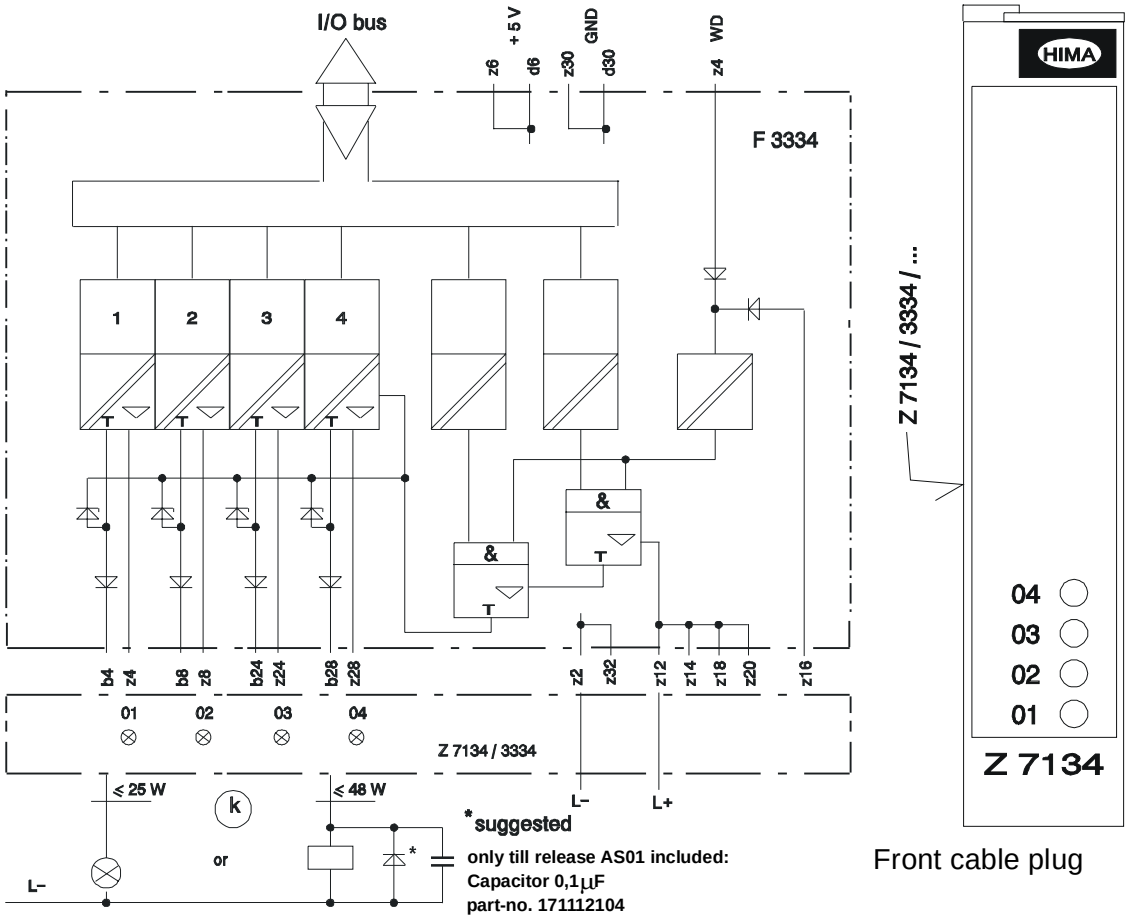
F 3334

F 3334: 4 fold output module,
safety related

resistive load or inductive load up to 2 A (48 W),
lamp connection up to 25 W, with integrated safety shutdown,
with safe isolation, with line monitoring,
no output signal with break of the L- supply
requirement class AK 1 ... 6



Block diagram

Front cable plug

The module is automatically tested during operation. The main test routines are:

– Reading back of the output signals. The operating point of the 0 signal read back is ≤ 6,5 V. Up to this value the level of the 0 signal may arise in case of a fault and this will not be detected
– Switching capability the test signal and cross-talking (walking-bit test)
– line monitoring.

Outputs	2 A, (k) short circuit proof
Internal voltage drop	max. 2 V at 2 A load
Admissible line resistance (in + out)	max. 3.6 Ohm
Undervoltage tripping	at ≤ 16 V
Operating points	
short circuit current	2.6 ... 5 A
line break	0.5 ... 9.5 mA
Outp. leakage current	max. 550 µA
Output voltage if output is reset	max. 1.5 V
Current input WD	max. 30 mA
Duration of the test signal	max. 250 µs
Space requirement	4 TE
Operating data	5 V DC: 130 mA
	24 V DC: 130 mA in add. load

Channel	Connection	Colour
1	b4	ws
2	b8	br
3	b24	gn
4	b28	ge
L–	z2	sw
L+	z12	rt

Cable
LiYY 4 x 0,5 mm^2

Flat pin
plug
2,8 x 0,8 mm^2

q = 1 mm^2
l = 750 mm

Lead marking of the cable plug
Z 7134 / 3334 / C..

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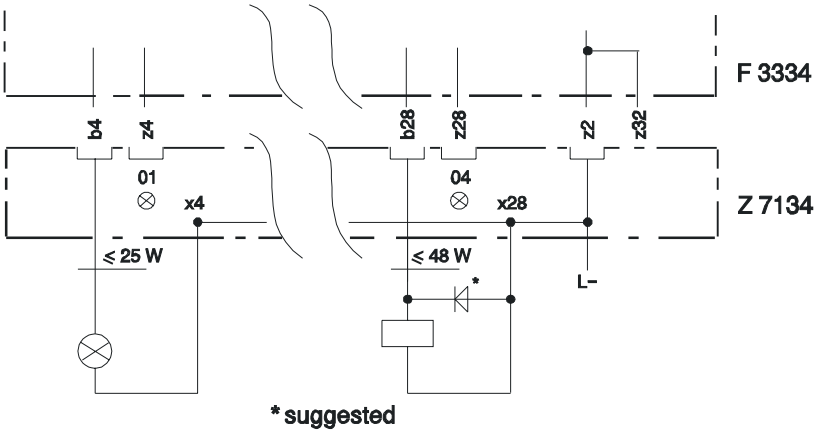
Z 7134 / 3334 / C.. / P2
2-pole connection



2-pole connection

Planning hints

– line break monitoring requires a minimum load of 10 mA. Use of the signal "line break" in the user's program up to requirement class 3.
– at the same time only 2 channels may be operated with the max. load (2 A). If the load is up to max. 1 A, all channels may be operated at the same time
– max. 10 output modules with nominal load may be used in one IO rack
– can be paralleled without external diodes

Appertaining softw. building block: HB-BLD-. (for current version refer to the description of the operating system).

In conjunction with decided 25 W lap types problems may occur caused by too high making current.

To prevent this at building block HB-BLD-. at input "INRUSH CURRENT IN ms" a time between 1 to 50 ms might be set to suppress the fault signal. The duration of the test then will be exceeded to the maximum of the entered time if this input is occupied.