

**BALDOR® • RELIANCE** 

**Product Information Packet**

**EM2515T-BG**

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

Part Detail							
Revision:	K	Status:	PRD/A	Change #:		Proprietary:	No
Type:	AC	Elec. Spec:	39WGX952	CD Diagram:	CD0180	Mfg Plant:	
Mech. Spec:	39E531	Layout:	39LYE531	Poles:	04	Created Date:	06-22-2016
Base:	RG	Eff. Date:	05-10-2021	Leads:	9#10		

Specs			
Catalog Number:	EM2515T-BG	Heater Indicator:	No Heater
Enclosure:	OPSB	Insulation Class:	H
Frame:	256T	Inverter Code:	Inverter Ready
Frame Material:	Steel	KVA Code:	G
Output @ Frequency:	20.000 HP @ 60 HZ	Lifting Lugs:	Standard Lifting Lugs
Synchronous Speed @ Frequency:	1800 RPM @ 60 HZ	Locked Bearing Indicator:	No Locked Bearing
Voltage @ Frequency:	460.0 V @ 60 HZ	Motor Lead Quantity/Wire Size:	9 @ 10 AWG
	230.0 V @ 60 HZ	Motor Lead Exit:	Ko Box
XP Class and Group:	None	Motor Lead Termination:	Flying Leads
XP Division:	Not Applicable	Motor Type:	3948M
Agency Approvals:	UR	Mounting Arrangement:	F1
	CSA EEV	Power Factor:	85
	CSA	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

<b>Current @ Voltage:</b>	24.000 A @ 460.0 V	<b>Shaft Ground Indicator:</b>	Shaft Grounding
	48.000 A @ 230.0 V	<b>Shaft Rotation:</b>	Reversible
	52.000 A @ 208.0 V	<b>Shaft Slinger Indicator:</b>	No Slinger
<b>Design Code:</b>	A	<b>Speed Code:</b>	Single Speed
<b>Drip Cover:</b>	No Drip Cover	<b>Motor Standards:</b>	NEMA
<b>Duty Rating:</b>	CONT	<b>Starting Method:</b>	Direct on line
<b>Electrically Isolated Bearing:</b>	Not Electrically Isolated	<b>Thermal Device - Bearing:</b>	None
<b>Feedback Device:</b>	NO FEEDBACK	<b>Thermal Device - Winding:</b>	None
<b>Front Face Code:</b>	Standard	<b>Vibration Sensor Indicator:</b>	No Vibration Sensor
<b>Front Shaft Indicator:</b>	None	<b>Winding Thermal 1:</b>	None
		<b>Winding Thermal 2:</b>	None

<b>Nameplate NP3553LUA</b>										
<b>CAT.NO.</b>	EM2515T-BG									
<b>SPEC.</b>	39E531X952G1									
<b>HP</b>	20									
<b>VOLTS</b>	230/460									
<b>AMPS</b>	48/24									
<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>					52
<b>DE</b>	6309				<b>ODE</b>	6208				
<b>ENCL</b>	OPSB		<b>SN</b>							
<b>VPWM INVERTER READY</b>										
<b>CT30-60(2:1) VT3-60(20:1)</b>										
<b>USABLE AT</b>	50HZ 20HP 190/380V 58/29A								SF1.0	

Parts List		
Part Number	Description	Quantity
SA322855	SA 39E531X952G1	1.000 EA
RA310664	RA 39E531X952G1	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
LC0181	CONNECTION LABEL	1.000 EA
NP3553LUA	ALUM SUPER-E VPWM INVERTER READY UL	1.000 EA
39PA1000	PACKAGING GROUP 39 PRINT	1.000 EA
MN416A01	TAG-INSTAL-MAINT no wire (2100/bx) 4/22	1.000 EA
LD7020E09	LEAD SET, 10AWG, 9 LEAD, 20" LONG LEADS	1.000 EA

**AC Induction Motor Performance Data**

Record # 57686

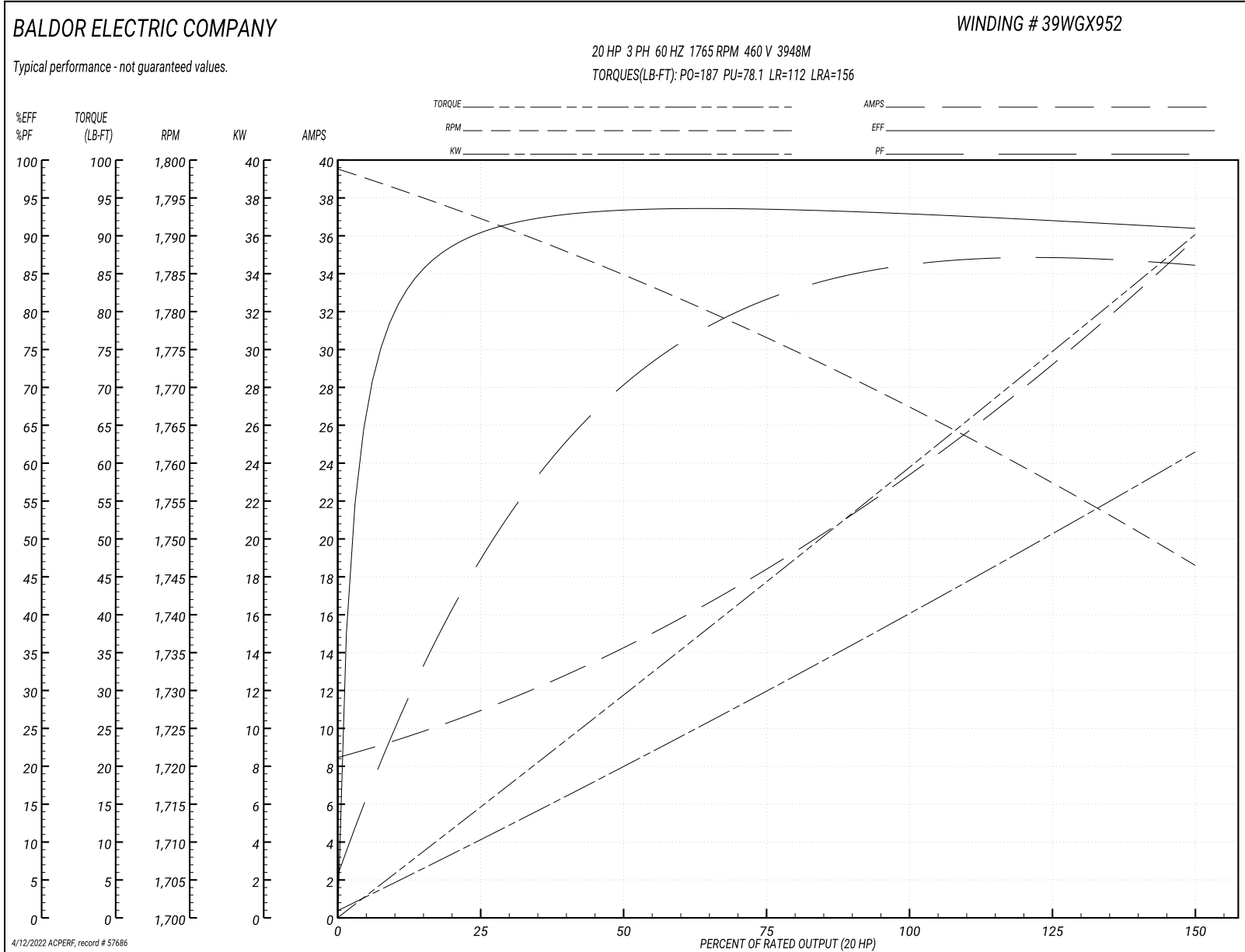
Typical performance - not guaranteed values

Winding: 39WGX952-R003			Type: 3948M			Enclosure: OPSB		
<b>Nameplate Data</b>				<b>460 V, 60 Hz: High Voltage Connection</b>				
Rated Output (HP)	20		Full Load Torque	59.7 LB-FT				
Volts	230/460		Start Configuration	direct on line				
Full Load Amps	48/24		Breakdown Torque	187 LB-FT				
R.P.M.	1765		Pull-up Torque	78.1 LB-FT				
Hz	60 Phase	3	Locked-rotor Torque	112 LB-FT				
NEMA Design Code	A	KVA Code	G	Starting Current	156 A			
Service Factor (S.F.)	1.15		No-load Current	8.83 A				
NEMA Nom. Eff.	93	Power Factor	85	Line-line Res. @ 25°C	0.48438 Ω			
Rating - Duty	40C AMB-CONT		Temp. Rise @ Rated Load	37°C				
S.F. Amps			Temp. Rise @ S.F. Load	46°C				
			Locked-rotor Power Factor	33.3				

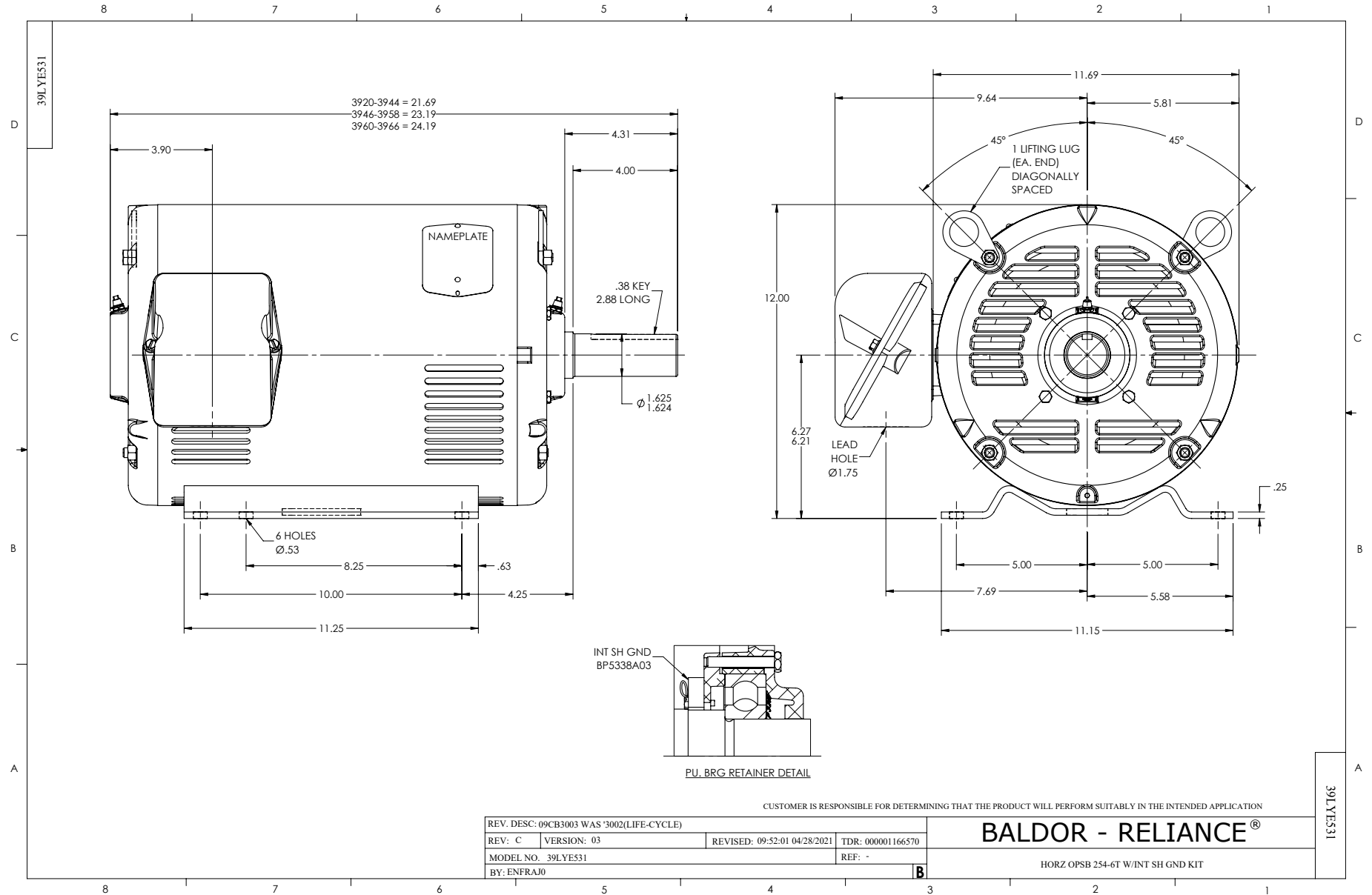
**Load Characteristics 460 V, 60 Hz, 20 HP**

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	50	72	81	85	87	87	86
Efficiency	90.2	93.3	93.5	93	92.2	91	92.5
Speed	1792.2	1784.8	1776.1	1767.5	1757.6	1746.3	1762
Line amperes	10.5	14	18.6	23.8	29.4	35.6	27.2

Performance Graph at 460V, 60Hz, 20.0HP Typical performance - Not guaranteed values







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		
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MTL: -	© □	

**BALDOR - RELIANCE®**

3PH, DV, 9 LEADS, DELTA CONNECTION

SH 1 of 1

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