

ABB BALDOR RELIANCE III

Customer information packet GNEM2528T

20HP//15KW, 1180//980RPM, 3PH, 60//50HZ, 286

Specifications

Enclosure	OPSB
Frame	286T
Frame Material	Steel
Frequency	50.00 Hz 60.00 Hz
Motor Letter Type	Three Phase
Output @ Frequency	15.000 KW @ 50 HZ 20.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1200 RPM @ 60 HZ
Voltage @ Frequency	230.0 V @ 60 HZ 208.0 V @ 60 HZ 190.0 V @ 50 HZ 460.0 V @ 60 HZ 380.0 V @ 50 HZ
Agency Approvals	NEMA PREMIUM (OLD LOGO) UKCA WEEE CURUSEEV CE NEMA PREMIUM IE3
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	66.000 A @ 190.0 V 58.000 A @ 230.0 V 56.000 A @ 208.0 V 33.000 A @ 380.0 V

Part Detail

Revision	A
Type	AC
Mech. spec.	40G48
Base	
Status	PRD/A
Elec. spec.	40WGX408
Layout	40LYG048
Eff. date	09-02-2025
CD Diagram	CD0180
Poles	06
Leads	9#10
Proprietary	False
Created date	09-19-2023

	29.000 A @ 460.0 V
Design Code	A
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	92.4 %
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 Duty
IP Rating	NONE
KVA Code	K
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	4060M
Mounting Arrangement	F1
Number of Poles	6
Overall Length	26.06 IN
Power Factor	70
Product Family	General Purpose
Pulley End Bearing Type	Ball
Pulley Face Code	Standard
Pulley Shaft Indicator	Standard
Rodent Screen	None
RoHS Status	ROHS COMPLIANT
Service Factor	1.15
Shaft Diameter	1.875 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible

Shaft Slinger Indicator	No Slinger
Speed	1180 rpm
	980 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

NP4304L									
CAT.NO.	GNEM2528T								
SPEC.	40G048X408G1								
HP	20HP//15KW						PH	3	
VOLTS	208-230/460//190/380								
AMPS	56-58/29//66/33								
R.P.M. (1/MIN)	1180//980						WT.	167KG	KG
FRAME	286T	HZ		60//50			I.P.	22	
SER.F.	1.15	CODE	K	DES.	A	CLASS	F		
NOM.EFF.	92.4//91.2		% (100%)						
P.F.	70	IC01, 10:1 VT							
RATING	40C AMB-S1 CONT				CC	010A			
DE	6311		ODE	6309					
ENCL	OPSB	SN							
	SFA 64/32//74/37								
	IE3-50HZ 93.2 (75%),92.8 (50%)								
	IE3-60HZ 93.2 (75%),92.0 (50%)								

AC Induction Motor Performance Data

Record # 100993

Typical performance - not guaranteed values

Winding: 40WGX408-R002			Type: 4060M	Enclosure: OPSB	
Nameplate Data			460 V, 60 Hz: High Voltage Connection		
Rated Output (HP)	20		Full Load Torque	88.52 LB-FT	
Volts	208-230/460//190/380		Start Configuration	direct on line	
Full Load Amps	56-58/29//66/33		Breakdown Torque	330 LB-FT	
R.P.M.	1180//980		Pull-up Torque	124 LB-FT	
Hz	60//50	Phase	3	Locked-rotor Torque	181 LB-FT
NEMA Design Code	A	KVA Code	K	Starting Current	201 A
Service Factor (S.F.)	1.15		No-load Current	16.77 A	
NEMA Nom. Eff.	92.4	Power Factor	70	Line-line Res. @ 25°C	0.341 Ω
Rating - Duty	40C AMB-CONT		Temp. Rise @ Rated Load	29°C	
S.F. Amps	64/32//74/37		Temp. Rise @ S.F. Load	34°C	
			Locked-rotor Power Factor	30.4	
			Rotor inertia	7.35 lb-ft²	

Load Characteristics 460 V, 60 Hz, 20 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	30	50	62	70	75	77	73
Efficiency	87.2	92	93.2	93.3	92.9	92.2	93.1
Speed	1196	1193	1189	1185	1181	1176	1183
Line amperes	17.95	20.57	24.1	28.55	33.63	39.36	31.6

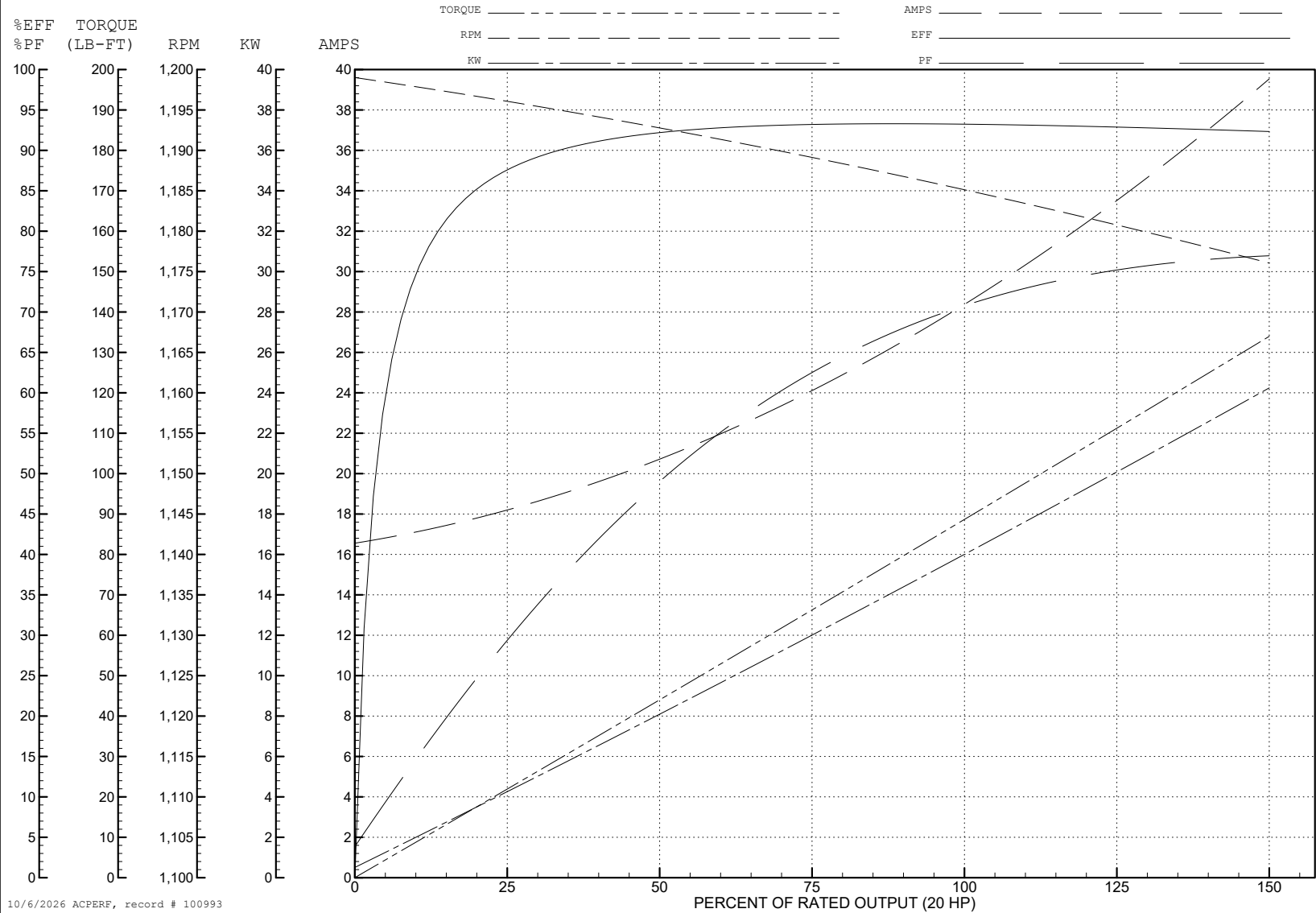
ABB Motors and Mechanical Inc.

WINDING # 40WGx408

Typical performance - not guaranteed values.

20 HP 3 PH 60 HZ 1185 RPM 460 V 4060M

TORQUES (LB-FT): PO=330 PU=124 LR=181 LRA=201



AC Induction Motor Performance Data

Record # 100994

Typical performance - not guaranteed values

Winding: 40WGX408-R002		Type: 4060M	Enclosure: OPSB
Nameplate Data		380 V, 50 Hz: High Voltage Connection	
Rated Output (HP)	20	Full Load Torque	107 LB-FT
Volts	208-230/460//190/380	Start Configuration	direct on line
Full Load Amps	56-58/29//66/33	Breakdown Torque	318 LB-FT
R.P.M.	1180//980	Pull-up Torque	128 LB-FT
Hz	60//50 Phase	Locked-rotor Torque	186 LB-FT
NEMA Design Code	A KVA Code	Starting Current	195 A
Service Factor (S.F.)	1.15	No-load Current	16.32 A
NEMA Nom. Eff.	92.4 Power Factor	Line-line Res. @ 25°C	0.341 Ω
Rating - Duty	40C AMB-CONT	Temp. Rise @ Rated Load	36°C
S.F. Amps	64/32//74/37	Temp. Rise @ S.F. Load	44°C
		Locked-rotor Power Factor	33.7
		Rotor inertia	7.35 lb-ft ²

Load Characteristics 380 V, 50 Hz, 20 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	35	57	69	75	78	80	77
Efficiency	89.4	92.8	93.2	92.7	91.9	90.6	92.2
Speed	996	992	987	983	978	971	980
Line amperes	17.89	21.53	26.41	32.45	39.28	47.11	36.5

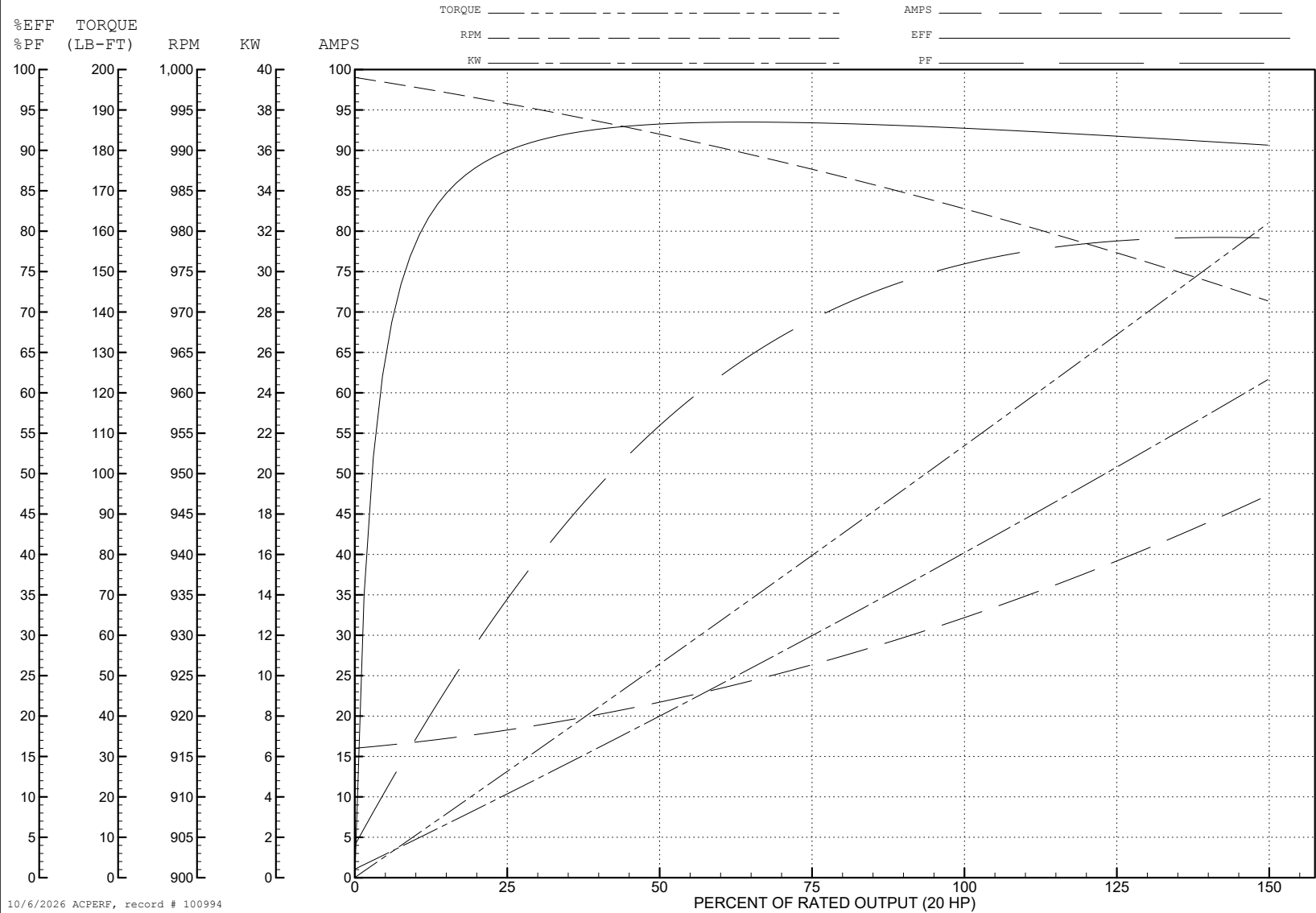
ABB Motors and Mechanical Inc.

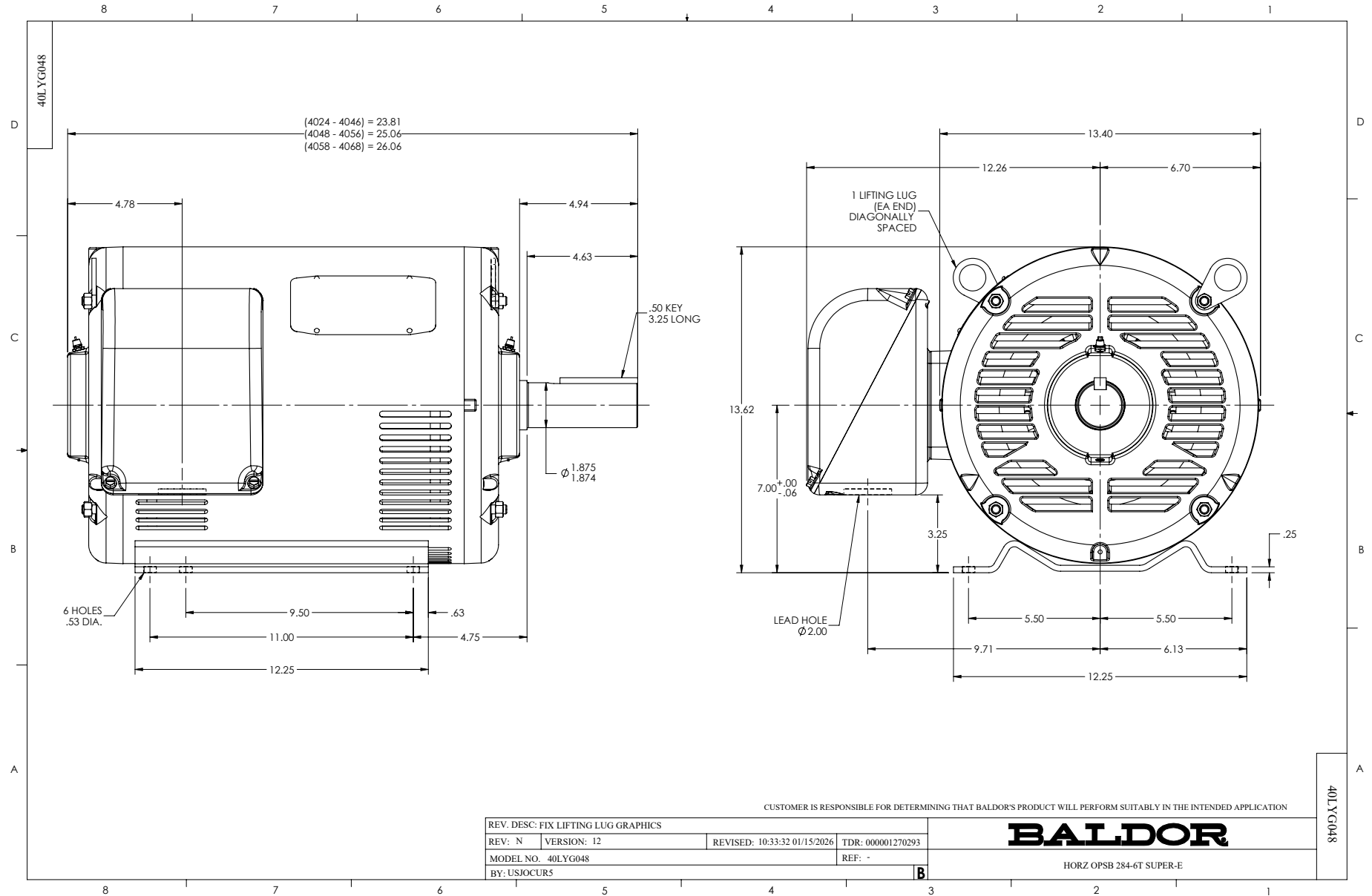
WINDING # 40WGx408

Typical performance - not guaranteed values.

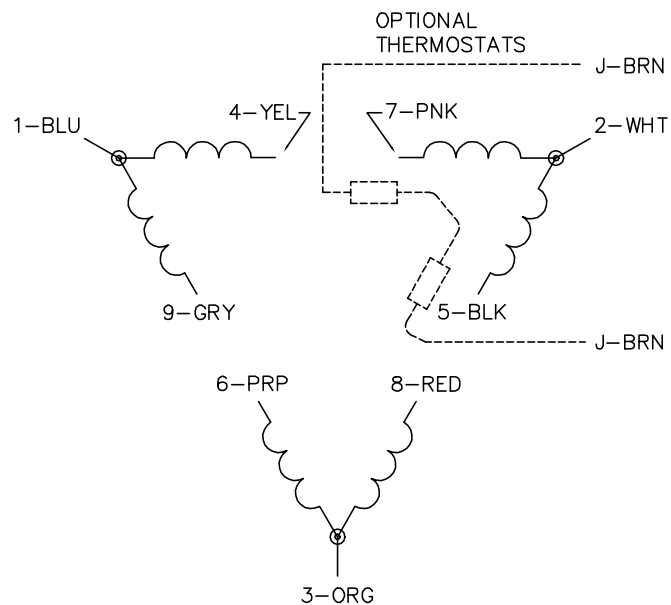
20 HP 3 PH 50 HZ 983 RPM 380 V 4060M

TORQUES (LB-FT): PO=318 PU=128 LR=186 LRA=195

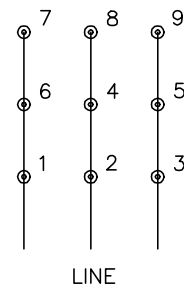




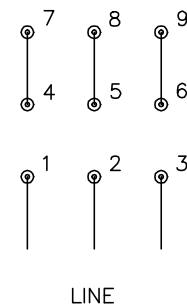
CD0180



LOW VOLTAGE
(2D)



HIGH VOLTAGE
(1D)



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.

CD0180

REV. DESC: ADD CLASS CONN00000007

REV. LTR: D

VERSION: 01

TDR: 000001099922

FILE: \AAA\00005\148

REVISED: 10: 25: 29 02/19/2019

BY: ENBRIRO

MTL: —



BALDOR - RELIANCE®

3PH, DV, 9 LEADS, DELTA CONNECTION

SH 1 of 1