

**BALDOR® • RELIANCE™**

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# Customer information packet

## CEM2531T

25HP, 1775RPM, 3PH, 60HZ, 284TC, 4050M, OPSB, F

## Specifications

Enclosure	OPSB
Frame	284TC
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	460.0 V @ 60 HZ 230.0 V @ 60 HZ
Agency Approvals	CSA EEV NEMA PREMIUM NEMA_PREMIUM UR
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	64.000 A @ 208.0 V 60.000 A @ 230.0 V 30.000 A @ 460.0 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 Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	30.0 a

## Part detail

Revision	D
Type	AC
Mech. spec.	40D102
Base	
Status	PRD/A
Elec. spec.	40WGX806
Layout	40LYD102
Eff. date	06-27-2024
CD Diagram	CD0005
Poles	04
Leads	9#10
Proprietary	False
Created date	02-10-2021

<b>Insulation Class</b>	F
<b>Inverter Code</b>	Inverter Ready
<b>KVA Code</b>	G
<b>Lifting Lugs</b>	Standard Lifting Lugs
<b>Locked Bearing Indicator</b>	Locked Bearing
<b>Motor Lead Quantity/Wire Size</b>	9 @ 10 AWG
<b>Motor Lead Termination</b>	Flying Leads
<b>Motor Standards</b>	NEMA
<b>Motor Type</b>	4050M
<b>Mounting Arrangement</b>	F1
<b>Number of Poles</b>	4
<b>Overall Length</b>	25.06 IN
<b>Power Factor</b>	82
<b>Product Family</b>	General Purpose
<b>Pulley End Bearing Type</b>	Ball
<b>Pulley Face Code</b>	C-Face
<b>Pulley Shaft Indicator</b>	Standard
<b>Rodent Screen</b>	None
<b>Service Factor</b>	1.15
<b>Shaft Diameter</b>	1.875 IN
<b>Shaft Ground Indicator</b>	No Shaft Grounding
<b>Shaft Rotation</b>	Reversible
<b>Shaft Slinger Indicator</b>	No Slinger
<b>Speed</b>	1775 rpm
<b>Speed Code</b>	Single Speed
<b>Starting Method</b>	Direct on line
<b>Thermal Device - Bearing</b>	None
<b>Thermal Device - Winding</b>	None
<b>Vibration Sensor Indicator</b>	No Vibration Sensor
<b>Winding Thermal 1</b>	None
<b>Winding Thermal 2</b>	None

**Nameplate**

NP3554LUA										
<b>CAT.NO.</b>	CEM2531T			<b>P/N</b>				<b>ENCL</b>		<b>OPSB</b>
<b>SPEC.</b>	40D102X806G1	<b>CC</b>	010A	<b>FRAME</b>		284TC	<b>SER.NO.</b>			
<b>HP</b>	25	<b>CLASS</b>		F	<b>HZ</b>	60				
<b>RPM</b>	1775	<b>PH</b>	3	<b>DES</b>		A				
<b>VOLTS</b>	230/460			<b>CODE</b>		G	<b>ODE BRG</b>	6309	<b>DE BRG</b>	6311
<b>AMPS</b>	60/30									
<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>CT30-60(2:1) VT3-60(20:1)</b>						
<b>USABLE AT</b>	50HZ 25HP 190/380V 72/36A			SF1.0						
<b>HTR-VOLTS</b>	<b>HTR-AMPS</b>	<b>MAX. SPACE HEATER TEMP.</b>								

**AC Induction Motor Performance Data**

Record # 86783

Typical performance - not guaranteed values

<b>Winding: 40WGX806-R001</b>		<b>Type: 4050M</b>		<b>Enclosure: OPSB</b>	
<b>Nameplate Data</b>			<b>460 V, 60 Hz: High Voltage Connection</b>		
Rated Output (HP)	25	Full Load Torque	73.81 LB-FT		
Volts	230/460	Start Configuration	direct on line		
Full Load Amps	60/30	Breakdown Torque	232 LB-FT		
R.P.M.	1775	Pull-up Torque	116 LB-FT		
Hz	60 Phase	Locked-rotor Torque	133 LB-FT		
NEMA Design Code	A KVA Code	Starting Current	192 A		
Service Factor (S.F.)	1.15	No-load Current	12.6 A		
NEMA Nom. Eff.	93.6 Power Factor	Line-line Res. @ 25°C	0.35407 Ω		
Rating - Duty	40C AMB-CONT	Temp. Rise @ Rated Load	28°C		
S.F. Amps		Temp. Rise @ S.F. Load	34°C		
		Locked-rotor Power Factor	35		

**Load Characteristics 460 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>
Power Factor	45	67	78	82	85	85	84
Efficiency	89.4	93.1	93.8	93.6	93	92.1	93.2
Speed	1794.8	1789.5	1783.7	1777.6	1771	1763.2	1774
Line amperes	14.5	18.6	24.1	30.3	37.2	44.6	34.4

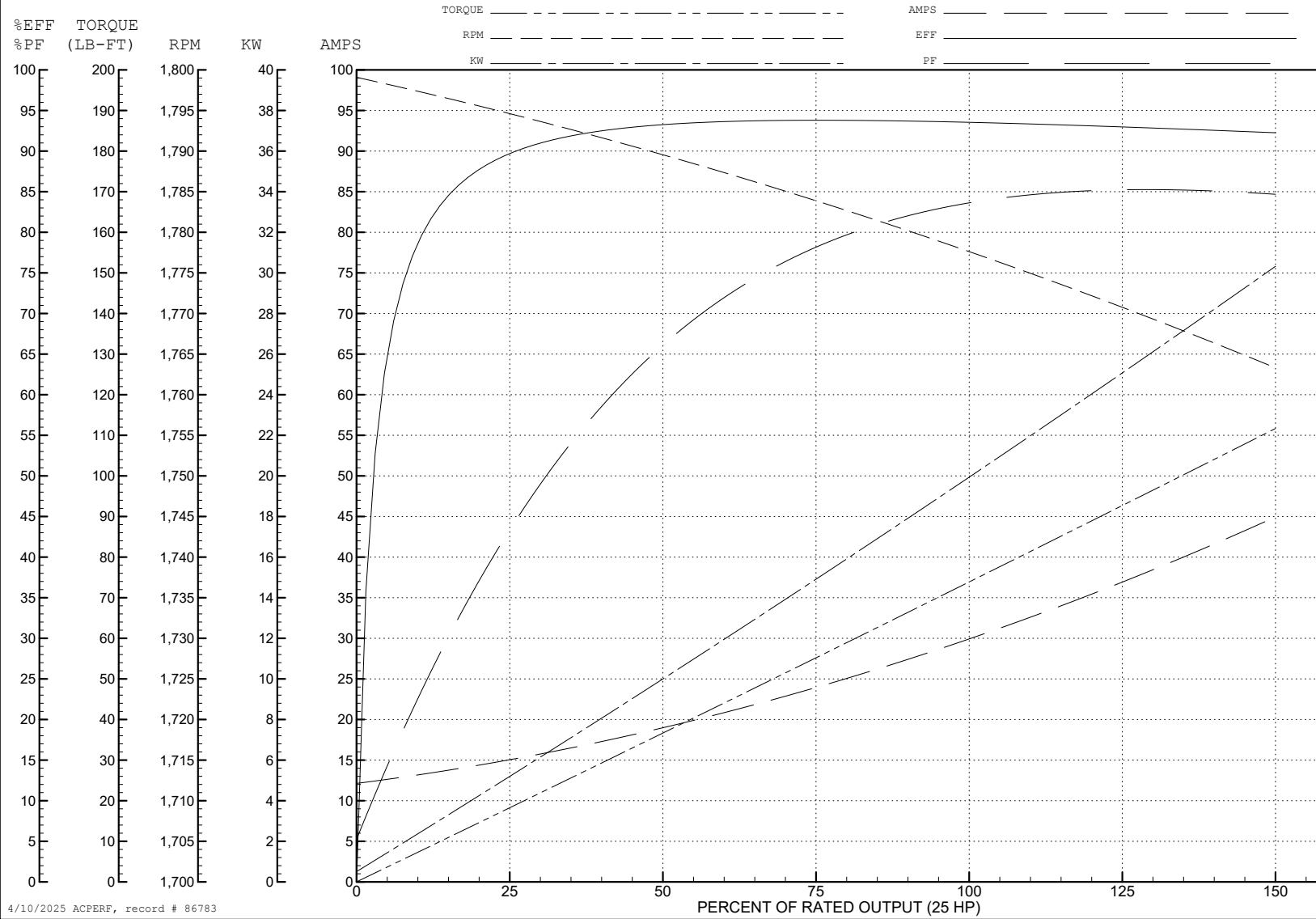
ABB Motors and Mechanical Inc.

WINDING # 40WGx806

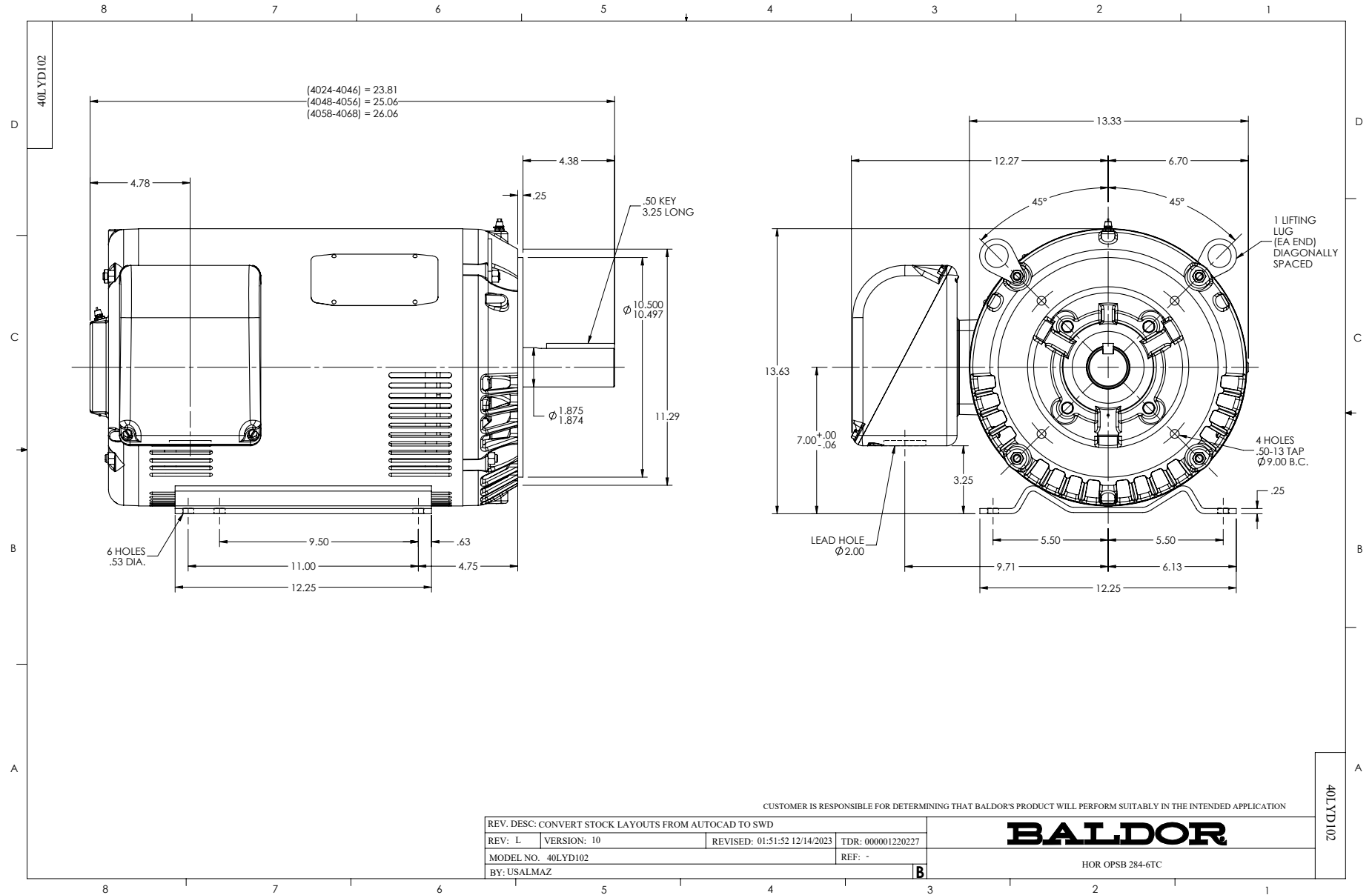
Typical performance - not guaranteed values.

25 HP 3 PH 60 HZ 1775 RPM 460 V 4050M

TORQUES (LB-FT): PO=232 PU=116 LR=133 LRA=192



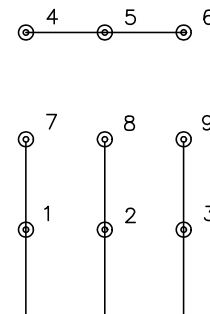
4/10/2025 ACPERF, record # 86783



CD0005

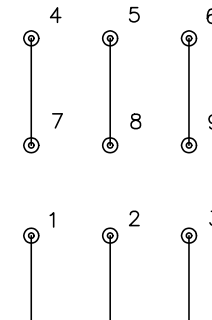


LOW VOLTAGE  
(2Y)



LINE

HIGH VOLTAGE  
(1Y)



LINE

NOTES:

1. INTERCHANGE ANY TWO LINE LEADS TO REVERSE ROTATION.
2. OPTIONAL THERMOSTATS ARE PROVIDED WHEN SPECIFIED.
3. ACTUAL NUMBER OF INTERNAL PARALLEL CIRCUITS MAY BE A MULTIPLE OF THOSE SHOWN ABOVE.
4. LEAD COLORS ARE OPTIONAL. LEADS MUST ALWAYS BE NUMBERED AS SHOWN.

CD0005

REV. DESC: REVISE TO SHOW OPTIONAL COLORS			
REV. LTR: E	BY: JLP	REVISED: 01/19/99 10:15	TDR: 0171435
S00000		FILE: AAA00005140	MDL: -
		MTL: -	

**BALDOR ELECTRIC Co.**

3PH, DV, 9 LEADS