

**BALDOR • RELIANCE**

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# Customer information packet

## EM2528T

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

## 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	460.0 V @ 60 HZ 230.0 V @ 60 HZ
Agency Approvals	CSA EEV NEMA PREMIUM NEMA_PREMIUM UR
Ambient Temperature	40 °C
Auxillary Box	No Auxillary Box
Auxillary Box Lead Termination	None
Base Indicator	Rigid
Bearing Grease Type	Polyrex EM (-20F +300F)
Blower	None
Current @ Voltage	56.000 A @ 208.0 V 54.000 A @ 230.0 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

## Part detail

Revision	V
Type	AC
Mech. spec.	40G48
Base	
Status	PRD/A
Elec. spec.	40WGX191
Layout	40LYG048
Eff. date	11-29-2023
CD Diagram	CD0180
Poles	06
Leads	9#10
Proprietary	False
Created date	10-14-2010

High Voltage Full Load Amps	27.0 a
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**

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**Nameplate**

**NP2138LUA**

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

**Accessories**

<b>Part number</b>	<b>Description</b>	<b>Multiplier</b>
40-1400	C FACE KIT	A8

**AC Induction Motor Performance Data**

Record # 66052

Typical performance - not guaranteed values

<b>Winding:</b> 40WGX191-R001		<b>Type:</b> 4056M		<b>Enclosure:</b> OPSB	
<b>Nameplate Data</b>			<b>460 V, 60 Hz: High Voltage Connection</b>		
<b>Rated Output (HP)</b>	20	<b>Full Load Torque</b>	88.68 LB-FT		
<b>Volts</b>	230/460	<b>Start Configuration</b>	direct on line		
<b>Full Load Amps</b>	54/27	<b>Breakdown Torque</b>	291 LB-FT		
<b>R.P.M.</b>	1180	<b>Pull-up Torque</b>	110 LB-FT		
<b>Hz</b>	60 <b>Phase</b>	3	<b>Locked-rotor Torque</b>	160 LB-FT	
<b>NEMA Design Code</b>	A <b>KVA Code</b>	H	<b>Starting Current</b>	177 A	
<b>Service Factor (S.F.)</b>	1.15	<b>No-load Current</b>	14.1 A		
<b>NEMA Nom. Eff.</b>	92.4 <b>Power Factor</b>	74	<b>Line-line Res. @ 25°C</b>	0.38967 Ω	
<b>Rating - Duty</b>	40C AMB-CONT	<b>Temp. Rise @ Rated Load</b>	29°C		
<b>S.F. Amps</b>		<b>Temp. Rise @ S.F. Load</b>	35°C		
		<b>Locked-rotor Power Factor</b>	31.3		

**Load Characteristics 460 V, 60 Hz, 20 HP**

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

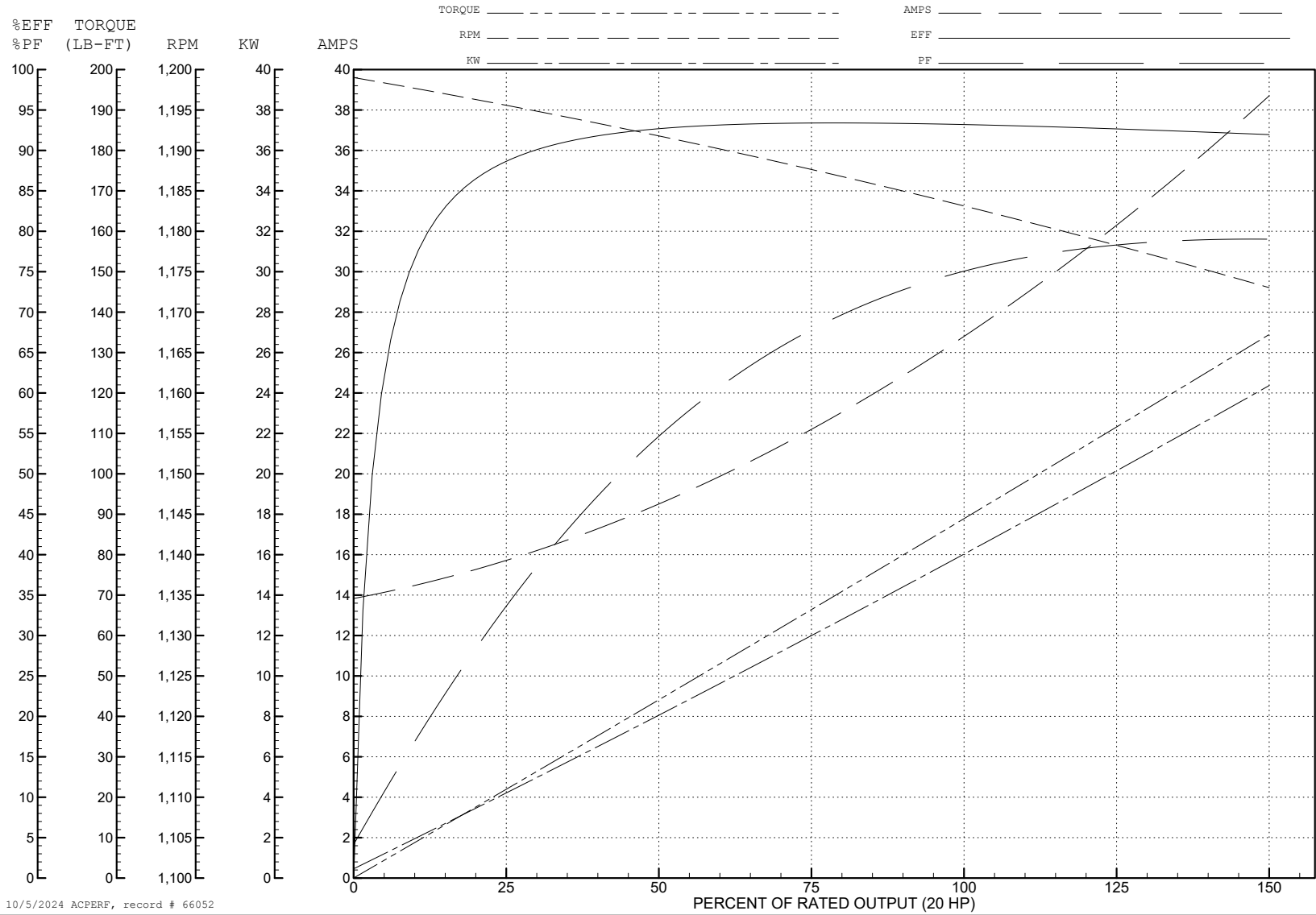
ABB Motors and Mechanical Inc.

WINDING # 40WGx191

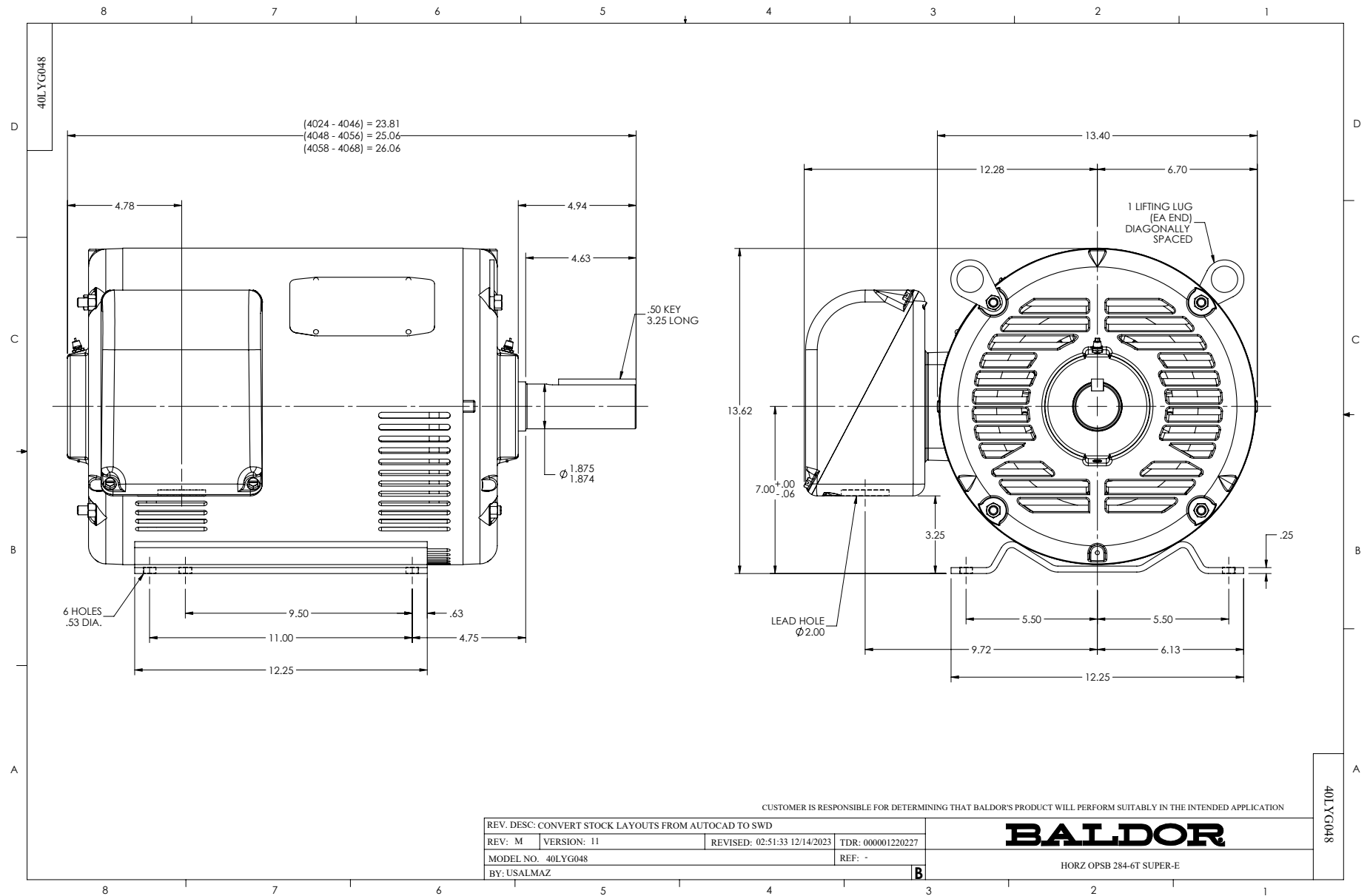
Typical performance - not guaranteed values.

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

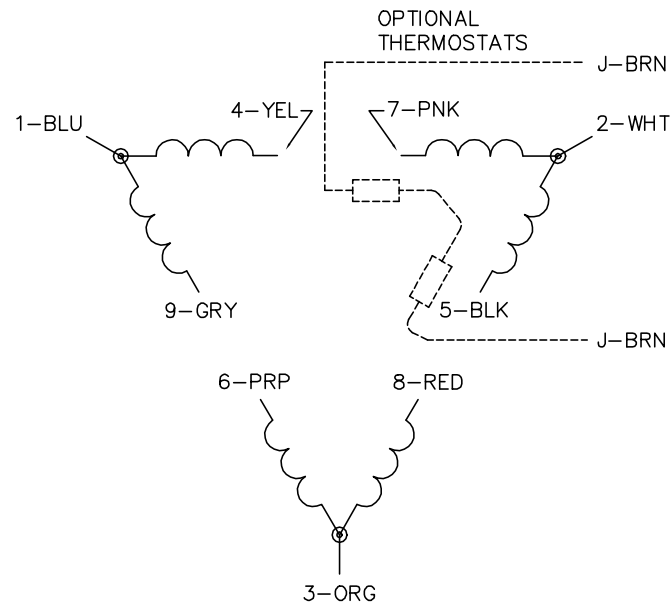
TORQUES (LB-FT): PO=291 PU=110 LR=160 LRA=177



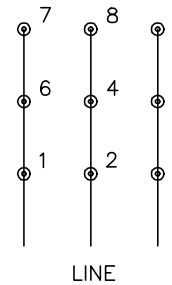




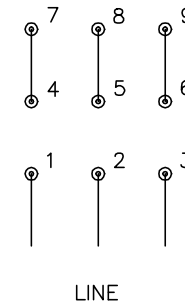
CD0180



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

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FILE: \AAA\00005\148	REVISED: 10:25:29 02/19/2019	BY: ENBRIRO
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**BALDOR - RELIANCE®**

3PH, DV, 9 LEADS, DELTA CONNECTION

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