

# Outdoor single-pole disconnectors DRIBO Fir

rated voltage 25 and 38.5 kV  
rated current 400 A



**DRIBO, spol. s r.o.**

Pražákova 36  
619 00 Brno  
Czech Republic

Tel.: +420 533 101 111, Fax: +420 543 216 619, E-mail: [dribo@dribo.cz](mailto:dribo@dribo.cz), Internet: <http://www.dribo.eu>

ISO 9001  
ISO 14001  
BUREAU VERITAS  
Certification



## Outdoor single-pole disconnectors DRIBO FLR

These switching devices are used for the disconnection of end-position substations and parts of the no-load power lines. The DRIBO FLR disconnectors are equipped with a simple arc quenching equipment, which provides for breaking of the circuit irrespective of the speed of manipulation.

The disconnectors are designed for mounting on a console or within the range of the line span.

The disconnectors comply with the requirements of the EN 62271-1 and EN 62271-102 standards. The insulators used at the disconnectors meet the requirements on pollution class IV to ČSN 33 0405.

The easy and rugged design of the disconnectors provides for the reliability of their operation in the most different climatic environments.

Parts of the supporting structure are made of hot-galvanized steel; the contact springs, small parts of the locking mechanism and arc-quenching contacts are made of stainless steel.

All current-carrying parts are manufactured of galvanically silvered electrolytical copper.

**Under normal operating conditions the disconnectors do not necessitate any maintenance and, therefore, are maintenance free over a period of twenty years.**

The dimensioning of the conductors of which the current-carrying path consists, as well as the contact pressure of stainless steel springs are one of the prerequisites for a defect-free switching, even after many years of operation of the disconnector in the most severe operating conditions and also in ice-accretion conditions.

The self-cleaning surface of the brand suspension insulators used, with silicon insulation, guarantees, with a high margin, the long-time insulation properties of the disconnector over the isolating distance, at areas with a high level of air pollution and under rain conditions. The short-circuit withstand capabilities are met with a big margin.

The well-proven structural elements are the result of long-term experience, which, along with the quality of material used and the accuracy of production, guarantee low operation and maintenance costs of the switching device.

The control of the disconnectors is done using 5 to 6 m long switching rods, or using rods being the part of the Powerman Hot handling set with a special attachment that have been tested also for operation in rainy conditions.

## Technical data

Rated voltage	U	kV	25	38,5
rated current	$I_r$	A	400	400
rated short-time current	$I_k$	kA	16	16
rated dynamic current	$I_p$	kA	40	40
permitted tension during the operation		kN	30	30
smallest phase pitch when placing the disconnectors side by side		mm	800	1200
smallest phase pitch in off-tracking position of the middle phase		mm	500	700
rated short-time withstand power frequency voltage / 1min. to be applied in both dry and wet conditions across the isolating distance		kV	60	90
rated lightning pulse withstand voltage across the isolating distance		kV	145	210

## Function description

### Opening

By pulling the on the control rod suspended over the upper edge of the control lever **6** the locking mechanism **5** opens, which releases the switching knife contact **1**. After loosening the switching knife contact, the current flows through by the arc quenching circuit **15**, connected in parallel. After having reached a distance, which is adequate for safe opening the disconnector opens in a quick-acting way, independent of the operation speed of the disconnector. By further application of pulling forces this contact achieves its opened switching position (vertical position).

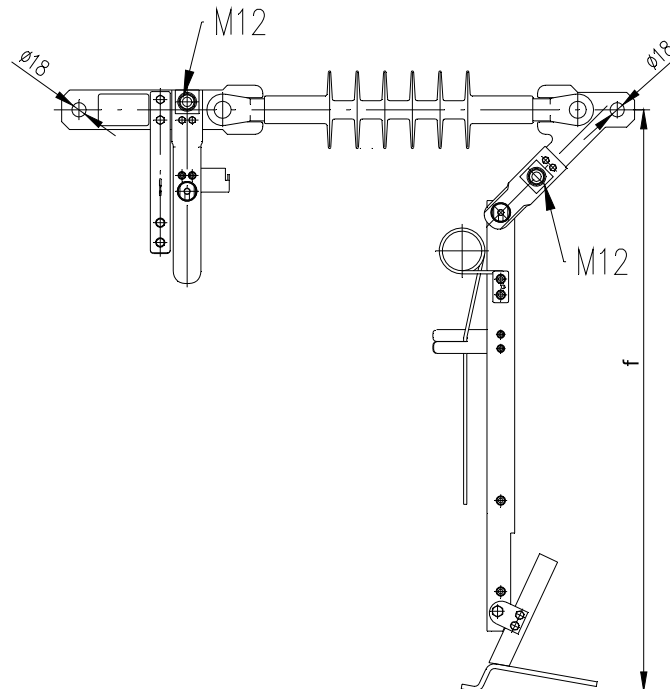
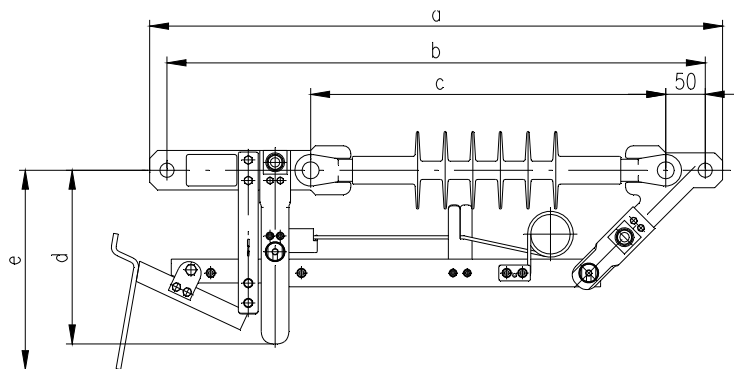


## Closing

Applying pressure of the operation rod on the bottom edge of the control lever **6** introduces the switching knife contact **1** into the guiding fork **4** and farther to the slide contact **3**. When reaching the end position the locking mechanism **5** locks the switching knife contact **1** in ON position. The quick-opening mechanism is activated during the closing operation.



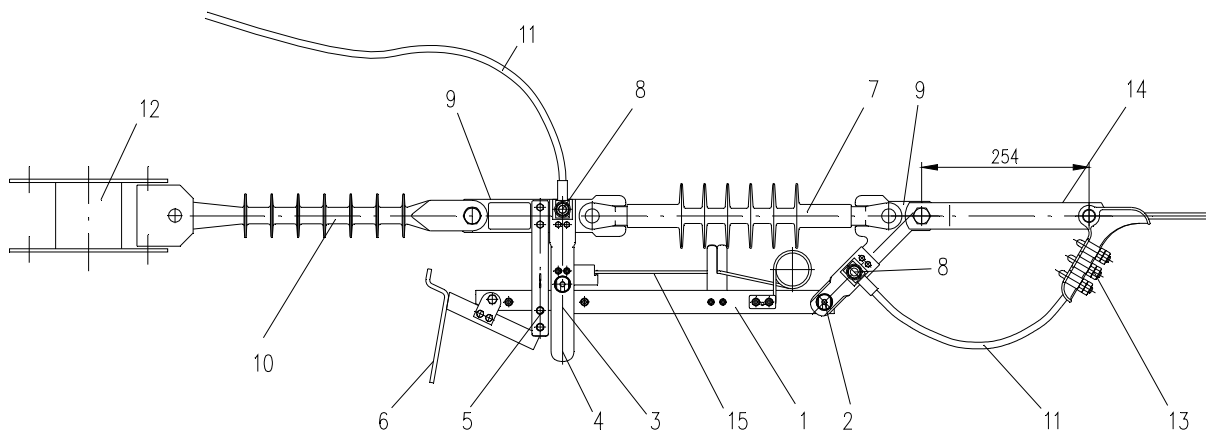
## Single-pole disconnectors DRIBO Fir



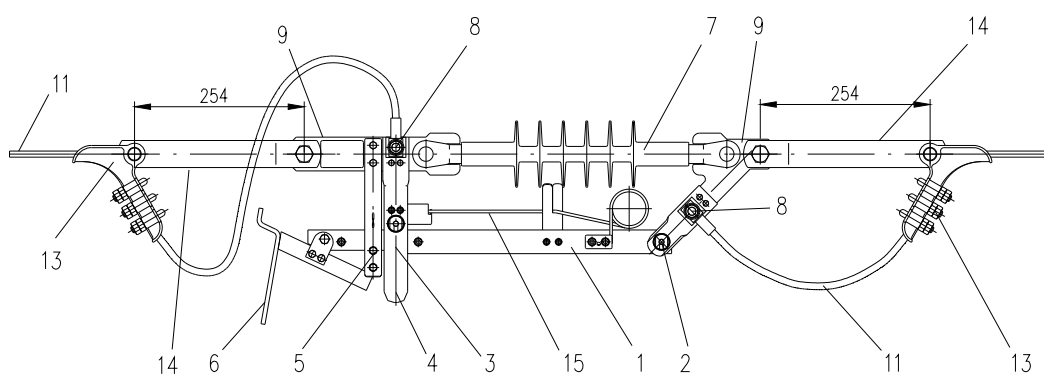
rated voltage kV	rated current A	design	a mm	b mm	c mm	d mm	e mm	f mm	weight kg
25	400	without clamps	726	682	450	220	262	735	5,5
25	400	with clamps	834	780	450	220	251	740	7,0
38,5	400		852	808	576	220	262	861	6,5

## Assembly examples

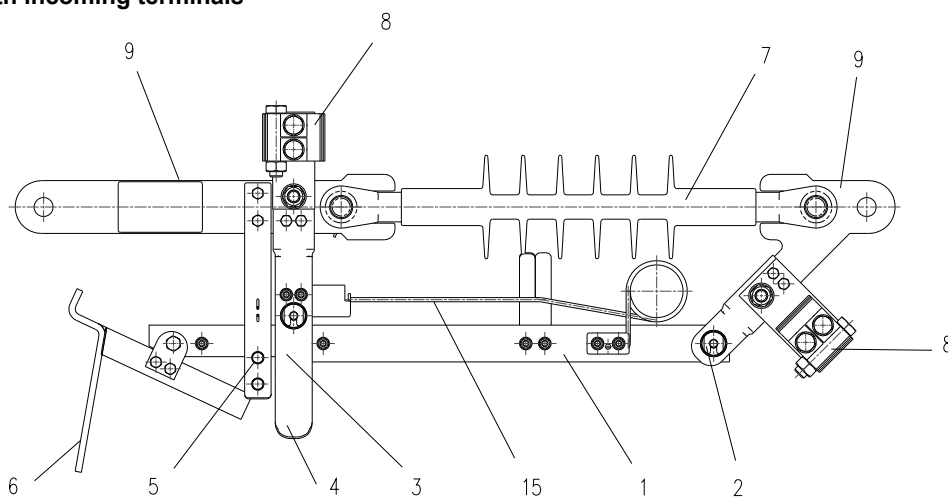
### Disconnecter mounted on the anchoring insulator



### Disconnecter suspended on conductors



### Version with incoming terminals



- |   |                         |    |                                   |    |   |
|---|-------------------------|----|-----------------------------------|----|---|
| 1 | switching knife contact | 6  | control lever                     | 11 | incoming conductor <sup>1)</sup>              |
| 2 | rotating contact        | 7  | insulator                         | 12 | anchoring fixture <sup>1)</sup>               |
| 3 | sliding contact         | 8  | incoming terminal                 | 13 | anchoring clamp terminal <sup>1)</sup>        |
| 4 | guiding fork            | 9  | fixture                           | 14 | extension piece – fork with lug <sup>2)</sup> |
| 5 | locking mechanism       | 10 | anchoring insulator <sup>1)</sup> | 15 | quick-opening mechanism                       |

<sup>1)</sup> not part of the delivery

<sup>2)</sup> separate item – accessory

## Recommended equipment

### Extension piece – fork with lug

