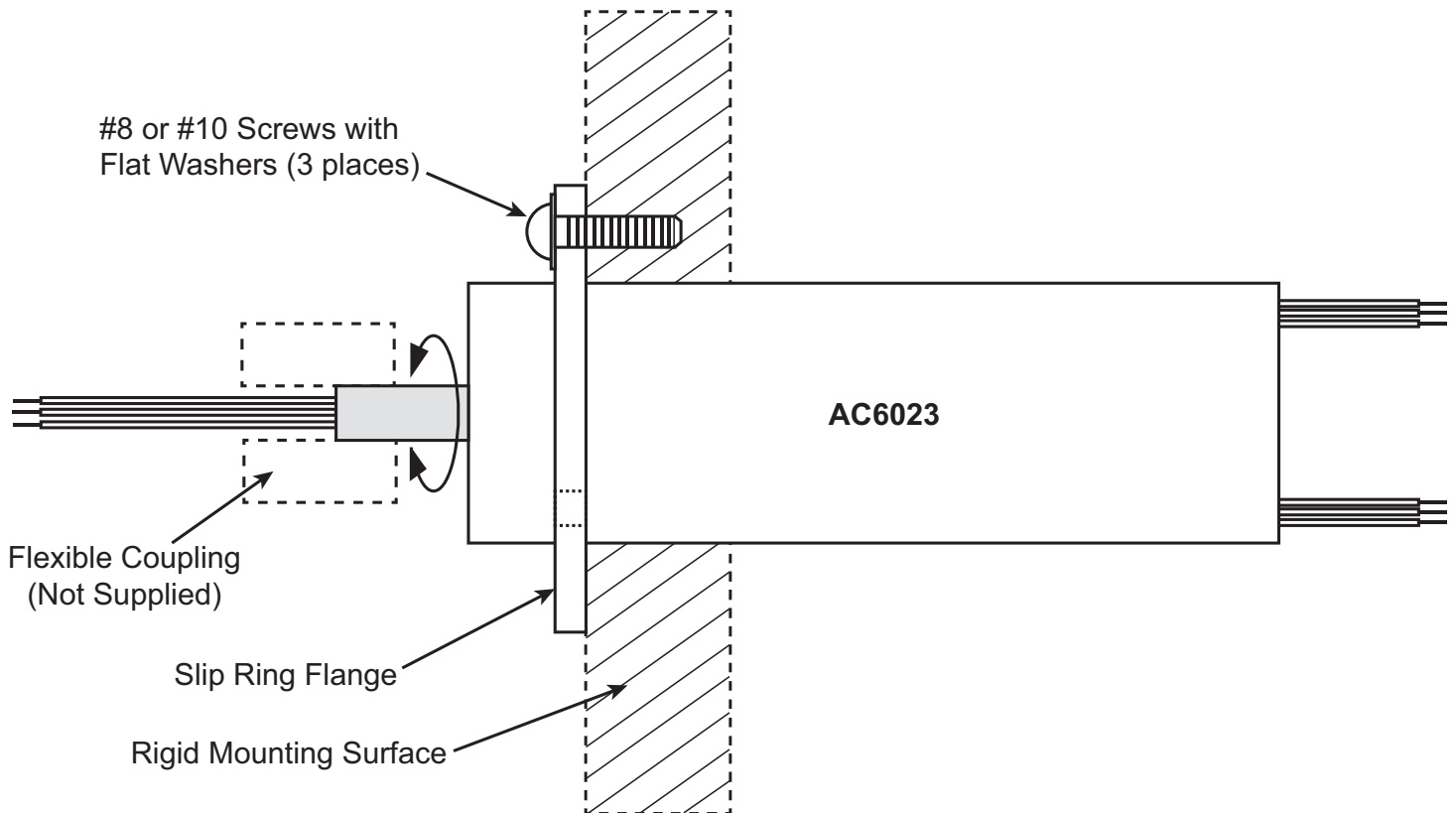


INSTALLATION GUIDE

AC6023

Proper Mounting Instructions

1. The slip ring capsule is designed to be flange-mounted with the barrel cantilevered (*see the figure below*).
2. The rotor must be driven with a flexible coupling (*i.e. rubber tubing, helical or bellows-type*) to accommodate any eccentricities in the mounting. The rotor leads can be used as a flexible coupling for operation at speeds up to 5 rpm.
3. As shown in the figure below, #8 or #10 screws with flat washers are used to mount the slip ring. These washers protect the flange from excessive strain. If lock washers are also used, flat washers should be mounted between the lock washers and the flange. (*Note: mounting hardware is not included*).
4. The slip ring is **not** designed to bear the weight of the equipment to which it is connected. Rotating equipment should be secured so that no axial or radial load is applied to the slip ring rotor.
5. The slip ring should be protected from water, dust and other harmful contaminants that could shorten the life of the slip ring. The level of protection that the slip ring needs is dependent on the environment to which it will be exposed and the level of sealing that is chosen. Most slip rings are not sealed and need full protection. Those slip rings that are provided with seals are only rated for light splash and dust sealing.
6. Secure all leads so that they do not rub against any surface as the equipment rotates. Care should be taken when routing and securing the leads so that no side loading of the slip ring occurs.
7. For best results when stripping wire, use thermal strippers or mechanical stripper, K. Miller Tool Co. Model #100.



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INSTALLATION GUIDE

AC6023

Proper Use and Safety Instructions

In order to safely use the family of AC6023 slip rings and achieve the optimal performance the following precautions must be followed.

1. Turn off system power prior to installing the slip ring to avoid risk of electrocution.
2. The operating voltage differential between any two circuits should not exceed 240 VAC. Any voltages, including surges and spikes, that exceed 240 VAC can damage the slip ring and present a safety risk.
3. The current on any given circuit should not exceed 2 Amperes.
4. When multiple circuits are to be used to carry current, the total current needs to be verified against the **Figure 1** by using the following steps.
 - a. Using the number of circuits (6, 12, 18 or 24) that are present in the slip ring select the appropriate curve from **Figure 1**.
 - b. Using the maximum ambient temperature to which the slip ring will be exposed, move along the x-axis of the appropriate curve to that point (along the x-axis) and read off the maximum allowable current for those circuits.
 - c. If not all of the available circuits will be used to carry current it is permissible to exceed the value from **step b** as long as the total power is verified using **Eq. 1**.

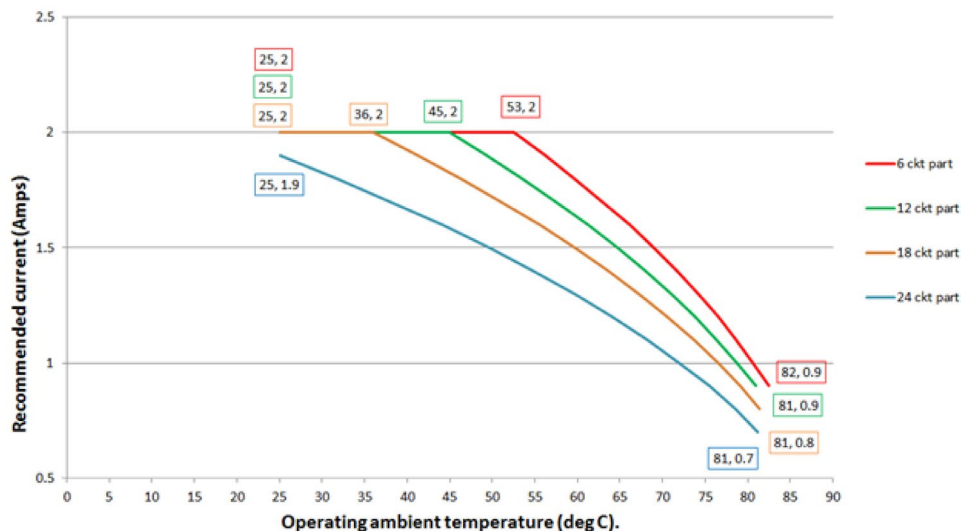


Figure 1: Recommended current levels for AC6023

Equation 1: Total Power = Sum $I^2 R$ for each circuit

Example:

- For the AC6023-24 being operated at 50°C, the maximum current that can be applied to each circuit (from Figure 1) is 1.5 Amperes.
- The total power in that case would be **24 X (1.5² R), which equals 54 R.**
- It is permissible to use more than 1.5 Amperes on some circuits if lower current levels are used on other circuits, and the total power does not exceed 54 R.
- One example of such a case would be if 10 circuits are operated at 2 Amperes and 14 circuits are operated at 1 Ampere.
- The total power would then be **[10 X (2.0² R)] + [14 X 1.0² R] = 54 R**
- Note that in no case should the current exceed 2 Amps for any circuit.