

**BALDOR • RELIANCE**

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# Customer information packet

## EM2515T-8

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

Class - None

Division - Not Applicable

## Specifications

Enclosure	OPSB
Frame	256T
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	1800 RPM @ 60 HZ
Voltage @ Frequency	200.0 V @ 60 HZ
Agency Approvals	NEMA PREMIUM CURUSEEV
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	55.000 A @ 200.0 V
Design Code	A
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	93.0 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Face Code	Standard
Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	55.0 a
Insulation Class	F
Inverter Code	Inverter Ready

## Part detail

Revision	K
Type	AC
Mech. spec.	39K57
Base	
Status	PRD/A
Elec. spec.	39WGX981
Layout	39LYK057
Eff. date	11-27-2023
CD Diagram	CD0695
Poles	04
Leads	6#8
Proprietary	False
Created date	06-20-2016

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	3948M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	23.19 IN
Power Factor	85
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	1765 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

**Nameplate**

<b>NP1259L</b>									
<b>CAT.NO.</b>	EM2515T-8								
<b>SPEC.</b>	39K057X981								
<b>HP</b>	20								
<b>VOLTS</b>	200								
<b>AMP</b>	55								
<b>RPM</b>	1765								
<b>FRAME</b>	256T		<b>HZ</b>	60		<b>PH</b>	3		
<b>SER.F.</b>	1.15	<b>CODE</b>	G	<b>DES</b>	A	<b>CL</b>	F		
<b>NEMA-NOM-EFF</b>	93	<b>PF</b>	85						
<b>RATING</b>	40C AMB-CONT								
<b>CC</b>	010A								
<b>DE</b>	6309		<b>ODE</b>	6208					
<b>ENCL</b>	OPSB	<b>SN</b>							

**Accessories**

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

**AC Induction Motor Performance Data**

Record # 57709

Typical performance - not guaranteed values

Winding: 39WGX981-R001		Type: 3948M	Enclosure: OPSB		
<b>Nameplate Data</b>			<b>200 V, 60 Hz: Single Voltage Motor</b>		
Rated Output (HP)	20	Full Load Torque	59.8 LB-FT		
Volts	200	Start Configuration	direct on line		
Full Load Amps	55	Breakdown Torque	182 LB-FT		
R.P.M.	1765	Pull-up Torque	76.1 LB-FT		
Hz	60	Phase	3	Locked-rotor Torque	109 LB-FT
NEMA Design Code	A	KVA Code	G	Starting Current	350 A
Service Factor (S.F.)	1.15	No-load Current	19.6 A		
NEMA Nom. Eff.	93	Power Factor	85	Line-line Res. @ 25°C	0.0886 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	
			Rotor inertia	2.1 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	51	73	82	85	87	87	86
Efficiency	90.5	93.3	93.5	93.1	92.1	90.8	92.5
Speed	1792	1785	1776	1767	1757	1745	1761
Line amperes	23.5	31.7	42.4	54.5	67.5	81.9	62.3

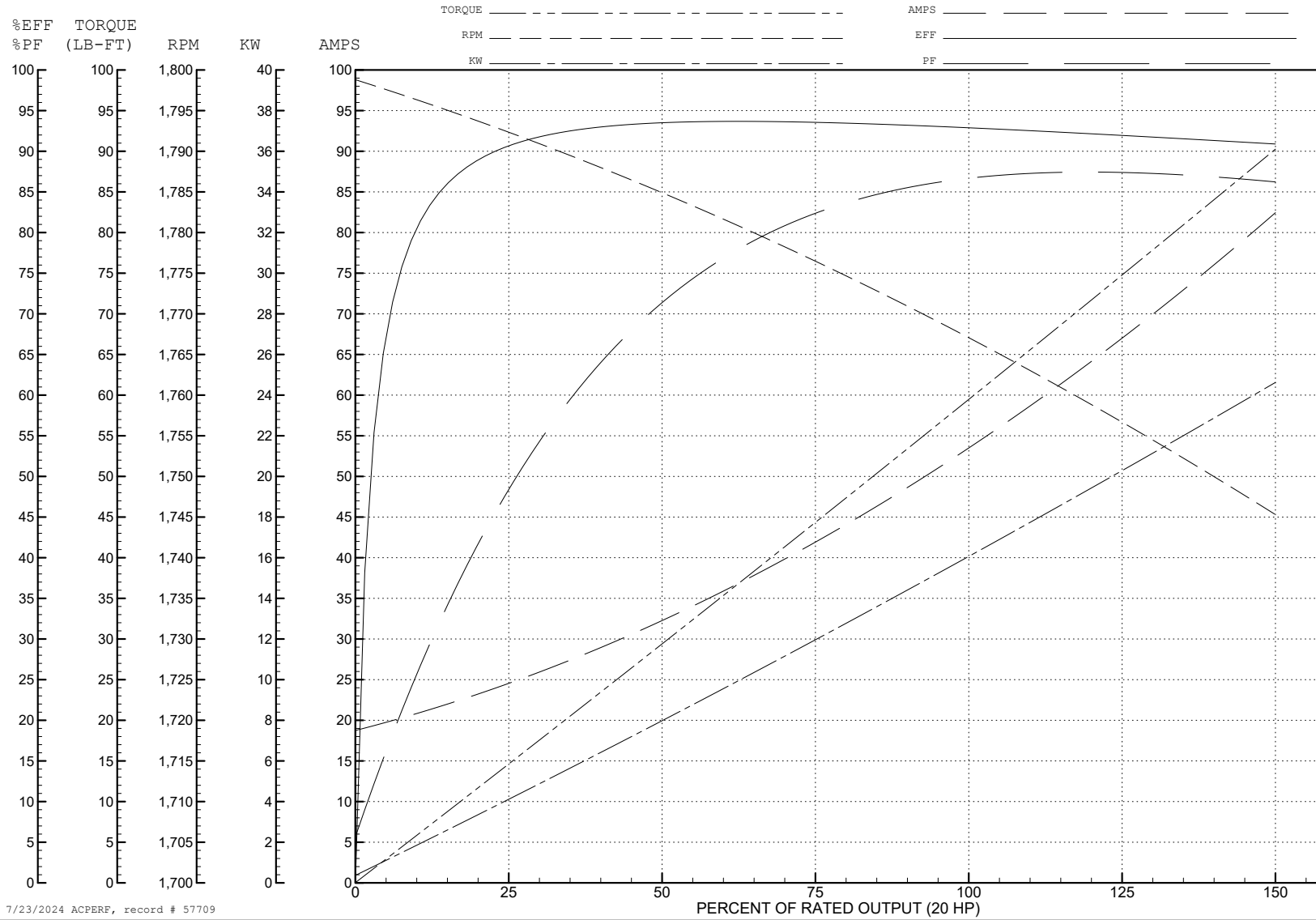
ABB Motors and Mechanical Inc.

WINDING # 39WGX981

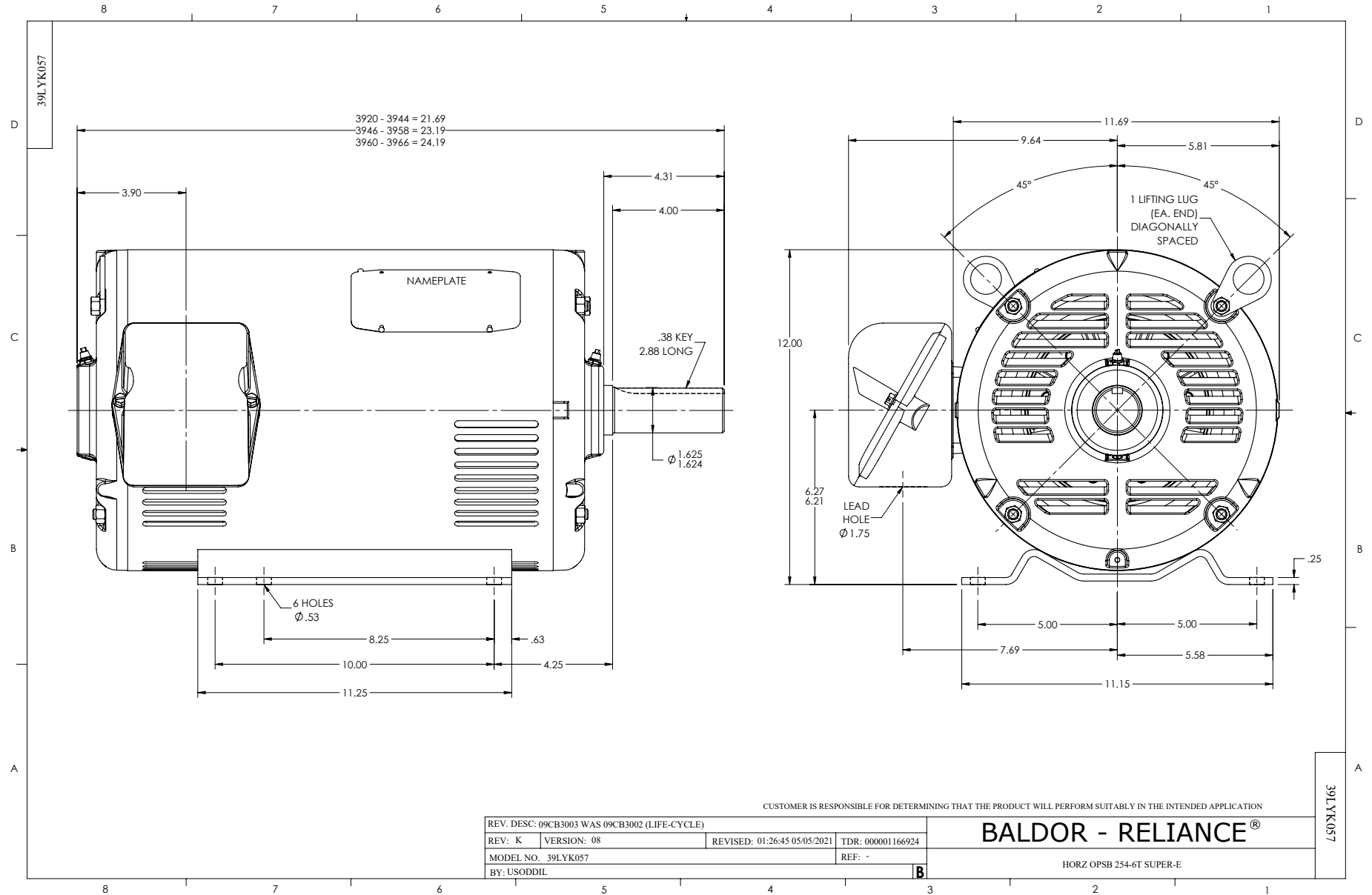
Typical performance - not guaranteed values.

20 HP 3 PH 60 HZ 1765 RPM 200 V 3948M

TORQUES (LB-FT): PO=182 PU=76.1 LR=109 LRA=350

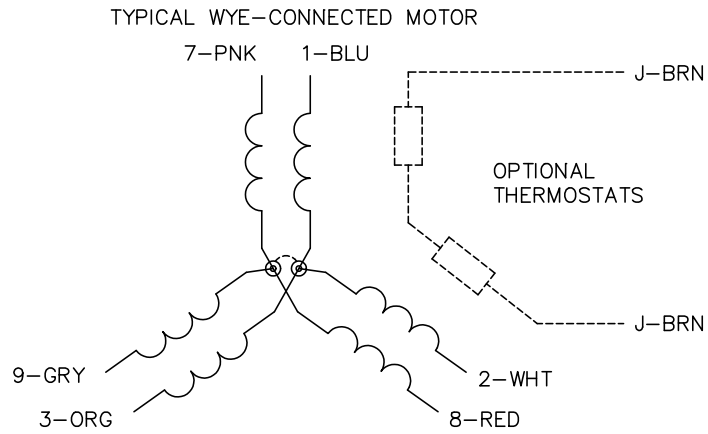


7/23/2024 ACPERF, record # 57709

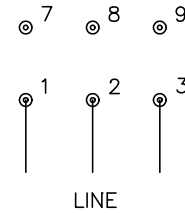




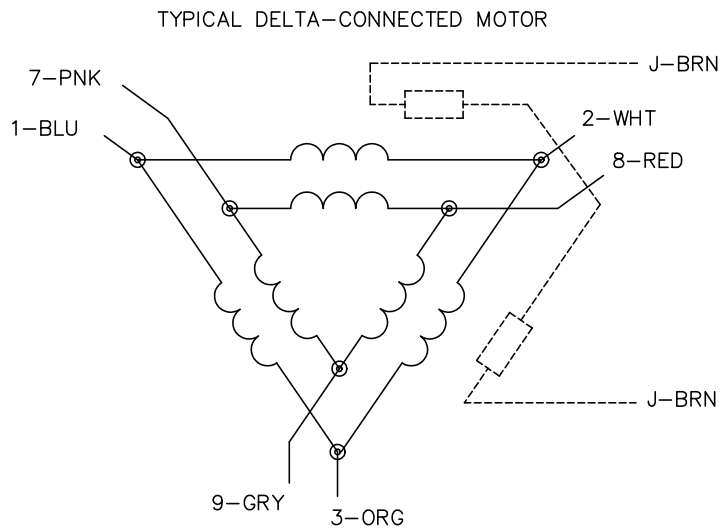
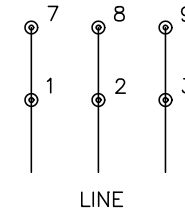
CD0695



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

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

REV. DESC: ADD CLASS CONN00000007		
REV. LTR: E	VERSION: 01	TDR: 000001099922
FILE: \AAA\00005\141	REVISED: 10:24:49 02/19/2019	BY: ENBRIRO
MTL: -	© □	

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

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