

**BALDOR • RELIANCE**

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# Customer information packet

## EM2531T-5

25HP, 1760RPM, 3PH, 60HZ, 284T, 4046M, 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	575.0 V @ 60 HZ
Agency Approvals	CSA EEV UR NEMA_PREMIUM NEMA PREMIUM
Ambient Temperature	40 °C
Auxillary Box	No Auxillary Box
Auxillary Box Lead Termination	None
Base Indicator	Rigid
Bearing Grease Type	Polyrex EM (-20F +300F)
Blower	None
Current @ Voltage	24.500 A @ 575.0 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	24.5 a
Insulation Class	F
Inverter Code	Inverter Ready

## Part detail

Revision	X
Type	AC
Mech. spec.	40G48
Base	
Status	PRD/A
Elec. spec.	40WGX795
Layout	40LYG048
Eff. date	06-27-2024
CD Diagram	CD0006
Poles	04
Leads	3#10
Proprietary	False
Created date	01-22-2013

IP Rating	NONE
KVA Code	G
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	No Locked Bearing
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	3 @ 10 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	Direct on line
Thermal Device - Bearing	None
Thermal Device - Winding	None
Vibration Sensor Indicator	No Vibration Sensor
Winding Thermal 1	None
Winding Thermal 2	None

**Nameplate**

**NP3554L**

<b>CAT.NO.</b>	EM2531T-5	<b>P/N</b>		<b>ENCL</b>	OPSB
<b>SPEC.</b>	40G048X795	<b>CC</b>	010A	<b>FRAME</b>	284T
<b>HP</b>	25	<b>CLASS</b>	F	<b>HZ</b>	60
<b>RPM</b>	1770	<b>PH</b>	3	<b>DES</b>	A
<b>VOLTS</b>	575	<b>CODE</b>	G	<b>ODE BRG</b>	6309
<b>AMPS</b>	24.5	<b>DE BRG</b>	6311		
<b>RATING</b>	40C AMB-CONT	<b>NEMA-NOM-EFF</b>	93.6	<b>GREASE</b>	POLYREX EM
<b>PF</b>	82	<b>SER.F.</b>	1.15	<b>VPWM INVERTER READY</b>	
<b>HTR-VOLTS</b>	<b>HTR-AMPS</b>	<b>MAX. SPACE HEATER TEMP.</b>			

**Accessories**

<b>Part number</b>	<b>Description</b>	<b>Multiplier</b>
40-1400	C FACE KIT	A8

**AC Induction Motor Performance Data**

Record # 41056

Typical performance - not guaranteed values

<b>Winding: 40WGX795-R001</b>		<b>Type: 4050M</b>		<b>Enclosure: OPSB</b>	
<b>Nameplate Data</b>			<b>575 V, 60 Hz: Single Voltage Motor</b>		
<b>Rated Output (HP)</b>	25	<b>Full Load Torque</b>	74 LB-FT		
<b>Volts</b>	575	<b>Start Configuration</b>	direct on line		
<b>Full Load Amps</b>	24.5	<b>Breakdown Torque</b>	220 LB-FT		
<b>R.P.M.</b>	1770	<b>Pull-up Torque</b>	94.1 LB-FT		
<b>Hz</b>	60	<b>Locked-rotor Torque</b>	128 LB-FT		
<b>NEMA Design Code</b>	B	<b>Starting Current</b>	155 A		
<b>Service Factor (S.F.)</b>	1.15	<b>No-load Current</b>	10.6 A		
<b>NEMA Nom. Eff.</b>	93.6	<b>Line-line Res. @ 25°C</b>	0.508 Ω		
<b>Rating - Duty</b>	40C	<b>Temp. Rise @ Rated Load</b>	28°C		
<b>S.F. Amps</b>	AMB-CONT	<b>Temp. Rise @ S.F. Load</b>	35°C		
		<b>Locked-rotor Power Factor</b>	34		
		<b>Rotor inertia</b>	3.96 LB-FT <sup>2</sup>		

**Load Characteristics 575 V, 60 Hz, 25 HP**

<b>% of Rated Load</b>	<b>25</b>	<b>50</b>	<b>75</b>	<b>100</b>	<b>125</b>	<b>150</b>	<b>S.F.</b>
<b>Power Factor</b>	44	67	77	82	83	83	82
<b>Efficiency</b>	89.6	93	93.8	93.6	93.1	92.3	93.3
<b>Speed</b>	1793	1787	1780	1773	1765	1755	1768
<b>Line amperes</b>	11.8	15.1	19.4	24.5	29.9	36	27.7

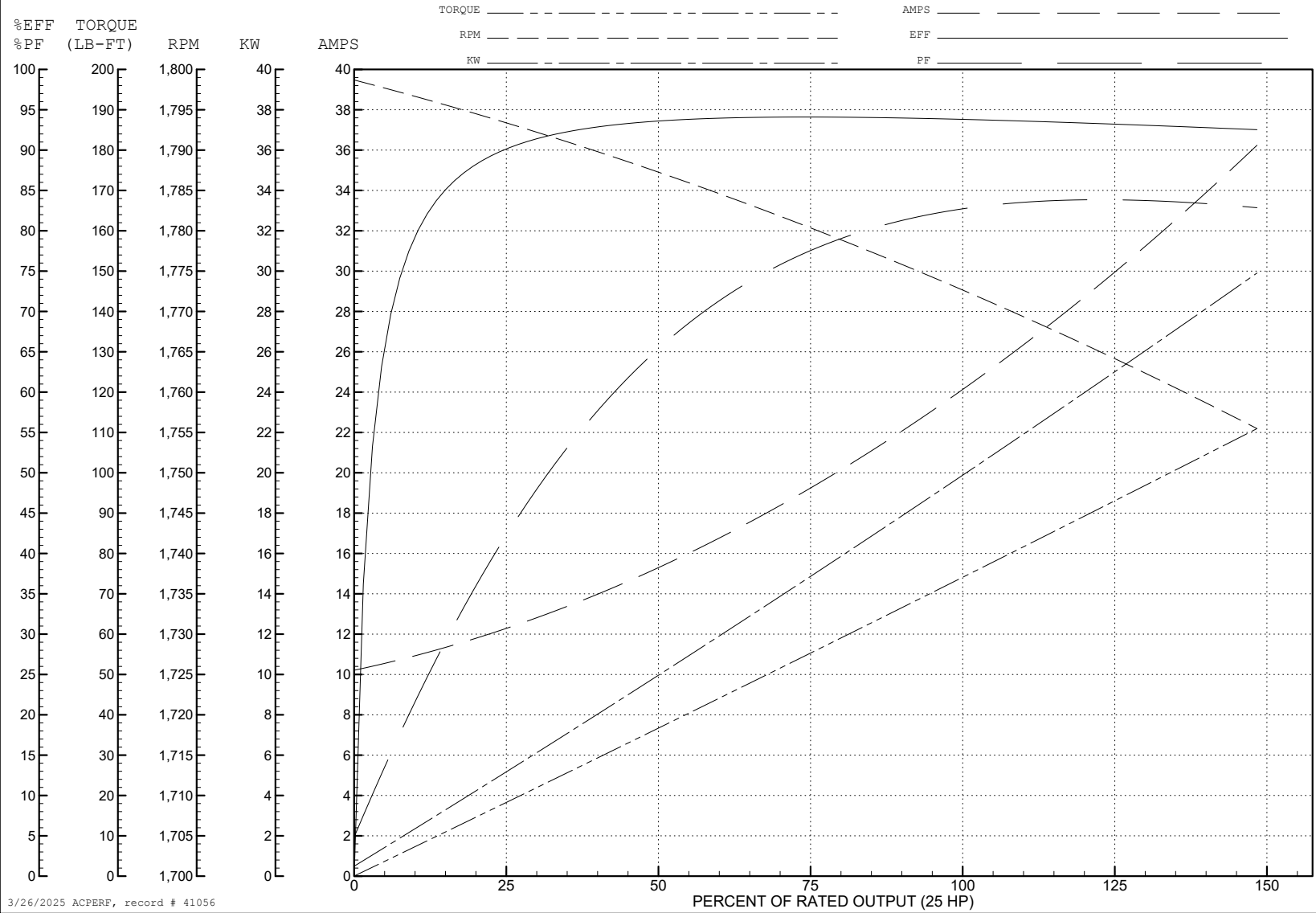
ABB Motors and Mechanical Inc.

WINDING # 40WGx795

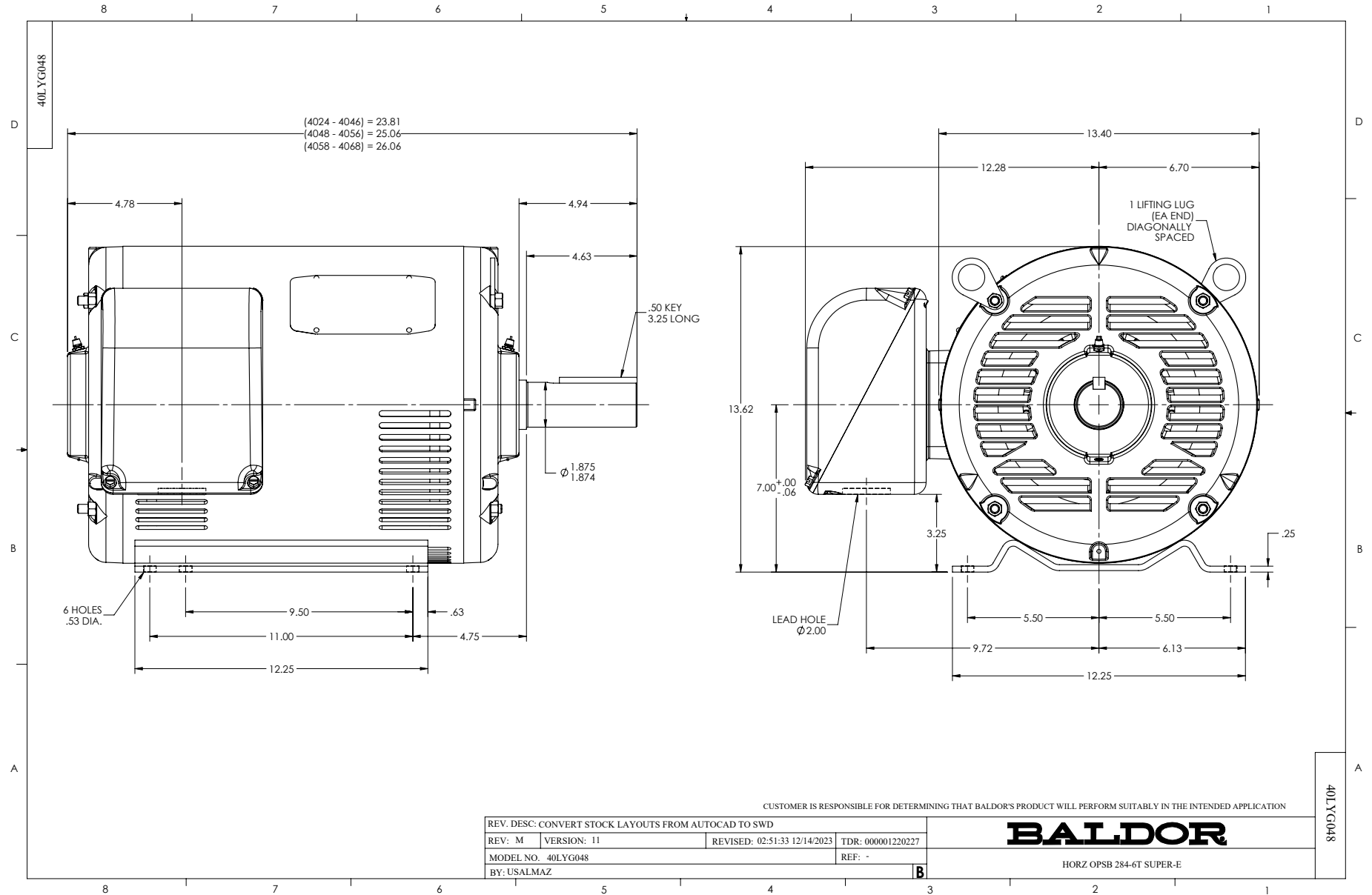
Typical performance - not guaranteed values.

25 HP 3 PH 60 HZ 1770 RPM 575 V 4050M

TORQUES (LB-FT): PO=220 PU=94.1 LR=128 LRA=155

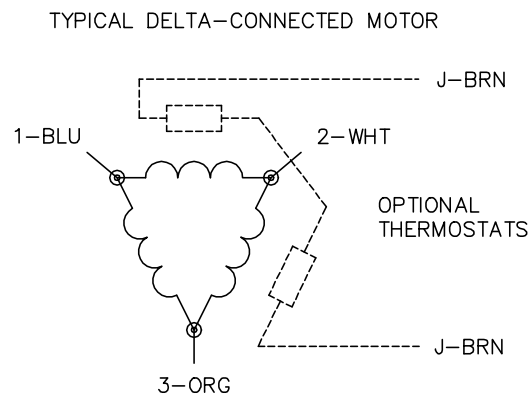
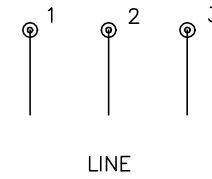
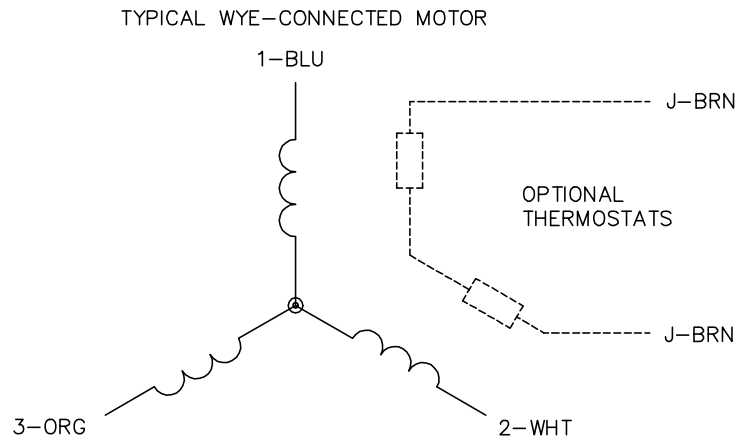


3/26/2025 ACPERF, record # 41056





CD0006



NOTES:

1. THREE LEAD MOTOR MAY BE EITHER 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 BE NUMBERED AS SHOWN.

CD0006

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3PH, SV, 3 LEADS, WYE OR DELTA CONNECTED

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