

**BALDOR • RELIANCE**

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# Customer information packet

## VEDM3710T

7.5HP, 1770RPM, 3PH, 60HZ, 213TC, 3738M, TEFC

Class - None

Division - Not Applicable

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6/9/2025 4:40:07 AM

## Specifications

Enclosure	TEFC
Frame	213TC
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	7.500 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	460.0 V @ 60 HZ 230.0 V @ 60 HZ
Agency Approvals	CCSA US CSA EEV NEMA PREMIUM NEMA_PREMIUM UR
Ambient Temperature	40 °C
Auxillary Box	No Auxillary Box
Auxillary Box Lead Termination	None
Base Indicator	No Mounting
Bearing Grease Type	Polyrex EM (-20F +300F)
Blower	None
Constant Torque Speed Range	6
Current @ Voltage	9.500 A @ 460.0 V 20.000 A @ 208.0 V 19.000 A @ 230.0 V
Design Code	A
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	91.7 %
Electrically Isolated Bearing	Not Electrically Isolated

## Part detail

Revision	J
Type	AC
Mech. spec.	37N865
Base	
Status	PRD/A
Elec. spec.	37WGR872
Layout	37LYN865
Eff. date	07-09-2021
CD Diagram	CD0005
Poles	04
Leads	9#14
Proprietary	False
Created date	04-22-2016

<b>Feedback Device</b>	NO FEEDBACK
<b>Front Face Code</b>	Standard
<b>Front Shaft Indicator</b>	None
<b>Heater Indicator</b>	No Heater
<b>High Voltage Full Load Amps</b>	9.5 a
<b>Insulation Class</b>	F
<b>Inverter Code</b>	Inverter Ready
<b>KVA Code</b>	J
<b>Lifting Lugs</b>	Standard Lifting Lugs
<b>Locked Bearing Indicator</b>	Locked Bearing
<b>Max Speed</b>	2700 rpm
<b>Motor Lead Exit</b>	Ko Box
<b>Motor Lead Quantity/Wire Size</b>	9 @ 14 AWG
<b>Motor Lead Termination</b>	Flying Leads
<b>Motor Standards</b>	NEMA
<b>Motor Type</b>	3738M
<b>Mounting Arrangement</b>	F1
<b>Number of Poles</b>	4
<b>Overall Length</b>	19.76 IN
<b>Power Factor</b>	80
<b>Product Family</b>	Dirty Duty Plus
<b>Pulley End Bearing Type</b>	Sealed Bearing
<b>Pulley Face Code</b>	C-Face
<b>Pulley Shaft Indicator</b>	Standard
<b>Rodent Screen</b>	None
<b>RoHS Status</b>	ROHS COMPLIANT
<b>Service Factor</b>	1.15
<b>Shaft Diameter</b>	1.375 IN
<b>Shaft Extension Location</b>	Pulley End
<b>Shaft Ground Indicator</b>	No Shaft Grounding
<b>Shaft Rotation</b>	Reversible
<b>Shaft Slinger Indicator</b>	No Slinger
<b>Speed</b>	1770 rpm
<b>Speed Code</b>	Single Speed

<b>Starting Method</b>	Direct on line
<b>Thermal Device - Bearing</b>	None
<b>Thermal Device - Winding</b>	None
<b>Vibration Sensor Indicator</b>	No Vibration Sensor
<b>Winding Thermal 1</b>	None
<b>Winding Thermal 2</b>	None

**Nameplate**

**NP3504**

<b>CAT NO</b>	VEDM3710T				
<b>SPEC.</b>	37N865R872G1	<b>ENCL</b>	TEFC		
<b>FRAME</b>	213TC	<b>HP</b>	7.5		
<b>VOLTS</b>	230/460				
<b>FLA</b>	19/9.5	<b>I.P.</b>	56		
<b>RPM</b>	1770	<b>RPM MAX</b>	2700		
<b>HZ</b>	60	<b>PH</b>	3	<b>CLASS</b>	F
<b>SER.F.</b>	1.15	<b>DES</b>	A	<b>CC</b>	010A
<b>NEMA-NOM-EFF</b>	91.7				
<b>RATING</b>	40C AMB-CONT				
<b>DE BRG</b>	6307	<b>ODE BRG</b>	6206		
<b>GREASE</b>	POLYREX EM				
<b>C HP FR</b>	60	<b>C HP TO</b>	90		
<b>CT HZ FROM</b>	6	<b>CT HZ TO</b>	60	<b>VT HZ FROM</b>	6
<b>SER.NO</b>		<b>VT HZ TO</b>	60		
	50C AT 1.0 SF				

**AC Induction Motor Performance Data**

Record # 55756

Typical performance - not guaranteed values

<b>Winding: 37WGR872-R013</b>		<b>Type: 3738M</b>		<b>Enclosure: TEFC</b>	
<b>Nameplate Data</b>			<b>460 V, 60 Hz: High Voltage Connection</b>		
<b>Rated Output (HP)</b>	7.5		<b>Full Load Torque</b>	22.2 LB-FT	
<b>Volts</b>	230/460		<b>Start Configuration</b>	direct on line	
<b>Full Load Amps</b>	19/9.5		<b>Breakdown Torque</b>	70.9 LB-FT	
<b>R.P.M.</b>	1770		<b>Pull-up Torque</b>	32.6 LB-FT	
<b>Hz</b>	<b>60 Phase</b>	3	<b>Locked-rotor Torque</b>	43 LB-FT	
<b>NEMA Design Code</b>	<b>A KVA Code</b>	J	<b>Starting Current</b>	70.9 A	
<b>Service Factor (S.F.)</b>	1.15		<b>No-load Current</b>	4.31 A	
<b>NEMA Nom. Eff.</b>	<b>91.7 Power Factor</b>	80	<b>Line-line Res. @ 25°C</b>	1.41 Ω	
<b>Rating - Duty</b>	40C AMB-CONT		<b>Temp. Rise @ Rated Load</b>	63°C	
<b>S.F. Amps</b>			<b>Temp. Rise @ S.F. Load</b>	78°C	
			<b>Locked-rotor Power Factor</b>	37.2	
			<b>Rotor inertia</b>	0.934 LB-FT <sup>2</sup>	

**Load Characteristics 460 V, 60 Hz, 7.5 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>	42	64	75	80	83	84	82
<b>Efficiency</b>	87.1	91.6	92	92	91.1	89.8	91.5
<b>Speed</b>	1793	1786	1778	1770	1760	1750	1764
<b>Line amperes</b>	4.83	6.02	7.6	9.5	11.6	13.9	10.8

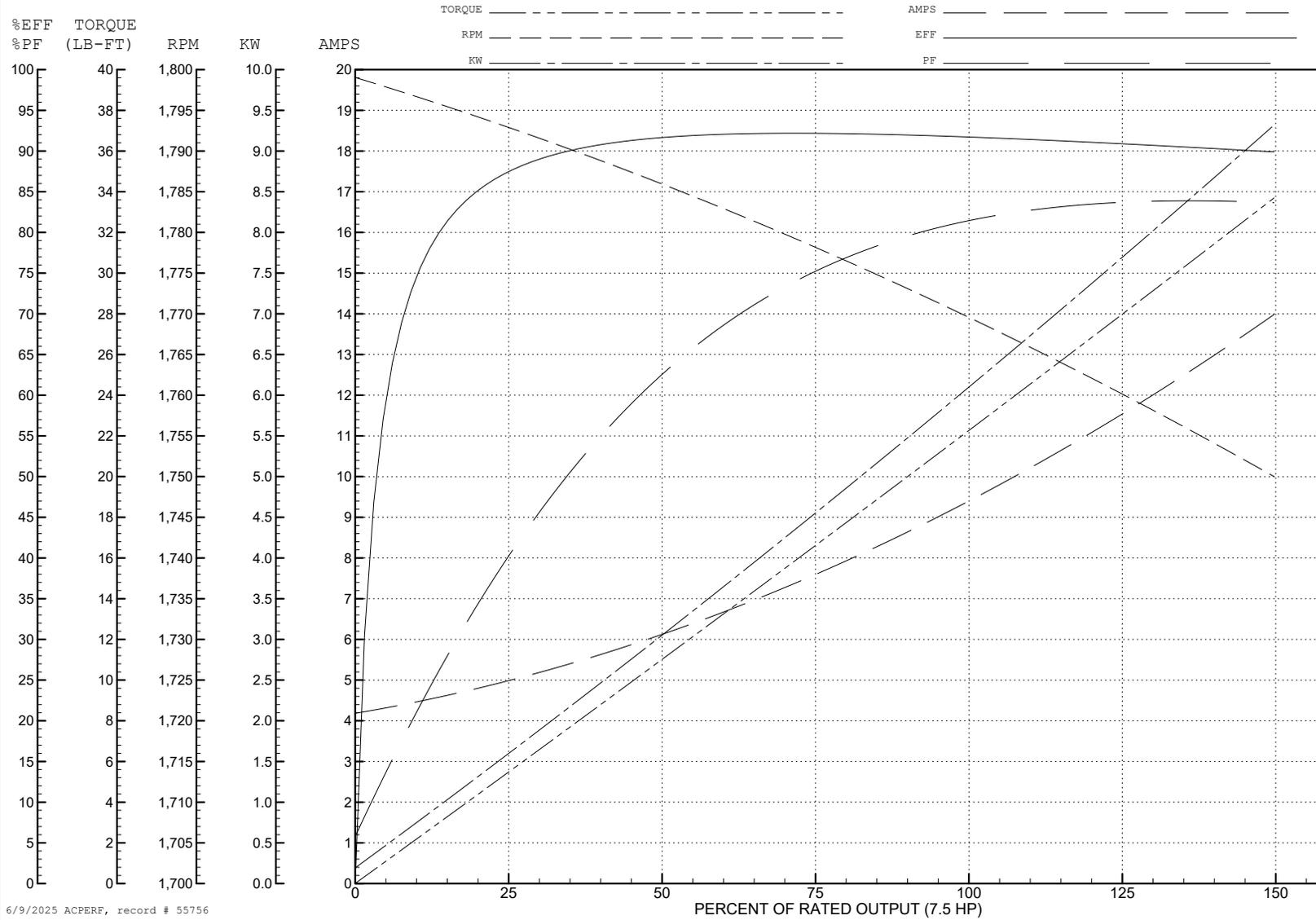
ABB Motors and Mechanical Inc.

WINDING # 37WGR872

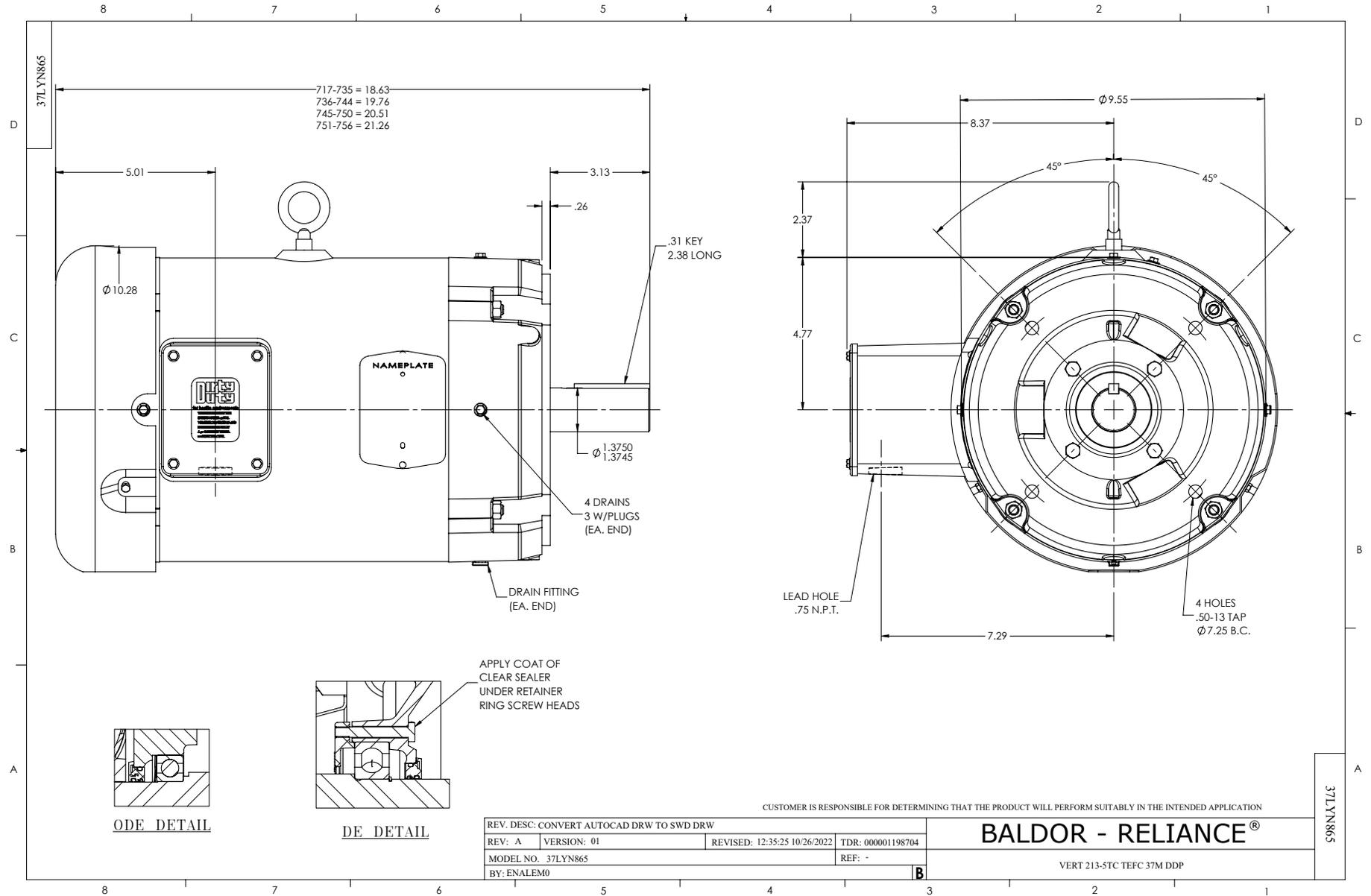
Typical performance - not guaranteed values.

7.5 HP 3 PH 60 HZ 1770 RPM 460 V 3738M

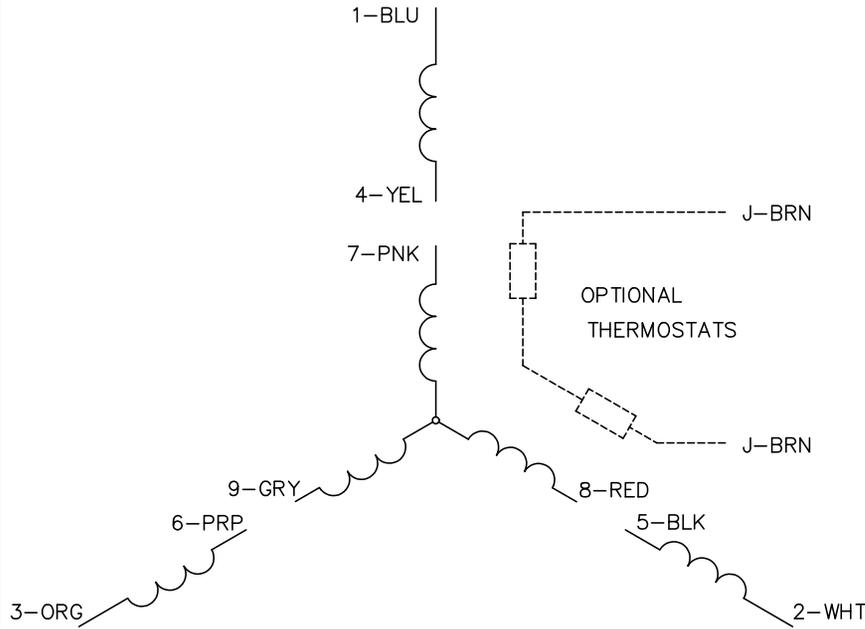
TORQUES (LB-FT): PO=70.9 PU=32.6 LR=43 LRA=70.9



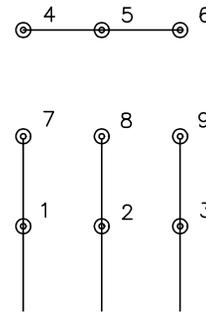
6/9/2025 ACPERF, record # 55756



CD0005

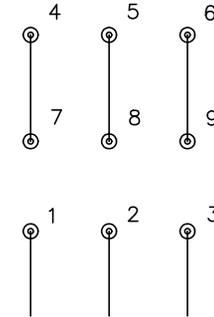


LOW VOLTAGE  
(2Y)



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