

ABB BALDOR RELIANCE III

Customer information packet

EM2538T-8

40HP, 3530RPM, 3PH, 60HZ, 286TS, 4046M, OPSB, F

Specifications

Enclosure	OPSB
Frame	286TS
Frame Material	Steel
Frequency	60.00 Hz
Motor Letter Type	Three Phase
Output @ Frequency	40.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	3600 RPM @ 60 HZ
Voltage @ Frequency	200.0 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	105.000 A @ 200.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	92.4 %
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	105.0 a
Insulation Class	F
Inverter Code	Inverter Ready
IP Rating	NONE

Part Detail

Revision	Q
Type	AC
Mech. spec.	40G51
Base	
Status	PRD/A
Elec. spec.	40WGX239
Layout	40LYG051
Eff. date	06-27-2024
CD Diagram	CD0695
Poles	02
Leads	6#4
Proprietary	False
Created date	05-14-2012

KVA Code	G
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	4046M
Mounting Arrangement	F1
Number of Poles	2
Overall Length	22.44 IN
Power Factor	89
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	1.625 IN
Shaft Extension Location	Pulley End
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	3530 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.	EM2538T-8			P/N				ENCL				OPSB
SPEC.	40G051X239	CC	010A	FRAME		286TS	SER.NO.					
HP	40		CLASS		F	HZ	60					
RPM	3530		PH	3	DES		B					
VOLTS	200		CODE		G	ODE BRG		6309	DE BRG	6311		
AMPS	105											
RATING	40C AMB-CONT		NEMA-NOM-EFF			92.4	GREASE		POLYREX EM			
PF	89	SER.F.	1.15	VPWM INVERTER READY								
HTR-VOLTS	HTR-AMPS	MAX. SPACE HEATER TEMP.										

Accessories

Part number	Description	Multiplier
40-1400	C FACE KIT	A8

AC Induction Motor Performance Data

Record # 38392

Typical performance - not guaranteed values

Winding: 40WGX239-R001			Type: 4046M		Enclosure: OPSB		
Nameplate Data			200 V, 60 Hz: Single Voltage Motor				
Rated Output (HP)		40	Full Load Torque		59.6 LB-FT		
Volts		200	Start Configuration		direct on line		
Full Load Amps		105	Breakdown Torque		210 LB-FT		
R.P.M.		3530	Pull-up Torque		75.8 LB-FT		
Hz	60	Phase	3	Locked-rotor Torque		104 LB-FT	
NEMA Design Code		B	KVA Code	G	Starting Current		658 A
Service Factor (S.F.)		1.15	No-load Current		27.6 A		
NEMA Nom. Eff.		92.4	Power Factor	89	Line-line Res. @ 25°C		0.0332 Ω
Rating - Duty		40C AMB-CONT		Temp. Rise @ Rated Load		35°C	
S.F. Amps				Temp. Rise @ S.F. Load		43°C	
				Locked-rotor Power Factor		24	
				Rotor inertia		1.97 LB-FT2	

Load Characteristics 200 V, 60 Hz, 40 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	64	81	88	89	90	90	90
Efficiency	90.6	93.4	93.4	92.7	91.8	90.7	92.2
Speed	3581	3566	3548	3529	3506	3483	3515
Line amperes	37.8	57	79.4	105	130	159	120

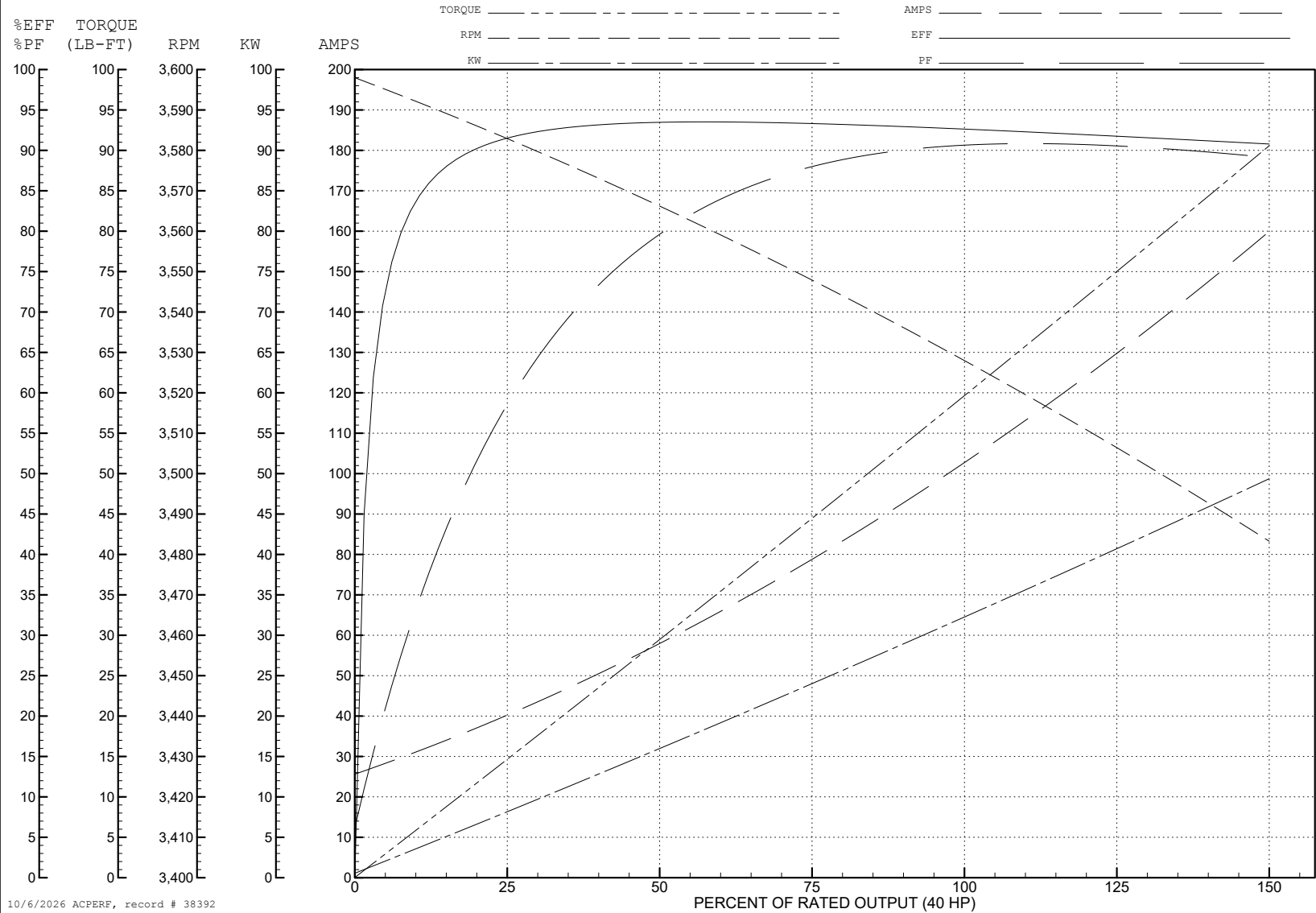
ABB Motors and Mechanical Inc.

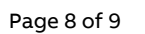
WINDING # 40WGX239

Typical performance - not guaranteed values.

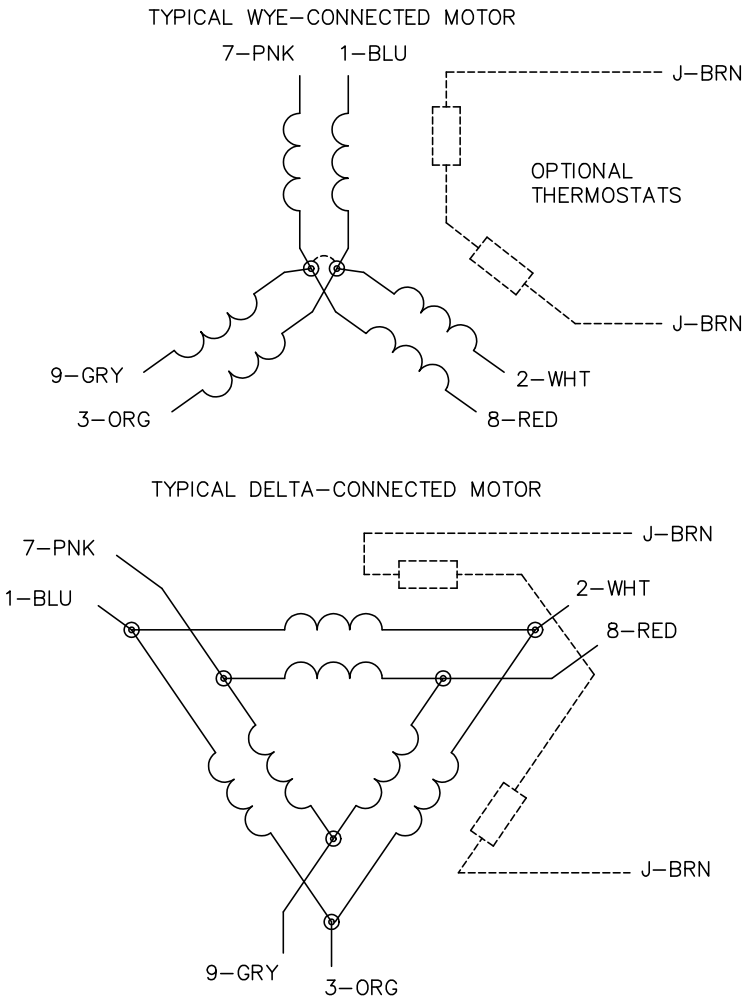
40 HP 3 PH 60 HZ 3530 RPM 200 V 4046M

TORQUES (LB-FT): PO=210 PU=75.8 LR=104 LRA=658

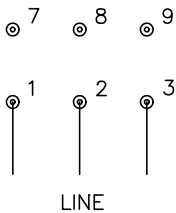




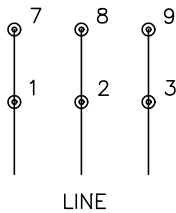
CD0695



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