

## UMC Powersaver – Multi Ratio

**UMC offers the widest variety of motors and gear ratios in the industry.**

We offer the widest variety of ratios to meet the unique demands of water application rates. The UMC Powersaver is available for dual voltage and single and three phase power for applications around the world.

As part of the UMC balanced drivetrain system the Powersaver 3.5 is designed for many years of trouble free operation.

**Design** – UMC saw the need for a more efficient electric motor and introduced the first Powersaver with a helical gear design, setting the standard for irrigation drivetrains over 25 years ago. This product has evolved into an efficient and reliable power transmission unit with models to fit all applications and it has become the standard method for powering center pivot irrigation systems.

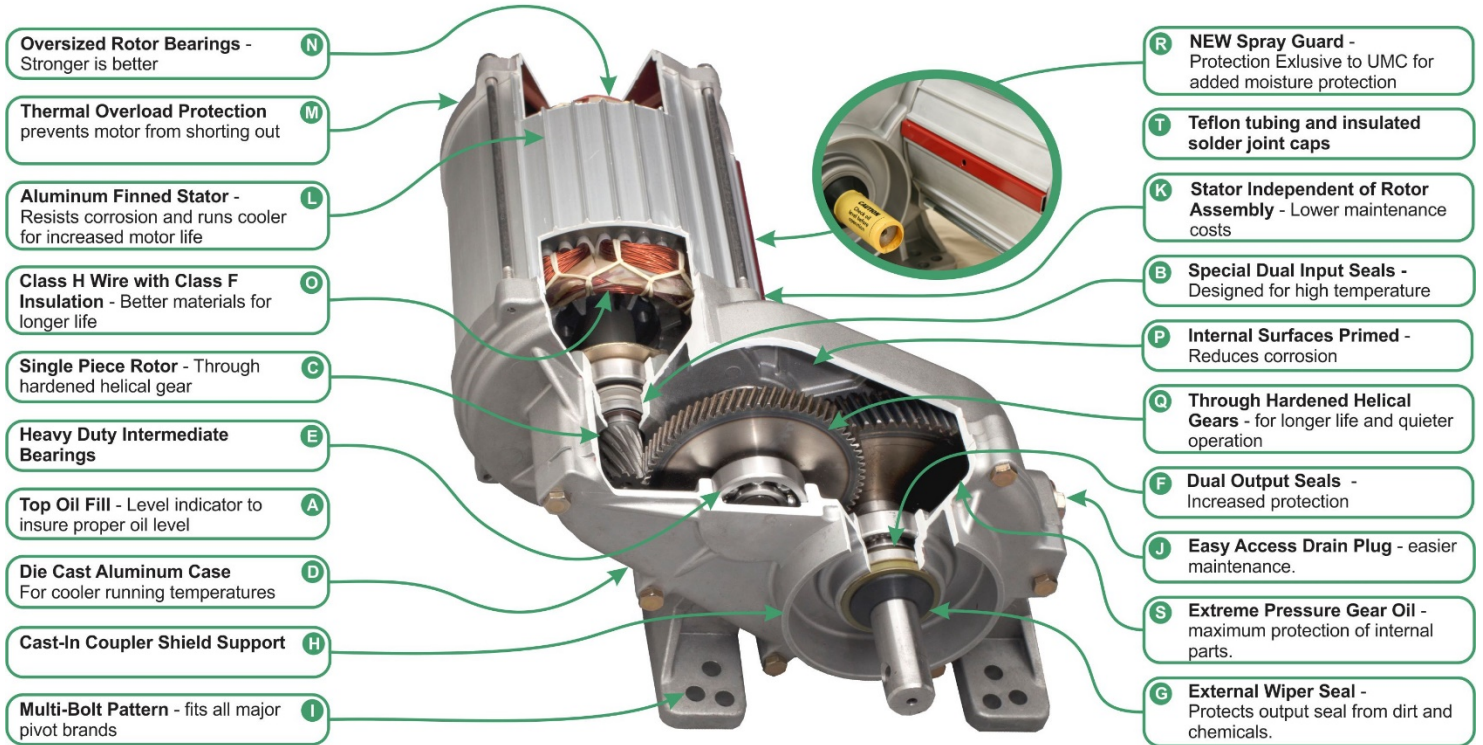


**Quality** – All of UMC’s Powersavers go through rigorous testing procedures and each finished unit is surge and high-pot tested prior to final assembly. Our motors are designed to meet UL, CSA, CCC, and CE requirements.

**Innovation** – Our Powersavers are designed with the grower in mind and feature many innovative design characteristics aimed at making service, maintenance, and installation faster and easier reducing service and downtime. Features such as the spray guard were designed to protect internal windings from the latest irrigation water techniques.

	<u>Valley</u>	<u>Valley</u>	<u>Valley</u>	<u>Zimmatic</u>	<u>UMC Powersaver Models:</u>					
	Standard speed	Mid-speed	High speed		<b>20:1</b>	<b>25:1</b>	<b>30:1</b>	<b>40:1</b>	<b>50:1</b>	<b>60:1</b>
<b>Output RPM</b>	34	43	68	43	86	67	57	44	35	29
<b>Motor RPM at Full Load</b>					1745	1745	1745	1745	1745	1745
<b>Nameplate HP</b>	0.6	0.75	1.2	0.75	1.5	1.5	1.5	0.75	0.75	0.75
<b>Torque In.-lbs.</b>	1100	1100	1100	1100	<b>1100</b>	<b>1350</b>	<b>1625</b>	<b>1100</b>	<b>1350</b>	<b>1625</b>
<b>Rated AMPS</b>	1.1	1.2	1.8	1.7	2.4	2.4	2.4	1.4	1.4	1.4
<b>Service Factor (SF)</b>	1.3	1.1	1.3	1.0	1.0	1.0	1.0	1.3	1.3	1.3
<b>Continuous HP Rating (@ Service Factor)</b>	0.78	0.78	1.5	0.75	<b>1.5</b>	<b>1.5</b>	<b>1.5</b>	<b>1.0</b>	<b>1.0</b>	<b>1.0</b>
<b>Continuous Torque Rating In.-lbs. (@ Service Factor)</b>	1400	1400	1400	1100	<b>1100</b>	<b>1350</b>	<b>1625</b>	<b>1400</b>	<b>1760</b>	<b>2100</b>
	<b>UMC Part Numbers 06168-XXXX</b>				<b>713D</b>	<b>713F</b>	<b>713B</b>	<b>713A</b>	<b>713H</b>	<b>713Q</b>

# UMC Powersaver 3.5 Product Features



	FEATURES	BENEFITS	NOTES
A	Top Oil Fill	Easier filling and inspection.	
B	Special Dual Input Seals	Specially designed seals to handle the heat and high speeds. Longer life.	
C	Single Piece Rotor		
D	Die Cast Aluminum Case	Lighter weight and cooler operation adding to the overall life of the Powersaver.	
E	Heavy Duty Intermediate Bearings		
F	Dual Output Seals	Second level of protection.	
G	External Wiper Seal	Helps protect output seals adding life to the seal and less maintenance.	
H	Cast-in Coupler Shield Support	Helps center the coupler shield.	
I	Multi-Bolt Pattern (3 patterns)	Fits all known pivot systems.	
J	Easy Access Drain Plug	Reduced maintenance time.	
K	Stator Independent of Rotor Assembly		
L	Aluminum Finned Stator	Helps circulate air in the motor for cooler operation which improves motor life.	
M	Thermal Overload Protection	Automatically resets, so no blown fuses, reducing maintenance costs.	
N	Oversized Rotor Bearings	Specially designed sealed bearings to handle higher speeds and help with keeping oil away from the motor.	
O	Class H wire w/ Class F Insulation	Longer life due to improved heat resistance.	
P	Internal Surfaces Primed	Helps keep moisture out of the gearbox.	
Q	Through Hardened Helical Gears	Longer gear life.	
R	New Spray Guard	Added protection against water intrusion from sprinklers adding life to the motor.	
S	Extreme Pressure Gear Oil	Quieter and smoother operation.	
T	Teflon tubing and insulated solder joint caps	Protects critical solder joints and improves moisture resistance.	

- Many UMC features have been copied or imitated by other manufacturers.