

Application, characteristics and technical data have to be taken from the hardware data sheet:

23BA20 1 KGT 150 403

Operation

The 23BA20 board has sixteen output relays. Two groups of eight contacts have the same common return. This allows to split the output channels only to two different process voltage sources.

Processing function

The I/O micro controller (EAP Ein- Ausgabe-Prozessor / Input- output processor) activates any output forced by the VAP of CMU (CMU = communication unit) by a command output request. The EAP controls the time duration of a pulse output by the loaded pulse length time value.

Output monitoring and supervision

Any output is checked and monitored by the EAP by different tests and supervision functions:

- the output pattern is read back before the output is activated
- the 24 V DC from backplane bus to switch the output relays is supervised during an active output
- the pulse duration is controlled by the EAP
- any detected error is indicated by LEDs.

One or two pole outputs

Fig. 2: to Fig. 4: show the different principle Wirings for one or two pole output channels. See the 23BA23 "Connections and Settings" for the wiring if (1 out of n) check is requested.

Settings

There are no settings required and possible on the 23BA20 board.

Signalling

The board monitors and checks its functionality as well as the dialog via the peripheral bus. Detected errors are indicated and/or transmitted by the board:

- by the red LED "ST" on the front plate
- by the red LED "PST" on the front plate
- by diagnostic messages

LED "ST"

The "ST" LED indicates board errors or peripheral bus errors.

The "ST"-LED indicates:

- board runs initialization procedure
- board is doing a cold- or warm start
- board has detected a memory error (RAM or EPROM)
- micro controller faulty
- no dialog via the peripheral bus for at least 2 minutes. The board is not polled by the PBP of CMU.

LED "PST"

The LED indicates an error at command output:

- 24 V DC for the output relays failed during command output
- Time out PBP during active output. Any active output is stopped (switched off).

LED "CO"

At least one output relay is switched on. The "CO" LED is direct connected to the 24 VDC. CO" is ON for the time an output is active (pulse or persistent).

RTU560

Connections and Settings Binary Output 23BA20

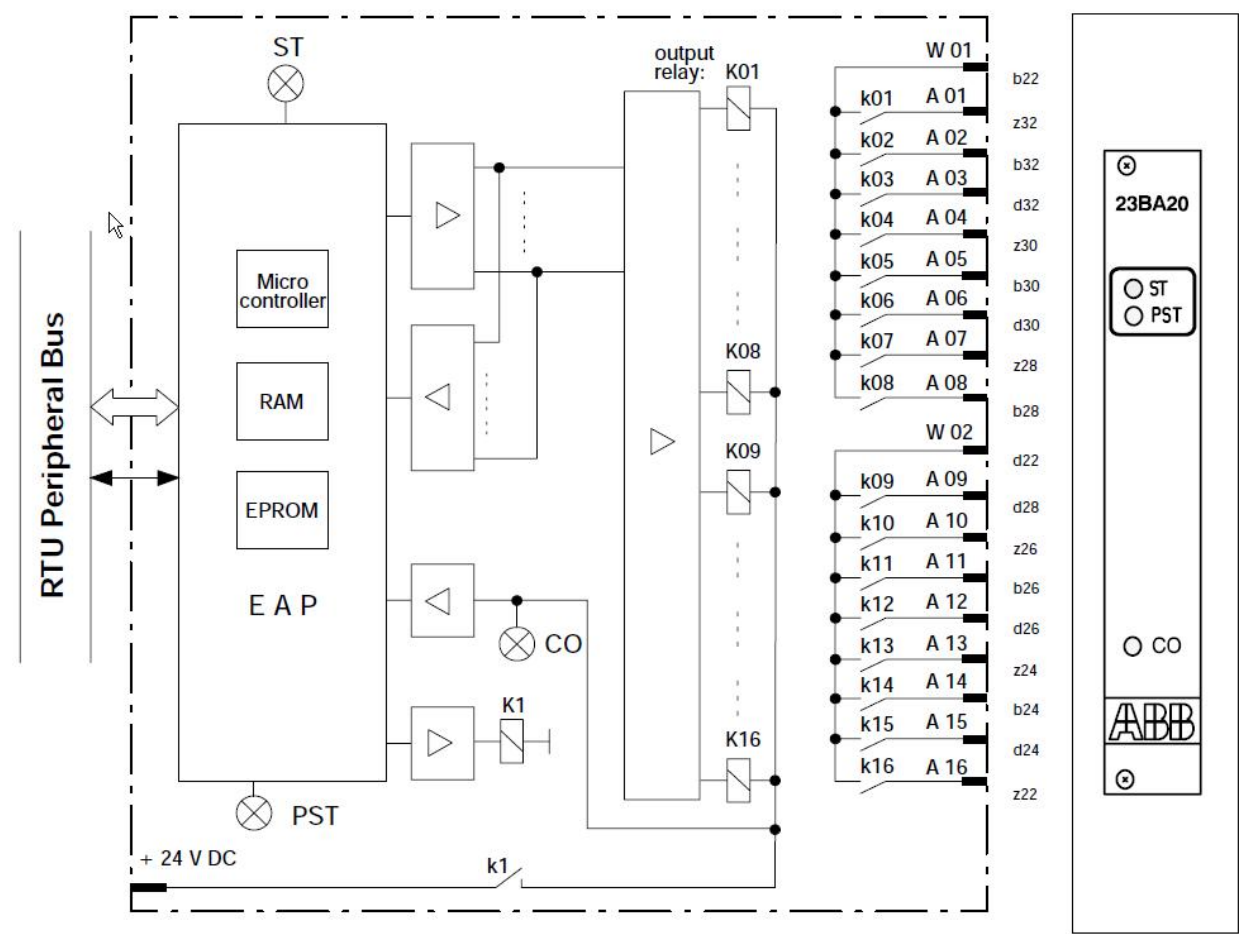


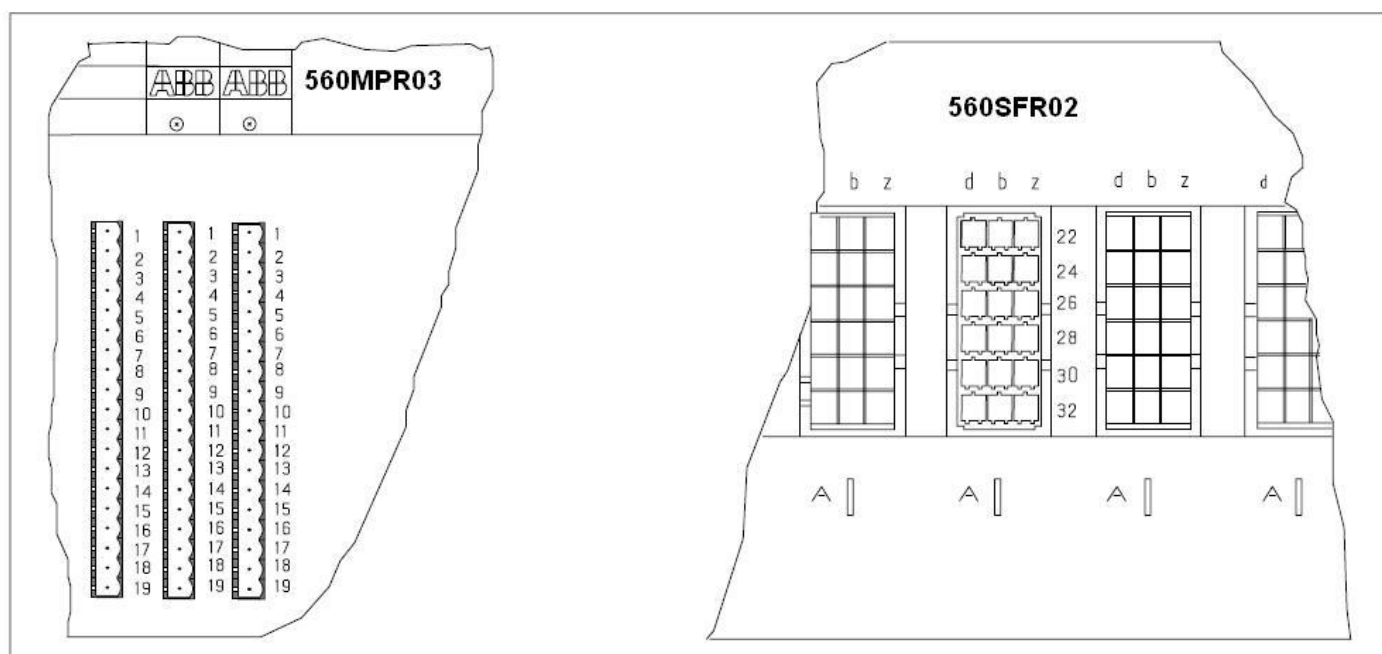
Fig. 1: Logic block diagram and front plate

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Connections and Settings Binary Output 23BA20

560MPR03	560SFR02			Signal identification		Re- mark
	Sub- Connector			Identification	Meaning	
1			z32	A 01	binary output 01	
2		b32		A 02	binary output 02	
3	d32			A 03	binary output 03	
4			z30	A 04	binary output 04	
5		b30		A 05	binary output 05	
6	d30			A 06	binary output 06	
7			z28	A 07	binary output 07	
8		b28		A 08	binary output 08	
9	d28			A 09	binary output 09	
10			z26	A 10	binary output 10	
11		b26		A 11	binary output 11	
12	d26			A 12	binary output 12	
13			z24	A 13	binary output 13	
14		b24		A 14	binary output 14	
15	d24			A 15	binary output 15	
16			z22	A 16	binary output 16	
17	A (Faston 6,3)			A	cable shield	
18		b22		W 01	common return 1 to 8	
19	d22			W 02	common return 9 to 16	

The pin configuration of 560SFR02 subrack corresponds to the direct pin configuration of the board connector
Subrack terminal connection:



Placement of signal terminal connectors on subracks

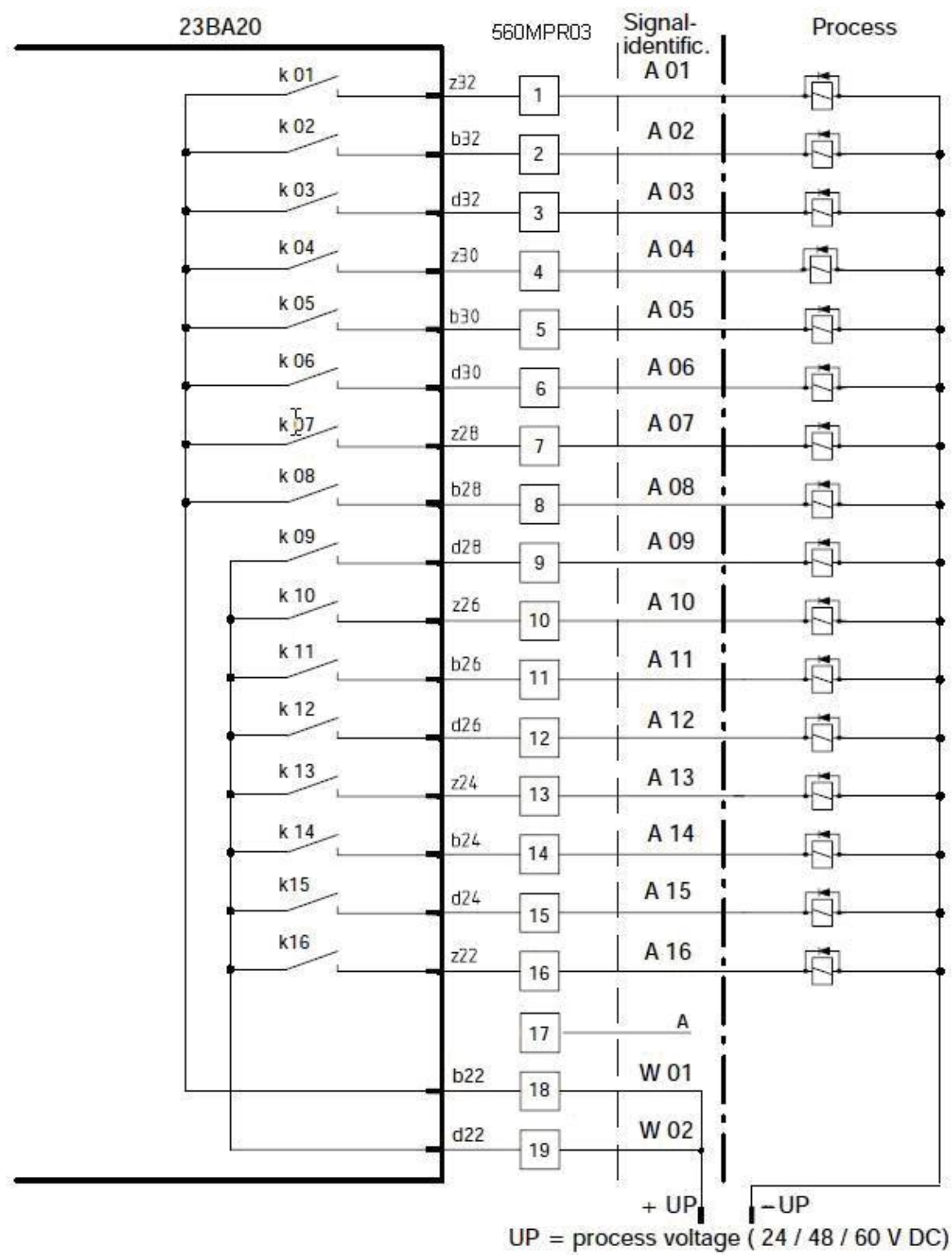


Fig. 2: Binary Output 1 pole same process voltage circuit on both output groups.

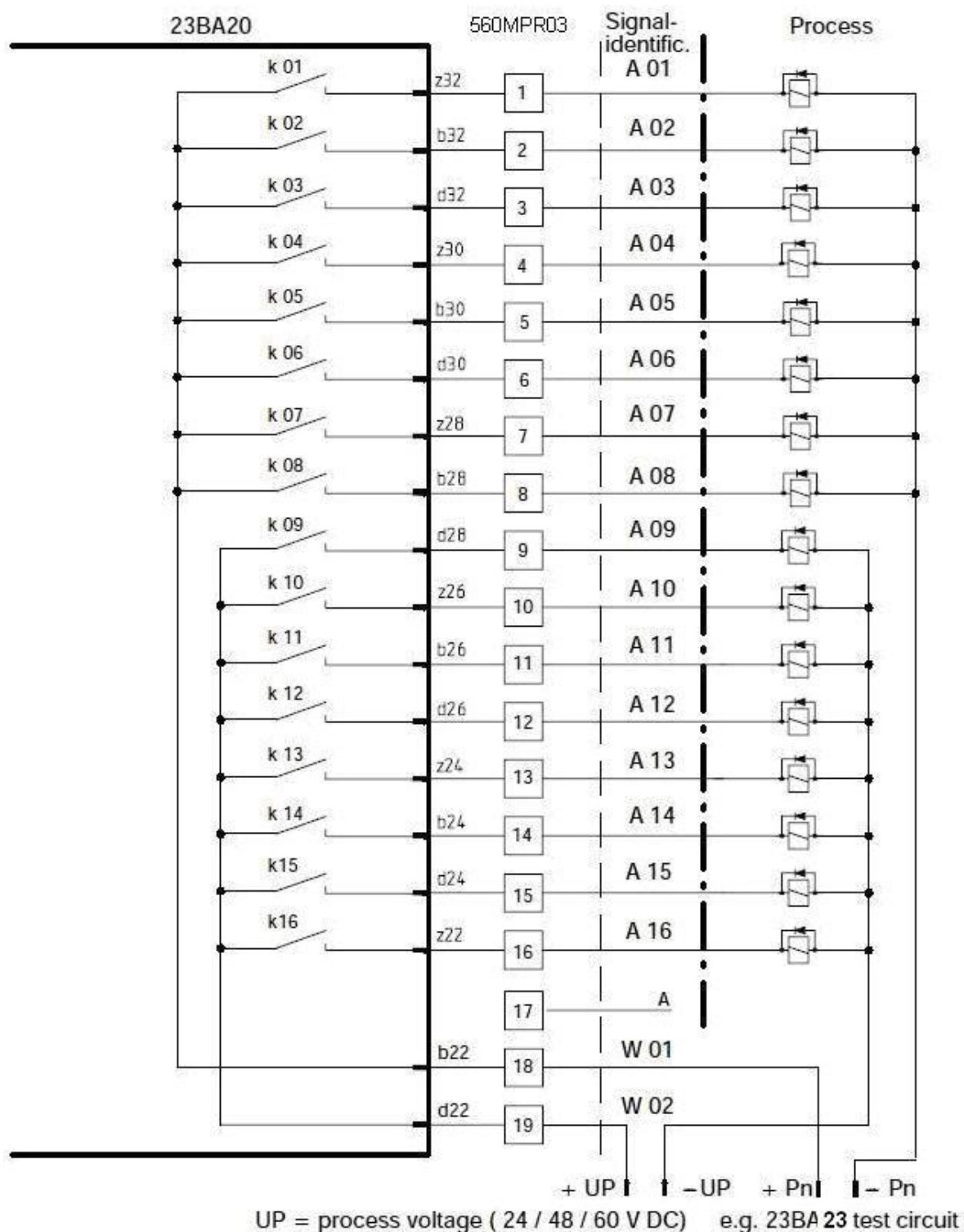


Fig. 3: Binary output 1 pole. Different process voltage sources on k 01-k 08 and k 09-k 16

* Pin assignment 560MPR03

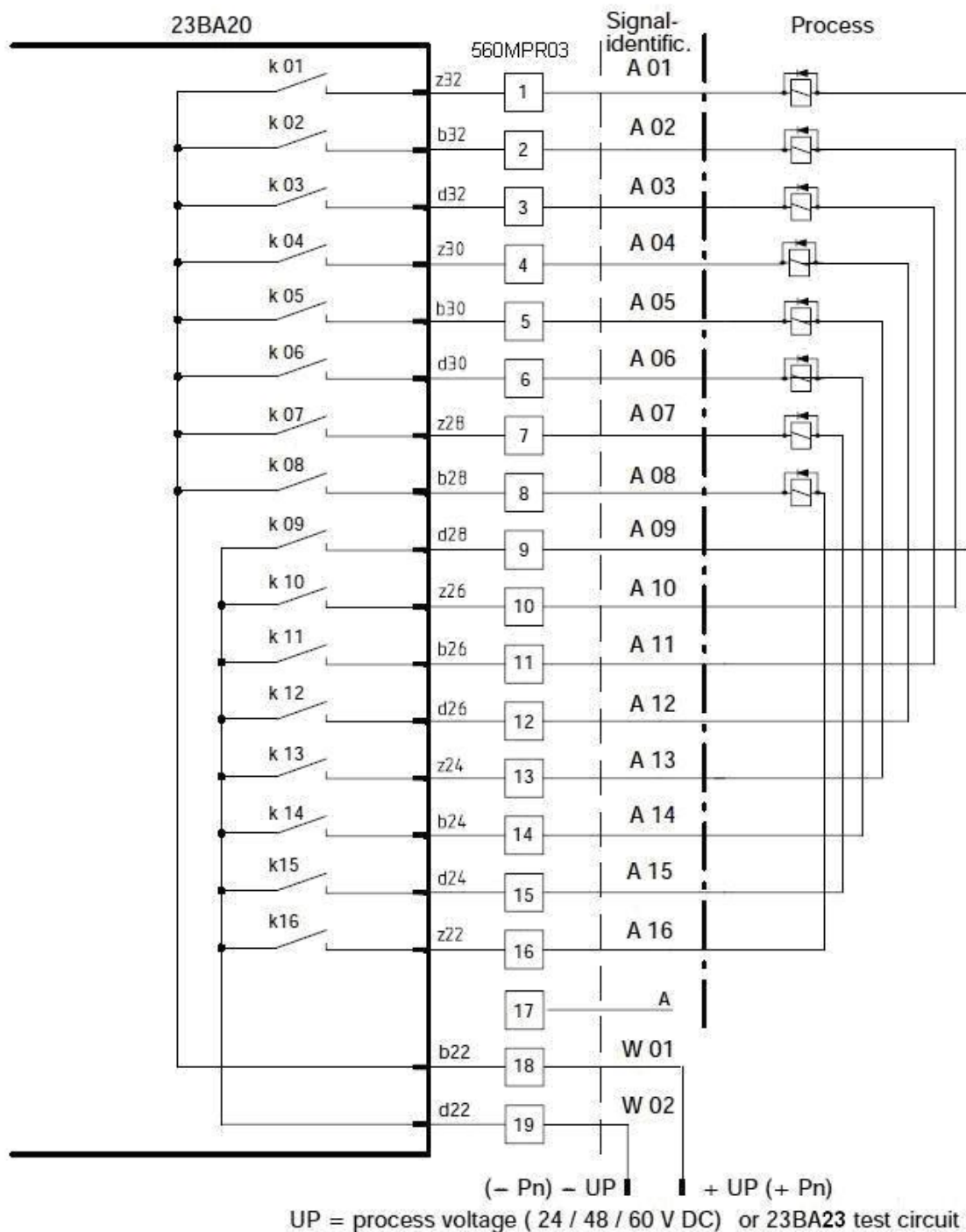


Fig. 4: Binary output 2 pole. Either direct or by 1 out of n check.

* Pin assignment 560MPR03

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Connections and Settings Binary Output 23BA20

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Connections and Settings
Binary Output 23BA20

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