

BALDOR® • RELIANCE 

Product Information Packet

EM2531T-5BG

25HP, 1770RPM, 3PH, 60HZ, 284T, 4050M, OPSB, F1

Part Detail							
Revision:	N	Status:	PRD/A	Change #:		Proprietary:	No
Type:	AC	Elec. Spec:	40WGX795	CD Diagram:	CD0006	Mfg Plant:	
Mech. Spec:	40E332	Layout:	40LYE332	Poles:	04	Created Date:	09-23-2014
Base:	RG	Eff. Date:	04-06-2022	Leads:	3#10		

Specs			
Catalog Number:	EM2531T-5BG	KVA Code:	G
Enclosure:	OPSB	Lifting Lugs:	Standard Lifting Lugs
Frame:	284T	Locked Bearing Indicator:	No Locked Bearing
Frame Material:	Steel	Motor Lead Quantity/Wire Size:	3 @ 10 AWG
Output @ Frequency:	25.000 HP @ 60 HZ	Motor Lead Exit:	Ko Box
Synchronous Speed @ Frequency:	1800 RPM @ 60 HZ	Motor Lead Termination:	Flying Leads
Voltage @ Frequency:	575.0 V @ 60 HZ	Motor Type:	4050M
Agency Approvals:	CSA	Mounting Arrangement:	F1
	CSA EEV	Power Factor:	82
	UR	Product Family:	General Purpose
Auxillary Box:	No Auxillary Box	Pulley End Bearing Type:	Ball
Auxillary Box Lead Termination:	None	Pulley Face Code:	Standard
Base Indicator:	Rigid	Pulley Shaft Indicator:	Standard
Bearing Grease Type:	Polyrex EM (-20F +300F)	Rodent Screen:	None
Blower:	None	Shaft Extension Location:	Pulley End
Current @ Voltage:	24.500 A @ 575.0 V	Shaft Ground Indicator:	Shaft Grounding
Design Code:	A	Shaft Rotation:	Reversible
Drip Cover:	No Drip Cover	Shaft Slinger Indicator:	No Slinger

Duty Rating:	CONT	Speed Code:	Single Speed
Electrically Isolated Bearing:	Not Electrically Isolated	Motor Standards:	NEMA
Feedback Device:	NO FEEDBACK	Starting Method:	Direct on line
Front Face Code:	Standard	Thermal Device - Bearing:	None
Front Shaft Indicator:	None	Thermal Device - Winding:	None
Heater Indicator:	No Heater	Vibration Sensor Indicator:	No Vibration Sensor
Insulation Class:	H	Winding Thermal 1:	None
Inverter Code:	Inverter Ready	Winding Thermal 2:	None

Nameplate NP2138L											
CAT.NO.	EM2531T-5BG			P/N				ENCLOSURE	OPSB		
SPEC.	40E332X795G1		CC	010A	FRAME	284T		S/N			
HP	25			CLASS	H	HZ	60				
RPM	1770			PH	3	DES	A				
VOLT	575			KVA-CODE	G		ODE BRG	6309		DE BRG	6311
AMP	24.5			USABLE AT 208V							
RATING	40C AMB-CONT			GREASE	POLYREX EM						
NEMA-NOM-EFF	93.6	PF	82	SER.F.	1.15						
HTR-VOLTS				HTR-AMPS							

Parts List		
Part Number	Description	Quantity
SA287425	SA 40E332X795G1	1.000 EA
RA273638	RA 40E332X795G1	1.000 EA
HA6361A01	LIFTING LUG FOR 37, 39 & 40 FRAME ZINC	2.000 EA
HA6017	CAST ADAPTER, 40,42 KOBX	1.000 EA
19XW3118A12	.31-18 X .75 HEX WASHER HEAD TAPTITE II	2.000 EA
WD1000B25	GND LUG, BURNDY L125HP OR T&B L125HP-BB	1.000 EA
19XW3118G08	.31-18X.50,HEX WSHR HD,TAPTITE 2,GREEN	1.000 EA
HW1001A31	LOCKWASHER 5/16, ZINC PLT.591 OD, .319 I	2.000 EA
10CB3000SP	KOBX, CAST W/2.00 LEAD HOLE	1.000 EA
19XW3118A12	.31-18 X .75 HEX WASHER HEAD TAPTITE II	4.000 EA
40EP3200A02	STD FREP OPEN 309 BRG	1.000 EA
HW5100A11	W3917-042 WVY WSHR (WB)	1.000 EA
40EP3200B01	STD PUEP OPEN 311 LOCKED BRG W/AIR DEFLE	1.000 EA
10XN3118K40	5/16-18 X 2.25" HEX HD, GRADE 5	4.000 EA
HW1001A31	LOCKWASHER 5/16, ZINC PLT.591 OD, .319 I	4.000 EA
XY3816A12	3/8-16 FINISHED NUT	8.000 EA
10CB3500SP	CONDUIT BOX LID, CAST	1.000 EA
51XW2520A12	.25-20 X .75, TAPTITE II, HEX WSHR SLTD	4.000 EA
HW2501H28	KEY, 1/2 SQ X 3.250	1.000 EA
LB1115N	LABEL,LIFTING DEVICE (ON ROLLS)	1.000 EA
LB1508	LABEL "SHAFT GROUNDING BRUSH" 1.50 X .81	1.000 EA
HW4500A03	GREASE FITTING, .125 NPT 1610(ALEMITE) 8	1.000 EA
HW4500A20	1/8NPT SL PIPE PLUG	1.000 EA
HA4051A00	PLASTIC CAP FOR GREASE FITTING	1.000 EA

Parts List (continued)		
Part Number	Description	Quantity
MJ1000A02	GREASE, MOBIL POLYREX EM - 124047	0.050 LB
HW4500A03	GREASE FITTING, .125 NPT 1610(ALEMITE) 8	1.000 EA
HW4500A20	1/8NPT SL PIPE PLUG	1.000 EA
HA4051A00	PLASTIC CAP FOR GREASE FITTING	1.000 EA
MG1000Y03	MUNSELL 2.53Y 6.70/ 4.60, GLOSS 20,	0.070 GA
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	4.000 EA
40AD2002A01	LEXAN BAFFLE 40 FR OPEN	1.000 EA
40AD2002A01	LEXAN BAFFLE 40 FR OPEN	1.000 EA
HA3154A04	THRUBOLT STUD 3/8-16 X 18.750	4.000 EA
LB1119N	WARNING LABEL	1.000 EA
LC0006	CONNECTION LABEL	1.000 EA
NP2138L	ALUM SUPER-E UL CSA-EEV PREM CC (300	1.000 EA
40PA1000	PACKAGING GROUP	1.000 EA
MN416A01	TAG-INSTAL-MAINT no wire (2100/bx) 4/22	1.000 EA

AC Induction Motor Performance Data

Record # 50225

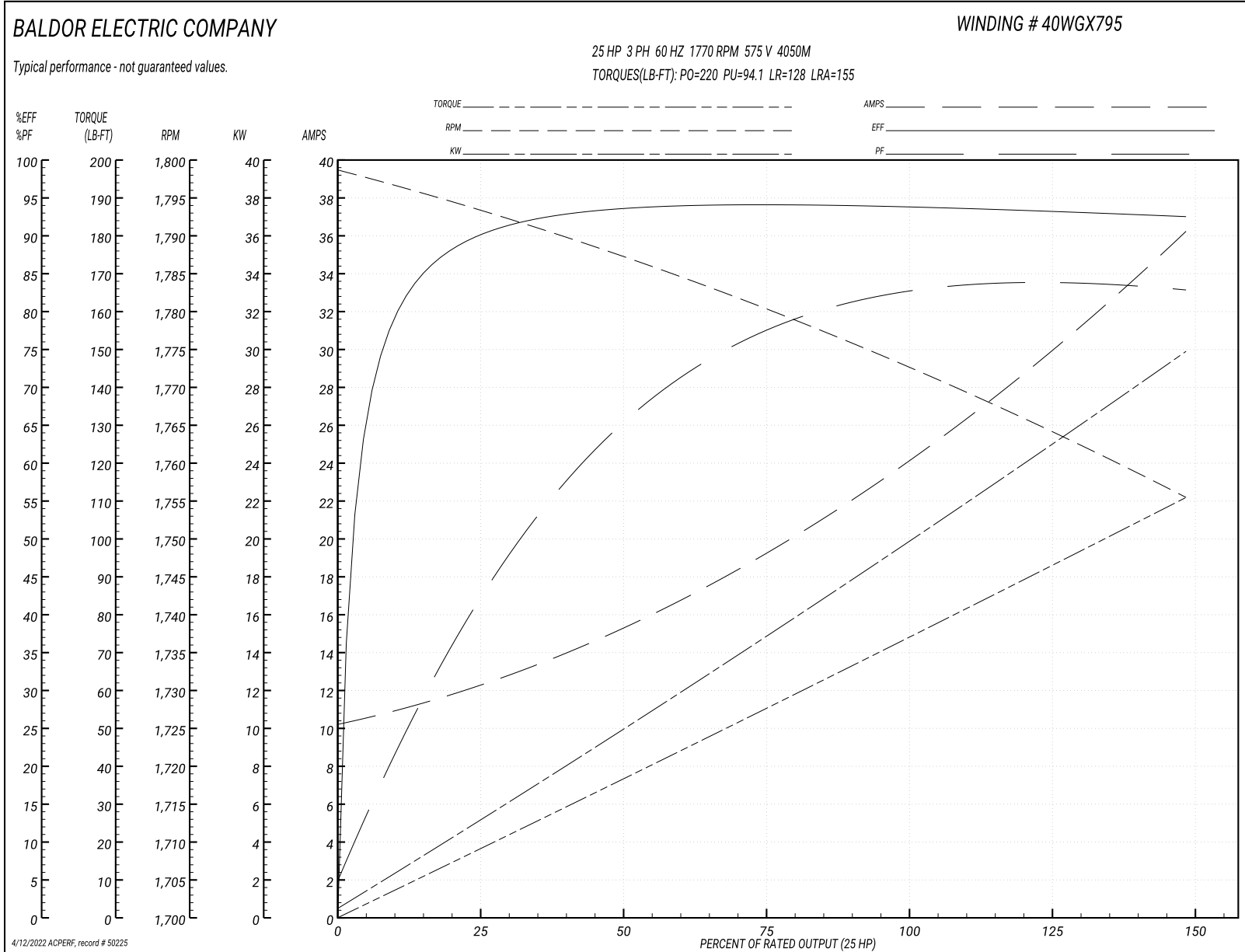
Typical performance - not guaranteed values

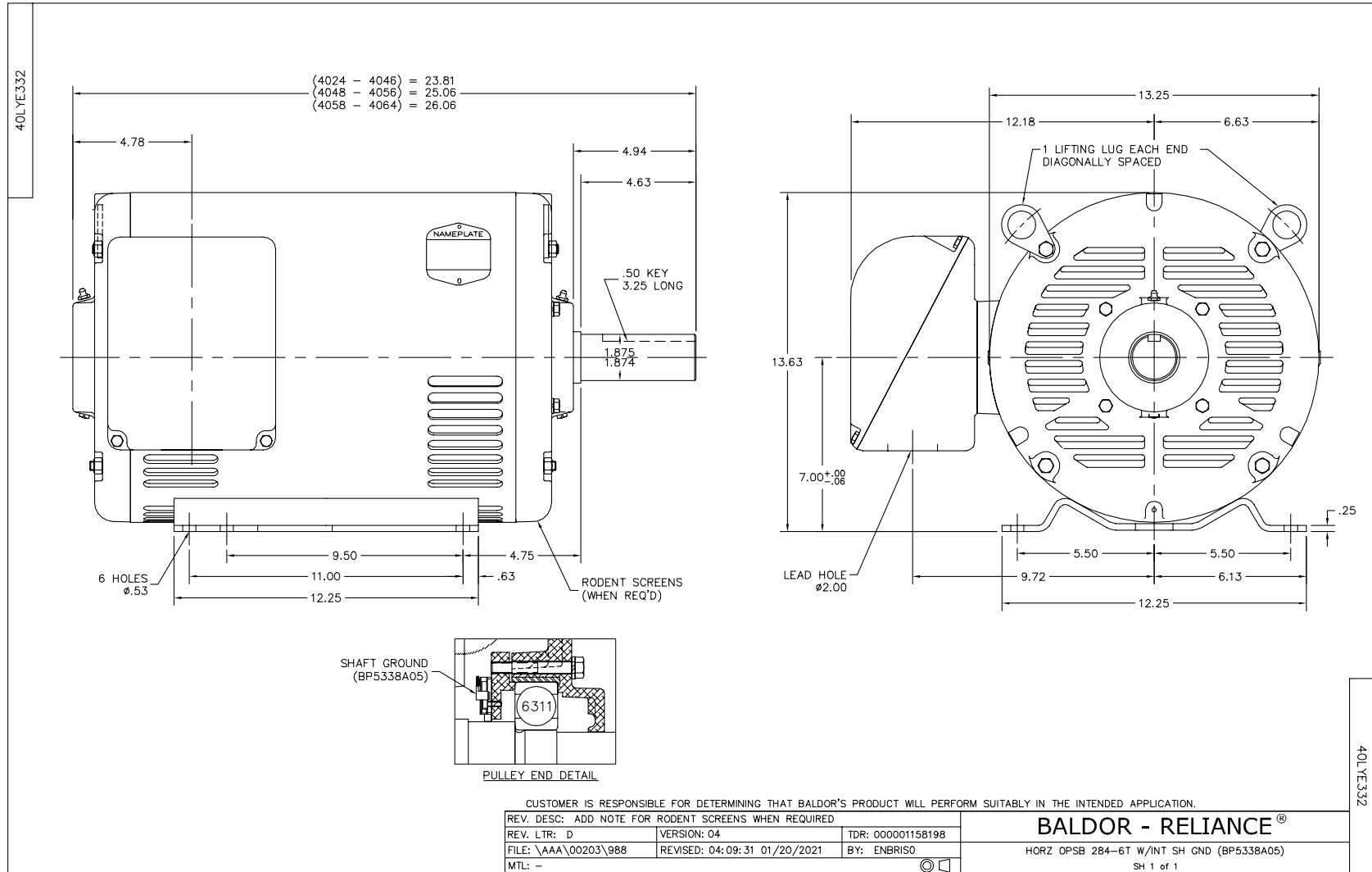
Winding: 40WGX795-R002		Type: 4050M		Enclosure: OPSB	
Nameplate Data			575 V, 60 Hz: Single Voltage Motor		
Rated Output (HP)	25	Full Load Torque	74 LB-FT		
Volts	575	Start Configuration	direct on line		
Full Load Amps	24.5	Breakdown Torque	220 LB-FT		
R.P.M.	1770	Pull-up Torque	94.1 LB-FT		
Hz	60 Phase	3	Locked-rotor Torque	128 LB-FT	
NEMA Design Code	B KVA Code	G	Starting Current	155 A	
Service Factor (S.F.)	1.15	No-load Current	10.6 A		
NEMA Nom. Eff.	93.6	Power Factor	82	Line-line Res. @ 25°C	0.508 Ω
Rating - Duty	40C AMB-CONT		Temp. Rise @ Rated Load	28°C	
S.F. Amps			Temp. Rise @ S.F. Load	35°C	
			Locked-rotor Power Factor	34	
			Rotor inertia	3.96 LB-FT ²	

Load Characteristics 575 V, 60 Hz, 25 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	44	67	77	82	83	83	82
Efficiency	89.6	93	93.8	93.6	93.1	92.3	93.3
Speed	1793	1787	1780	1773	1765	1755	1768
Line amperes	11.8	15.1	19.4	24.5	29.9	36	27.7

Performance Graph at 575V, 60Hz, 25.0HP Typical performance - Not guaranteed values





CD0006



NOTES:

1. THREE LEAD MOTOR MAY BE EITHER WYE CONNECTED OR DELTA CONNECTED.
2. INTERCHANGE ANY TWO LINE LEADS TO REVERSE ROTATION.
3. OPTIONAL THERMOSTATS ARE PROVIDED WHEN SPECIFIED.
4. ACTUAL NUMBER OF INTERNAL PARALLEL CIRCUITS MAY VARY.
5. LEAD COLORS ARE OPTIONAL. LEADS MUST BE NUMBERED AS SHOWN.

CD0006

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MTL: -	© □	

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3PH, SV, 3 LEADS, WYE OR DELTA CONNECTED

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