ABB BALDOR RELIANCE

Customer information packet

EFM2531T

25HP, 1775RPM, 3PH, 60HZ, 284T, 4050M, OPSB, F2

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Specifications

Enclosure	OPSB
Frame	284T
Frame Material	Steel
Frequency	50.00 Hz
	60.00 Hz
Motor Letter Type	Three Phase
Output @ Frequency	25.000 HP @ 60 HZ
	20.000 HP @ 50 HZ
Phase	3
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	460.0 V @ 60 HZ
	415.0 V @ 50 HZ
	380.0 V @ 50 HZ
	230.0 V @ 60 HZ
	190.0 V @ 50 HZ
Agency Approvals	WEEE
	NEMA PREMIUM (OLD LOGO)
	NEMA PREMIUM
	CURUSEEV
	CE
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
	58.000 A @ 190.0 V
	30.000 A @ 460.0 V
	30.000 A @ 415.0 V
	29.000 A @ 380.0 V

Part Detail

Revision	J
Type	AC
Mech. spec.	40E208
Base	
Status	PRD/A
Elec. spec.	40WGX806
Layout	40LYE208
Eff. date	05-28-2025
CD Diagram	CD0005
Poles	04
Leads	9#10
Proprietary	False
Created date	02-10-2021

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	29.0 a
Insulation Class	F
Inverter Code	Inverter Ready
KVA Code	G
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	No Locked Bearing
Motor Lead Quantity/Wire Size	9 @ 10 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	4050M
Mounting Arrangement	F2
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 Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	1475 rpm
	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

NP4295L									
CAT.NO.	EFM2531T								
SPEC.	40E208X806						**IP**	22	
HP	25HP/18.5KW//20HP/15KW								
VOLTS	230/460//190/380-415								
AMPS	60/30//58/29-30								
R.P.M. (1/MIN)	1775//1475								
FRAME	284T		**HZ**	60//50			**PH**	3	
SER.F.	1.15	**CODE**	G	**DES.**	A		**CLASS**	F	
NEMA NOM. EFF.	93.6//92.1		**P.F.**	82					
RATING	40C AMB-CONT					**WT.**	313		
CC	010A								
ENCL	OPSB	**SN**							
DE	6311		**ODE**	6309					
	IE3-60:93.8(75%)93.1(50%)								
	IE3-50:93.2(75%)92.2(50%								
	IC01 2:1 CT/20:1 VT								

Accessories

Part number	Description	Multiplier
40-1400	C FACE KIT	A8

AC Induction Motor Performance Data
Record # 92775
Typical performance - not guaranteed values

Winding: 40WGX806-R004	**Type:** 4050M	**Enclosure:** OPSB

Nameplate Data			
Rated Output (HP)			25//20
Volts			230/460//190/380-415
Full Load Amps			60/30//58/29-30
R.P.M.			1775//1475
Hz	60//50	**Phase**	3
NEMA Design Code	A	**KVA Code**	G
Service Factor (S.F.)			1.15
NEMA Nom. Eff.	93.6	**Power Factor**	82
Rating - Duty			40C AMB-CONT
S.F. Amps			

460 V, 60 Hz: High Voltage Connection	
Full Load Torque	73.81 LB-FT
Start Configuration	direct on line
Breakdown Torque	232 LB-FT
Pull-up Torque	116 LB-FT
Locked-rotor Torque	133 LB-FT
Starting Current	192 A
No-load Current	12.6 A
Line-line Res. @ 25ºC	0.35407 Ω
Temp. Rise @ Rated Load	28°C
Temp. Rise @ S.F. Load	34°C
Locked-rotor Power Factor	34.7
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	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

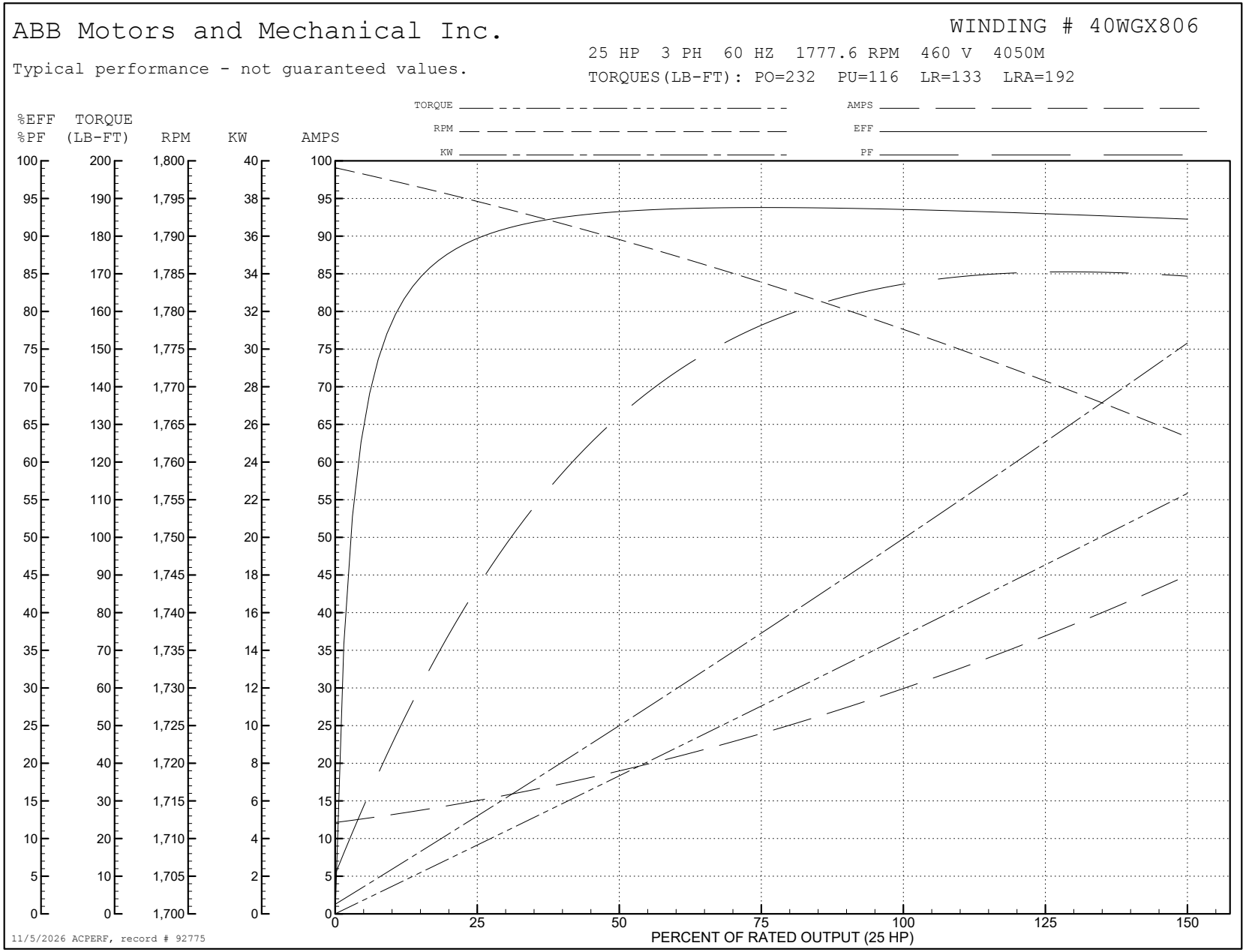


ABB Motors and Mechanical Inc.
WINDING # 40WGX806
Typical performance - not guaranteed values.
25 HP 3 PH 60 HZ 1777.6 RPM 460 V 4050M
TORQUES(LB-FT): PO=232 PU=116 LR=133 LRA=192
TORQUE
RPM
KW
AMPS
EFF
PF
%EFF %PF
TORQUE (LB-FT)
RPM
KW
AMPS
PERCENT OF RATED OUTPUT (25 HP)
11/5/2026 ACPERF, record # 92775

AC Induction Motor Performance Data
Record # 92776
Typical performance - not guaranteed values

Winding: 40WGX806-R004	**Type:** 4050M	**Enclosure:** OPSB

Nameplate Data			
Rated Output (HP)			25//20
Volts			230/460//190/380-415
Full Load Amps			60/30//58/29-30
R.P.M.			1775//1475
Hz	60//50	**Phase**	3
NEMA Design Code	A	**KVA Code**	G
Service Factor (S.F.)			1.15
NEMA Nom. Eff.	93.6	**Power Factor**	82
Rating - Duty			40C AMB-CONT
S.F. Amps			

415 V, 50 Hz: High Voltage Connection	
Full Load Torque	70.85 LB-FT
Start Configuration	direct on line
Breakdown Torque	267 LB-FT
Pull-up Torque	144 LB-FT
Locked-rotor Torque	165 LB-FT
Starting Current	202 A
No-load Current	15.76 A
Line-line Res. @ 25ºC	0.335 Ω
Temp. Rise @ Rated Load	27°C
Temp. Rise @ S.F. Load	32°C
Locked-rotor Power Factor	38.7
Rotor inertia	3.96 lb-ft²

Load Characteristics 415 V, 50 Hz, 20 HP

% of Rated Load	**25**	**50**	**75**	**100**	**125**	**150**	**S.F.**
Power Factor	35	56	68	75	80	82	78
Efficiency	87.8	92.2	93.2	93.1	92.7	92	92.9
Speed	1496	1491	1487	1482	1477	1471	1479
Line amperes	17.19	20.25	24.53	29.5	35.11	41.13	32.9

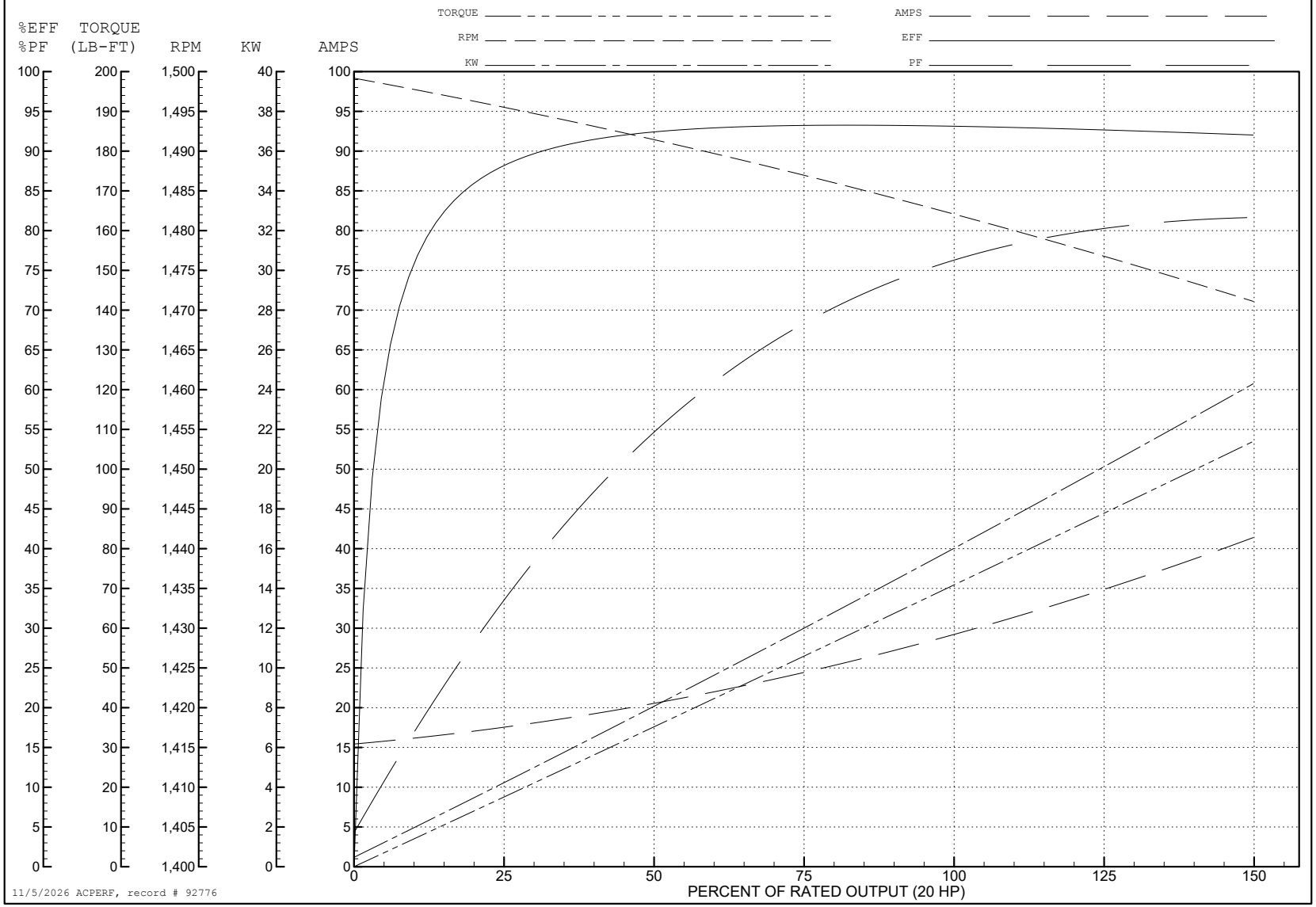
ABB Motors and Mechanical Inc.

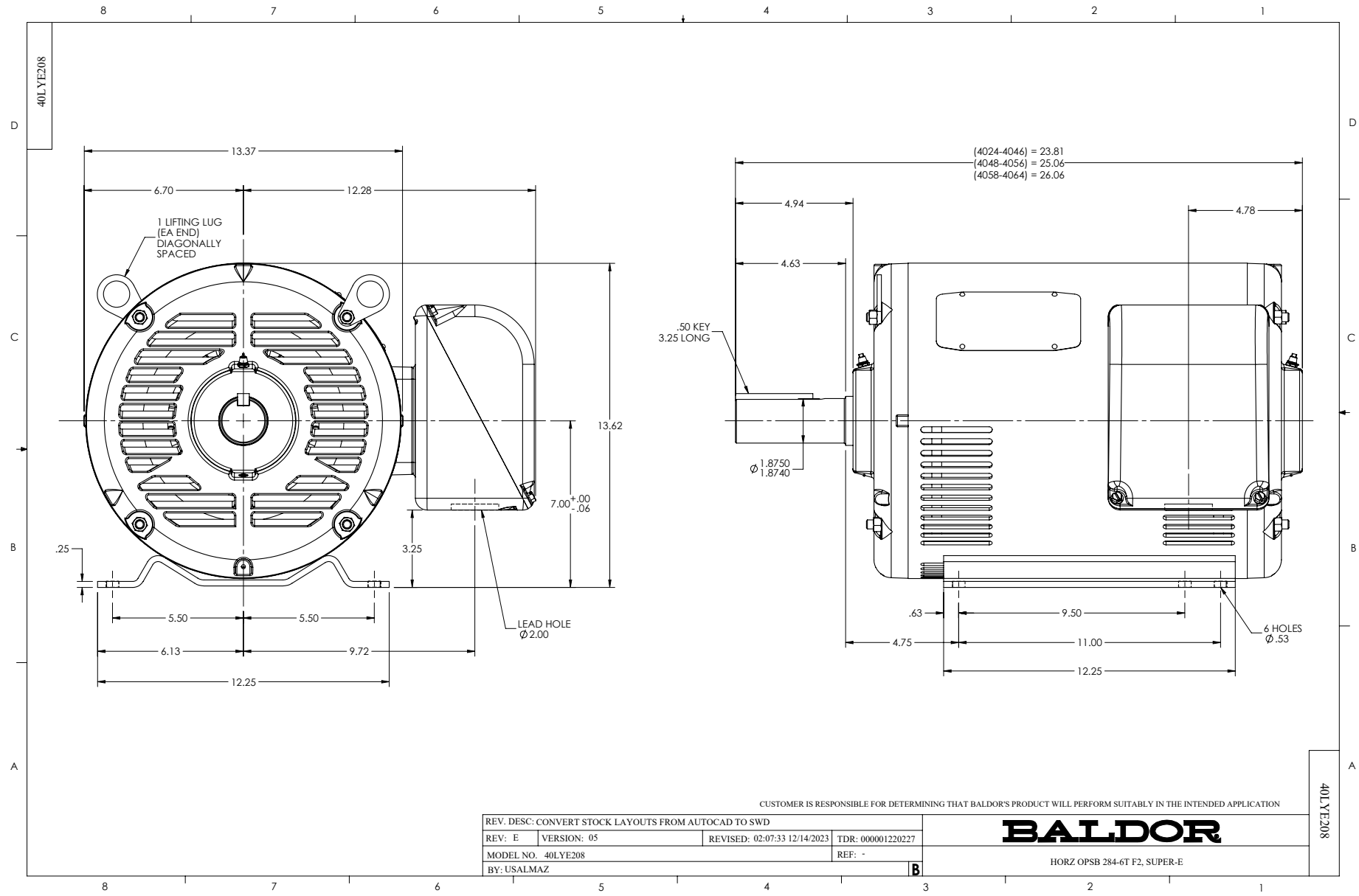
WINDING # 40WGX806

20 HP 3 PH 50 HZ 1482 RPM 415 V 4050M

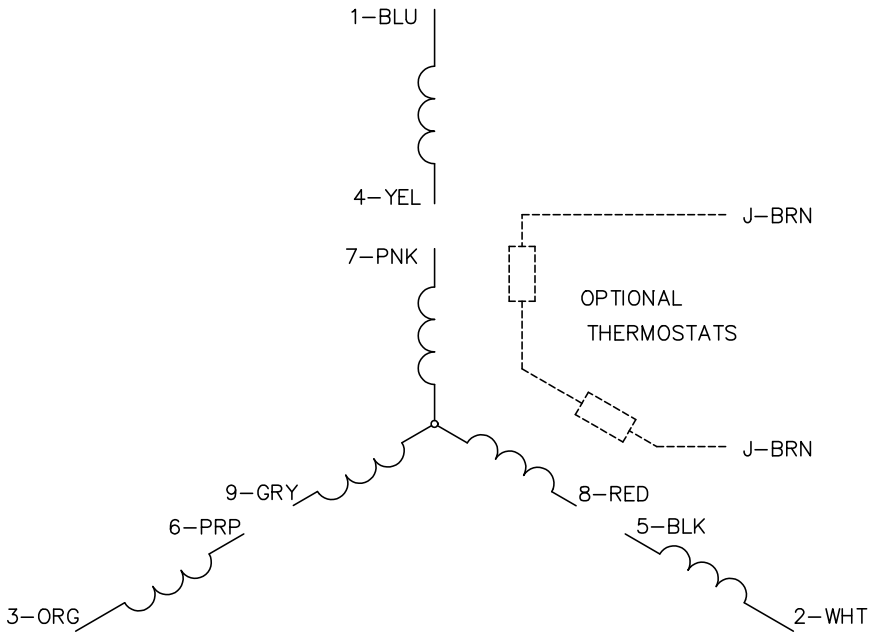
Typical performance - not guaranteed values.

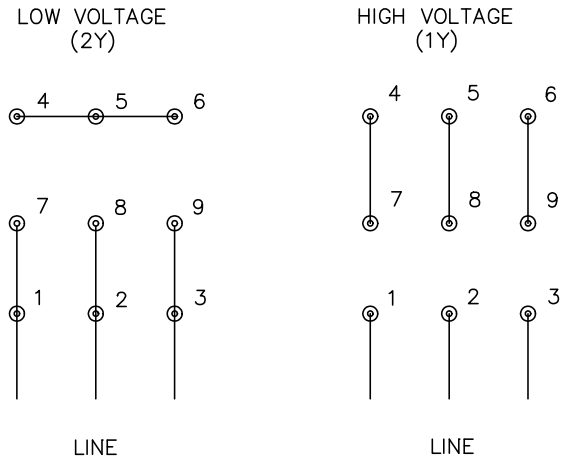
TORQUES(LB-FT): PO=267 PU=144 LR=165 LRA=202




40LYE208
13.37
6.70
12.28
1 LIFTING LUG (EA END) DIAGONALLY SPACED
13.62
7.00 +.00 -.06
3.25
.25
5.50
5.50
6.13
9.72
12.25
LEAD HOLE Ø 2.00
(4024-4046) = 23.81
(4048-4056) = 25.06
(4058-4064) = 26.06
4.94
4.63
4.78
.50 KEY
3.25 LONG
Ø 1.8750
1.8740
.63
9.50
4.75
11.00
12.25
6 HOLES Ø .53
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: E
VERSION: 05
REVISED: 02:07:33 12/14/2023
TDR: 000001220227
MODEL NO. 40LYE208
REF: -
BY: USALMAZ
B
BALDOR
HORZ OPSB 284-6T F2, SUPER-E
40LYE208

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