ABB BALDOR RELIANCE

Customer information packet

EM2528T

20HP, 1180RPM, 3PH, 60HZ, 286T, 4056M, OPSB, F1

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Specifications

Enclosure	OPSB
Frame	286T
Frame Material	Steel
Frequency	60.00 Hz
Motor Letter Type	Three Phase
Output @ Frequency	20.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1200 RPM @ 60 HZ
Voltage @ Frequency	230.0 V @ 60 HZ
	460.0 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	54.000 A @ 230.0 V
	56.000 A @ 208.0 V
	27.000 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 Face Code	Standard
Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	27.0 a

Part Detail

Revision	W
Type	AC
Mech. spec.	40G48
Base	
Status	PRD/A
Elec. spec.	40WGX191
Layout	40LYG048
Eff. date	09-02-2025
CD Diagram	CD0180
Poles	06
Leads	9#10
Proprietary	False
Created date	10-14-2010

Insulation Class	F
Inverter Code	Inverter Ready
IP Rating	NONE
KVA Code	H
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	No Locked Bearing
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	9 @ 10 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	4056M
Mounting Arrangement	F1
Number of Poles	6
Overall Length	25.06 IN
Power Factor	74
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 Extension Location	Pulley End
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	1180 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

NP2138LUA												
CAT.NO.	EM2528T			**P/N**					**ENCLOSURE**	OPSB		
SPEC.	40G048X191		**CC**	010A		**FRAME**	286T		**S/N**			
HP	20			**CLASS**	F		**HZ**	60				
RPM	1180			**PH**	3		**DES**	A				
VOLT	230/460				**KVA-CODE**	H			**ODE BRG**	6309	**DE BRG**	6311
AMP	54/27											
RATING	40C AMB-CONT				**GREASE**	POLYREX EM						
NEMA-NOM-EFF	92.4	**PF**	74	**SER.F.**	1.15							
	50hz 20 hp 190/380v 62/31a							sf 1.0				
HTR-VOLTS		**HTR-AMPS**										

Accessories

Part number	Description	Multiplier
40-1400	C FACE KIT	A8

AC Induction Motor Performance Data
Record # 66052
Typical performance - not guaranteed values

Winding: 40WGX191-R001	**Type:** 4056M	**Enclosure:** OPSB

Nameplate Data				**460 V, 60 Hz: High Voltage Connection**	
Rated Output (HP)			20	**Full Load Torque**	88.68 LB-FT
Volts			230/460	**Start Configuration**	direct on line
Full Load Amps			54/27	**Breakdown Torque**	291 LB-FT
R.P.M.			1180	**Pull-up Torque**	110 LB-FT
Hz	60	**Phase**	3	**Locked-rotor Torque**	160 LB-FT
NEMA Design Code	A	**KVA Code**	H	**Starting Current**	177 A
Service Factor (S.F.)			1.15	**No-load Current**	14.1 A
NEMA Nom. Eff.	92.4	**Power Factor**	74	**Line-line Res. @ 25ºC**	0.38967 Ω
Rating - Duty			40C AMB-CONT	**Temp. Rise @ Rated Load**	29°C
S.F. Amps				**Temp. Rise @ S.F. Load**	35°C
				Locked-rotor Power Factor	31.3

Load Characteristics 460 V, 60 Hz, 20 HP

% of Rated Load	**25**	**50**	**75**	**100**	**125**	**150**	**S.F.**
Power Factor	34	55	68	74	78	79	76
Efficiency	88.4	92.5	93.3	93.2	92.7	91.9	92.9
Speed	1195.7	1191.7	1187.5	1183.3	1178.5	1172.9	1180
Line amperes	15.4	18.3	22.2	27	32.4	38.5	30.2

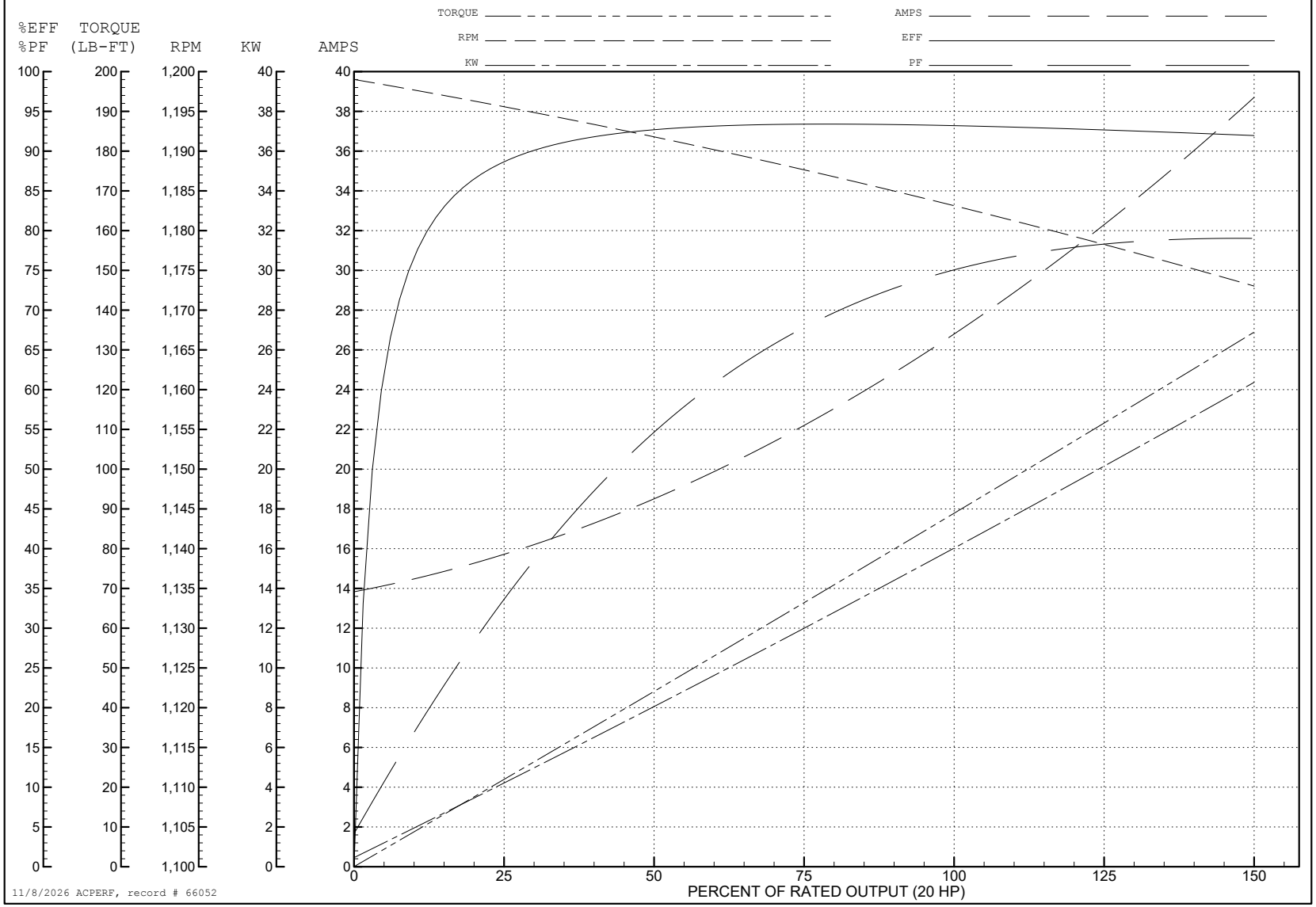
ABB Motors and Mechanical Inc.

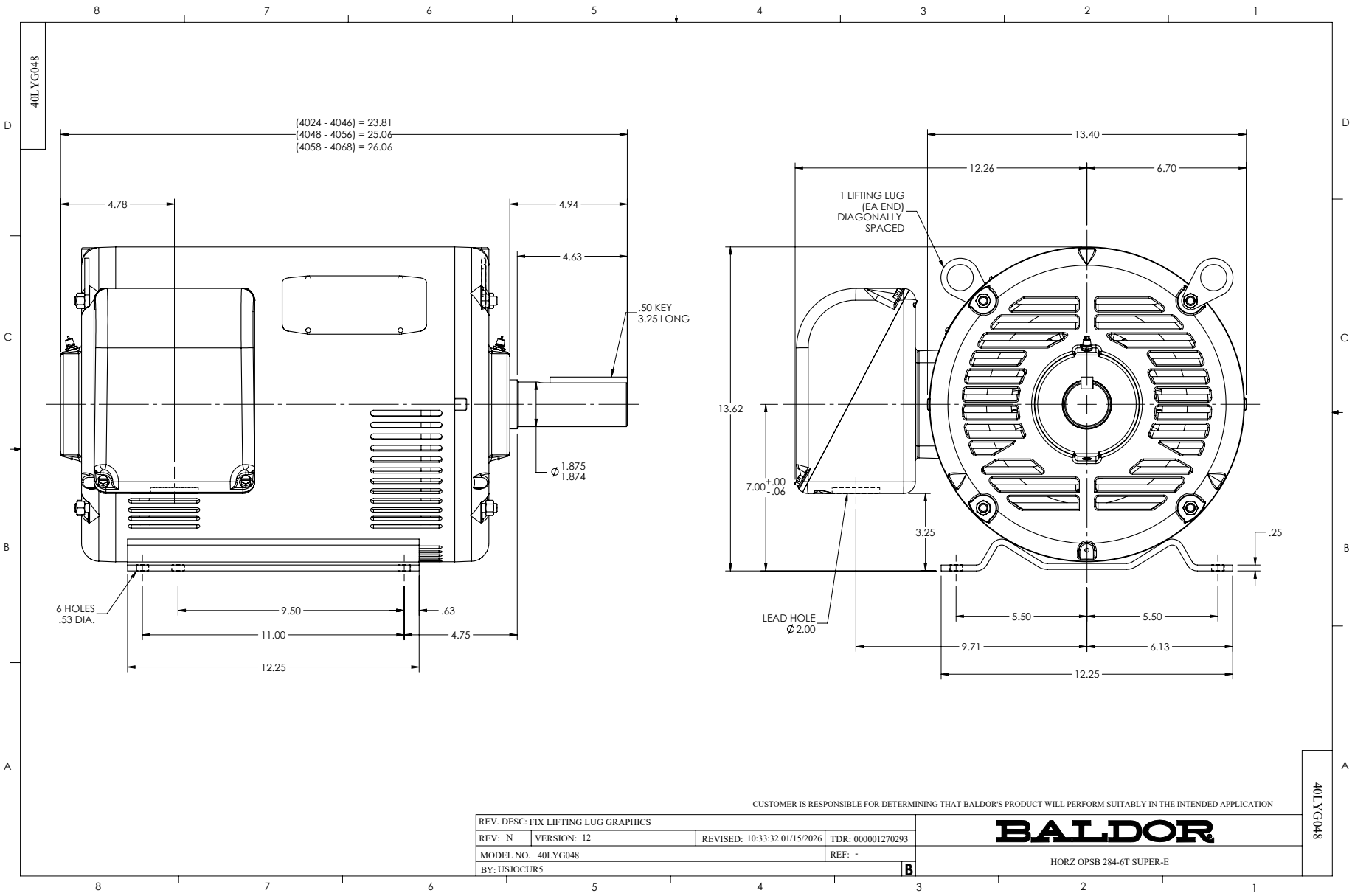
WINDING # 40WGX191

20 HP 3 PH 60 HZ 1180 RPM 460 V 4056M

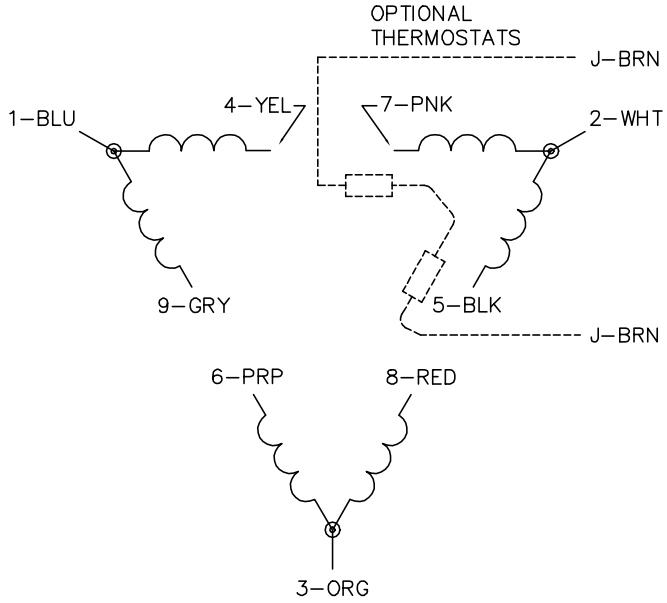
Typical performance - not guaranteed values.

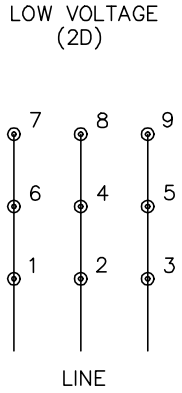
TORQUES(LB-FT): PO=291 PU=110 LR=160 LRA=177

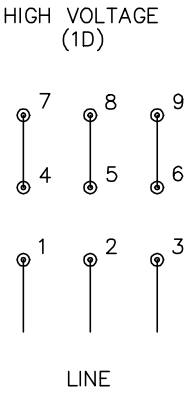



40LYG048
(4024 - 4046) = 23.81
(4048 - 4056) = 25.06
(4058 - 4068) = 26.06
4.78
4.94
4.63
.50 KEY
3.25 LONG
Ø 1.875
1.874
6 HOLES
.53 DIA.
9.50
.63
11.00
4.75
12.25
13.40
12.26
6.70
1 LIFTING LUG
(EA END)
DIAGONALLY
SPACED
13.62
7.00 +.00 -.06
3.25
.25
LEAD HOLE
Ø 2.00
5.50
5.50
9.71
6.13
12.25
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT BALDOR'S PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION
REV. DESC: FIX LIFTING LUG GRAPHICS
REV: N
VERSION: 12
REVISED: 10:33:32 01/15/2026
TDR: 000001270293
MODEL NO. 40LYG048
REF: -
BY: USJOCUR5
B
BALDOR
HORZ OPSB 284-6T SUPER-E
40LYG048

CD0180







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		
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BALDOR - RELIANCE®

3PH, DV, 9 LEADS, DELTA CONNECTION

SH 1 of 1