switch connection, which comprises two legs and a handle section connecting the legs. Two series disconnecting switches of two terminal blocks arranged adjacent to one another can thus be actuated simultaneously, for which purpose one leg is inserted into the actuating shaft of each series disconnecting switch.

The known disconnect terminals have proven themselves as such. It is considered disadvantageous that a separate adjustment of the switching levers connected to connecting elements independently of one another is only possible if the connecting element is removed again.

However, it is desirable to refine these disconnect terminals, wherein a simple, rapid, and reversible switch connection is enabled and a compact structure and a small number of components is maintained or improved, and wherein simultaneously recognizability of the switch position is enabled.

Embodiments of the present invention seek to solve this problem. Embodiments of the present invention seek to solve the problem by the subject matter of claim 1.

Summary

According to a first aspect of the present invention, there is provided an arrangement having at least two disconnect terminals and at least one coupling device, wherein the at least two disconnect terminals each comprise at least one switching lever, wherein each switching lever is adjustable independently from the other switching lever from a first switch position into at least one second switch position and back, wherein the switching levers are connectable by means of the at least one coupling device,

- wherein the at least one coupling device connects the switching levers if the at least one coupling device is switched into at least one first coupling position, and in that the at least one coupling device separates the switching levers from one another if the at least one coupling device is switched into at least one second coupling position, and
- wherein the at least one coupling device comprises at least one coupling element which is switchable linearly in the radial direction in relation to a pivot axis of the switching levers from the at least one first coupling position into the at least one second coupling position or into at least one further coupling position and back.

According to a second aspect of the present invention, there is provided an arrangement having at least two disconnect terminals and at least one coupling device, wherein the at least two disconnect terminals each comprise at least one switching lever, wherein each switching lever is adjustable independently from the other switching lever from a first switch position into at least one second switch position and back, wherein the switching levers are connectable by means of the at least one coupling device,
Wherein the at least one coupling device connects the switching levers if the at least one coupling device is switched into at least one first coupling position, and in that the at least one coupling device separates the switching levers from one another if the at least one coupling device is switched into at least one second coupling position, and
wherein the at least one coupling device comprises at least one coupling element which is switchable rotationally around an axis from the at least one first coupling position into the at least one second coupling position or into at least one further coupling position and back, wherein the axis is tangential to an imaginary circle having a center point through which a pivot axis of the switching lever extends.

An arrangement according to the invention comprises at least two disconnect terminals and at least one coupling device, wherein the at least two disconnect terminals each comprise at least one switching lever, wherein each switching lever is adjustable independently from the other switching lever from a first switch position into at least one second switch position and back, wherein the switching levers are connectable by means of the at least one coupling device. The at least one coupling device connects the switching levers to one another if the at least one coupling device is switched into at least one first coupling position, and the at least one coupling device separates the switching levers from one another if the at least one coupling device is switched into at least one second coupling position.

This results in an advantageously simple and rapid connection of switching levers of the disconnect terminals and also a similarly simple and rapid reversal of the connection of the switching levers by means of the coupling device in two different coupling positions. Moreover, other coupling configurations can be enabled by further coupling positions.

A further advantage is that all disconnect terminals having the same structure can be used.

Moreover, it is possible that not only two, but rather switching levers of multiple disconnect terminals can be connected in an advantageously simple manner.

Claims

1. An arrangement having at least two disconnect terminals and at least one coupling device, wherein the at least two disconnect terminals each comprise at least one switching lever, wherein each switching lever is adjustable independently from the other switching lever from a first switch position into at least one second switch position and back, wherein the switching levers are connectable by means of the at least one coupling device,
wherein the at least one coupling device connects the switching levers if the at least one coupling device is switched into at least one first coupling position, and in that the at least one coupling device separates the switching levers from one another if the at least one coupling device is switched into at least one second coupling position, and
wherein the at least one coupling device comprises at least one coupling element which is switchable linearly in the radial direction in relation to a pivot axis of the switching levers from the at least one first coupling position into the at least one second coupling position or into at least one further coupling position and back.

2. The arrangement as claimed in claim 1, wherein the at least one coupling element is held captively on the switching lever of one of the at least two disconnect terminals.

3. The arrangement as claimed in claim 1 or 2, wherein the at least one coupling element is switchable linearly in the radial direction in relation to a pivot axis of the switching levers from the first coupling position into the second coupling position or into the at least one further coupling position and back perpendicularly or at an angle in relation to the movement direction of a switching lever.

4. The arrangement as claimed in claim 3, wherein the at least one coupling element comprises at least one switch pin, at least one driver, and at least one handle, wherein the at least one switch pin is longer than the at least one driver.

5. The arrangement as claimed in claim 4, wherein the at least one coupling elementis accommodated in a displaceably guided manner with the at least one switch pin in at least one receptacle of the one switching lever of the at least one disconnect terminal and is fixed by a detent mechanism in each case in

the at least one first coupling position and in the at least one second coupling position or in the at least one further coupling position.

6. The arrangement as claimed in claim 5, wherein the at least one switch pin of the at least one coupling element comprises at least one lug and at least one detent spring having at least one detent lug as a detent mechanism.

7. The arrangement as claimed in any one of the preceding claims, wherein the at least one driver is engaged in the at least one first coupling position with at least one receptacle of an adjacent or at least one closest switching lever or at least one switching lever arranged remotely in a multiple of a grid, and in that the at least one driver is disengaged in the at least one coupling position or in the at least one further coupling position from the at least one receptacle of the adjacent or at least one closest switching lever or at least one switching lever arranged remotely in a multiple of a grid.

8. An arrangement having at least two disconnect terminals and at least one coupling device, wherein the at least two disconnect terminals each comprise at least one switching lever, wherein each switching lever is adjustable independently from the other switching lever from a first switch position into at least one second switch position and back, wherein the switching levers are connectable by means of the at least one coupling device,
Wherein the at least one coupling device connects the switching levers if the at least one coupling device is switched into at least one first coupling position, and in that the at least one coupling device separates the switching levers from one another if the at least one coupling device is switched into at least one second coupling position, and
wherein the at least one coupling device comprises at least one coupling element which is switchable rotationally around an axis from the at least one first coupling position into the at least one second coupling position or into at least one further coupling position and back, wherein the axis is tangential to an imaginary circle having a center point through which a pivot axis of the switching lever extends.

9. The arrangement as claimed in claim 8, wherein the at least one coupling element is held captively on the switching lever of one of the at least two disconnect terminals.

10. The arrangement as claimed in claim 8 or 9, wherein the at least one coupling element is a type of oblong hood and comprises a pivot section, a shaft sec-

tion having the axis, and at least one coupling section, wherein the shaft section of the at least one coupling element is accommodated so it is pivotable around the axis in a receptacle of a radially protruding actuating section of the switching lever and is held captively by a suitable means.

11. The arrangement as claimed in claim 10, wherein the suitable means is an undercut.

12. The arrangement as claimed in claim 11, wherein the at least one coupling element is pivoted in the at least one first coupling position via the radially protruding actuating section of at least the adjacent or at least one closest switching lever or at least one switching lever arranged remotely in a multiple of a grid and is coupled at least thereto in a formfitting manner, wherein the at least one coupling section of the at least one coupling element encloses in a hood-like manner the radially protruding actuating section of at least the adjacent or at least one closest switching lever or at least one switching lever arranged remotely in a multiple of a grid.

13. The arrangement as claimed in any one of claims 10 to 12, wherein the at least one coupling element is held in the at least one first coupling position in a first detent position, wherein at least one projection on the inner sides of side walls of the at least one coupling section of the at least one coupling element is engaged with ends of the receptacle of the actuating section of at least the adjacent or at least one closest switching lever or at least one switching lever arranged remotely in a multiple of a grid, and in that the at least one coupling element is held in the at least one second coupling position in a second detent position, wherein at least one detent device having a protruding section and an indented section corresponding thereto is provided.

14. The arrangement as claimed in claim 8 or 9, wherein the at least one coupling element is arranged pivotably around at least one axis and captively in each case in a receptacle in at least one actuating section of the at least one switching lever, wherein the respective receptacle comprises at least one slot, through which the at least one coupling element is installable.

15. The arrangement as claimed in claim 14, wherein the at least one coupling element comprises in each case a cylindrical body having an associated pivot axis and at least one arm attached to the body having at least one hook section.

16. The arrangement as claimed in claim 15, wherein the at least one hook section extends in the at least one first coupling position through the at least one slot and is engaged with at least one further receptacle of the actuating section of at least the adjacent or at least one closest switching lever or at least one switching lever arranged remotely in a multiple of a grid, wherein the at least one hook section remains in the respective corresponding receptacle in the at least one second coupling position.

17. The arrangement as claimed in any one of claims 14 to 16, wherein the at least one coupling element is locked in each of the at least one first coupling position and in the at least one second coupling position by means of at least one lug or at least one projection, which is engaged in the respective at least one coupling position or in the at least one further coupling position with a respective fixed recess.

18. The arrangement as claimed in any one of claims 14 to 17, wherein the at least one coupling element is switchable by means of a tool.

19. The arrangement as claimed in any one of claims 13 to 16, wherein the at least one actuating section of the at least one switching lever having the corresponding receptacles is formed having the at least one coupling element and the corresponding receptacles as at least one box-shaped region or receptacle sections each as a separate part, which is attached in a suitable manner to the at least one switching lever.