ABB BALDOR RELIANCE

Customer information packet

CEM2531T

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

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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	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	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
Insulation Class	F

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

Inverter Code	Inverter Ready
KVA Code	G
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Motor Lead Quantity/Wire Size	9 @ 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	C-Face
Pulley Shaft Indicator	Standard
Rodent Screen	None
Service Factor	1.15
Shaft Diameter	1.875 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	1775 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			**P/N**						**ENCL**	OPSB	
SPEC.	40D102X806G1	**CC**	010A		**FRAME**	284TC		**SER.NO.**				
HP	25		**CLASS**	F	**HZ**	60						
RPM	1775		**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.**									

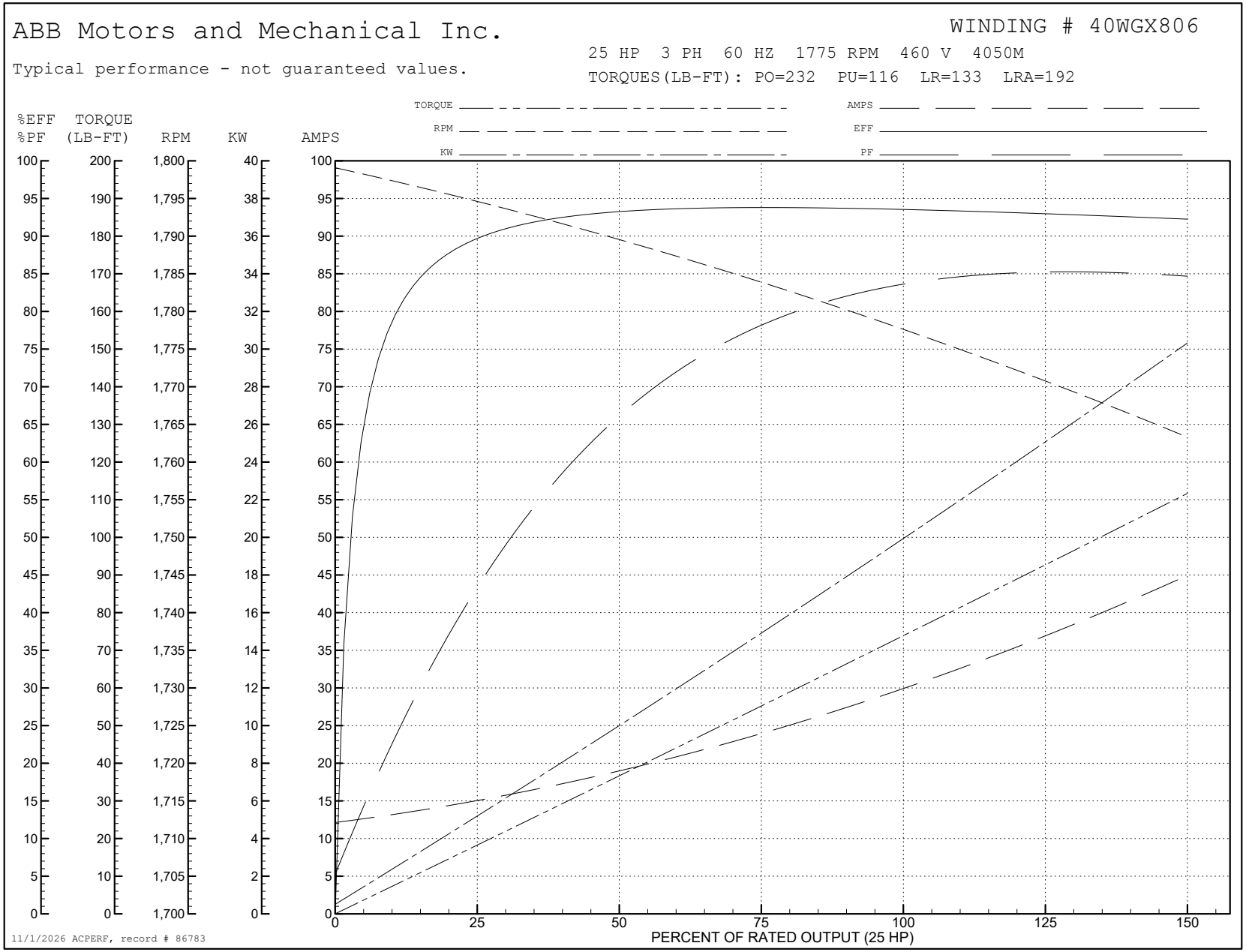
AC Induction Motor Performance Data
Record # 86783
Typical performance - not guaranteed values

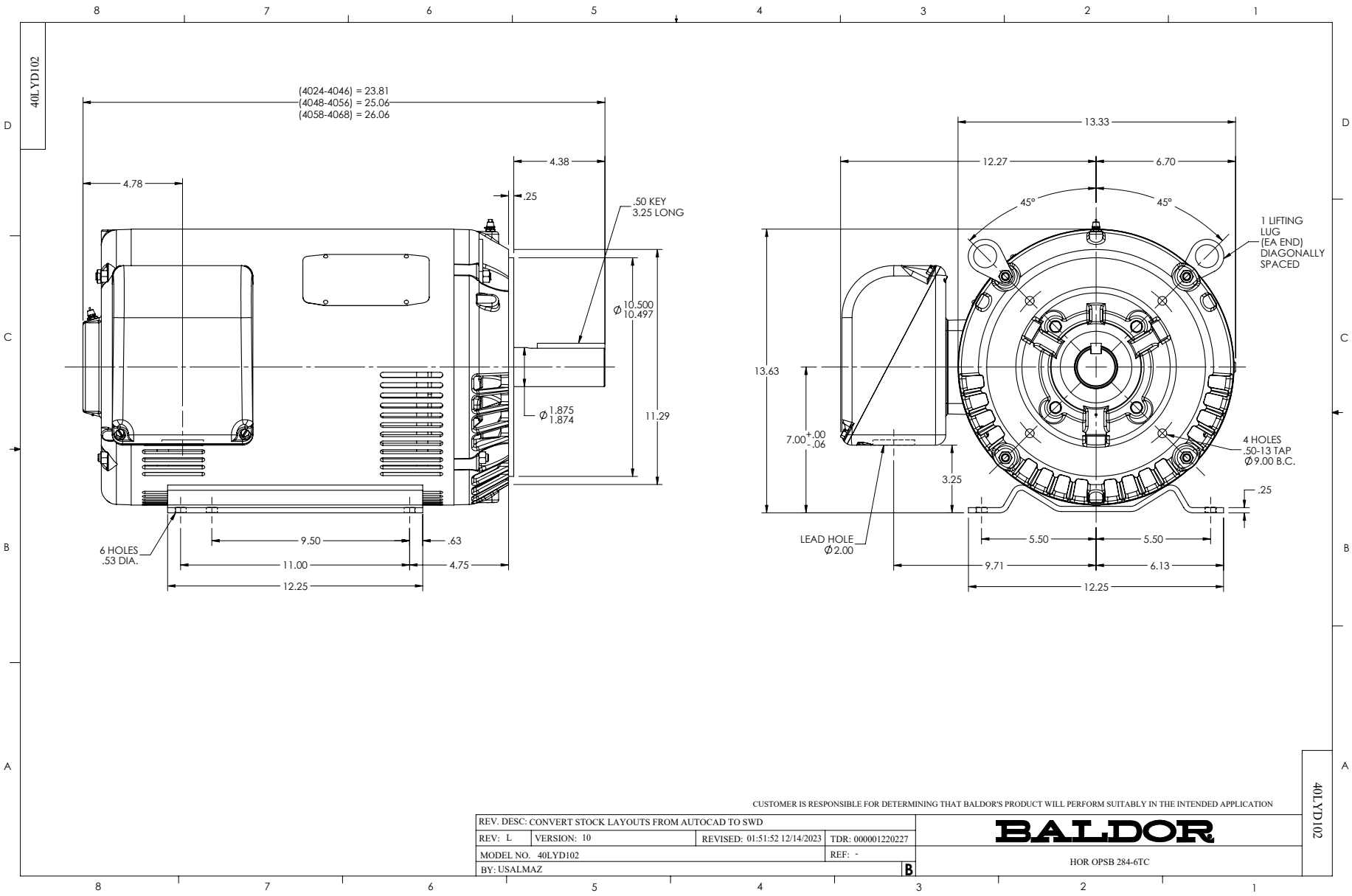
Winding: 40WGX806-R001	**Type:** 4050M	**Enclosure:** OPSB

Nameplate Data				**460 V, 60 Hz: High Voltage Connection**	
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**	3	**Locked-rotor Torque**	133 LB-FT
NEMA Design Code	A	**KVA Code**	G	**Starting Current**	192 A
Service Factor (S.F.)			1.15	**No-load Current**	12.6 A
NEMA Nom. Eff.	93.6	**Power Factor**	82	**Line-line Res. @ 25ºC**	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

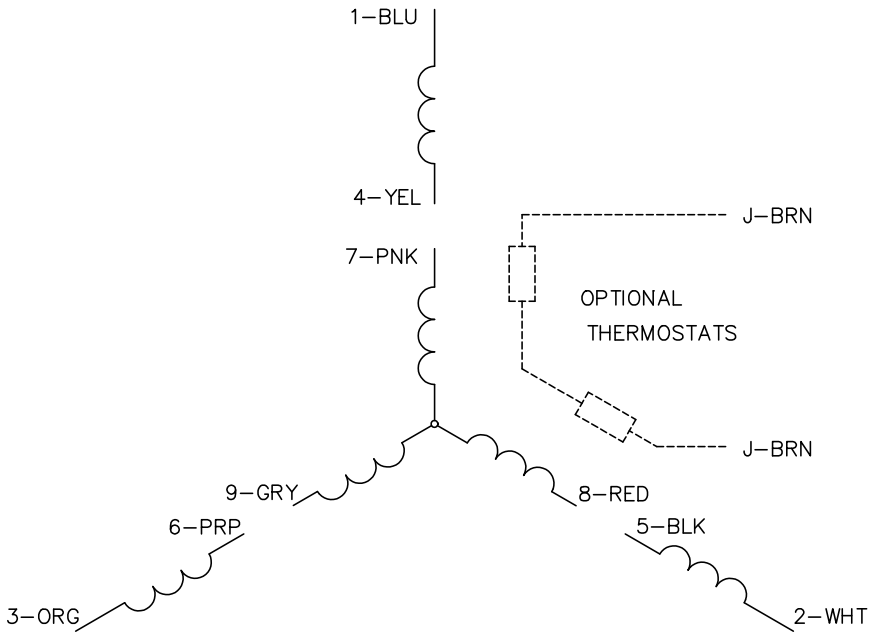
Load Characteristics 460 V, 60 Hz, 25 HP

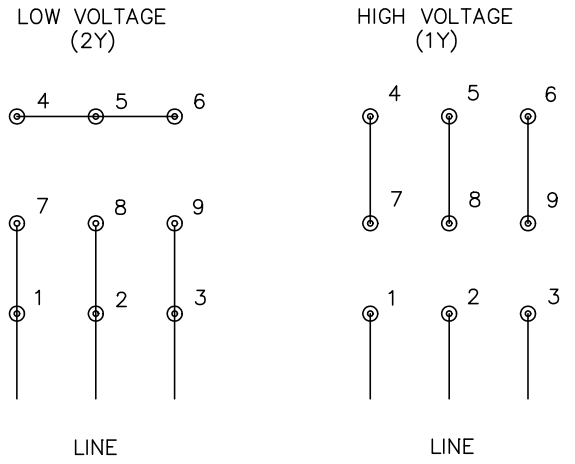
% of Rated Load	**25**	**50**	**75**	**100**	**125**	**150**	**S.F.**
Power Factor	45	67	78	82	85	85	84
Efficiency	89.4	93.1	93.8	93.6	93	92.1	93.2
Speed	1794.8	1789.5	1783.7	1777.6	1771	1763.2	1774
Line amperes	14.5	18.6	24.1	30.3	37.2	44.6	34.4


ABB Motors and Mechanical Inc.
WINDING # 40WGX806
25 HP 3 PH 60 HZ 1775 RPM 460 V 4050M
Typical performance - not guaranteed values.
TORQUES(LB-FT): PO=232 PU=116 LR=133 LRA=192
TORQUE
RPM
KW
AMPS
EFF
PF
%EFF %PF
TORQUE (LB-FT)
RPM
KW
AMPS
PERCENT OF RATED OUTPUT (25 HP)
11/1/2026 ACPERF, record # 86783


40LYD102
(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
13.33
12.27
6.70
45°
45°
1 LIFTING
LUG
(EA END)
DIAGONALLY
SPACED
13.63
7.00 +.00 -.06
4 HOLES
.50-13 TAP
Ø 9.00 B.C.
3.25
.25
LEAD HOLE
Ø 2.00
5.50
5.50
9.71
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: L
VERSION: 10
REVISED: 01:51:52 12/14/2023
TDR: 000001220227
MODEL NO. 40LYD102
REF: -
BY: USALMAZ
B
BALDOR
HOR OPSB 284-6TC
401LYD102

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