

# Electronic control unit

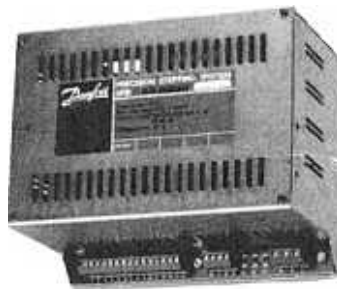
## Type SRB 3110

### Application SRB 3110

SRB 3110 is applied for the control of step clutches and precision clutches, type SRA.  
SRB 3110 is connected to external signal sources. Signals from here give a start/stop signal to the SRA.

By way of SRB 3110 the following functions can be realized:

- Start and stop from the same signal source.
- Start and stop from two signal sources.
- Control of 2 x 1, 2 x 2 or 3 x 2 valves.
- Free mode (SRA on/off).
- Activation on positive and negative edge.
- Supply voltage for signal sources.
- Status signal (brake/clutch mode).
- Manual start and stop.
- Switch for manual and automatic operation.
- Connection for overload protection of the SRA.
- Connection for options.



### Code no.

| TYPE     | ENCLOSURE | CODE NO. |
|----------|-----------|----------|
| SRB 3110 | IP 00     | 080B1049 |

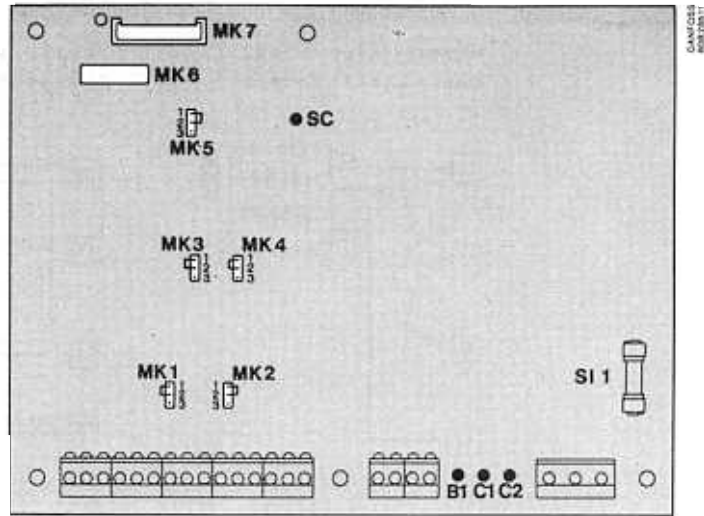
### Technical data

|                     |   |
|---------------------|---|
| Supply voltage      | 100, 115, 200, 220 or 240 V ac.               |
| Mains frequency     | 50 - 60 Hz.                                   |
| Consumption         | max. 80 W                                     |
| Ambient temperature | 0 - 40°C *                                    |
| Fuses               | 1 pcs. 0,4 A, 1 pcs. 0,8 A<br>slow-blow fuses |





\* By the control of only 2 x 1 valves; max. ambient temperature 50°C.



## Programming



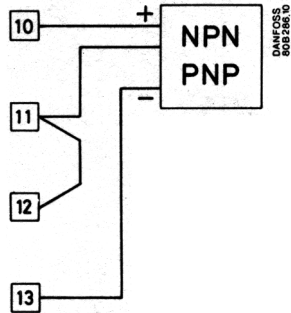
\* SI 1, 0,8 A is supplied by a supply voltage of 100 and 115 V ac.  
The shown jumpers and the fuse, 0,4 A, are mounted on delivery of SRB 3110.

| POS.   | FUNCTION             | NOTES  |
|--|----------------------|--|
| <b>MK 1.</b> Choice of type of signal source                     | Pos. 1-2<br>Pos. 2-3 | Input for stop signal - NPN<br>Input for stop signal - PNP   |
| <b>MK 2.</b> Choice of type of signal source                     | Pos. 1-2<br>Pos. 2-3 | Input for start signal - NPN<br>Input for start signal - PNP   |
| <b>MK 3.</b><br>Choice of edge sensivity for stop signal source  | Pos. 1-2<br>Pos. 2-3 | Activation on negative edge <br>Activation on positive edge  |
| <b>MK 4.</b><br>Choice of edge sensivity for start signal source | Pos. 1-2<br>Pos. 2-3 | Activation on negative edge <br>Activation on positive edge  |
| <b>MK 5.</b> Activation of output 3. (Brake or clutch valves).   | Pos. 1-2<br>Pos. 2-3 | Activation via optionbox.<br>Activation via terminal 14.<br>Activation on low level  |
| <b>MK 6.</b> Options connection 2                                |                      | Connection to internal options.  |
| <b>MK 7.</b> Options connection 1                                |                      | Connection to SRB 3200 (optionbox).  |

**Connection of signal sources**

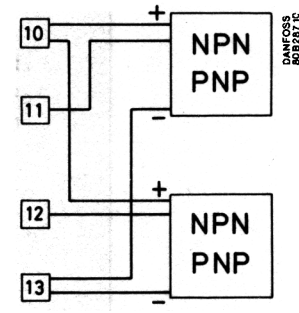
Level control:

Start-/stop signal from one signal source.



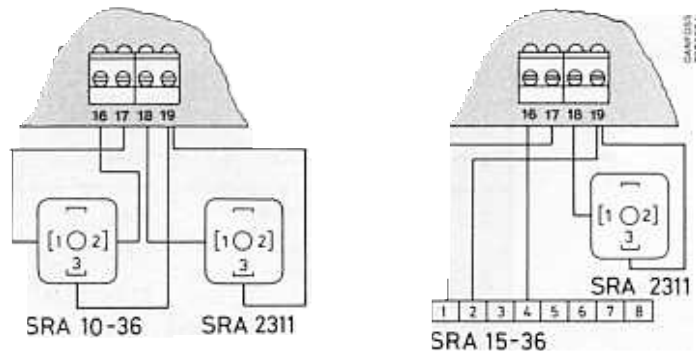
Pulse control:

Start-/stop signal from two signal sources.



NPN/PNP signal source; see programming page 3.

**Connection SRA**



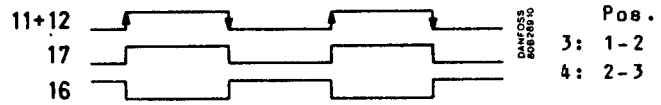
**Max. cycling frequency**

| NUMBER OF VALVES TOTAL | 2 x 1 | 2 x 2 | 1 x 2 | 3 x 2 | 3 x 1 |
|------------------------|-------|-------|-------|-------|-------|
| MAXIMUM Hz             | 50    | 20    | 20    | 13    | 33    |

**SRA 10** ; 2 x 1 valves  
**SRA 15-36** ; 2 x 2 valves  
**SRA 2311** ; 1 x 2 valves

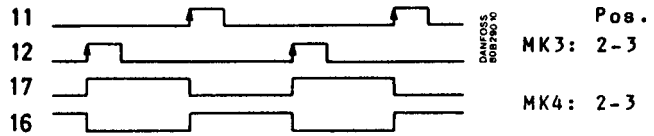
**Applications**

**EXAMPLE 1 : Level control with one signal source.**



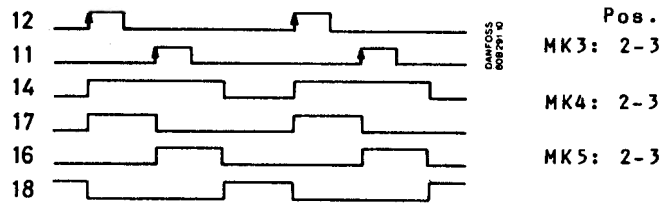
TL.11 + TL.12 : Input for start-/stop signal.  
 TL.17 : Output for clutch valves.  
 TL.16 : Output for brake valves.

**EXAMPLE 2 : Pulse control with two signal sources.**

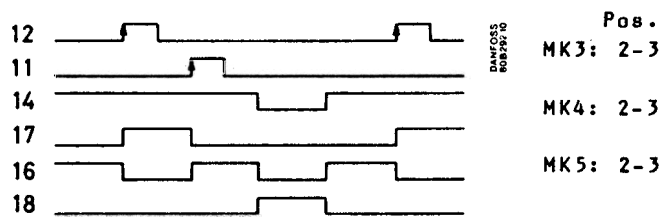


TL.11 : Input for stop signal.  
 TL.12 : Input for start signal.  
 TL.17 : Output for clutch valves.  
 TL.16 : Output for brake valves.

**EXAMPLE 3 : Activation of output 3 terminal 18.**

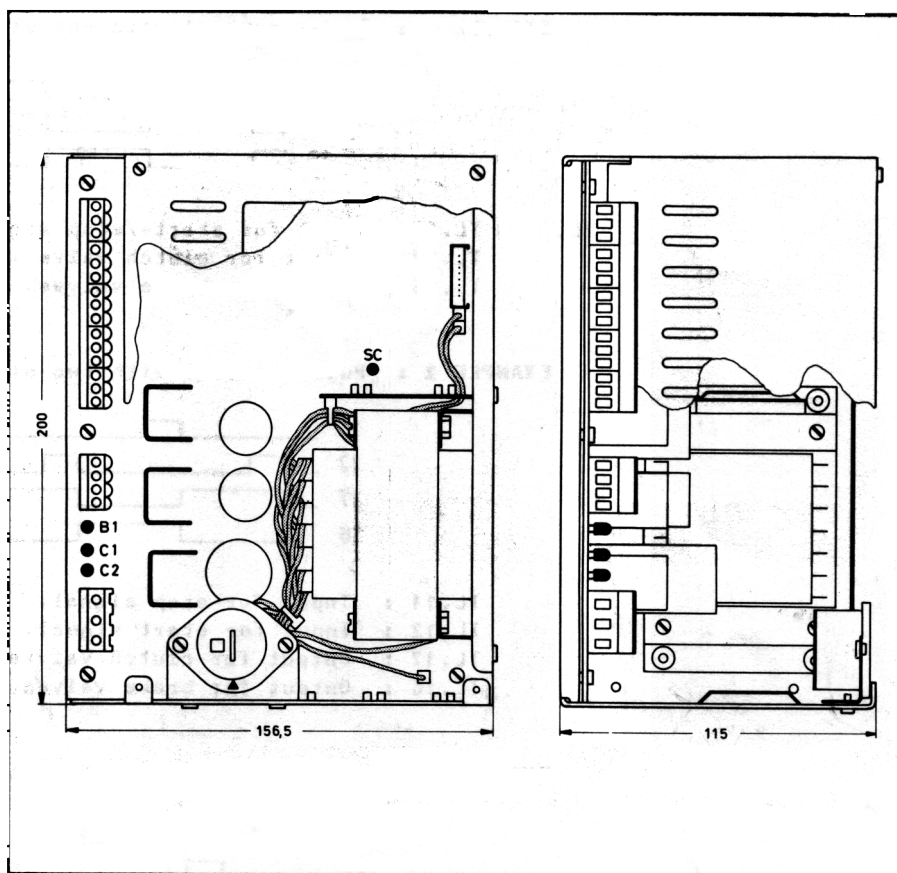


or



TL.12 : Input for start signal.  
 TL.11 : Input for stop signal.  
 TL.14 : Input for free mode.  
 TL.17 : Output for clutch valves.  
 TL.16 : Output for brake valves.  
 TL.18 : Output 3 for clutch-/brake valves.

## Dimensional sketch



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### Light-emitting diodes

B 1 lights when output, TL.16, is ON (brake mode)  
The control always starts up in this position.

C 1 lights when output, TL.17, is ON (clutch mode).

C 2 lights when output 3, TL.18, is ON.

SC lights if the valve outputs are short-circuited

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### Connection cables

Between the SRB 3110 and signal sources:

Screened cable, min. 0,5 mm<sup>2</sup>, max. length 50 m.

Between the SRB 3110 and the SRA:

Screened cable, min. 0,5 mm<sup>2</sup>, max. 0,25 ohm per conductor.

Where it is possible, the space between the connection cables and other installations should be at least 200 mm.