

ABB BALDOR RELIANCE III

Customer information packet

EM2531T-8

25HP, 1770RPM, 3PH, 60HZ, 284T, 4050M, OPSB, F1

Specifications

Enclosure	OPSB
Frame	284T
Frame Material	Steel
Frequency	60.00 Hz
Motor Letter Type	Three Phase
Output @ Frequency	25.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1800 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	70.000 A @ 200.0 V
Design Code	A
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	93.6 %
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	70.0 a
Insulation Class	F
Inverter Code	Inverter Ready
IP Rating	NONE

Part Detail

Revision	X
Type	AC
Mech. spec.	40G48
Base	
Status	PRD/A
Elec. spec.	40WGX796
Layout	40LYG048
Eff. date	09-02-2025
CD Diagram	CD0695
Poles	04
Leads	6#6
Proprietary	False
Created date	01-22-2013

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 @ 6 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	4050M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	25.06 IN
Power Factor	82
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	1.875 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.	EM2531T-8				P/N				ENCL				OPSB	
SPEC.	40G048X796		CC	010A		FRAME		284T		SER.NO.				
HP	25			CLASS		F		HZ		60				
RPM	1770			PH	3		DES		A					
VOLTS	200				CODE		G		ODE BRG		6309	DE BRG		6311
AMPS	70													
RATING	40C AMB-CONT			NEMA-NOM-EFF				93.6		GREASE		POLYREX EM		
PF	82		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 # 41057

Typical performance - not guaranteed values

Winding: 40WGX796-R001				Type: 4050M		Enclosure: OPSB	
Nameplate Data				200 V, 60 Hz: Single Voltage Motor			
Rated Output (HP)		25		Full Load Torque		74.1 LB-FT	
Volts		200		Start Configuration		direct on line	
Full Load Amps		70		Breakdown Torque		213 LB-FT	
R.P.M.		1770		Pull-up Torque		91.1 LB-FT	
Hz	60	Phase	3	Locked-rotor Torque		124 LB-FT	
NEMA Design Code		B	KVA Code	G	Starting Current		432 A
Service Factor (S.F.)		1.15		No-load Current		29 A	
NEMA Nom. Eff.		93.6	Power Factor	82	Line-line Res. @ 25°C		0.0619 Ω
Rating - Duty		40C AMB-CONT		Temp. Rise @ Rated Load		33°C	
S.F. Amps				Temp. Rise @ S.F. Load		40°C	
				Locked-rotor Power Factor		33	
				Rotor inertia		3.96 LB-FT2	

Load Characteristics 200 V, 60 Hz, 25 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	46	68	78	82	84	83	83
Efficiency	89.6	93	93.8	93.6	93.1	92.3	93.3
Speed	1793	1786	1780	1772	1764	1754	1767
Line amperes	32.7	42.4	55	69.9	85.7	104	79.4

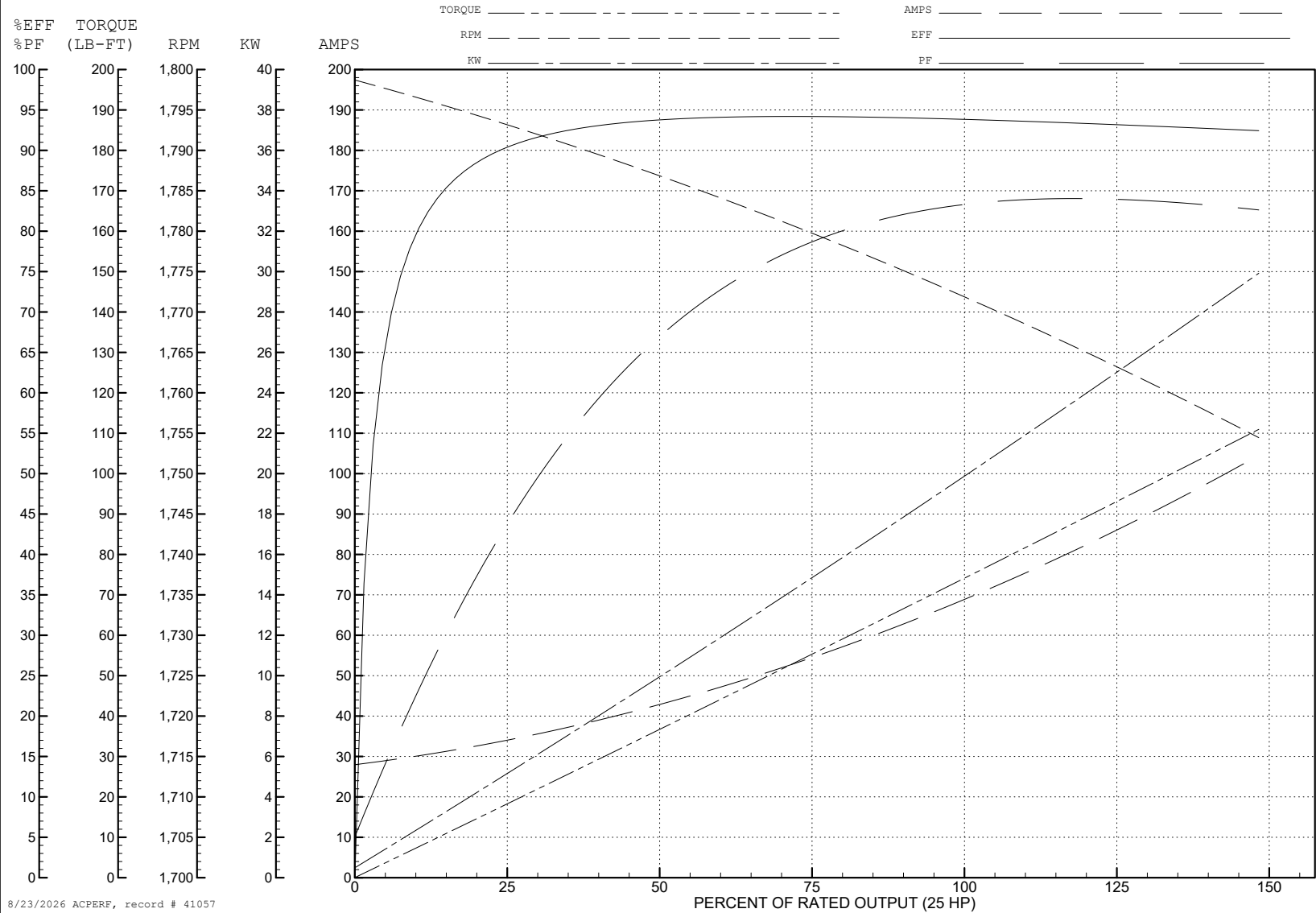
ABB Motors and Mechanical Inc.

WINDING # 40WGX796

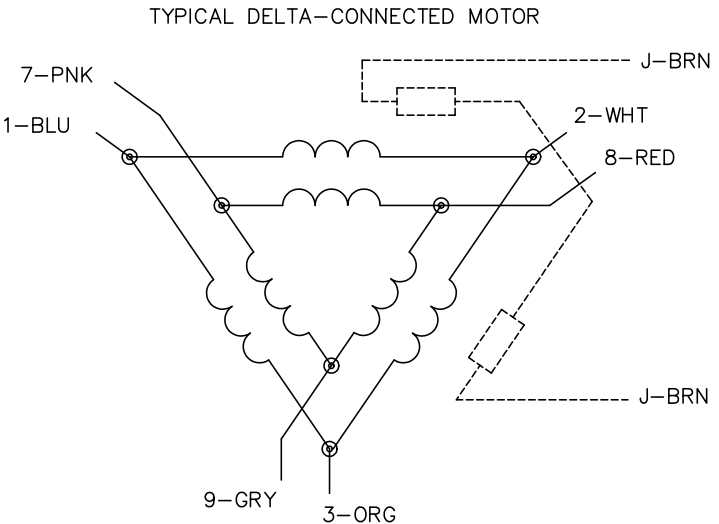
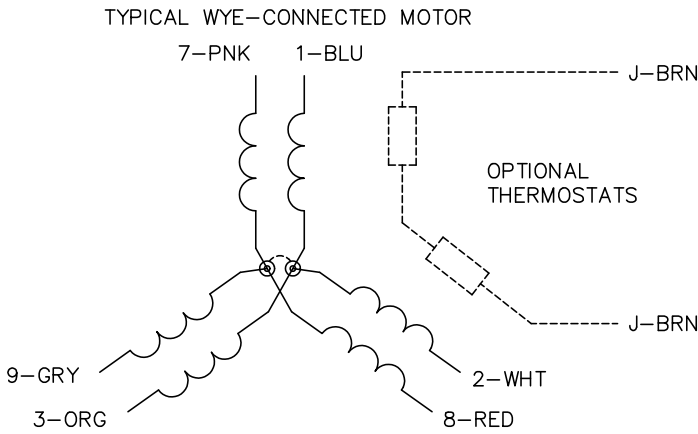
Typical performance - not guaranteed values.

25 HP 3 PH 60 HZ 1770 RPM 200 V 4050M

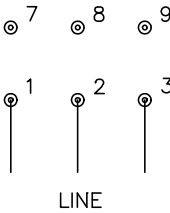
TORQUES (LB-FT): PO=213 PU=91.1 LR=124 LRA=432



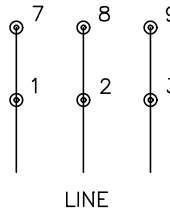
CD0695



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