# Specifications\_



# Drip Proof UniDrive<sup>®</sup> Motor 24VDC 100Watt 110236

The UniDrive<sup>®</sup> motor has just one moving part, operates almost silently and gives you unprecedented flexibility in manufacturing lead time.

The new UniDrive<sup>®</sup> motor is a solution offering greater reliability and design freedom. The system is remarkably simple and cost effective. It consists of an externally-mounted direct drive brushless DC motor and an electronic speed control.

### Extreme Reliability: 300,000 Hour Bearing Life

The new UniDrive<sup>®</sup> system uses an extremely reliable 4<sup>%</sup>inch diameter brushless DC servo-motor with an electronically-controlled operating speed of just 280 rpm. It produces high torque at low speed without using gear reducers, linkages or drive chains. The net result of the low speed combined with the robust bearings is a 310,000 hour calculated bearing life (L<sub>10</sub> ANSI/AFBMA Std 9-1978.)

# **Almost Silent Operation**

The UniDrive<sup>®</sup> motor is almost silent in operation at full power. There are no gears, chains or other moving parts to generate noise.

### **Plug and Play Simplicity**

The UniDrive<sup>®</sup> motor controller is a rugged, reliable device that gives you a simple plug and play connection. You control your manufacturing lead-time.

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# **Simple to Service**

If a motor ever fails, it is easy to replace because it's mounted externally. Only one part number needs to be stocked for spares and repairs.

# **Drip Proof Enclosure**

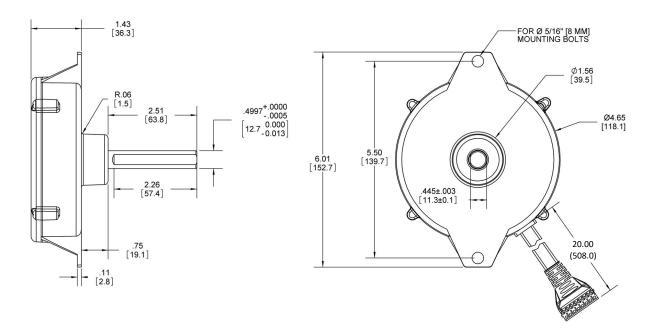
For use in wet (not high pressure wash-down) environments. Includes 303 stainless steel shaft, sealed front bearing and sealant applied to motor seams resulting in an IP 52 enclosure. Associated control electronics will require suitable enclosure by the installer.

### Features

- 24V brushless DC motor
- 4.63" Ø x 1.5"L
- 303 ASTM SS shaft 0.5"Ø x 2.5"L with flat
- Sealed front bearing
- Sealant at motor casting seams
- 20" leads with connector
- IP 52 drip proof enclosure
- 4-100W input
- 56-280 RPM
- 15 in-lbf continuous torque



# Specifications\_



US Patent 7,537,107

Motor Series		100W24			
Description	U	US Units		Metric Units	
Input Power					
Voltage (rated)	24	VDC	24	VDC	
Amperage (rated)	4	Amps	4	Amps	
Amperage (no-load)	0.17	Amps	0.17	Amps	
Watts (rated)	96	Watts	96	Watts	
Output					
Speed (rated)	280	RPM	29.3	r/s	
Speed (minimum)	56	RPM	5.9	r/s	
Torque (continuous)	15	ln∙lbf	1.69	N∙m	
Torque (starting)	42	ln·lbf	4.75	N∙m	
Motor Constants					
K <sub>E</sub> (Back EMF)	67.0	V/kRPM	0.64	V/r/s	
K <sub>T</sub> (Torque/Amp)	90.6	In∙oz/A	0.64	N·m/A	
R <sub>⊤</sub> (Terminal Resistance)	1.7	Ohms	1.7	Ohms	

UniDrive <sup>®</sup> is a registered trademark of Milwaukee Electronics Corporation or its subsidiaries.

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For more information, contact: <u>Sales@AutomationControlsGroup.com</u> Telephone: (619) 677-6530



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