

Title (en)

Load drive circuits.

Title (de)

Leistungssteuerschaltung.

Title (fr)

Circuit de commande d'une charge.

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Application

EP 89116296 A 19890904

Priority

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Abstract (en)

This invention is concerned with a load drive circuit using circuits of normal make contacts or normal brake contacts. This load drive circuit comprises a plurality of main contacts pairs (R3a, R4a), main relays (R3, R4) the number of which is the same as that of the main contacts pairs, first auxiliary contacts pairs (R3b, R4b) the number of which is the same as that of the main contacts pairs, second auxiliary contacts pairs (R2a2, R2a3) the number of which is the same as that of the main contacts pairs, a first relay (R1), a second relay (R2), a third auxiliary contact (R2b), a fourth auxiliary contact (R1a2), a fifth auxiliary contact (R1b), and a starting switch (S). The plurality of main contacts pairs are connected in a main circuit for energizing a load (4) so that the load (4) can be started to operate by the logical product of all the main contacts pairs (R3a, R4a). The main relays (R3, R4) are used to open and close the main contacts. The first auxiliary contacts are opened when the main contacts are closed, and closed when they are opened. The first relay is connected in series with the third auxiliary contact, the plurality of first auxiliary contacts pairs and the starting switch across a power supply (5). The second relay is connected in series with the fourth auxiliary contact and the starting switch across the power supply (5). The main relays are respectively connected in series with the second auxiliary contacts pairs across the power supply (5). Any one of the main relays is connected in series with the fifth auxiliary contact. The self-holding contacts pairs (R1a1, R2a1) are respectively connected in parallel with the third and fourth auxiliary contacts pairs (R2b, R1a2). The third auxiliary contact is closed when the self-holding contact (R2a1) connected to the second relay and the second auxiliary contacts are opened, and opened when they are closed. The fifth auxiliary contact is closed when the self-holding contact (R1a1) connected to the first relay and the fourth auxiliary contact are opened, and opened when they are closed. Thus, when the contacts of any one of the contacts pairs through which electric power is supplied to the load (4) are not opened due to some situations, the supply of power cannot be prevented from being resumed after the load drive circuit is once stopped from operation.

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