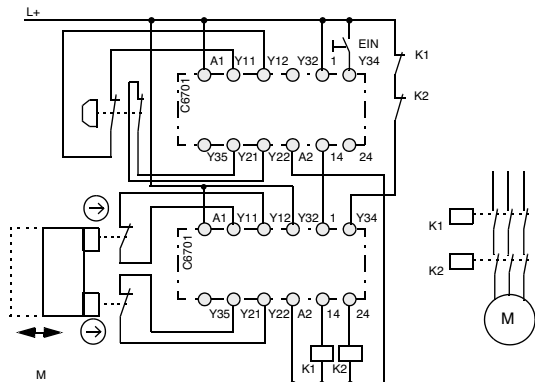


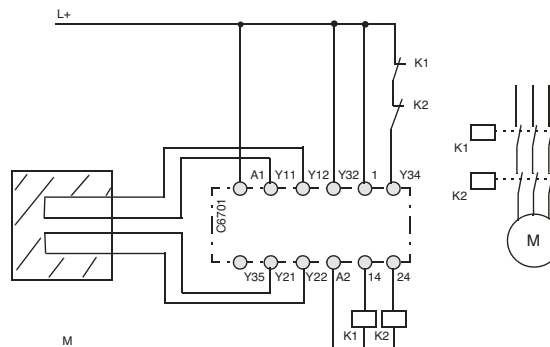
Application examples

C6702

Emergency Stop, two channel, monitored start with additional ON button and safety gate monitoring category 4/SIL 3



Safety mat, two channel, autostart category 3/SIL 2



Application

The C 6702 safety combination can be used in EMERGENCY STOP circuits according to EN 418 and in safety circuits according to EN 60 204-1 (11.98), e.g. in movable guards and safety gates. Depending on the external circuit elements, safety category 4 according to DIN EN 954-1 or SIL 3 according to IEC 61508 can be achieved.

Functions and connections

The C 6702 solid-state safety combination has one safe solid-state output and one time-delayed safe solid-state output. Three LEDs indicate the operating state and the function.

When the device is put into operation it runs through a self-test to test the correct functioning of the internal electronics. All internal circuit components are monitored for faults cyclically during operation.

The EMERGENCY STOP button and/or the position switches or light arrays are connected to terminals Y11, Y12 and Y21, Y22. The ON button is connected in series with the NC contacts of the external.

The cascading input 1 is connected either via a safe output or directly to the supply voltage L+ (24 V DC). External actuators or loads can be switched via safe outputs 14, 28. It must be ensured that the actuators or loads and the C 6702 electronic safety combination have the same frame potential. Paralleling outputs 14 and 28 to increase the load current is not permissible.

If electronic sensors (e.g. light-array monitoring) are used in single-channel operation, Y35 must be connected to L+ (24VDC).

For autostart operation, Y32 must be connected directly to L+ (24VDC) and Y34 must be connected to it via NC contacts of the external actuators.

⚠ Use a power pack to IEC 60536 safety class III (SELV or PELV) for power supply!

Terminal marking

Supply voltage	A1	L/+
	A2	M
Inputs	Y11, 12	Channel 1 EMERGENCY STOP or position switch
	Y21, 22	Channel 1 EMERGENCY STOP or position switch
	Y35	With / without cross circuit detection
	Y32	Autostart changeover switch
	Y34	ON button, feedback circuit
Input	1	Cascading input
Outputs	14	Safe solid state output
	28	Safe solid state output, time delayed

Operation

LEDs			Operation			
POWER	RUN	FAIL	PS	E-STOP	ON	Outputs
☀	☀	●	ON	non activated	activated	on
☀	●	☀		activated ①	non activated	off
☀	●	●		non activated	non activated	off
☀	◐ flashes	☀		activated	non activated	off/on
☀	●	◐ flashes	on start up self test approx. 7 sec.			
Fault						
☀	●	◐ flashes	Defect in electronic Change in terminal assignment during operation Short circuit to 24V ②			off
●	●	●	No supply voltage			

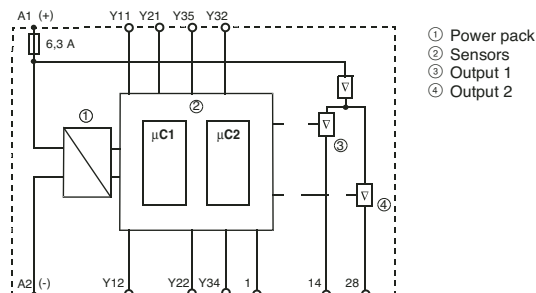
Fault clearance

1. Switch supply voltage off.
2. Clear fault or replace device.
3. Switch supply voltage back on.

Cable length

for 2 x 1.5mm² 150nF/km max. 2000m total cable length for sensors

Internal circuit



① Sensor circuits open; Cross circuit between the sensors; Short circuit of sensors to frame
② Only when using device with "cross circuit detection".