



F 3333: 4-channel output module

safety-related, applicable up to SIL 3 according to IEC 61508

- resistive load or inductive load up to 2 A (48 W)
- lamp connection up to 25 W
- with integrated safety shutdown, with safe isolation
- no output signal at break of the L- supply

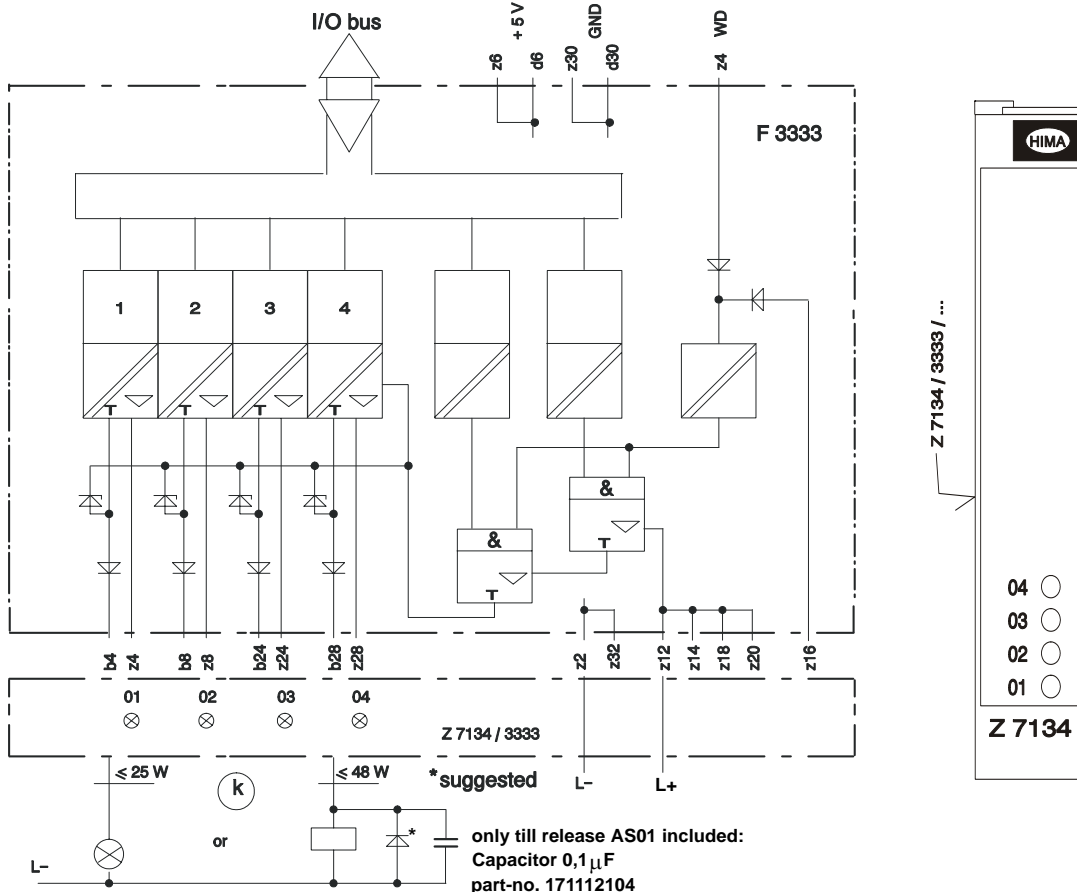


Figure 1: Block diagram and front cable plug

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 of the test signal and cross-talking (walking-bit test)

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 Ω
Undervoltage tripping	at ≤ 16 V
Operating point for short circuit current	2.6 ... 5 A
Output leakage current	max. 550 μ A
Output voltage if output is reset	max. 1.5 V
Monitored switching time	max. 200 μ s
Space requirement	4 SU
Operating data	5 VDC / 100 mA
	24 VDC / 120 mA plus load

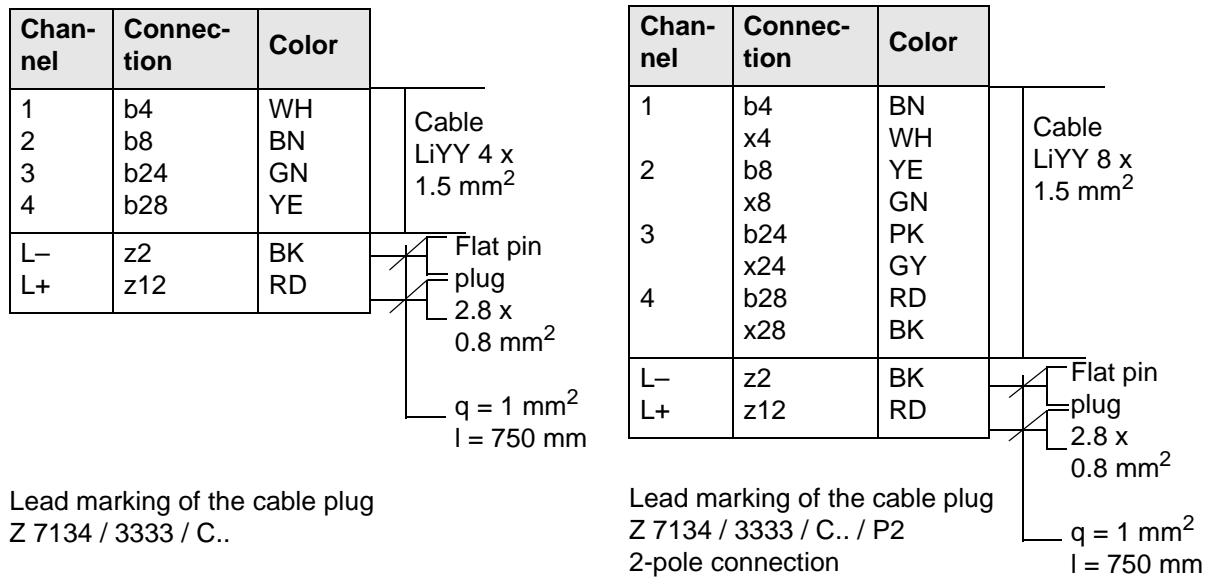


Figure 2: Lead markings of the cable plugs

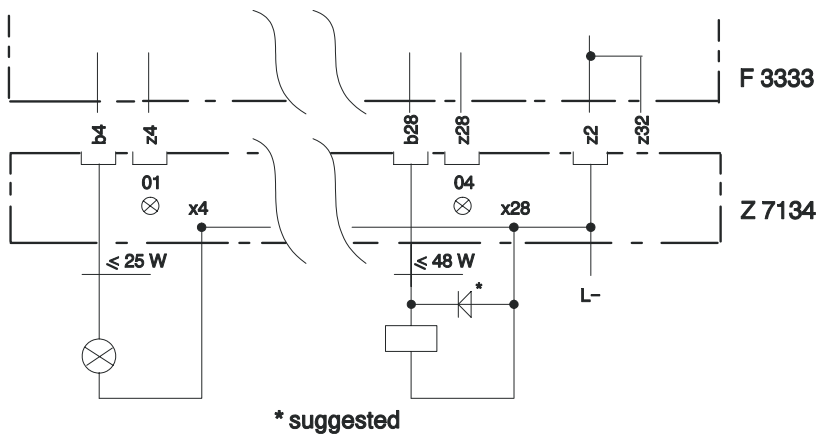


Figure 3: 2-pole connection

Planning notes

- 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 I/O subrack
- can be used in parallel without external diodes



The connection of capacitive loads is not permitted. A length of the connection line up to 3 km is possible. The line capacity, however, is limited to a maximum of 1 μ F.