

**BALDOR • RELIANCE**

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# Customer information packet

## EM2515T-CI

20HP, 1765RPM, 3PH, 60HZ, 256T, 0946M, OPEN, F1

Class - None

Division - Not Applicable

## Specifications

Enclosure	OPEN
Frame	256T
Frame Material	Iron
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	230.0 V @ 60 HZ 460.0 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	48.000 A @ 230.0 V 49.000 A @ 208.0 V 24.000 A @ 460.0 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

## Part detail

Revision	W
Type	AC
Mech. spec.	09D01
Base	
Status	PRD/A
Elec. spec.	09WGY363
Layout	09LYD001
Eff. date	02-07-2023
CD Diagram	CD0005
Poles	04
Leads	9#12
Proprietary	False
Created date	03-08-2010

Front Face Code	Standard
Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	24.0 a
Insulation Class	F
Inverter Code	Inverter Ready
KVA Code	H
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	0946M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	22.37 IN
Power Factor	84
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	Direct on line
Thermal Device - Bearing	None
Thermal Device - Winding	None

<b>Vibration Sensor Indicator</b>	<b>No Vibration Sensor</b>
<b>Winding Thermal 1</b>	<b>None</b>
<b>Winding Thermal 2</b>	<b>None</b>

**Nameplate**

NP3554LUA										
<b>CAT.NO.</b>	EM2515T-CI			<b>P/N</b>				<b>ENCL</b>		<b>OPEN</b>
<b>SPEC.</b>	09D001Y363G2	<b>CC</b>	010A	<b>FRAME</b>		256T	<b>SER.NO.</b>			
<b>HP</b>	20	<b>CLASS</b>		F	<b>HZ</b>	60				
<b>RPM</b>	1765	<b>PH</b>	3	<b>DES</b>		A				
<b>VOLTS</b>	230/460			<b>CODE</b>		H	<b>ODE BRG</b>	6208	<b>DE BRG</b>	6309
<b>AMPS</b>	48/24			<b>USABLE AT 208V</b>			N/A			
<b>RATING</b>	40C AMB-CONT			<b>NEMA-NOM-EFF</b>		93	<b>GREASE</b>	POLYREX EM		
<b>PF</b>	84	<b>SER.F.</b>	1.15	<b>CT30-60(2:1) VT3-60(20:1)</b>						
<b>USABLE AT</b>	50HZ 20HP 190/380V 54/27A			SF 1.0						
<b>HTR-VOLTS</b>	<b>HTR-AMPS</b>	<b>MAX. SPACE HEATER TEMP.</b>								

**AC Induction Motor Performance Data**

Record # 32255

Typical performance - not guaranteed values

<b>Winding:</b> 09WGY363-R003		<b>Type:</b> 0946M		<b>Enclosure:</b> OPEN		
<b>Nameplate Data</b>			<b>460 V, 60 Hz: High Voltage Connection</b>			
<b>Rated Output (HP)</b>	20	<b>Full Load Torque</b>	60 LB-FT			
<b>Volts</b>	230/460	<b>Start Configuration</b>	direct on line			
<b>Full Load Amps</b>	48/24	<b>Breakdown Torque</b>	190 LB-FT			
<b>R.P.M.</b>	1765	<b>Pull-up Torque</b>	100 LB-FT			
<b>Hz</b>	60 <b>Phase</b>	3	<b>Locked-rotor Torque</b>	110 LB-FT		
<b>NEMA Design Code</b>	A <b>KVA Code</b>	H	<b>Starting Current</b>	164 A		
<b>Service Factor (S.F.)</b>	1.15	<b>No-load Current</b>	8.5 A			
<b>NEMA Nom. Eff.</b>	93 <b>Power Factor</b>	84	<b>Line-line Res. @ 25°C</b>	0.433 Ω		
<b>Rating - Duty</b>	40C AMB-CONT	<b>Temp. Rise @ Rated Load</b>	46°C			
<b>S.F. Amps</b>		<b>Temp. Rise @ S.F. Load</b>	56°C			
		<b>Locked-rotor Power Factor</b>	33.6			
		<b>Rotor inertia</b>	2.01 LB-FT <sup>2</sup>			

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

<b>% of Rated Load</b>	<b>25</b>	<b>50</b>	<b>75</b>	<b>100</b>	<b>125</b>	<b>150</b>	<b>S.F.</b>
<b>Power Factor</b>	52	74	83	87	89	89	88
<b>Efficiency</b>	87.4	91.9	92.8	93	92.2	91.4	92.4
<b>Speed</b>	1792	1784	1775	1767	1757	1748	1761
<b>Line amperes</b>	10.2	13.7	18.2	23.1	28.5	34.2	26.2

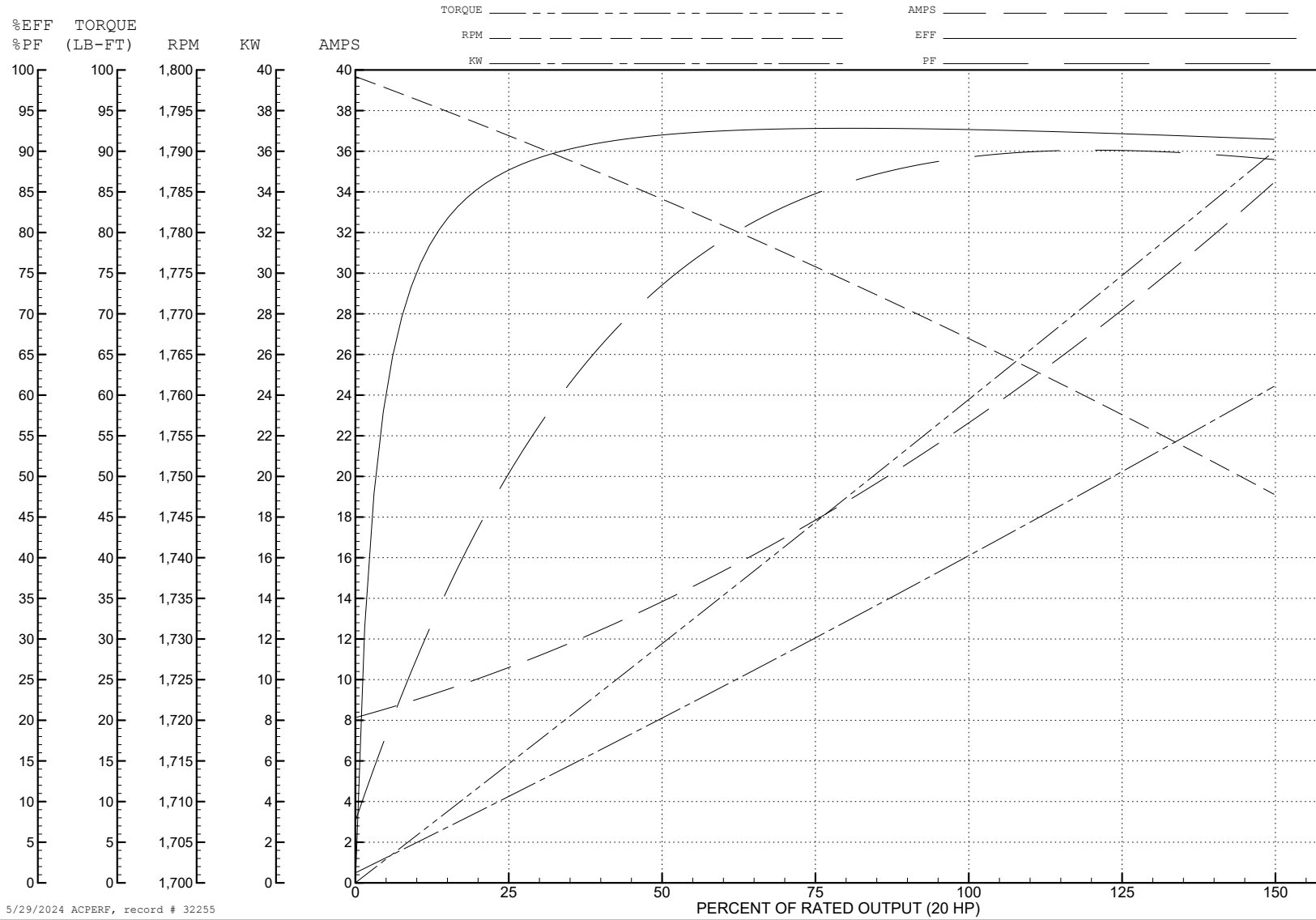
ABB Motors and Mechanical Inc.

WINDING # 09WGY363

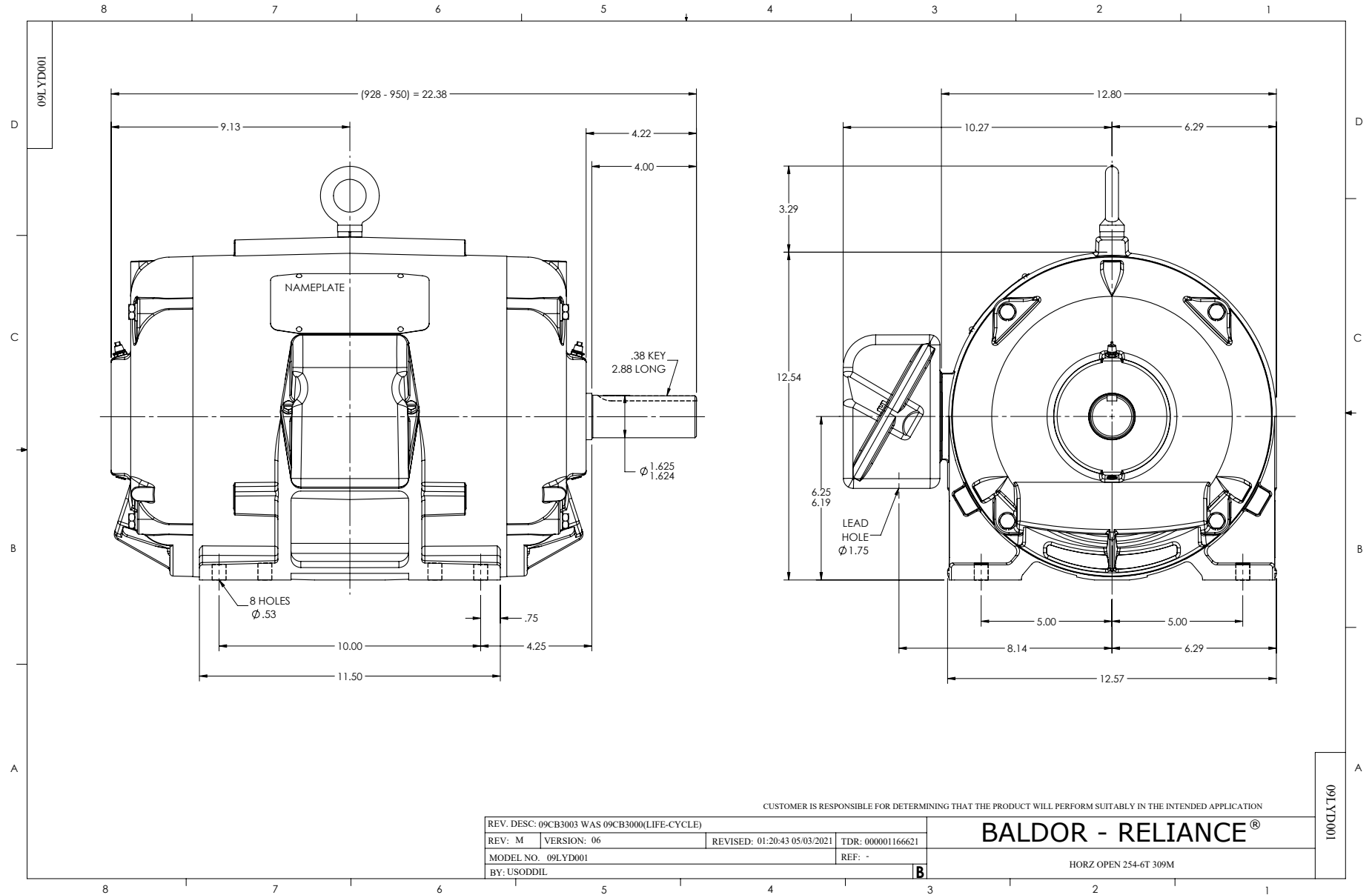
Typical performance - not guaranteed values.

20 HP 3 PH 60 HZ 1765 RPM 460 V 0946M

TORQUES (LB-FT): PO=190 PU=100 LR=110 LRA=164



5/29/2024 ACPERF, record # 32255





CD0005



LOW VOLTAGE  
(2Y)



LINE

HIGH VOLTAGE  
(1Y)



LINE

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.

CD0005

REV. DESC: REVISE TO SHOW OPTIONAL COLORS			
REV. LTR: E	BY: JLP	REVISED: 01/19/99 10:15	TDR: 0171435
S00000		FILE: AAA00005140	MDL: -
		MTL: -	

**BALDOR ELECTRIC Co.**

3PH, DV, 9 LEADS