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# Customer information packet

## EM2514T-G

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

Class -

Division - Not Applicable

## Specifications

Enclosure	OPSB
Frame	254T
Frame Material	Steel
Frequency	60.00 Hz
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	460.0 V @ 60 HZ 230.0 V @ 60 HZ
Agency Approvals	CSA EEV UR CSA
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	23.500 A @ 460.0 V 47.000 A @ 230.0 V 51.000 A @ 208.0 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	Y
Type	AC
Mech. spec.	39E366
Base	
Status	PRD/A
Elec. spec.	39WGX101
Layout	39LYE366
Eff. date	12-09-2024
CD Diagram	CD0180
Poles	02
Leads	9#12
Proprietary	False
Created date	11-29-2011

High Voltage Full Load Amps	23.5 a
Insulation Class	H
Inverter Code	Inverter Ready
KVA Code	G
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	No Locked Bearing
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	9 @ 12 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	Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	3510 rpm
Speed Code	Single Speed
Starting Method	Direct on line
Thermal Device - Bearing	None
Thermal Device - Winding	None
Vibration Sensor Indicator	No Vibration Sensor
Winding Thermal 1	None
Winding Thermal 2	None

**Nameplate**

<b>NP3553LUA</b>										
<b>CAT.NO.</b>	EM2514T-G									
<b>SPEC.</b>	39E366X101G1									
<b>HP</b>	20									
<b>VOLTS</b>	230/460									
<b>AMPS</b>	47/23.5									
<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>	A	<b>CLASS</b>	H			
<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>SN</b>								
<b>DE</b>	6309	<b>ODE</b>	6208							
<b>VPWM INVERTER READY</b>										
<b>CT30-60(2:1) VT3-60(20:1)</b>										
<b>USABLE AT</b>	50HZ 20HP 190/380V 56/28A							<b>SF1.0</b>		

**AC Induction Motor Performance Data**

Record # 36295

Typical performance - not guaranteed values

Winding: 39WGX101-R010		Type: 3928M	Enclosure: OPSB	
<b>Nameplate Data</b>			<b>460 V, 60 Hz: High Voltage Connection</b>	
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

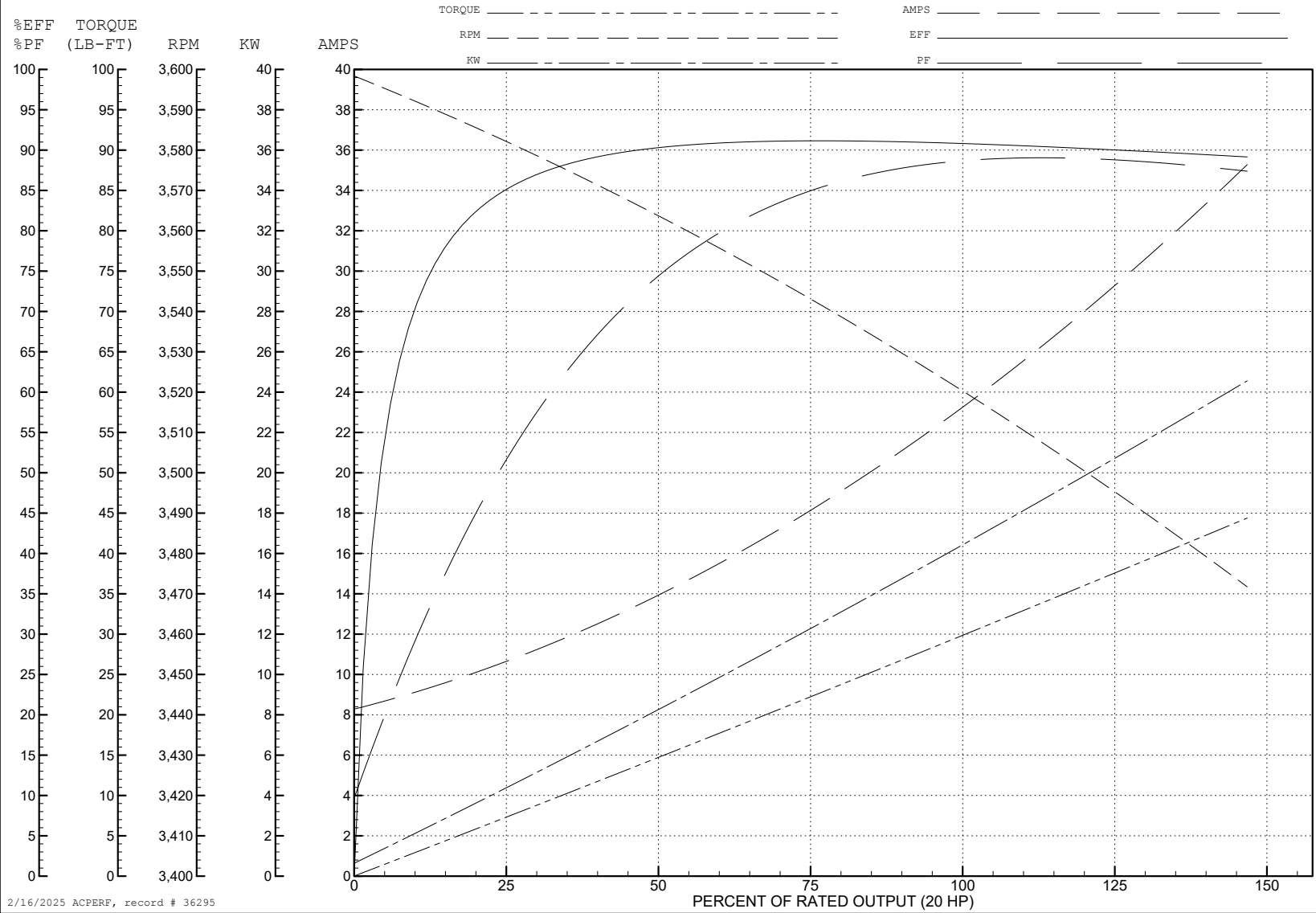
ABB Motors and Mechanical Inc.

WINDING # 39WGX101

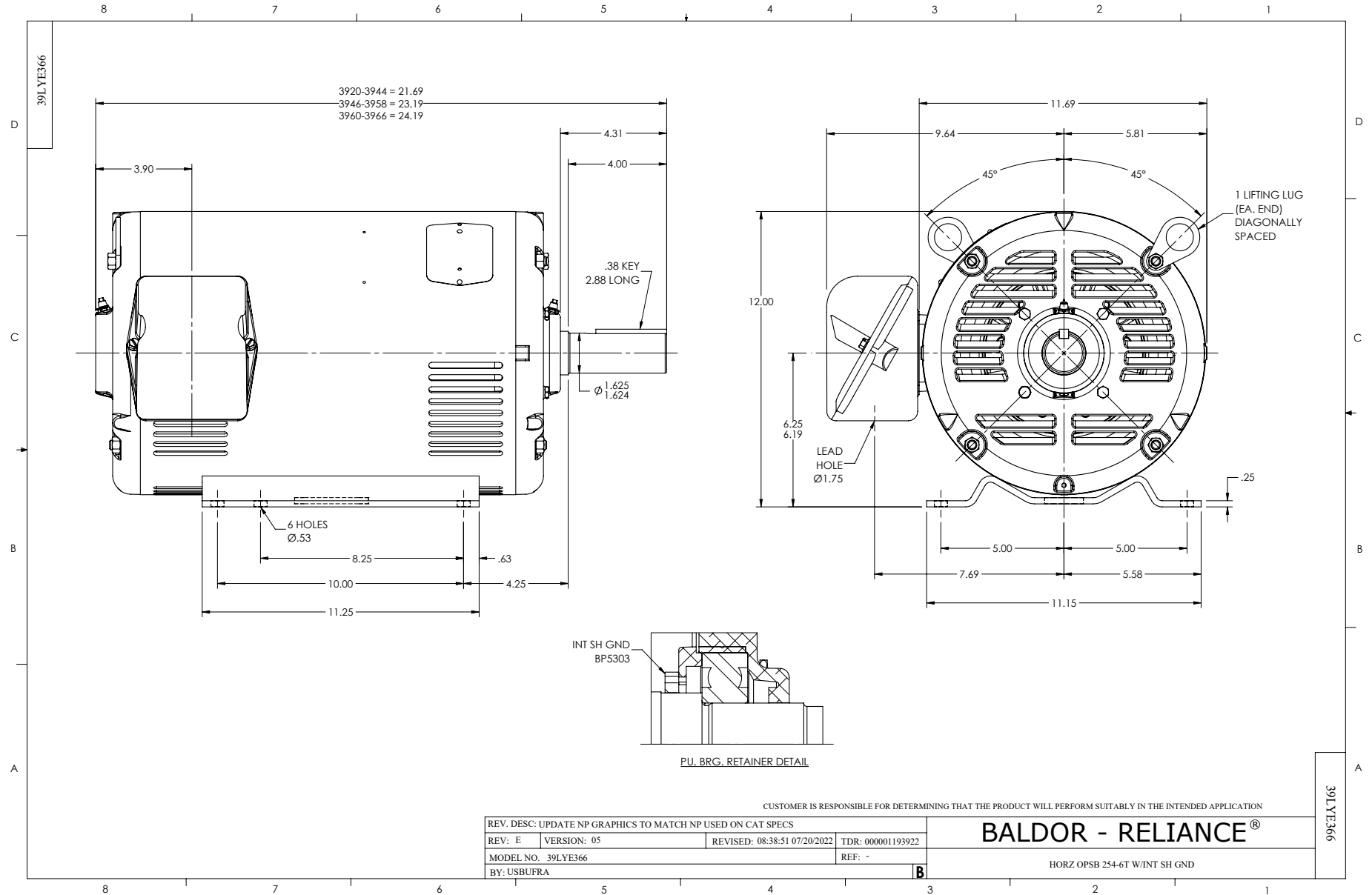
Typical performance - not guaranteed values.

20 HP 3 PH 60 HZ 3510 RPM 460 V 3928M

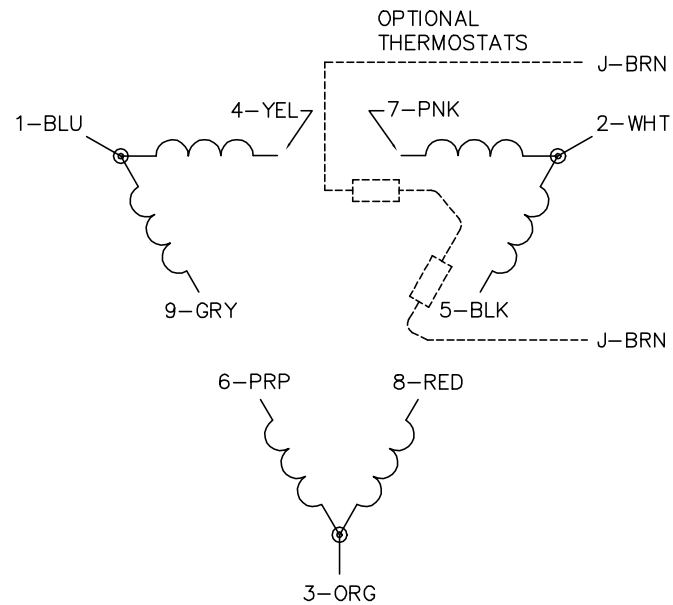
TORQUES (LB-FT): PO=111 PU=36.1 LR=50.6 LRA=153



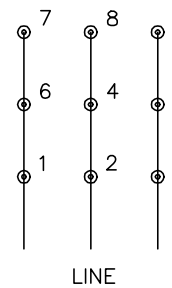
2/16/2025 ACPERF, record # 36295



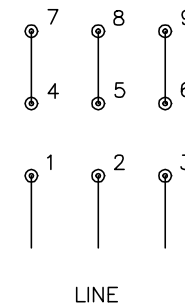
CD0180



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		
REV. LTR: D	VERSION: 01	TDR: 000001099922
FILE: \AAA\00005\148	REVISED: 10: 25: 29 02/19/2019	BY: ENBRIRO
MTL: -	© □	

**BALDOR - RELIANCE®**

3PH, DV, 9 LEADS, DELTA CONNECTION

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