

ABB BALDOR RELIANCE III

Customer information packet

EM2539T-8

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	NEMA PREMIUM NEMA PREMIUM (OLD LOGO) CURUSEEV
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	F
Inverter Code	Inverter Ready
KVA Code	H

Part Detail

Revision	P
Type	AC
Mech. spec.	40J002
Base	
Status	PRD/A
Elec. spec.	40WGX238
Layout	40LYJ002
Eff. date	04-25-2025
CD Diagram	CD0695
Poles	04
Leads	6#4
Proprietary	False
Created date	05-14-2012

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	No 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-8				P/N				ENCL				OPSB	
SPEC.	40J002X238G1		CC	010A		FRAME		324T		SER.NO.				
HP	40			CLASS		F		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.											

Parts List

Part number	Description	Quantity
SA244539	SA 40J002X238G1	1.000 ea
RA231423	RA 40J002X238G1	1.000 ea
HA6361A01	LIFTING LUG FOR 37, 39 & 40 FRAME ZINC	2.000 ea
HA6017	CAST ADAPTER, 40,42 KOBX	1.000 ea
19XW3118A12	.31-18 X .75 HEX WASHER HEAD TAPTITE II	2.000 ea
HW1001A31	LOCKWASHER 5/16, ZINC PLT.591 OD, .319 I	2.000 ea
WD1000B25	GND LUG, BURNDY L125HP OR T&B L125HP-BB	1.000 ea
19XW3118G08	.31-18X.50,HEX WSHR HD,TAPTITE 2,GREEN	1.000 ea
10CB3001	CONDUIT BOX CAST W/2.500 LEAD HOLE	1.000 ea
19XW3118A12	.31-18 X .75 HEX WASHER HEAD TAPTITE II	4.000 ea
HW1001A31	LOCKWASHER 5/16, ZINC PLT.591 OD, .319 I	4.000 ea
40EP3200A02	STD FREP OPEN 309 BRG	1.000 ea
HW5100A11	W3917-042 WVY WSHR (WB)	1.000 ea
40EP3201A01	PU ENDPLATE, MACH - OPEN - FOR 312 BRG	1.000 ea
XY3816A12	3/8-16 FINISHED NUT W/SERRATIONS	4.000 ea
10CB3500SP	CONDUIT BOX LID, CAST	1.000 ea
51XW2520A12	.25-20 X .75, TAPTITE II, HEX WSHR SLTD	4.000 ea
HW2501H33	KEY, 1/2 SQ X 3.875	1.000 ea
MN416A01	TAG-INSTAL-MAINT no wire (2500 bx)11/25	1.000 ea
HA4051A00	PLASTIC CAP FOR GREASE FITTING	1.000 ea
MG1050Y01	CELEROL BALDOR GOLD *5 GALLON BUCKET*	0.030 ga
HW4500A03	GREASE FITTING, .125 NPT 1610(ALEMITE) 8	1.000 ea
HW4500A20	1/8NPT SL PIPE PLUG	1.000 ea
MJ1000A02	GREASE, POLYREX EM EXXON	0.050 lb
HW4500A03	GREASE FITTING, .125 NPT 1610(ALEMITE) 8	1.000 ea
HW4500A20	1/8NPT SL PIPE PLUG	1.000 ea
HA4051A00	PLASTIC CAP FOR GREASE FITTING	1.000 ea
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	4.000 ea
40AD2002A01	LEXAN BAFFLE 40 FR OPEN	1.000 ea
40AD2002A01	LEXAN BAFFLE 40 FR OPEN	1.000 ea
HA3113A13	THRUBOLT 3/8-16 X 19.750 W/4.00 THD LENG	4.000 ea

LB1624	COMBINED WARNING LABEL, ISO/ANSI PICTOGR	1.000 ea
LC0695	CONNECTION LABEL	1.000 ea
NP3554L	SS SUPER-E,CURUS-EEV,NEMA PREM,CC,300 SR	1.000 ea
40PA1000	PACKAGING GROUP	1.000 ea

Accessories

Part number	Description	Multiplier
42-1300	C FACE KIT	A8
42EP1601A01	SP'L D-FLANGE MTD. PU. E.P. MDL.42 W/BFL	P1

AC Induction Motor Performance Data

Record # 38390

Typical performance - not guaranteed values

Winding: 40WGX238-R001				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

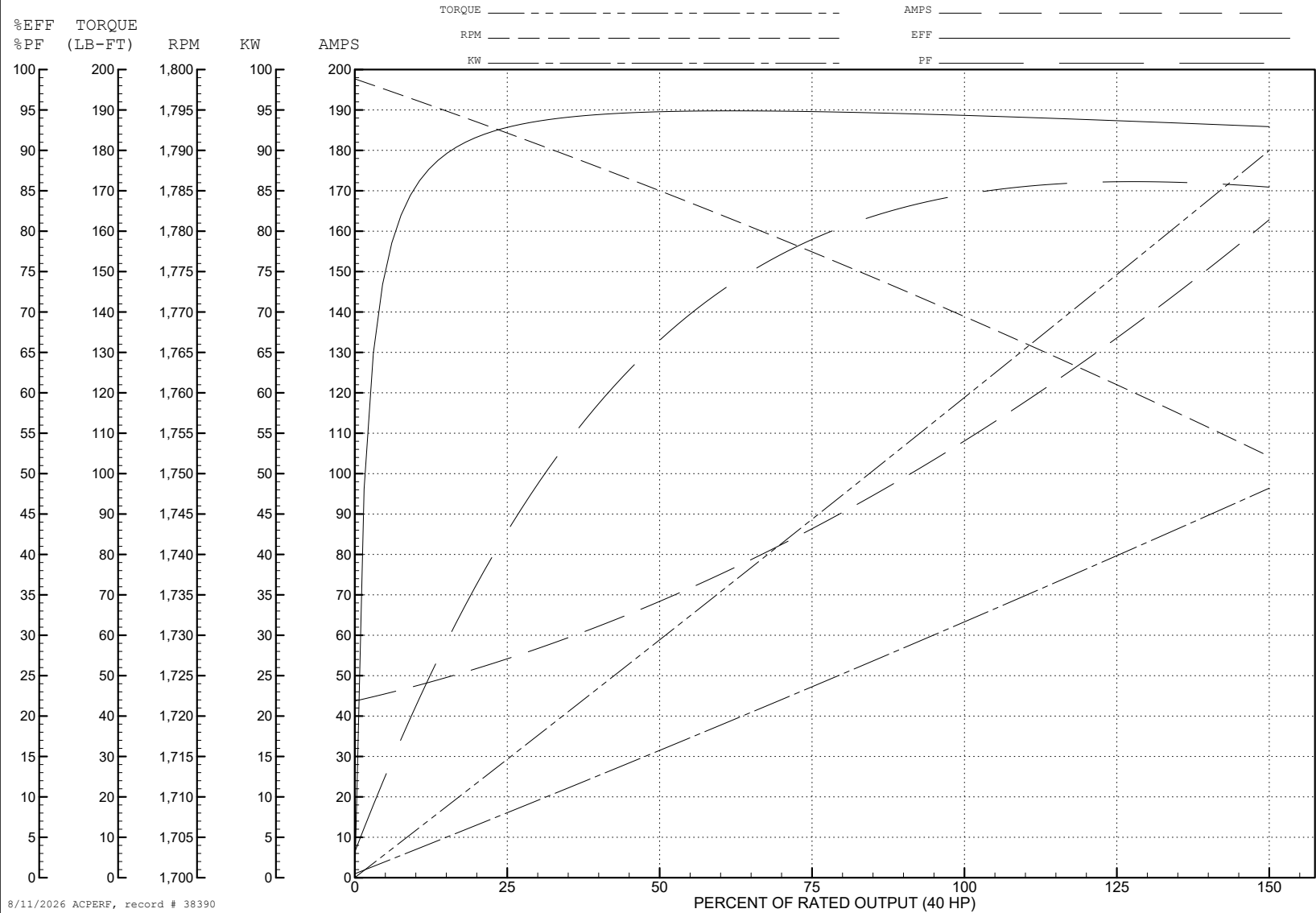
ABB Motors and Mechanical Inc.

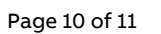
WINDING # 40WGX238

Typical performance - not guaranteed values.

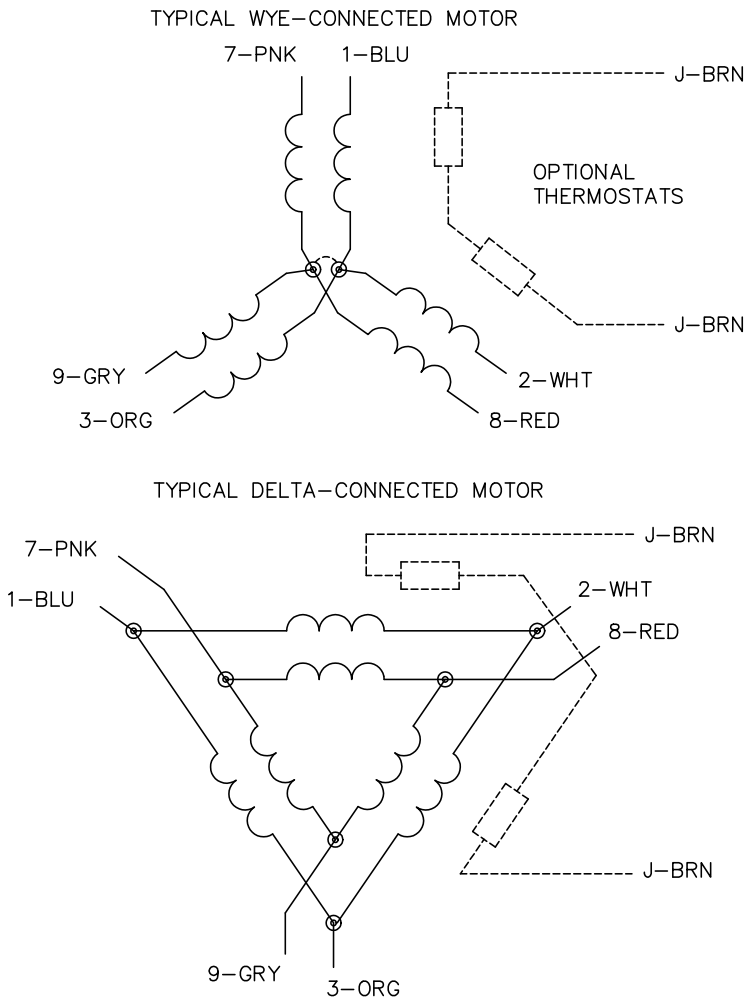
40 HP 3 PH 60 HZ 1770 RPM 200 V 4064M

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

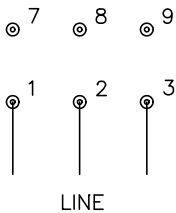




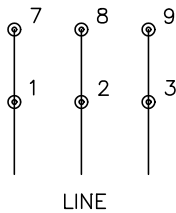
CD0695



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