ABB BALDOR RELIANCE

Customer information packet

EM2538T-8

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

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11/22/2026 3:00:45 AM

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. @ 25ºC**	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

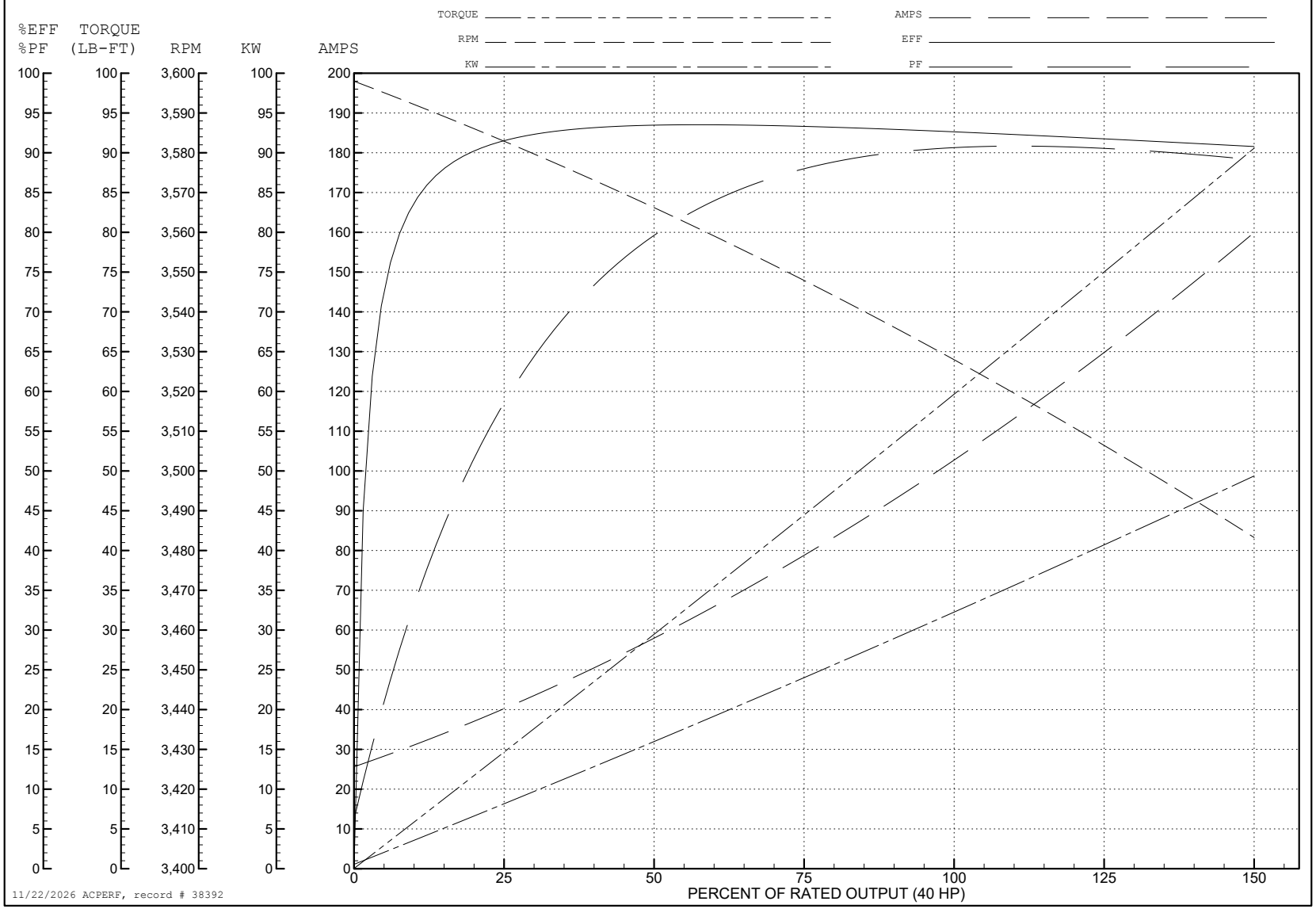
ABB Motors and Mechanical Inc.

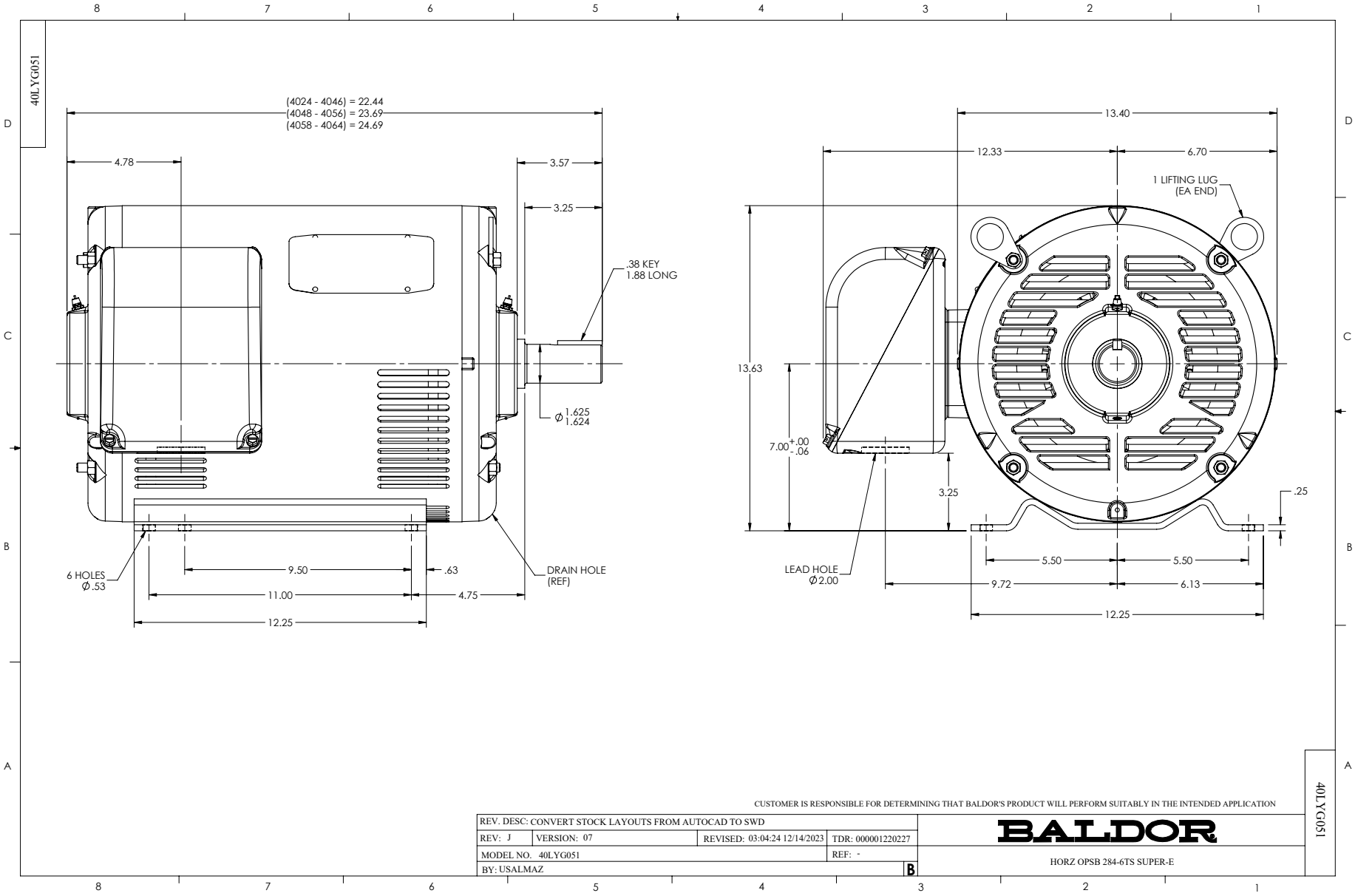
WINDING # 40WGX239

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

Typical performance - not guaranteed values.

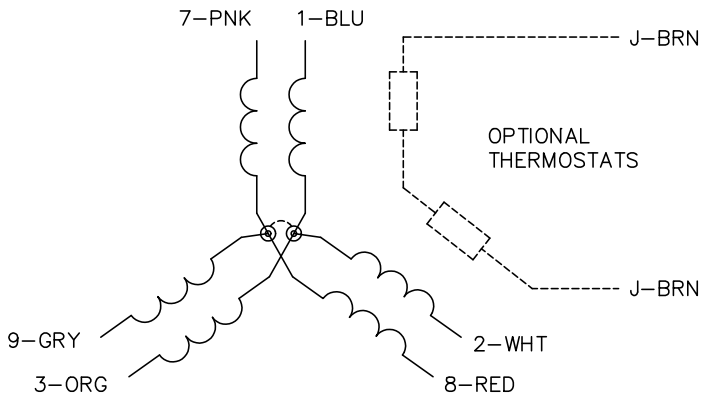
TORQUES(LB-FT): PO=210 PU=75.8 LR=104 LRA=658



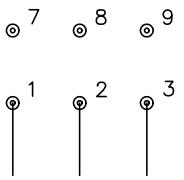

40LYG051
(4024 - 4046) = 22.44
(4048 - 4056) = 23.69
(4058 - 4064) = 24.69
4.78
3.57
3.25
.38 KEY
1.88 LONG
Ø 1.625
1.624
6 HOLES
Ø .53
9.50
.63
11.00
4.75
12.25
DRAIN HOLE
(REF)
13.40
12.33
6.70
1 LIFTING LUG
(EA END)
13.63
7.00 +.00 -.06
3.25
.25
LEAD HOLE
Ø 2.00
5.50
5.50
9.72
6.13
12.25
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT BALDOR'S PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION
REV. DESC: CONVERT STOCK LAYOUTS FROM AUTOCAD TO SWD
REV: J
VERSION: 07
REVISED: 03:04:24 12/14/2023
TDR: 000001220227
MODEL NO. 40LYG051
REF: -
BY: USALMAZ
B
BALDOR
HORZ OPSB 284-6TS SUPER-E
40LYG051

CD0695

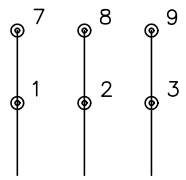
TYPICAL WYE–CONNECTED MOTOR



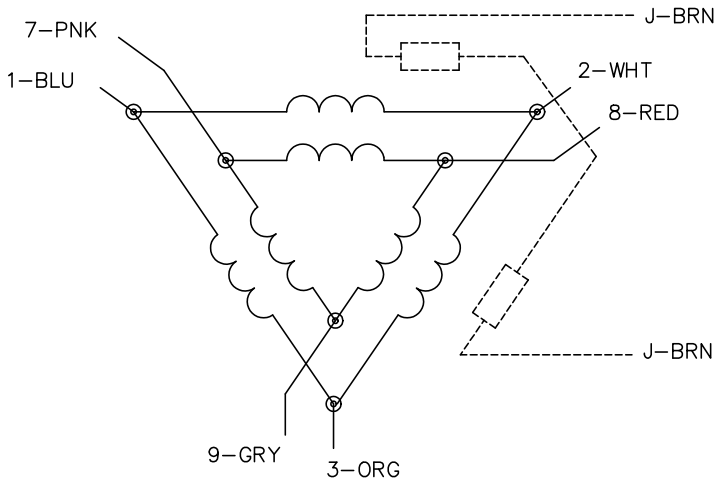
START CONNECTION



RUN CONNECTION



TYPICAL DELTA–CONNECTED MOTOR



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.

CD0695

REV. DESC: REVISE TO SHOW OPTIONAL COLORS			BALDOR ELECTRIC Co.
REV. LTR: C	BY: JLP	REVISED: 01/21/99 3:19	TDR: 0171435
CD0695		FILE: AAA00005151	MDL: –
		MTL: –	3PH, SV, 6 LEADS, PART WINDING START