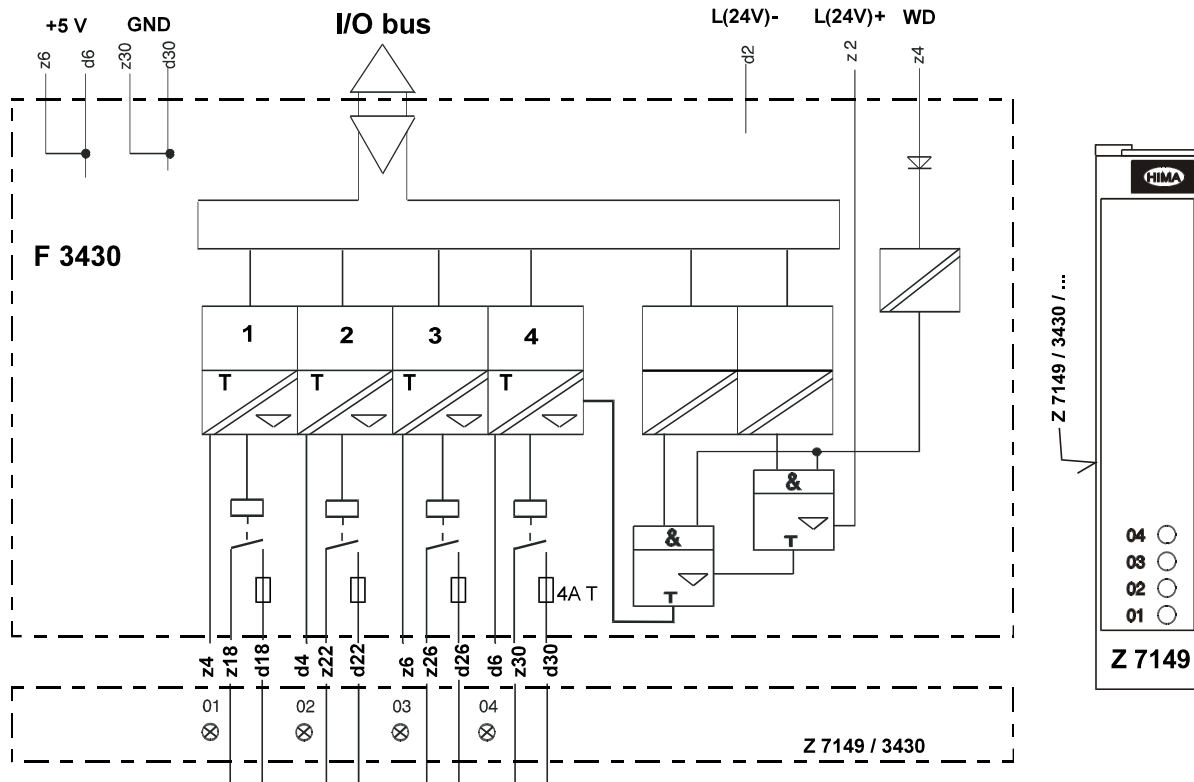




F 3430: 4-channel relay module

safety-related, applicable up to SIL 3 according to IEC 61508
 Switching voltage $\geq 5\text{ V}$, $\leq 250\text{ V AC}$ / $\leq 110\text{ V DC}$,
 with integrated safety shutdown,
 with safety isolation, with 3 subsequent relays (in diversity),
 solid state output (open collector) for LED display in the cable plug

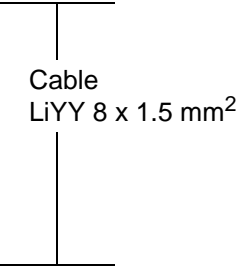


Block diagram

Front cable plug

Relay output	NO contact, dust-tight
Contact material	Silver alloy, gold-flashed
Switching time	approx. 8 ms
Reset time	approx. 6 ms
Bounce time	approx. 1 ms
Switching current	$10\text{ mA} \leq I \leq 4\text{ A}$
Life, mech.	$\geq 30 \times 10^6$ cycles
Life, elec.	$\geq 2.5 \times 10^5$ cycles with full resistive load and ≤ 0.1 cycles per second
Switching capacity AC	up to 250 V AC max. 500 VA, $\cos \varphi > 0.5$
Switching capacity DC	up to 30 V DC max. 120 W
(non inductive)	up to 70 V DC max. 50 W
	up to 110 V DC max. 30 W
Space requirement	4 SU
Operating Data	5 V DC / $< 100\text{ mA}$
	24 V DC / $< 120\text{ mA}$

Channel	Connection	Colour
1	z18 d18	WH BN
2	z22 d22	GN YE
3	z26 d26	GY PK
4	z30 d30	BU RD



Lead marking of the cable plug
Z 7149 / 3430 / C../P2

The module has a safe isolation between the input and the output contact, according EN 50178 (VDE 0160). The clearance in air and the creepage distance are dimensioned for overvoltage class III up to 300 V.

The module is equipped with relays in diversity.

The relay amplifier is suitable for the switching of safety-related circuits. Thus the amplifier can be used for safety shutdowns, e. g. to cut off the entire fuel supply for combustion plants.

Restrictions

- For the application it must be ensured that the module is replaced after reaching the maximum quantity of switching cycles (e. g. 300.000 switching cycles at a rated operation 30 V DC / 4 A).
- For SIL 3 plants (according to IEC 61508) function checks have to be made by the manufacturer within a period of three years, for SIL 2 plants within a period of six years.
- The replacement of components must be made only by the manufacturer regarding the valid standards and TÜV restrictions.