

# Commercial Motor / Brake Heater



- Dedicated Motor with Heating Elements
- Severe Duty Features Available
- Special Brake Rectifier
- Brake Heating Circuit
- Normal or Rapid Brake Reaction Time

## RACO COMMERCIAL MOTOR / BRAKE HEATER

### Introduction

Electric heating of the motor and/or brake is always recommended where moisture condensation followed by frost may occur or where a wet corrosive atmosphere with long periods of rest are to be expected. Environmental conditions such as high humidity combined with high temperature deviations between day and night may warrant electrical heating of the motor or brake. If a RACO commercial motor/brake solution is selected the option described below can be offered.

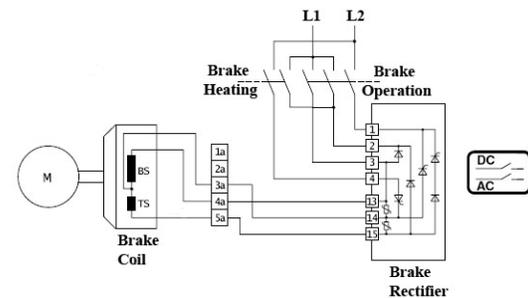
### Electrical Motor Heating Design

Typically, resistive elements are wound during the production process of the motor into the winding or placed in hollow compartments in the stator of the motor. Based on the size of the motor the resistive power level can range from 20W to 50W. The supply voltage can be selected as 115VAC, 208 to 230VAC or 400 to 460VAC, 50 / 60Hz. Termination to the heater is provided in the motor terminal box.

### Electrical Brake Heating Design

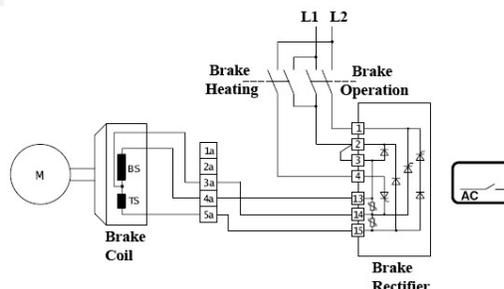
Brake heating is applied if the motor is at rest and the brake is not activated. Through a specially designed brake rectifier, stand still heating will be applied to the brake coils. The brake rectifier has to be mounted in a control

cabinet or MCC bucket with an additional auxiliary control relay. By energizing the reversing motor starter or the VFD control circuit, the contacts of the auxiliary relay will switch the brake rectifier from supplying heating current to the brake coils to full operational magnetizing current to the acceleration and holding coil of the brake. Dependant on the size of the brake, heating power levels can range from 20W to 50W. The electrical design for the brake circuit can incorporate the normal as well as the rapid reaction time for the holding brake.



Brake circuit heating / quick reaction time

For all above inquiries please consult with your local RACO sales engineer or RACO factory.



Brake circuit heating / normal reaction time