

Guard Door and E-Stop Safety Controllers

AZR 31 T2 to Monitor One Device

Safety Category (EN954-1): CC4

Stop Category (EN60204-1): 0



- Features**
- Control Category 4 to EN 954-1
 - 3 enabling circuits
 - Monitoring of mechanical position switches, safety switches, solenoid interlocks, coded magnet sensors, switching mats or E-stops
 - 2 NC contacts can be connected
 - Can be used as emergency-stop controller for stop Category 0 to EN 60204-1
 - 1 auxiliary contact (NC)
 - Cross-wire monitoring
 - Automatic reset function
 - Removable terminal block
 - Start-stop function
 - Feedback circuit to monitor external contactors
 - 4 LED's to show operating conditions
 - Additional contacts by means of output expansion

Dimensions 45 x 73.2 x 121 mm

Model Designation	AZR 31 T2-24VDC
	AZR 31 T2-24VAC
	AZR 31 T2-110VAC
	AZR 31 T2-230VAC

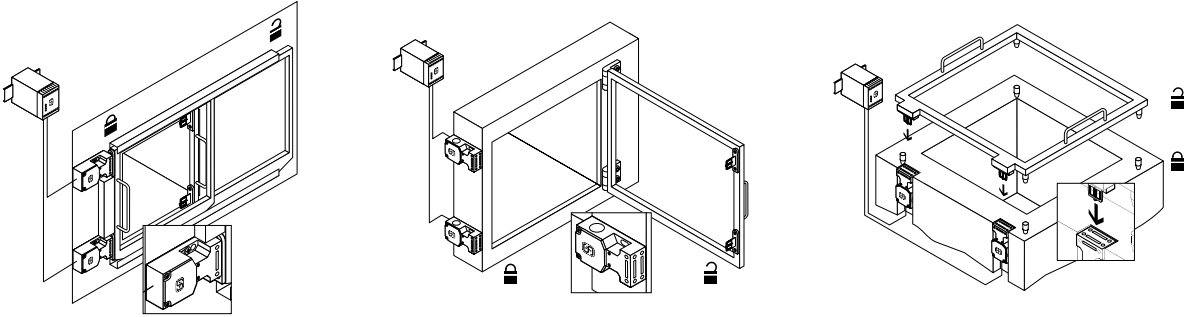
Approvals BG UL CSA

Guard Door and E-Stop Safety Controllers

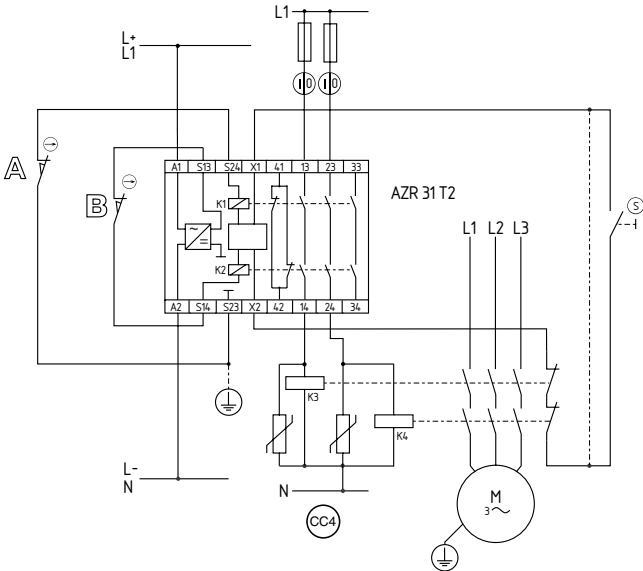
AZR 31 T2 to Monitor One Device



Typical Application




Typical Wiring Diagram



Notes

- NC contacts must have positive opening function when the guard device is opened.
- The feedback circuit monitors the positions of the positive-drive NC contacts on the contactors K3 and K4. If the feedback circuit is not needed, a jumper connection is to be fitted between the inputs X1 and X2.
- The wiring diagram is with guard devices closed and shows the de-energized condition, whereby the normally closed contacts connected must be closed.

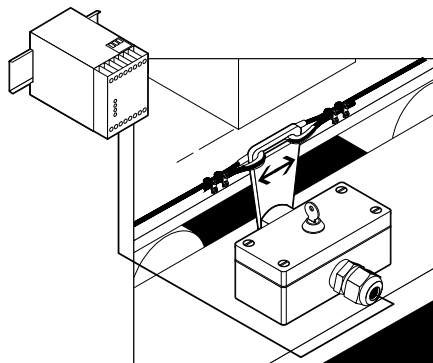
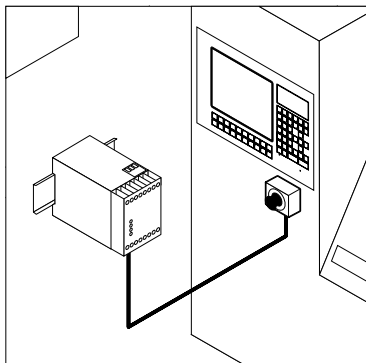
Circuit Options

- **Start Pushbutton**  A start pushbutton (NO) can optionally be connected to the inputs X1 and X2. With the guard device(s) closed, the enabling circuits are then not closed until the start pushbutton has been operated. If neither start button nor feedback circuit are connected, a jumper must be wired between X1 and X2.

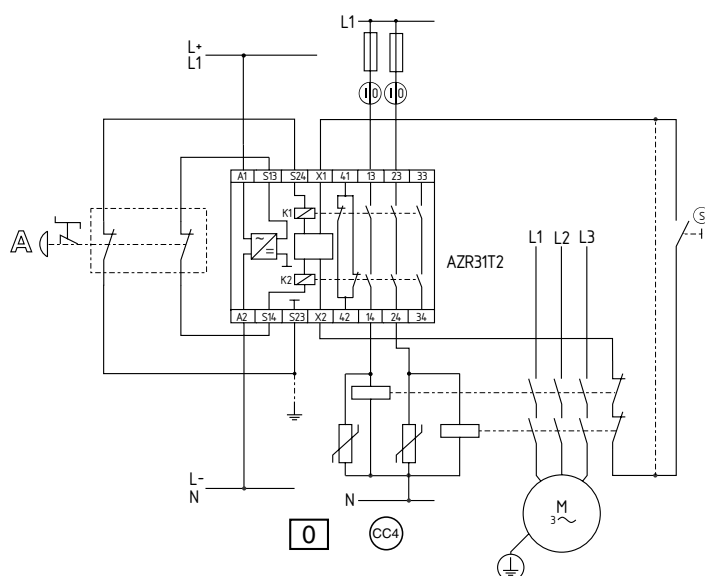
Guard Door and E-Stop Safety Controllers

AZR 31 T2 to Monitor One Device

Typical
Application



Typical
Wiring
Diagram



Notes

- The safety controller fulfills Category 0 to EN 60 204-1.
- Secures to Control Category 4 to EN 954-1.
- AZR safety controller being used to monitor an emergency-stop.
- The diagram is shown for the de-energized condition.

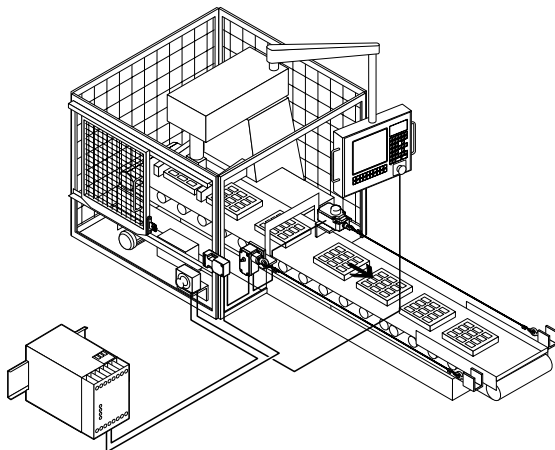
Circuit Option

- **Start Pushbutton ⑤**
A start pushbutton can optionally be connected between the terminals X1 and X2. If no start pushbutton is used, a jumper must be wired between X1 and X2.

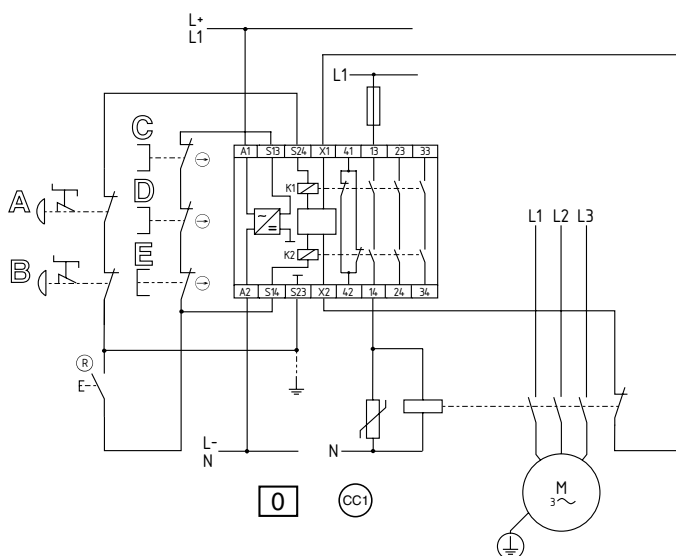
Guard Door and E-Stop Safety Controllers

AZR 31 T2 to Monitor One Device

**Typical
Application**



**Typical
Wiring
Diagram**



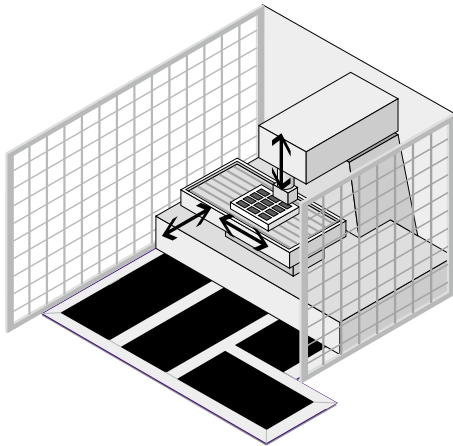
Notes

- The safety controller fulfills stop Category 0 to EN 60 204-1.
- The arrangement shown in the wiring diagram serves to achieve Control Category 1 to EN 954-1.
- AZR safety controller being used to monitor two emergency-stop switches (A and B), two ZS pull-wire switches (C and D) and a safety switch of the AZ 16 range with separate actuator (E) as well as a power contactor.
- The diagram is shown for the de-energized condition.

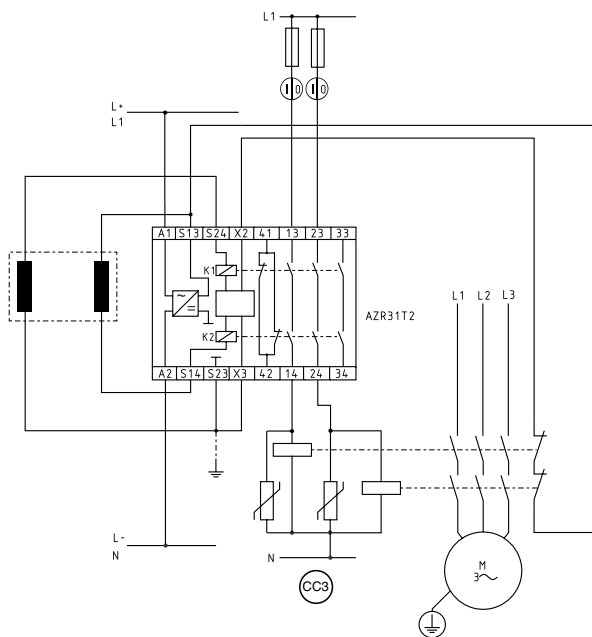
Safety Controllers for Special Applications

Monitoring Safety Switching Mats Using AZR 31 T2

Typical
Application



Typical
Wiring
Diagram



Notes

- To achieve Control Category 3 to EN 954-1
- Monitoring a safety switching mat and power contactors using the AZR safety controller with automatic reset.
- The wiring diagram shows the de-energized condition.