	<b>Pull-up Torque</b>	179 LB-FT		
<b>Hz</b>	60 <b>Phase</b>	3	<b>Locked-rotor Torque</b>	235 LB-FT	
<b>NEMA Design Code</b>	<b>A KVA Code</b>	G	<b>Starting Current</b>	316 A	
<b>Service Factor (S.F.)</b>		1.15	<b>No-load Current</b>	19.3 A	
<b>NEMA Nom. Eff.</b>	94.1 <b>Power Factor</b>	82	<b>Line-line Res. @ 25°C</b>	0.155 Ω	
<b>Rating - Duty</b>	40C AMB-CONT		<b>Temp. Rise @ Rated Load</b>	41°C	
<b>S.F. Amps</b>			<b>Temp. Rise @ S.F. Load</b>	50°C	
			<b>Locked-rotor Power Factor</b>	32	
			<b>Rotor inertia</b>	5.09 LB-FT <sup>2</sup>	

**Load Characteristics 460 V, 60 Hz, 40 HP**

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

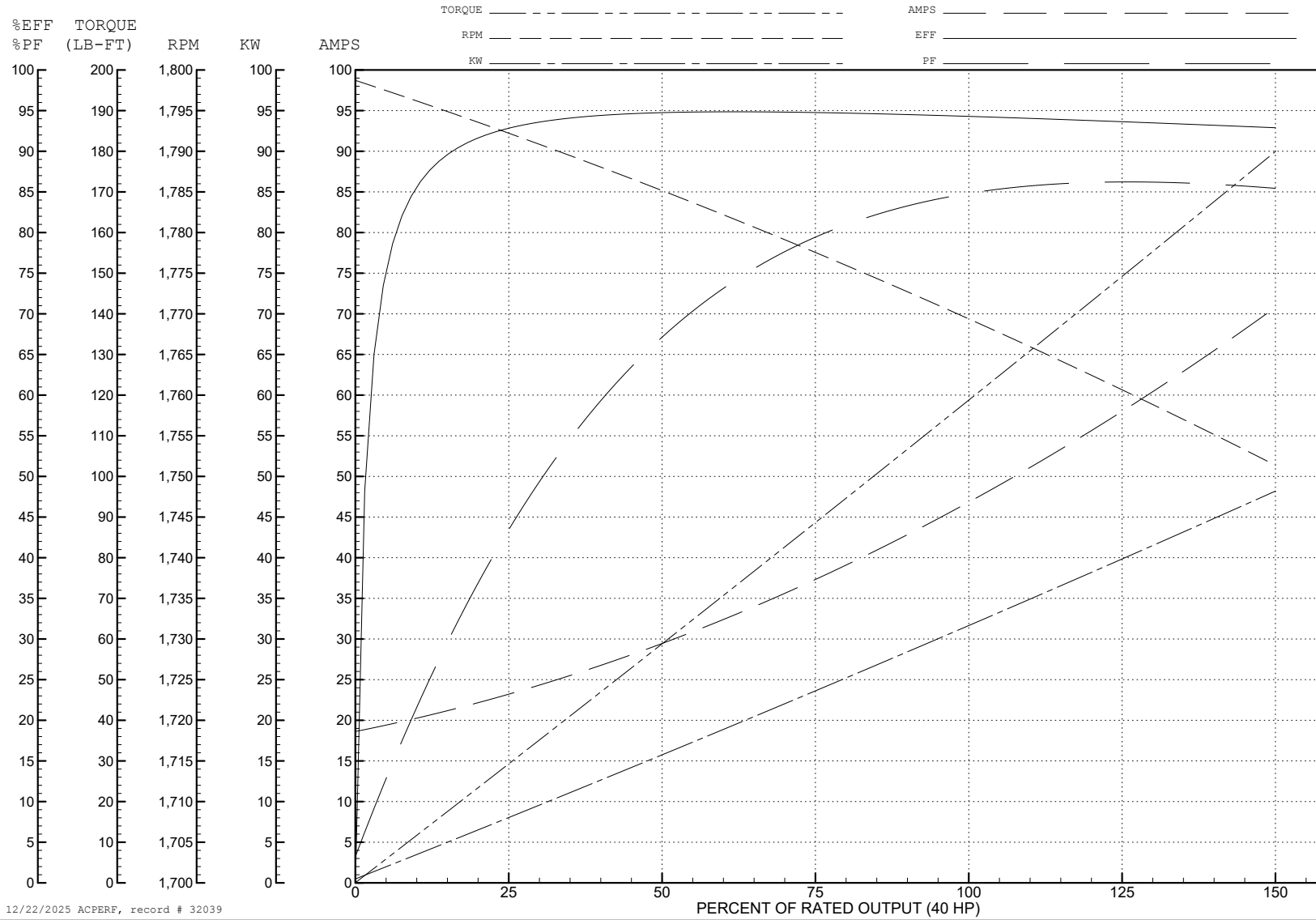
ABB Motors and Mechanical Inc.

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



12/22/2025 ACPERF, record # 32039

