ABB BALDOR RELIANCE

Customer information packet

CEM2531T-G

25HP, 1770RPM, 3PH, 60HZ, 284TC, OPSB, F1

Copyright © All product information within this document is subject to ABB Motors and Mechanical Inc. copyright © protection, unless otherwise noted.
11/26/2026 1:47:30 PM

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	230.0 V @ 60 HZ
	460.0 V @ 60 HZ
Agency Approvals	CSA
	CSA EEV
	NEMA PREMIUM
	UR
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	30.000 A @ 460.0 V
	60.000 A @ 230.0 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
Heater Indicator	No Heater
High Voltage Full Load Amps	30.0 a
Insulation Class	H
Inverter Code	Inverter Duty

Part Detail

Revision	F
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	40WGX793
Layout	40LY-000-046
Eff. date	06-27-2024
CD Diagram	CD0005
Poles	04
Leads	9#10
Proprietary	False
Created date	04-29-2020

IP Rating	NONE
KVA Code	G
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
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 Face Code	C-Face
Rodent Screen	None
Service Factor	1.15
Shaft Diameter	1.875 IN
Shaft Ground Indicator	Shaft Grounding
Shaft Rotation	Reversible
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

NP3554LUA												
CAT.NO.	CEM2531T-G			**P/N**						**ENCL**	OPSB	
SPEC.	40-0000-0102	**CC**	010A		**FRAME**	284TC		**SER.NO.**				
HP	25		**CLASS**	H	**HZ**	60						
RPM	1770		**PH**	3	**DES**	A						
VOLTS	230/460			**CODE**	G		**ODE BRG**	6309	**DE BRG**	6311		
AMPS	60/30											
RATING	40C AMB-CONT			**NEMA-NOM-EFF**	93.6		**GREASE**	POLYREX EM				
PF	82	**SER.F.**	1.15		**CT30-60(2:1) VT3-60(20:1)**							
USABLE AT	50HZ 25HP 190/380V 72/36A			SF1.0								
HTR-VOLTS	**HTR-AMPS**		**MAX. SPACE HEATER TEMP.**									

AC Induction Motor Performance Data
Record # 48205
Typical performance - not guaranteed values

Winding: 40WGX793-R002	**Type:** 4050M	**Enclosure:** OPSB

Nameplate Data				**460 V, 60 Hz: High Voltage Connection**	
Rated Output (HP)			25	**Full Load Torque**	74 LB-FT
Volts			230/460	**Start Configuration**	direct on line
Full Load Amps			60/30	**Breakdown Torque**	216 LB-FT
R.P.M.			1770	**Pull-up Torque**	88.8 LB-FT
Hz	60	**Phase**	3	**Locked-rotor Torque**	121 LB-FT
NEMA Design Code	A	**KVA Code**	G	**Starting Current**	190 A
Service Factor (S.F.)			1.15	**No-load Current**	12.7 A
NEMA Nom. Eff.	93.6	**Power Factor**	82	**Line-line Res. @ 25ºC**	0.299 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	34
				Rotor inertia	3.96 LB-FT2

Load Characteristics 460 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	1787	1781	1774	1766	1757	1769
Line amperes	14.3	18.6	24	30.4	37.2	44.9	34.5

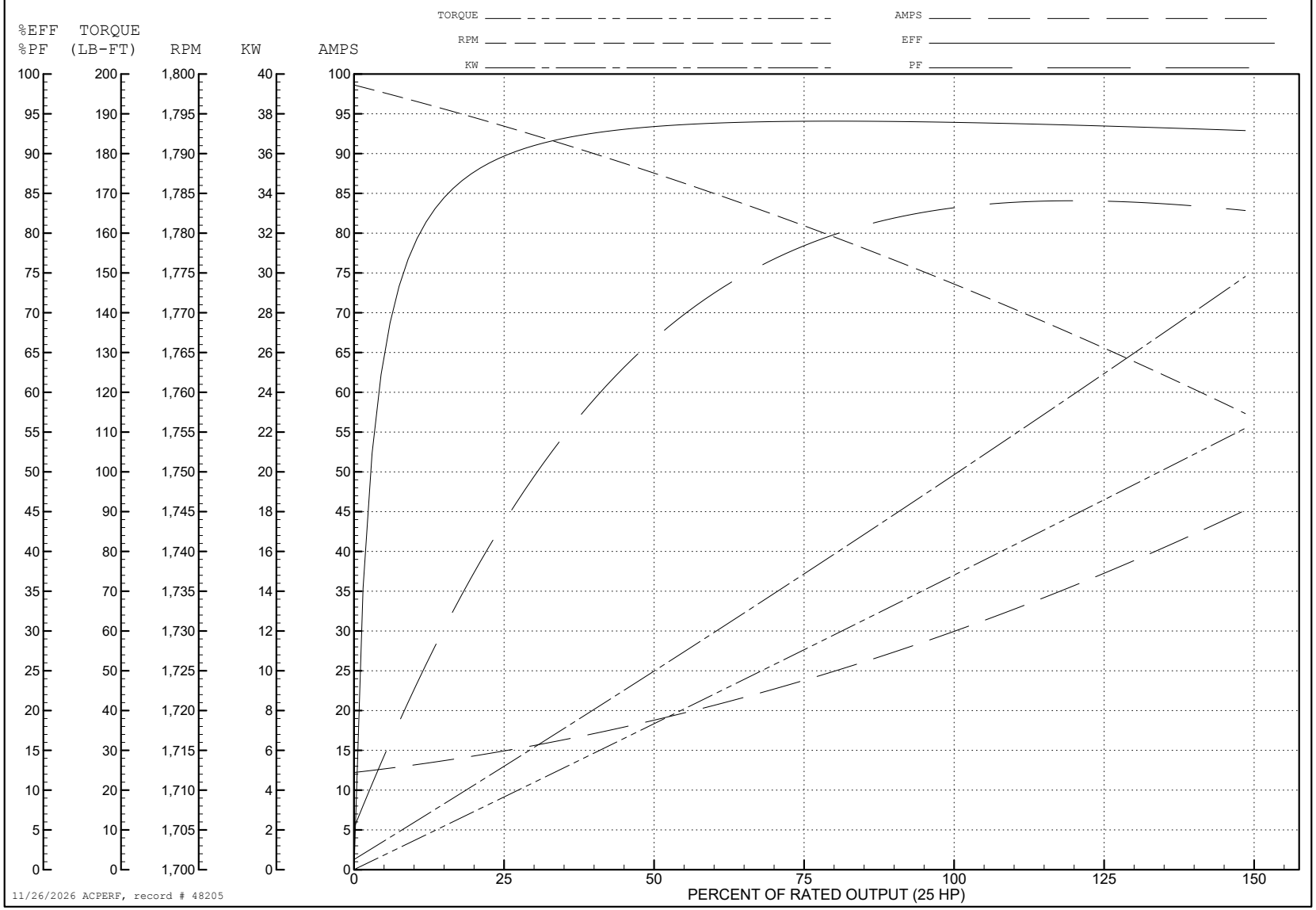
ABB Motors and Mechanical Inc.

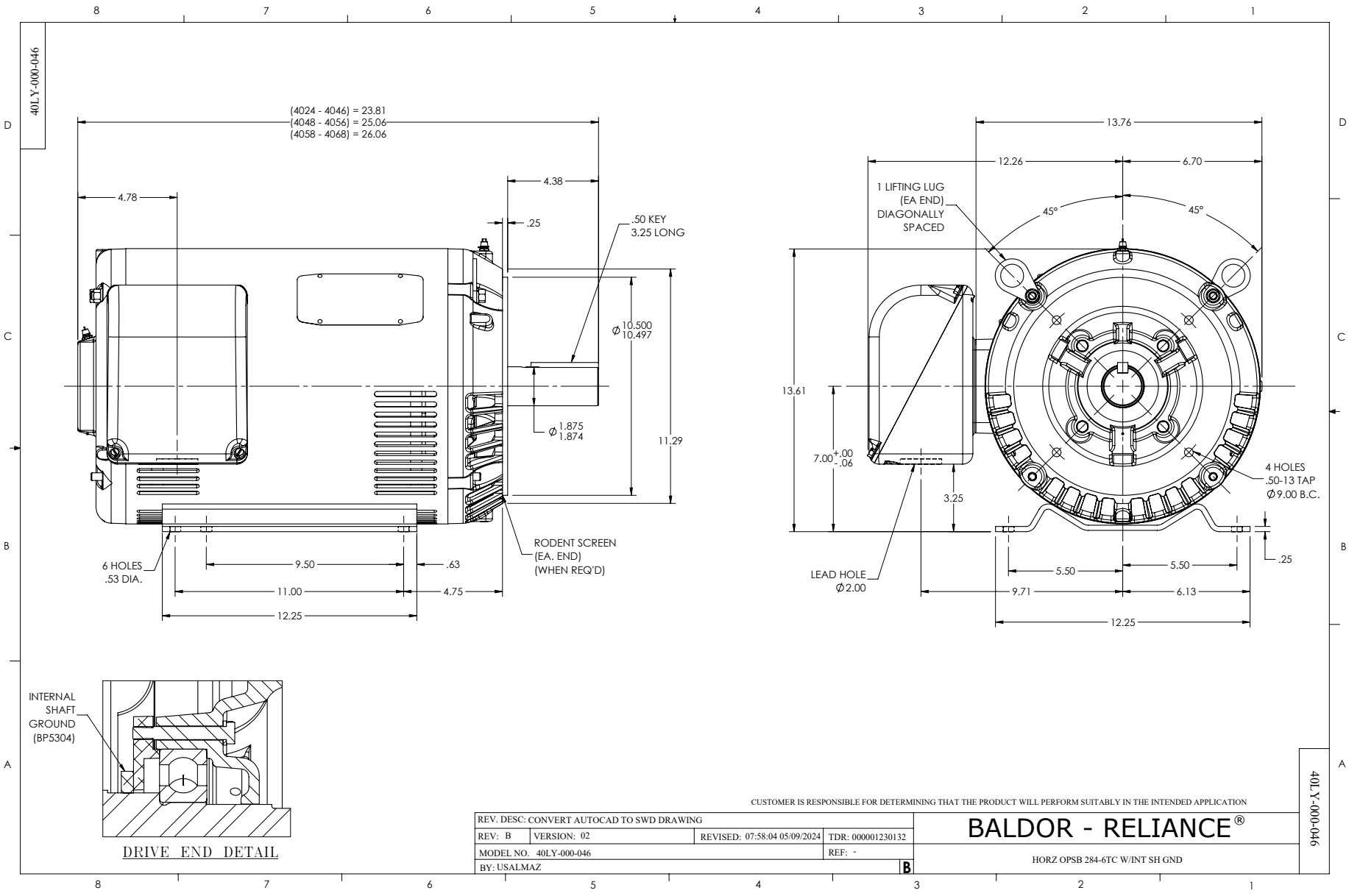
WINDING # 40WGX793

25 HP 3 PH 60 HZ 1770 RPM 460 V 4050M

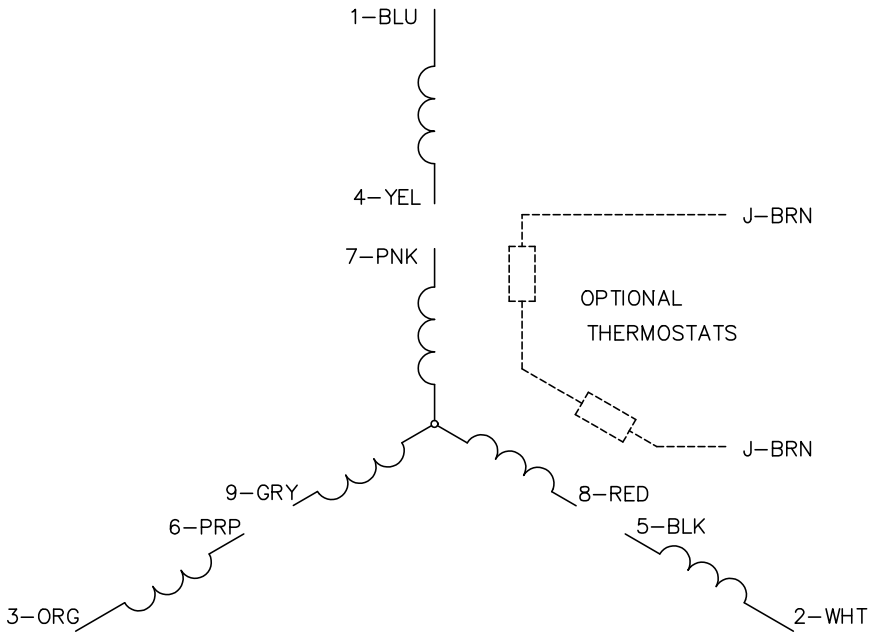
Typical performance - not guaranteed values.

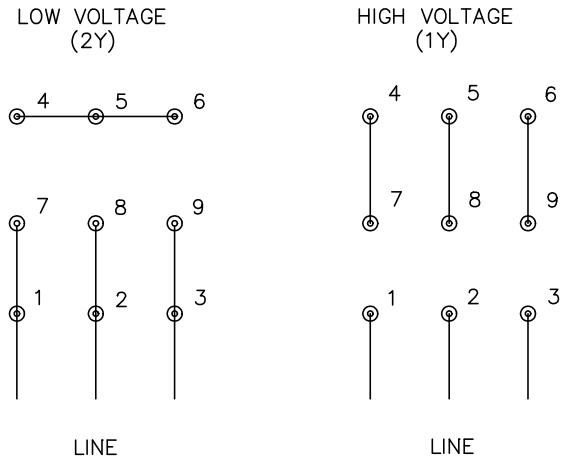
TORQUES(LB-FT): PO=216 PU=88.8 LR=121 LRA=190




40LY-000-046
(4024 - 4046) = 23.81
(4048 - 4056) = 25.06
(4058 - 4068) = 26.06
4.78
4.38
.25
.50 KEY
3.25 LONG
Ø 10.500
10.497
Ø 1.875
1.874
11.29
6 HOLES
.53 DIA.
9.50
.63
11.00
4.75
12.25
RODENT SCREEN
(EA. END)
(WHEN REQ'D)
13.76
12.26
6.70
1 LIFTING LUG
(EA END)
DIAGONALLY
SPACED
45°
45°
13.61
7.00 +.00 -.06
3.25
4 HOLES
.50-13 TAP
Ø 9.00 B.C.
.25
LEAD HOLE
Ø 2.00
5.50
5.50
9.71
6.13
12.25
INTERNAL
SHAFT
GROUND
(BP5304)
DRIVE END DETAIL
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT THE PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION
REV. DESC: CONVERT AUTOCAD TO SWD DRAWING
REV: B
VERSION: 02
REVISED: 07:58:04 05/09/2024
TDR: 000001230132
MODEL NO. 40LY-000-046
REF: -
BY: USALMAZ
B
BALDOR - RELIANCE®
HORZ OPSB 284-6TC W/INT SH GND
40LY-000-046

CD0005





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			BALDOR ELECTRIC Co.
REV. LTR: E	BY: JLP	REVISED: 01/19/99 10:15	TDR: 0171435
CD0005		FILE: AAA00005140	MDL: –
		MTL: –	3PH, DV, 9 LEADS