

# **BALDOR**® • ***RELIANCE***

## **Product Information Packet**

# **EM2514T**

**20HP,3510RPM,3PH,60HZ,254T,3928M,OPSB,F1**

Part Detail							
Revision:	G	Status:	PRD/A	Change #:		Proprietary:	No
Type:	AC	Prod. Type:	3928M	Elec. Spec:	39WGX101	CD Diagram:	CD0180
Enclosure:	OPSB	Mfg Plant:		Mech. Spec:	39K57	Layout:	39LYK057
Frame:	254T	Mounting:	F1	Poles:	02	Created Date:	10-22-2010
Base:	RG	Rotation:	R	Insulation:	F	Eff. Date:	11-09-2016
Leads:	9#12					Replaced By:	
Literature:		Elec. Diagram:					

<b>Nameplate NP3553L</b>										
<b>CAT.NO.</b>	EM2514T									
<b>SPEC.</b>	39K057X101G1									
<b>HP</b>	20									
<b>VOLTS</b>	230/460									
<b>AMP</b>	47/23.5									
<b>RPM</b>	3510									
<b>FRAME</b>	254T				<b>HZ</b>	60			<b>PH</b>	3
<b>SER.F.</b>	1.15		<b>CODE</b>	G	<b>DES</b>	B		<b>CL</b>	F	
<b>NEMA-NOM-EFF</b>	91		<b>PF</b>	88						
<b>RATING</b>	40C AMB-CONT									
<b>CC</b>	010A				<b>USABLE AT 208V</b>			51		
<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>										

Parts List		
Part Number	Description	Quantity
SA205151	SA 39K057X101G1	1.000 EA
RA192395	RA 39K057X101G1	1.000 EA
S/P107-000-005	SUPER-E PROC'S(254/6 FR.) ZK PLANT - POL	1.000 EA
HA6361A01	LIFTING LUG FOR 37, 39 & 40 FRAME ZINC	2.000 EA
HA6016	ADAPTER, CAST CONDUIT BOX	1.000 EA
09CB3002	CB W/1.38 LEAD HOLE FOR 37, 39, 307 & 30	1.000 EA
HW1001A25	LOCKWASHER 1/4, ZINC PLT .493 OD, .255 I	2.000 EA
WD1000B17	T&B CX35TN TERMINAL	1.000 EA
51XW1032A06	10-32 X .38, TAPTITE II, HEX WSHR SLTD S	1.000 EA
39EP3200A01SP	FR/PU ENDPLATE, MACH	1.000 EA
HW5100A08	W3118-035 WVY WSHR (WB)	1.000 EA
39EP3201A13	PU ENDPLATE, MACH	1.000 EA
XY3816A12	3/8-16 FINISHED NUT	8.000 EA
09CB3501	CONDUIT BOX LID FOR 09CB3001 & 09CB3002	1.000 EA
51XW2520A12	.25-20 X .75, TAPTITE II, HEX WSHR SLTD	2.000 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
MN416A01	TAG-INSTAL-MAINT no wire (1000/bx) 11/14	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, POLYREX EM EXXON (USe 4824-15A)	0.030 LB
HA4051A00	PLASTIC CAP FOR GREASE FITTING	1.000 EA

<b>Parts List (continued)</b>		
<b>Part Number</b>	<b>Description</b>	<b>Quantity</b>
HW4500A03	GREASE FITTING, .125 NPT 1610(ALEMITE) 8	1.000 EA
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
39AD2002C01	BAFFLE PLATE,"X" DIM=2.12 OPEN SLOT BAND	1.000 EA
39AD2002C01	BAFFLE PLATE,"X" DIM=2.12 OPEN SLOT BAND	1.000 EA
HA3154A09	TB STUD 3/8-16 X 16.25	4.000 EA
LB1119N	WARNING LABEL	1.000 EA
LC0181	CONNECTION LABEL	1.000 EA
NP3553L	ALUM SUPER-E VPWM INVERTER READY UL	1.000 EA
39PA1000	PACKAGING GROUP 39 PRINT	1.000 EA

<b>Accessories</b>		
<b>Part Number</b>	<b>Description</b>	<b>Multiplier</b>
39-3400	C FACE KIT	A8

**AC Induction Motor Performance Data**

Record # 13049 - Typical performance - not guaranteed values

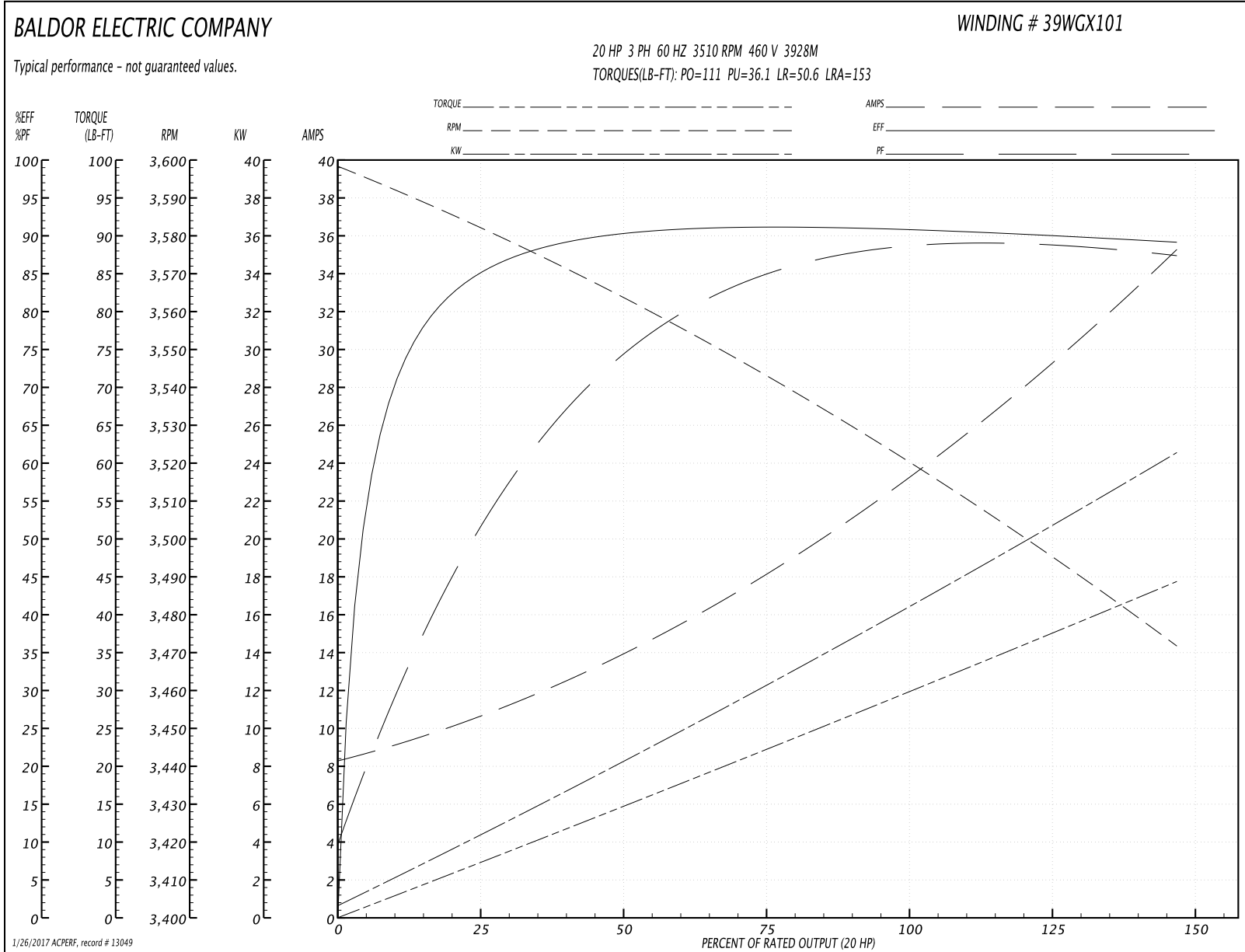
<b>Winding:</b> 39WGX101-R004	<b>Type:</b> 3928M	<b>Enclosure:</b> OPSB
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Nameplate Data				460 V, 60 Hz: High Voltage Connection	
Rated Output (HP)	20			Full Load Torque	29.6 LB-FT
Volts	230/460			Start Configuration	direct on line
Full Load Amps	47/23.5			Breakdown Torque	111 LB-FT
R.P.M.	3510			Pull-up Torque	36.1 LB-FT
Hz	60	Phase	3	Locked-rotor Torque	50.6 LB-FT
NEMA Design Code	B	KVA Code	G	Starting Current	153 A
Service Factor (S.F.)	1.15			No-load Current	8.61 A
NEMA Nom. Eff.	91	Power Factor	88	Line-line Res. @ 25°C	0.512 Ω
Rating - Duty	40C AMB-CONT			Temp. Rise @ Rated Load	44°C
S.F. Amps				Temp. Rise @ S.F. Load	54°C
				Locked-rotor Power Factor	30
				Rotor inertia	0.715 LB-FT <sup>2</sup>

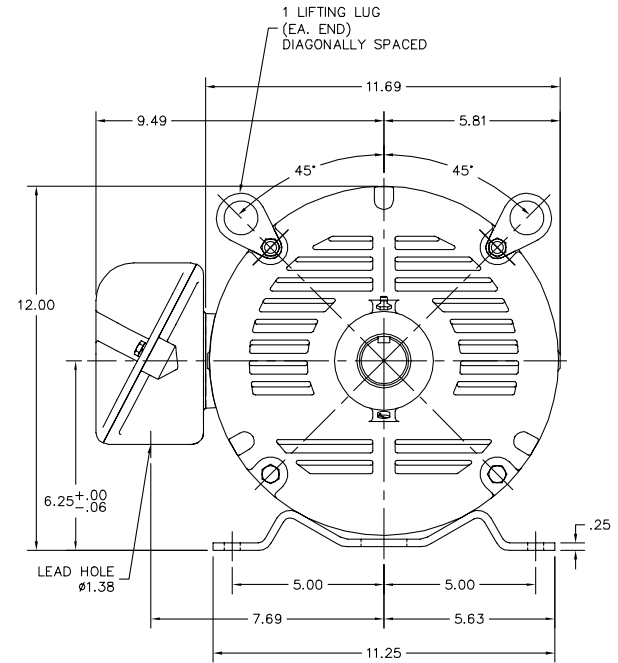
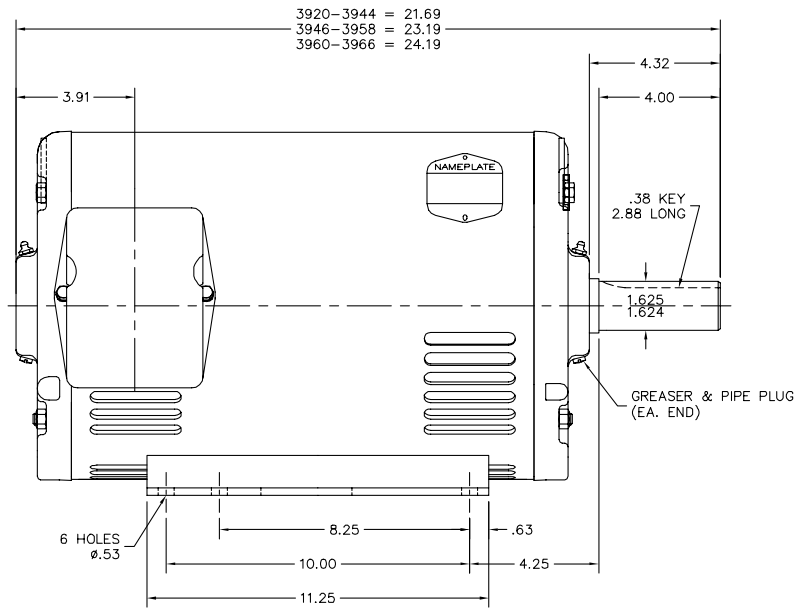
Load Characteristics 460 V, 60 Hz, 20 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	52	74	83	87	89	89	88
Efficiency	84.7	90.1	91.2	91	90.1	89.1	90.5
Speed	3581	3563	3544	3522	3496	3472	3506
Line amperes	10.2	13.9	18.1	23.3	29.1	35	26.78

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



39LYK057



39LYK057

CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT BALDOR'S PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION.

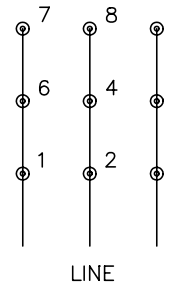
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MTL: -		

**BALDOR**  
 HORZ OPSB 254-6T SUPER-E  
 SH 1 of 1

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.

REV. DESC: REVISE TO SHOW OPTIONAL COLORS			
REV. LTR: C	BY: JLP	REVISED: 01/21/99 2:28	TDR: 0171435
0810D0		FILE: AAA00005148	MDL: -
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**BALDOR ELECTRIC Co.**

3PH, DV, 9 LEADS, DELTA CONNECTION

CD0180