

## Circuit Status

Circuit shown with guard doors closed and ready for motor starting.

## **Operating Principle**

Opening any of the guards will switch the input circuits (S13-S14 & S21-S22) to the Minotaur monitoring safety relay unit. The Minotaur output circuits (13-14 & 23-24) will cause the contactor to isolate the motor power.

## **Fault Detection**

A single fault will not cause a loss of safety function.

Safety critical single faults, except for those over a contact set of all but the first opened and last closed guard switches, will be detected at the next opening a guard.

If either contactor K1or K2 sticks ON - the motor will stop on command due to the other contactor, but the Minotaur cannot be reset. A single fault detected on the Minotaur safety input circuits will result in the lock-out of the system to a safe state (OFF) at the next operation of the respective input device.

## Comments

It is recommended that all guards and E-Stop switches are individually opened and closed on a regular basis to enable the Minotaur to prevent an accumulation of undetected faults.

For some high risk applications, especially where the wiring cannot be fully protected against all potential damage, it may be necessary to install a Minotaur for each switch.

