

**BALDOR® • RELIANCE** 

**Product Information Packet**

**EM2515T-5BG**

**20HP, 1765RPM, 3PH, 60HZ, 256T, 3948M, OPSB, F1**

Part Detail							
Revision:	L	Status:	PRD/A	Change #:		Proprietary:	No
Type:	AC	Elec. Spec:	39WGX995	CD Diagram:	CD0006	Mfg Plant:	
Mech. Spec:	39E531	Layout:	39LYE531	Poles:	04	Created Date:	09-08-2016
Base:	RG	Eff. Date:	05-10-2021	Leads:	3#12		

Specs			
Catalog Number:	EM2515T-5BG	Inverter Code:	Inverter Ready
Enclosure:	OPSB	KVA Code:	G
Frame:	256T	Lifting Lugs:	Standard Lifting Lugs
Frame Material:	Steel	Locked Bearing Indicator:	No Locked Bearing
Output @ Frequency:	20.000 HP @ 60 HZ	Motor Lead Quantity/Wire Size:	3 @ 12 AWG
Synchronous Speed @ Frequency:	1800 RPM @ 60 HZ	Motor Lead Exit:	Ko Box
Voltage @ Frequency:	575.0 V @ 60 HZ	Motor Lead Termination:	Flying Leads
XP Class and Group:	None	Motor Type:	3948M
XP Division:	Not Applicable	Mounting Arrangement:	F1
Agency Approvals:	CSA	Power Factor:	85
	CSA EEV	Product Family:	General Purpose
	UR	Pulley End Bearing Type:	Ball
Auxillary Box:	No Auxillary Box	Pulley Face Code:	Standard
Auxillary Box Lead Termination:	None	Pulley Shaft Indicator:	Standard
Base Indicator:	Rigid	Rodent Screen:	None
Bearing Grease Type:	Polyrex EM (-20F +300F)	Shaft Extension Location:	Pulley End
Blower:	None	Shaft Ground Indicator:	Shaft Grounding
Current @ Voltage:	19.100 A @ 575.0 V	Shaft Rotation:	Reversible

<b>Design Code:</b>	A	<b>Shaft Slinger Indicator:</b>	No Slinger
<b>Drip Cover:</b>	No Drip Cover	<b>Speed Code:</b>	Single Speed
<b>Duty Rating:</b>	CONT	<b>Motor Standards:</b>	NEMA
<b>Electrically Isolated Bearing:</b>	Not Electrically Isolated	<b>Starting Method:</b>	Direct on line
<b>Feedback Device:</b>	NO FEEDBACK	<b>Thermal Device - Bearing:</b>	None
<b>Front Face Code:</b>	Standard	<b>Thermal Device - Winding:</b>	None
<b>Front Shaft Indicator:</b>	None	<b>Vibration Sensor Indicator:</b>	No Vibration Sensor
<b>Heater Indicator:</b>	No Heater	<b>Winding Thermal 1:</b>	None
<b>Insulation Class:</b>	H	<b>Winding Thermal 2:</b>	None

<b>Nameplate NP3553L</b>										
<b>CAT.NO.</b>	EM2515T-5BG									
<b>SPEC</b>	39E531X995G1									
<b>HP</b>	20									
<b>VOLTS</b>	575									
<b>AMPS</b>	19.1									
<b>RPM</b>	1765									
<b>FRAME</b>	256T				<b>HZ</b>	60			<b>PH</b>	3
<b>SF</b>	1.15		<b>CODE</b>	G	<b>DES</b>	A		<b>CLASS</b>	H	
<b>NEMA NOM. EFF</b>	93		<b>PF</b>	85						
<b>RATING</b>	40C AMB-CONT									
<b>CC</b>	010A				<b>USABLE AT 208V</b>					
<b>ENCL</b>	OPSB		<b>SER</b>							
<b>DE</b>	6309			<b>ODE</b>	6208					
<b>VPWM INVERTER READY</b>										
<b>CT30-60(2:1) VT3-60(20:1)</b>										

Parts List		
Part Number	Description	Quantity
SA326998	SA 39E531X995G1	1.000 EA
RA314905	RA 39E531X995G1	1.000 EA
HA6361A01	LIFTING LUG FOR 37, 39 & 40 FRAME ZINC	2.000 EA
HA6016	ADAPTER, CAST CONDUIT BOX	1.000 EA
09CB3003	CB W/1.75" DIA LD HL - 37, 39, 307 & 309	1.000 EA
51XW2520A12	.25-20 X .75, TAPTITE II, HEX WSHR SLTD	2.000 EA
WD1000B16	T&B CX70TN OR L70P TERMINAL LUG	1.000 EA
59XW2520G07	.25-20X.44,HEX SER WSHR,TAPTITE 2,GREEN	1.000 EA
39EP3200A01SP	FR/PU ENDPLATE, MACH	1.000 EA
HW5100A08	W3118-035 WVY WSHR (WB)	1.000 EA
39EP3201A22	PU ENDPLATE, MACH	1.000 EA
XY3816A12	3/8-16 FINISHED NUT	8.000 EA
10XN2520K28	1/4-20 X 1.75" HX HD SCRWGRADE 5, ZINC P	4.000 EA
09CB3501SP	CONDUIT BOX LID FOR 09CB3001 & 09CB3002	1.000 EA
51XW2520A12	.25-20 X .75, TAPTITE II, HEX WSHR SLTD	2.000 EA
HW2501G25	KEY, 3/8 SQ X 2.875	1.000 EA
LB1115N	LABEL,LIFTING DEVICE (ON ROLLS)	1.000 EA
LB1508	LABEL "SHAFT GROUNDING BRUSH" 1.50 X .81	1.000 EA
HA4051A00	PLASTIC CAP FOR GREASE FITTING	1.000 EA
HW4500A03	GREASE FITTING, .125 NPT 1610(ALEMITE) 8	1.000 EA
HW4500A20	1/8NPT SL PIPE PLUG	1.000 EA
MJ1000A02	GREASE, MOBIL POLYREX EM - 124047	0.030 LB
HA4051A00	PLASTIC CAP FOR GREASE FITTING	1.000 EA
HW4500A03	GREASE FITTING, .125 NPT 1610(ALEMITE) 8	1.000 EA

<b>Parts List (continued)</b>		
<b>Part Number</b>	<b>Description</b>	<b>Quantity</b>
HW4500A20	1/8NPT SL PIPE PLUG	1.000 EA
MG1000Y03	MUNSELL 2.53Y 6.70/ 4.60, GLOSS 20,	0.050 GA
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	2.000 EA
39AD2002A01	BAFFLE PLATE 39 OPEN, SLOTTED BAND MTRS	1.000 EA
39AD2002A01	BAFFLE PLATE 39 OPEN, SLOTTED BAND MTRS	1.000 EA
HA3154A03	STUD, 3/8-16 X 17.75	4.000 EA
LB1119N	WARNING LABEL	1.000 EA
LC0006	CONNECTION LABEL	1.000 EA
NP3553L	ALUM SUPER-E VPWM INVERTER READY UL CSA-	1.000 EA
39PA1000	PACKAGING GROUP 39 PRINT	1.000 EA
MN416A01	TAG-INSTAL-MAINT no wire (2100/bx) 4/22	1.000 EA

**AC Induction Motor Performance Data**

Record # 59144

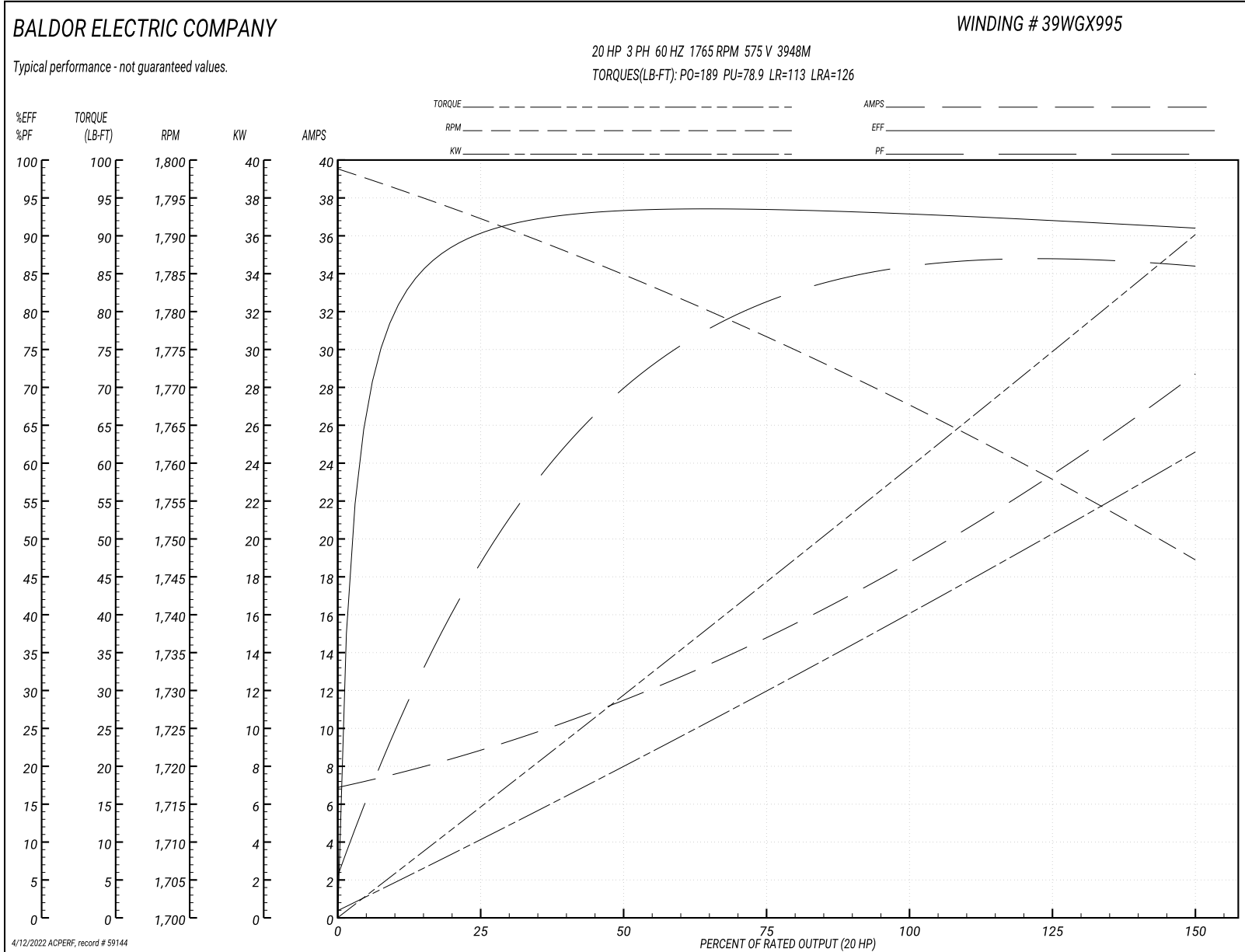
Typical performance - not guaranteed values

<b>Winding:</b> 39WGX995-R002		<b>Type:</b> 3948M		<b>Enclosure:</b> OPSB	
<b>Nameplate Data</b>			<b>575 V, 60 Hz: Single Voltage Motor</b>		
<b>Rated Output (HP)</b>	20	<b>Full Load Torque</b>	59.7 LB-FT		
<b>Volts</b>	575	<b>Start Configuration</b>	direct on line		
<b>Full Load Amps</b>	19.1	<b>Breakdown Torque</b>	189 LB-FT		
<b>R.P.M.</b>	1765	<b>Pull-up Torque</b>	78.9 LB-FT		
<b>Hz</b>	60 <b>Phase</b>	3	<b>Locked-rotor Torque</b>	113 LB-FT	
<b>NEMA Design Code</b>	A <b>KVA Code</b>	G	<b>Starting Current</b>	126 A	
<b>Service Factor (S.F.)</b>	1.15		<b>No-load Current</b>	7.18 A	
<b>NEMA Nom. Eff.</b>	93 <b>Power Factor</b>	85	<b>Line-line Res. @ 25°C</b>	0.711 Ω	
<b>Rating - Duty</b>	40C AMB-CONT		<b>Temp. Rise @ Rated Load</b>	37°C	
<b>S.F. Amps</b>			<b>Temp. Rise @ S.F. Load</b>	46°C	
			<b>Locked-rotor Power Factor</b>	33.3	
			<b>Rotor inertia</b>	2.1 LB-FT <sup>2</sup>	

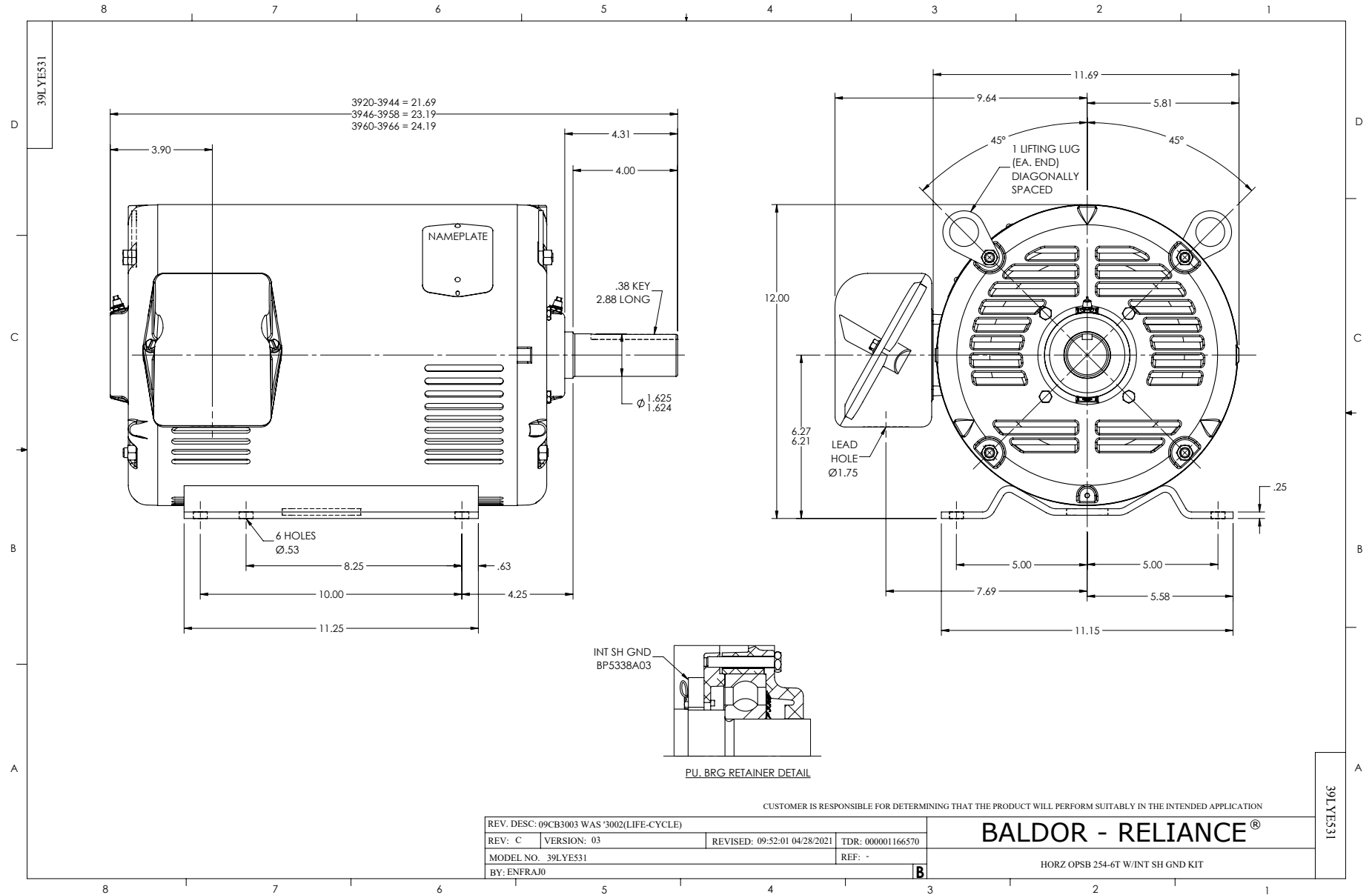
**Load Characteristics 575 V, 60 Hz, 20 HP**

<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>	49	72	81	85	86	87	86
<b>Efficiency</b>	90.2	93.1	93.4	93.1	92.1	91	92.5
<b>Speed</b>	1792	1785	1776	1768	1758	1747	1762
<b>Line amperes</b>	8.49	11.3	14.9	19.1	23.6	28.5	21.8

Performance Graph at 575V, 60Hz, 20.0HP 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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**BALDOR - RELIANCE®**

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

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