

ABB BALDOR RELIANCE III

Customer information packet

EM2539T-8G

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	200.0 V @ 60 HZ
Agency Approvals	CSA EEV
	UR
	CSA
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	109.000 A @ 200.0 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	109.0 a
Insulation Class	H
Inverter Code	Inverter Ready
KVA Code	H

Part Detail

Revision	L
Type	AC
Mech. spec.	40E245
Base	
Status	PRD/A
Elec. spec.	40WGX238
Layout	40LYE245
Eff. date	06-27-2024
CD Diagram	CD0695
Poles	04
Leads	6#4
Proprietary	False
Created date	09-11-2013

Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	No Locked Bearing
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	6 @ 4 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	84
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	Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	1770 rpm
Speed Code	Single Speed
Starting Method	Part Winding
Thermal Device - Bearing	None
Thermal Device - Winding	None
Vibration Sensor Indicator	No Vibration Sensor
Winding Thermal 1	None
Winding Thermal 2	None

Nameplate

NP3554L											
CAT.NO.	EM2539T-8G			P/N						ENCL	OPSB
SPEC.	40E245X238G1	CC	010A	FRAME		324T	SER.NO.				
HP	40		CLASS		H	HZ	60				
RPM	1770		PH	3	DES		A				
VOLTS	200		CODE		H	ODE BRG		6309	DE BRG	6312	
AMPS	109										
RATING	40C AMB-CONT		NEMA-NOM-EFF			94.1	GREASE		POLYREX EM		
PF	84	SER.F.	1.15	VPWM INVERTER READY							
HTR-VOLTS	HTR-AMPS	MAX. SPACE HEATER TEMP.									

AC Induction Motor Performance Data

Record # 50232

Typical performance - not guaranteed values

Winding: 40WGX238-R002				Type: 4064M		Enclosure: OPSB		
Nameplate Data				200 V, 60 Hz: Single Voltage Motor				
Rated Output (HP)		40		Full Load Torque		119 LB-FT		
Volts		200		Start Configuration		direct on line		
Full Load Amps		109		Breakdown Torque		415 LB-FT		
R.P.M.		1770		Pull-up Torque		181 LB-FT		
Hz	60	Phase	3	Locked-rotor Torque		238 LB-FT		
NEMA Design Code		A	KVA Code	H		Starting Current		734 A
Service Factor (S.F.)		1.15		No-load Current		45.2 A		
NEMA Nom. Eff.		94.1	Power Factor	84		Line-line Res. @ 25°C		0.03 Ω
Rating - Duty		40C AMB-CONT		Temp. Rise @ Rated Load		41°C		
S.F. Amps				Temp. Rise @ S.F. Load		49°C		
				Locked-rotor Power Factor		32		
				Rotor inertia		5.09 LB-FT2		

Load Characteristics 200 V, 60 Hz, 40 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	44	68	78	84	86	86	85
Efficiency	92.9	94.6	94.9	94.4	93.6	93	94
Speed	1792	1785	1777	1770	1761	1752	1765
Line amperes	52.1	67.5	87.3	109	134	162	124

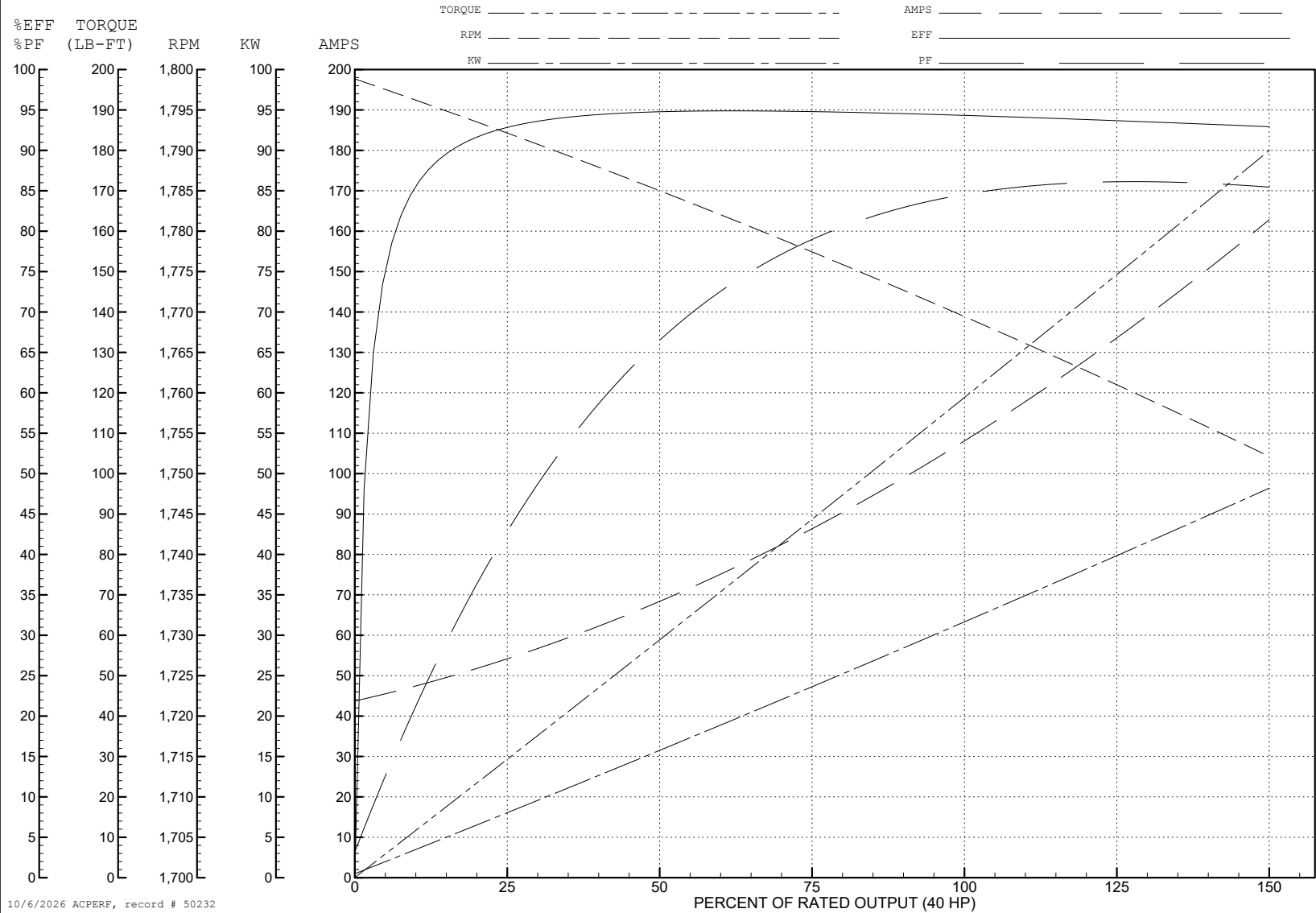
ABB Motors and Mechanical Inc.

WINDING # 40WGX238

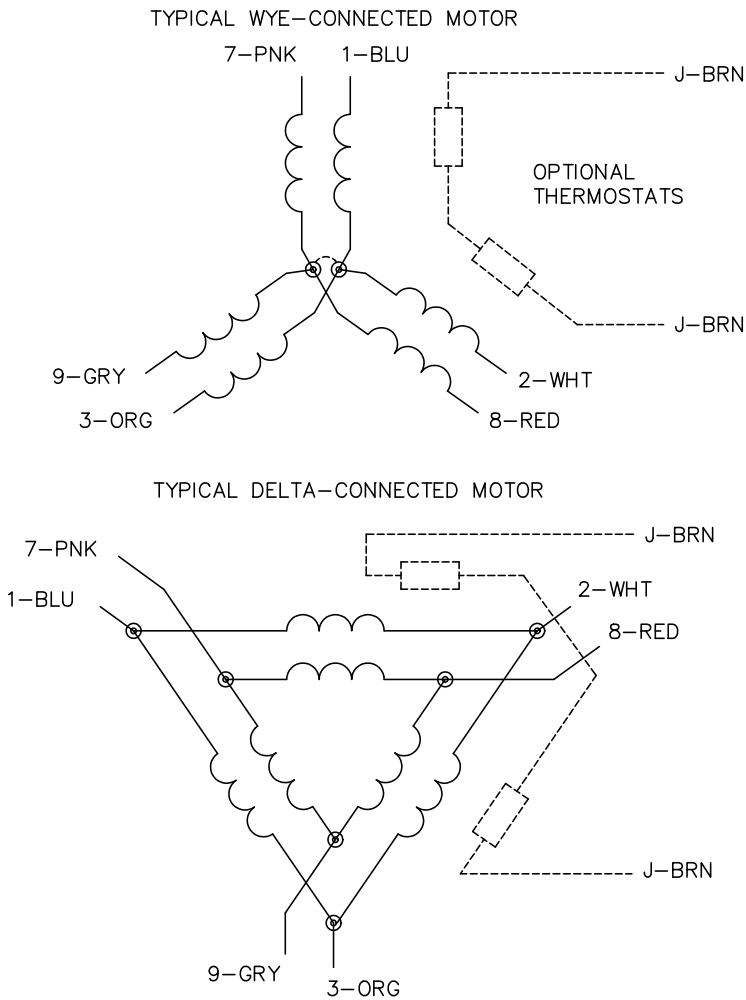
Typical performance - not guaranteed values.

40 HP 3 PH 60 HZ 1770 RPM 200 V 4064M

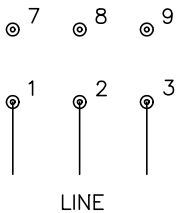
TORQUES (LB-FT): PO=415 PU=181 LR=238 LRA=734



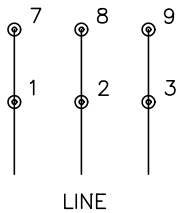
CD0695



START CONNECTION



RUN CONNECTION



NOTES:

1. MOTOR MAY BE WYE CONNECTED OR DELTA CONNECTED.
2. INTERCHANGE ANY TWO LINE LEADS TO REVERSE ROTATION.
3. OPTIONAL THERMOSTATS ARE PROVIDED WHEN SPECIFIED.
4. ACTUAL NUMBER OF INTERNAL PARALLEL CIRCUITS MAY VARY.
5. LEAD COLORS ARE OPTIONAL. LEADS MUST ALWAYS BE NUMBERED AS SHOWN.

REV. DESC: REVISE TO SHOW OPTIONAL COLORS

REV. LTR: C

BY: JLP

REVISED: 01/21/99 3:19

TDR: 0171435

S69000

FILE: AAA00005151

MDL: -

MTL: -

BALDOR ELECTRIC Co.

3PH, SV, 6 LEADS, PART WINDING START

CD0695