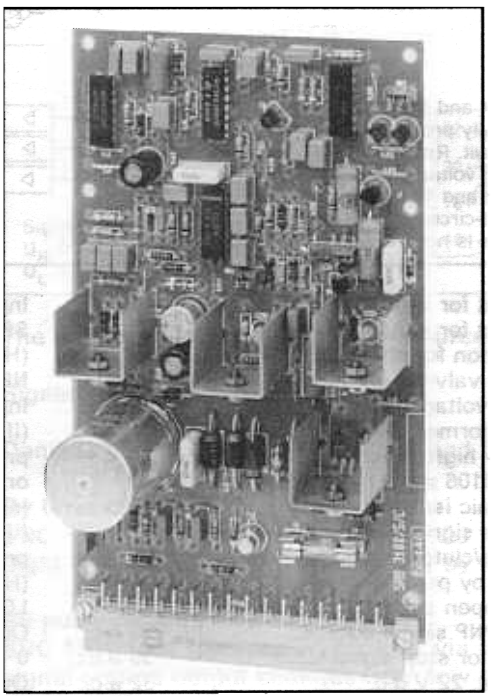
Electronic Control Unit Type SRB 3106

Data sheet 8-1988

Application



SRB 3106 can control Danfoss step units, type SRA.
External signal sources provide the SRB 3106 with information to control the starting and stopping of the SRA.

The SRB 3106 gives the following functions:

- Start and stopsignal from the same signal source.
- Start and stopsignal from two signal sources.
- Control of 2x1 or 2x2 valves.
- Free mode (SRA on/off).
- Supply voltage for signal sources.
- Status signal (brake/clutch mode).

Ordering

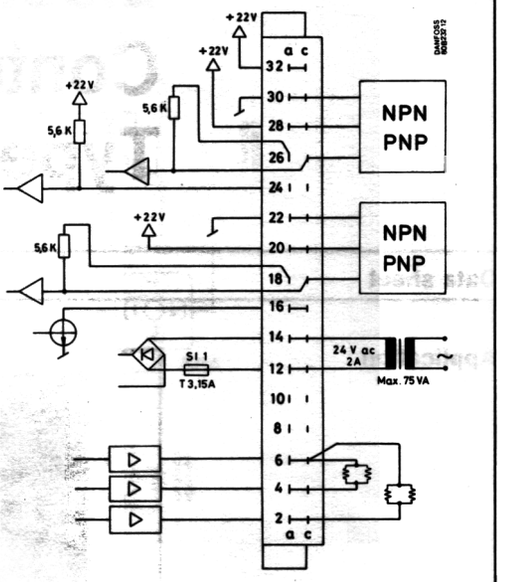
Type	Code no.
SRB 3106	**080B1050**

Technical data

Supply voltage	24 V a.c. +10/−15%
Mains frequency	50 - 60 Hz
Consumption	max. 55 W
Ambient temperature	0 - 40°C*
Fuse	1 pc. 3.15 A slow blow fuse

* By control of only 2x1 valves; max. ambient temperature 50°C.

Plug connection

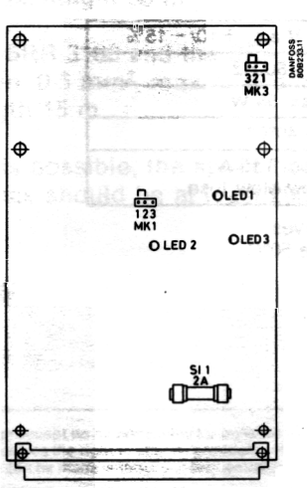


The terminals 2, 4 and 6 are mutually electrically protected against short-circuit. Reset by isolating the main voltage supply from terminals 12 and 14 in minimum 10 seconds. Short-circuit to 0 V or other terminals is not allowed.

2 a.c.: Output for brake valves.
4 a.c.: Output for clutch valves.
6 a.c.: Common for clutch and brake valves.
12/14 a.c.: Main voltage supply. Transformer; 24 V a.c. Max. 75 VA safety high isolating transformer. SRB 3106 must have separate galvanic isolated supply.
16 a.c.: Status signal (brake/clutch) brake / clutch (Only by pulse control) NPN open collector max. 50 mA.
18 a.: NPN/PNP signal source.
18 c.: Input for stop signal
20 a.c.: Output; 22 V d.c.*
22 a.c.: 0 V.
24 c.: Input for free mode; SRA on/off. (HIGH = ON, LOW = OFF)
26 a.: NPN/PNP signal source.
26 c.: Input for start signal (If pulse control has been programmed). or Input for start/stop signal. (If level control has been programmed). (HIGH = brake mode, LOW = clutch mode).
28 a.c.: Output; 22 V d.c.*
30 a.c.: 0 V.
32 a.c.: Output; 22 V d.c.*

* The max. permissible load on terminals 20, 28 and 32 is 100 mA.

Programming

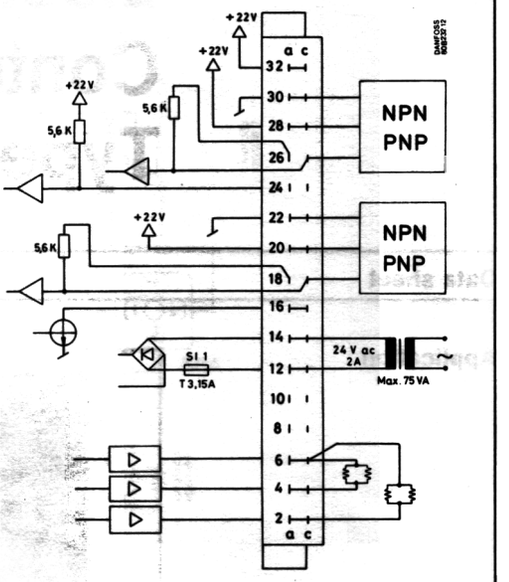


The shown short-circuit jumpers have been fitted prior to delivery of SRB 3106.

Pos.	Function	Notes
MK1	Pos. 1-2 Pos. 2-3	Control of 2x1 valves* Control of 2x2 valves**
MK3	Pos. 1-2 Pos. 2-3	Level control Pulse control

* By the control of 2x1 valves; max. cycling frequency 50 Hz.
** By the control of 2x2 valves; max. cycling frequency 20 Hz.

Plug connection



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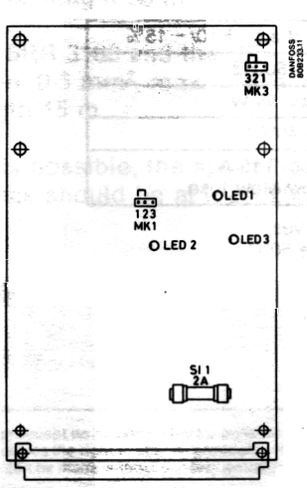

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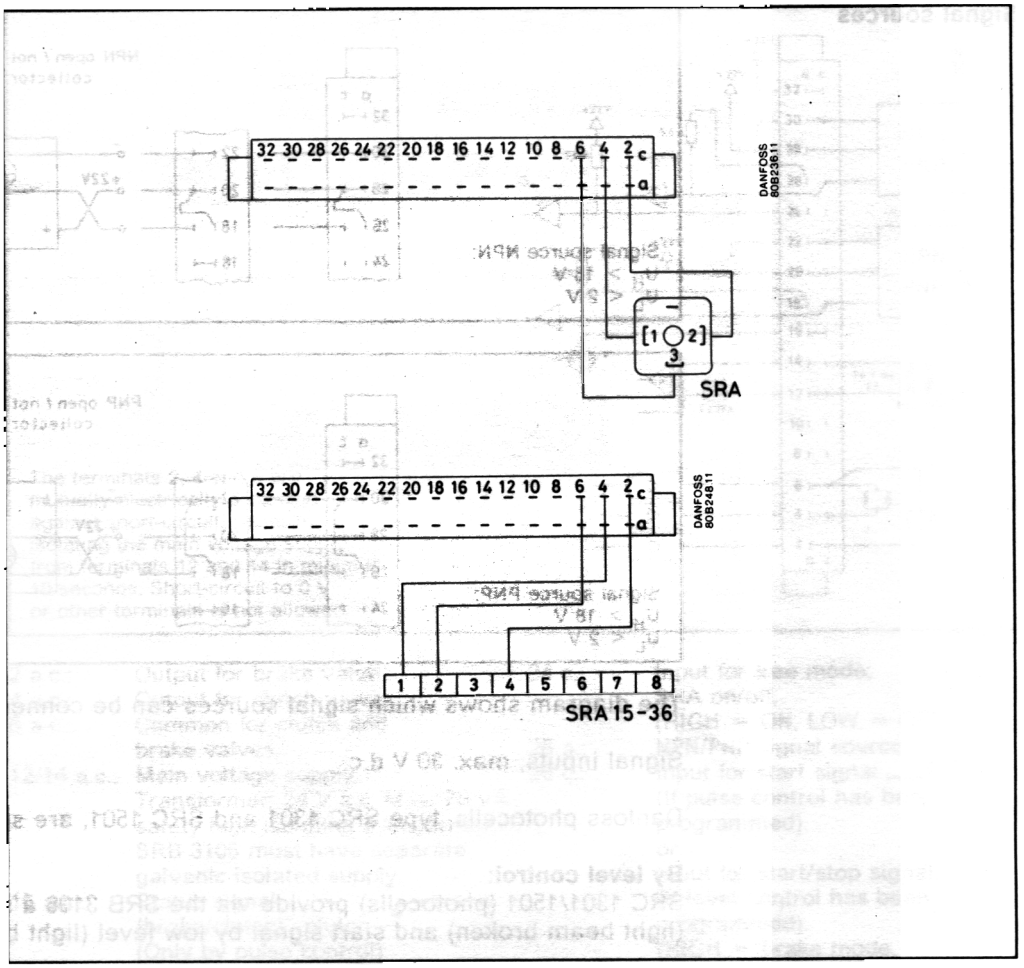
* By the control of 2x1 valves; max. cycling frequency 50 Hz.
** By the control of 2x2 valves; max. cycling frequency 20 Hz.

Connection of SRA



Light-emitting diodes

LED 1 lights: if the valve outputs are short-circuited.
LED 2 lights: when the SRA is in clutch mode.
LED 3 lights: when the SRA is in brake mode.
The control always starts in this position by pulse control.

Connection cables

Between SRB 3106 and the signal sources:
Cable, max. length 50 m.

Between SRB 3106 and the SRA:
Cable, min. 0.5 mm^2, max. 0.25 ohm per conductor.
Max. length 15 m.

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

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