

**BALDOR • RELIANCE**

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# Customer information packet

## EM2514T-8

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

Class - None

Division - Not Applicable

## Specifications

Enclosure	OPSB
Frame	254T
Frame Material	Steel
Frequency	60.00 Hz
Haz Area Class and Group	None
Haz Area Division	Not Applicable
Motor Letter Type	Three Phase
Output @ Frequency	20.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	3600 RPM @ 60 HZ
Voltage @ Frequency	200.0 V @ 60 HZ
Agency Approvals	CSA EEV CURUSEEV 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	53.000 A @ 200.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	91.0 %
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	W
Type	AC
Mech. spec.	39K57
Base	
Status	PRD/A
Elec. spec.	39WGX814
Layout	39LYK057
Eff. date	06-11-2024
CD Diagram	CD0695
Poles	02
Leads	6#8
Proprietary	False
Created date	05-14-2012

High Voltage Full Load Amps	53.0 a
Insulation Class	F
Inverter Code	Inverter Ready
IP Rating	NONE
KVA Code	G
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	No Locked Bearing
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	6 @ 8 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3928M
Mounting Arrangement	F1
Number of Poles	2
Overall Length	21.69 IN
Power Factor	88
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	1.625 IN
Shaft Extension Location	Pulley End
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	3510 rpm
Speed Code	Single Speed
Starting Method	Part Winding
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**

<b>NP3553L</b>									
<b>CAT.NO.</b>	EM2514T-8								
<b>SPEC</b>	39K057X814								
<b>HP</b>	20								
<b>VOLTS</b>	200								
<b>AMPS</b>	53								
<b>RPM</b>	3510								
<b>FRAME</b>	254T		<b>HZ</b>	60		<b>PH</b>	3		
<b>SF</b>	1.15	<b>CODE</b>	G	<b>DES</b>	B	<b>CLASS</b>	F		
<b>NEMA NOM. EFF</b>	91	<b>PF</b>	88						
<b>RATING</b>	40C AMB-CONT								
<b>CC</b>	010A								
<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>									

**Accessories**

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

**AC Induction Motor Performance Data**

Record # 38396

Typical performance - not guaranteed values

Winding: 39WGX814-R001		Type: 3928M	Enclosure: OPSB		
<b>Nameplate Data</b>			<b>200 V, 60 Hz: Single Voltage Motor</b>		
Rated Output (HP)	20	Full Load Torque	29.6 LB-FT		
Volts	200	Start Configuration	direct on line		
Full Load Amps	53	Breakdown Torque	105 LB-FT		
R.P.M.	3510	Pull-up Torque	34.1 LB-FT		
Hz	60	Phase	3	Locked-rotor Torque	47.8 LB-FT
NEMA Design Code	B	KVA Code	G	Starting Current	333 A
Service Factor (S.F.)	1.15	No-load Current	18.2 A		
NEMA Nom. Eff.	91	Power Factor	88	Line-line Res. @ 25°C	0.102 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 200 V, 60 Hz, 20 HP**

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	58	77	86	88	89	88	89
Efficiency	85.5	90.7	91.5	91	90	88.8	90.4
Speed	3580	3561	3541	3518	3491	3465	3502
Line amperes	22.2	31	40.8	53.1	66.5	80.4	61.1

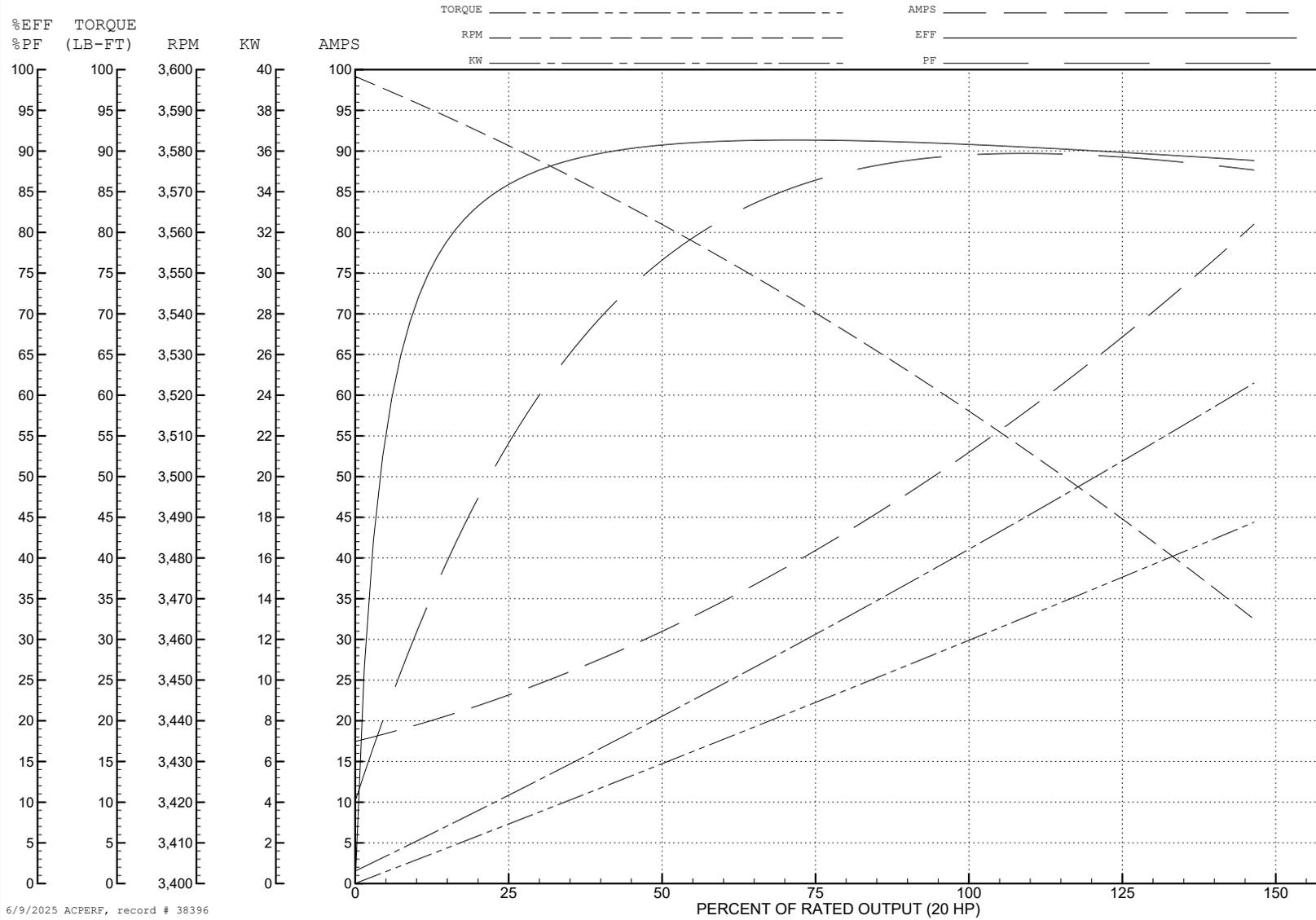
ABB Motors and Mechanical Inc.

WINDING # 39WGX814

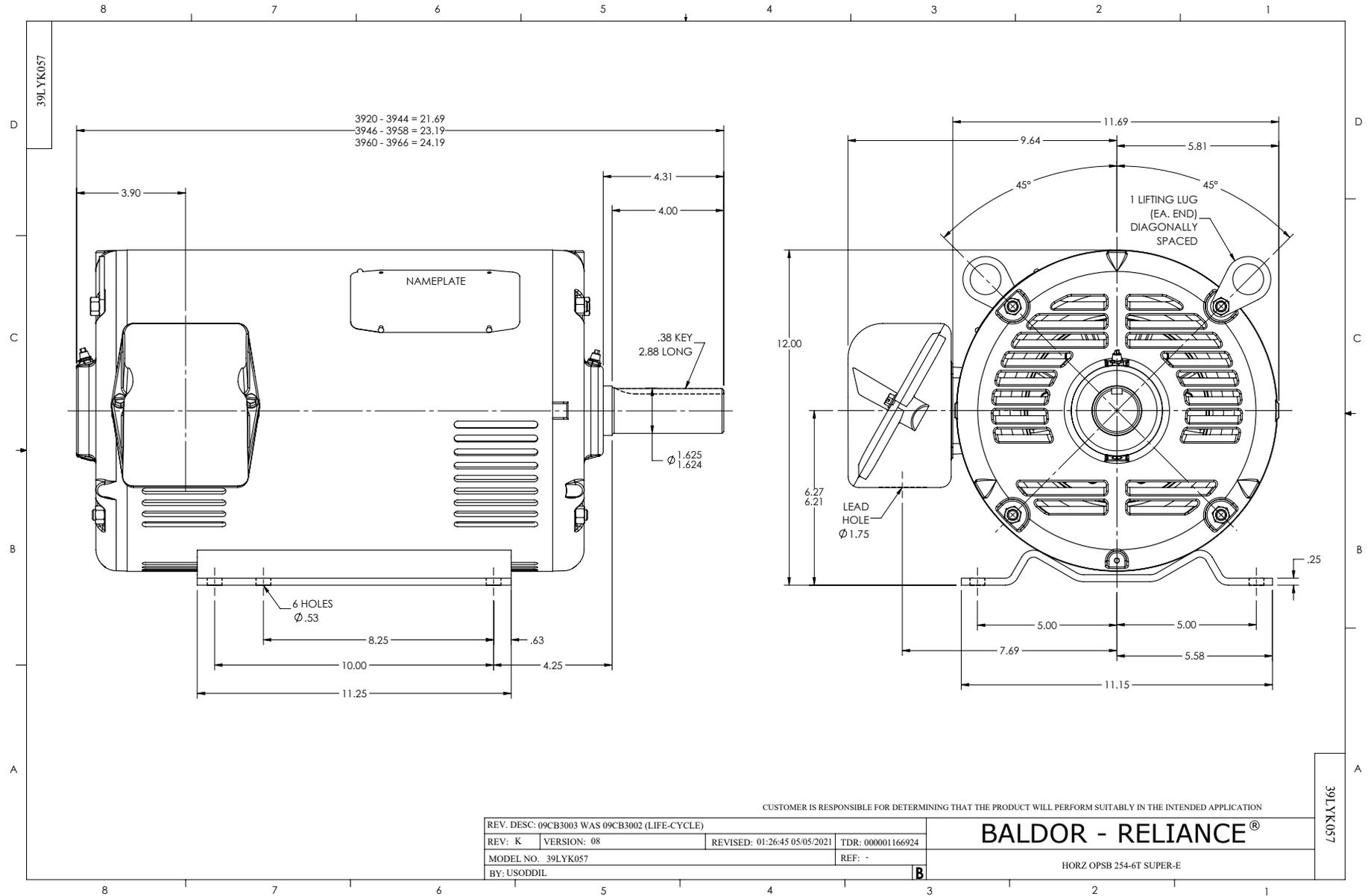
20 HP 3 PH 60 HZ 3510 RPM 200 V 3928M

Typical performance - not guaranteed values.

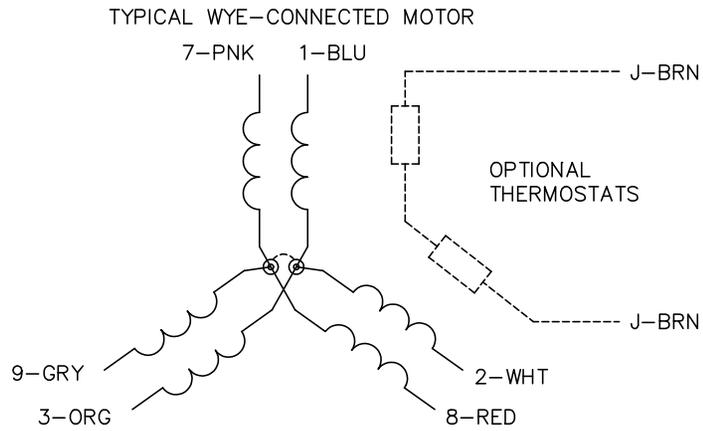
TORQUES (LB-FT): PO=105 PU=34.1 LR=47.8 LRA=333



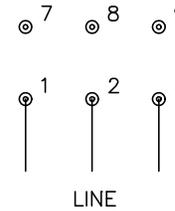
6/9/2025 ACPERF, record # 38396



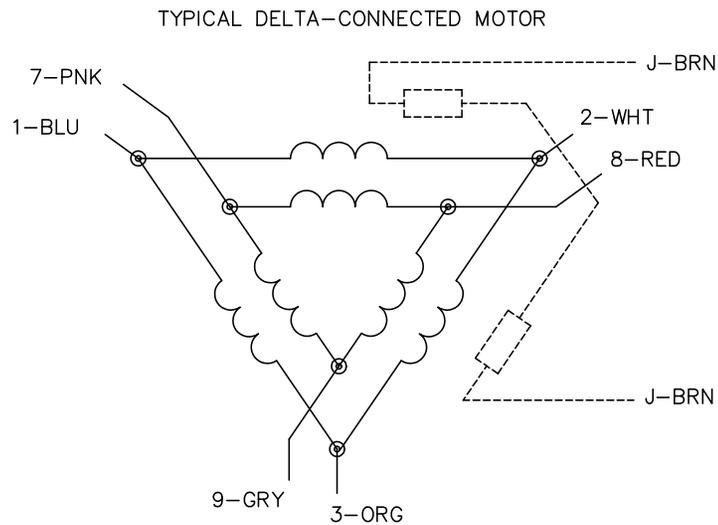
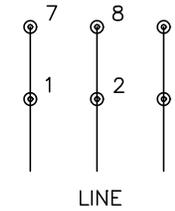
CD0695



START CONNECTION



RUN CONNECTION



NOTES:

1. MOTOR MAY BE 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 ALWAYS BE NUMBERED AS SHOWN.

CD0695

REV. DESC: REVISE TO SHOW OPTIONAL COLORS			
REV. LTR: C	BY: JLP	REVISED: 01/21/99 3:19	TDR: 0171435
S69000		FILE: AAA00005151	MDL: -
		MTL: -	

**BALDOR ELECTRIC Co.**

3PH, SV, 6 LEADS, PART WINDING START