

DRIESCHER -**Outdoor Switch-Disconnecter
Type FLa 15/97**

- Rated voltage
12 kV, 24 kV, 36 kV and 38.5 kV
- Rated current
400 A and 630 A
- 1-pole and 3-pole design



15/97

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DRIESCHER - Outdoor Switch-Disconnecter FLa 15/97

according to EN 62271-103

content

- 3 General, designs
- 4 Switching in a vacuum
- 5 Operation mode, technical data **FLa 15/97**
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- Horizontal arrangement of the switch-disconnectors***
- 6 **FLa 15/97** mounted on wooden or concrete pole
- 7 Mounting supports, cu-tension straps
- 8 **FLa 15/97 wide span system**, coupling shafts for wide span system
- 9 Arrangement according to system "Tonnenbild", arrangement for wide span system
- 10 Underframe, support bearing
- 11 Permissible tension angle, Tension units, Concrete cross-arm
- 12 **FLa 15/97 - 64W**
- 13 Accessories for tension units
-
- Vertical arrangement of the switch-disconnectors***
- 14 Technical data **FLa 15/97 - 6400**
- 15 **FLa 15/97 - 6400 1-pole design**
- 16 **FLa 15/97 - 6410 - with fuse holders**
- 17 **FLa 15/97 - 6410 SA - with fuse holders and operating fuse**
- 18 Arrangements of operators for Type **FLa 15/97 - 6400, FLa 15/97 - 6410**
- 19 Operation examples
- 20 Examples to use the switch-disconnectors

DRIESCHER - Outdoor Switch-Disconnecter FLa 15/97

General

Contrary to former outdoor switch-disconnectors in which it was common practice for the arc to be extinguished in oil, with the new developed outdoor switch-disconnector FLa 15/97 arc extinction takes place in a vacuum interrupter.

Based on a patented insulating system there is also no liquid or gaseous medium required for the external insulation strength of the vacuum interrupters.

The vacuum quenching device is embedded in a weather-proof insulating housing.

This switchgear is therefore also recommended for special applications (e.g. in water protection areas).

The outdoor switch-disconnector is capable of switching on its rated current as well as its rated short-circuit making current via the main contact system.

The disconnecting process is implemented via the shunt-connected vacuum interrupters, resulting in no external arcing phenomena.

A fully developed eccentric make-and-break mechanism operates the vacuum interrupters and ensures Class M2 with regard to the mechanical strength (corresponds to 5000 mechanical operating cycles).

The designs FLa 15/97 correspond in their main dimensions to the switches FLa 15/60, FLa 6400 and FLa 6410 (refer to brochure 762, 763), i.e. the fixing dimensions have remained unchanged.

Also the operating linkage (brochure 775) can be used in the common design.

The switch frames and the operating shafts mounted in bronze bearings are hot-galvanized.

All insulators used in the design (brochure 712) are of cycloaliphatic cast resin.

The contacts with flanged ends in compliance with DIN 46206 as well as all other live components of the contact system are of electrolytic copper and are silver-plated in compliance with QTL 200.

Amply dimensioned cross-sections as well as the external spring mechanism at the contact jaw which provides constant contact pressure guarantee an easy and satisfactory switching, even after many years of operation.

Connecting screws with nuts, washers and lock washers are made of rustproof steel.

The outdoor switch-disconnector FLa 15/97 are available for rated voltages of 12 kV to 38.5 kV and rated currents of 400 A and 630 A, and have been tested in compliance with the valid regulations.

By using adapters it is possible to retrofit already installed equipment from the FLa 15/60 family (of the more recent design) with vacuum interrupters.

The attached earthing switches are, however, always without rapid breaking.

The external metal parts of the rapid make-and-break mechanism (actuating fork) are made of rustproof steel.

Designs

Horizontal arrangement

- FLa 15/97; for wooden- or concrete pole (switching angle 60°)
- FLa 15/97; wide span system on concrete pole or steel cross arms; (switching angle 60°)
- FLa 15/97 - 64W; (switch angle 110°)

Vertical arrangement (switching angle 90°)

- FLa 15/97 - 6400
- FLa 15/97 - 6410; with fuses
- FLa 15/97 - 6410 SA; with fuse operates
- FLa 15/97 - 6400 1-pole design

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Switching in a vacuum

• The trend is to use a vacuum

During the Sixties basic research began on switching in a vacuum. At this time low-oil switches had become firmly established in medium voltage networks, based on their reliable operation over decades, and were accepted by users as reliable devices. In laboratory tests it proved that the vacuum switches were superior by far to the conventionally applied switching principles.

The first experience with this vacuum technology was gathered using our line sectionalizers in overhead lines for railway operations, which have been successfully used since 1971.

In principle, the proven arcing chamber method has been maintained in the new switchgears which were developed in 1997.

In distribution networks a reliable power supply is the key criterion, wherein it is not the high number of operating cycles which is so important, but rather the high degree of reliability.

Even after many years of life the switchgear must make and break reliably.

All these requirements necessitate a switching unit with electrical properties that preferably do not change throughout its service life.

The vacuum interrupter is hermetically sealed and the purest materials ensure that the vacuum required for reliable switching remains intact throughout the entire service life.

Also the contact resistances remain at very low values as there is no oxidation process in a vacuum.

• Advantages of the switch-disconnector FLA 15/97 over outdoor switch-disconnectors with conventional extinguishing media:

- faster dielectric recovery after the breaking process
- high insulation resistance
- short total travel
- compact operating mechanism
- low contact wear and consequently
- high operating frequency
- very long service life

Description of operation:

During the **disconnection** the main contacts open first, while the current is commutated to the shunt-connected current path, the pivot arm and the actuating fork.

Once a specified disconnecting position is reached the actuating fork operates the toggle mechanism inside the arcing chamber and causes the vacuum interrupter to disconnect.

The breaking arc in the vacuum arcing chamber is safely extinguished at the first current zero with **no external** arcing phenomena.

The continued movement of the hinged insulator then provides the visible isolating distance.

During the **making process** the pivot arm strikes the actuating fork (vacuum interrupter is still disconnected). After the continued movement of the hinged insulator or immediately before making contact with the main contact a visible pre-arcing occurs between the main contacts, which extinguishes when the main contact system has full current carrying capacity.

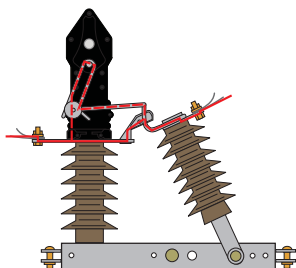
Immediately afterwards the shunted vacuum interrupter closes.



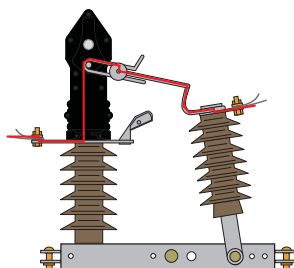
DRIESCHER - Outdoor Switch-Disconnecter FLa 15/97

Operation mode

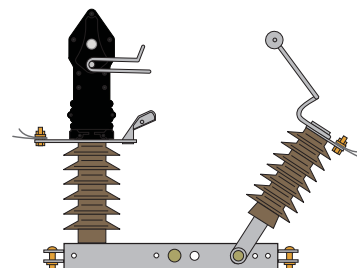
• Breaking Operation



Switch in "ON" position
Main and secondary contact system
as well as vacuum interrupter closed.

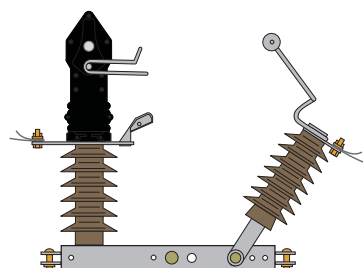


Switch during breaking phase.
The main contact system breaks while the
operating current is in full commutation
with the shunted vacuum interrupter.
The operating current is interrupted by the
vacuum interrupter.

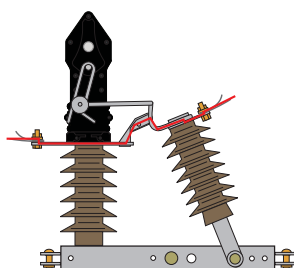


Switch in "OFF" position
Main and secondary contact system
as well as vacuum interrupter open.
The visible gap is attained.

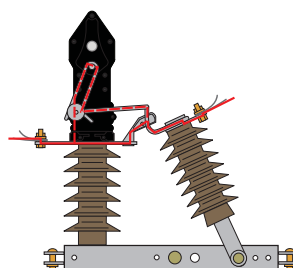
• Making Operation



Switch in "OFF" position
Main and secondary contact system
as well as vacuum interrupter open.



Switch during the making phase.
The operating current is switched on via
the main contact system.
The vacuum interrupter closes when the
main contacts have made full contact.



Switch in "ON" position
Main and secondary contact system
as well as vacuum interrupter closed.

Principle of operation for FLa 15/97. Apart from the modified main contact system, the operating from the shunted vacuum interrupter at the FLa 15/97-6400 and FLa 15/97-6410 absolute identical.

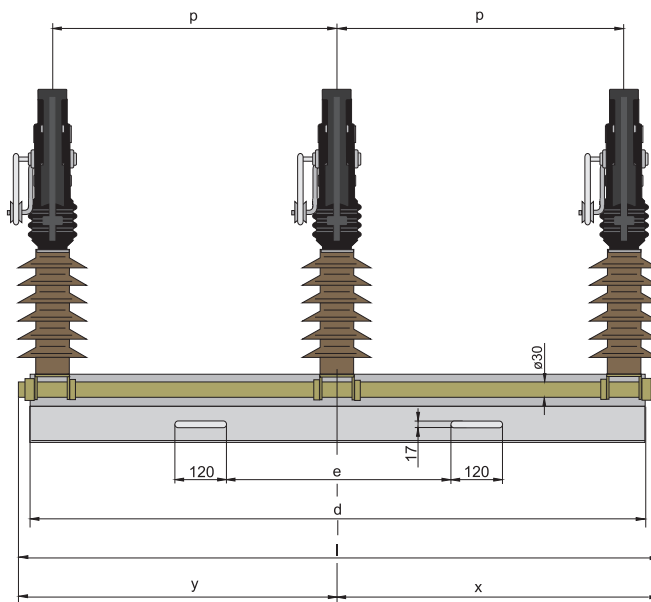
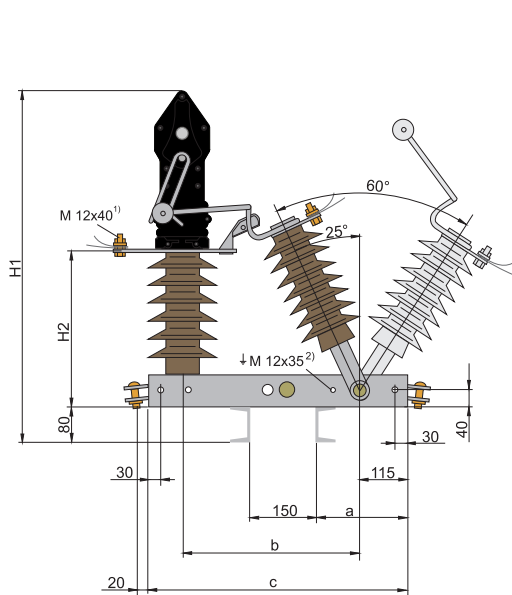
Technical data

Type	FLa 15/97				
Rated voltage	U _r	12 kV	24 kV	36 kV	38.5 kV
Rated current	I _r	400 / 630 A	400 / 630 A	400 / 630 A	400 / 630 A
Rated mainly active load breaking current	I ₁	630 A	630 A	630 A	630 A
Rated distribution line closed-loop breaking current	I _{2a}	630 A	630 A	630 A	630 A
Rated cable-charging breaking current	I _{4a}	25 A	25 A	28 A	28 A
Rated earth fault breaking current	I _{6a}	200 A	200 A	200 A	200 A
Rated cable breaking current under earth fault conditions	I _{6b}	32 A	32 A	32 A	32 A
Rated peak withstand current	I _p	40 kA	40 kA	40 kA	40 kA
Rated short time current (1 sec.)	I _k	16 kA ¹⁾	16 kA ¹⁾	16 kA ¹⁾	16 kA ¹⁾
Rated short-circuit making current	I _{ma}	25 kA	25 kA	16 kA	16 kA
Rated power frequency withstand voltage	U _d				
conductor - earth / conductor - conductor		28 kV	50 kV	70 kV	80 kV
break gap		32 kV	60 kV	80 kV	90 kV
Rated lightning impulse withstand voltage	U _p				
conductor - earth / conductor - conductor		75 kV	125 kV	170 kV	180 kV
break gap		85 kV	145 kV	195 kV	210 kV

1) This data applies also for mounted earthing switches

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FLa 15/97 - for mounting horizontal on wooden or concrete pole



- 1) Hex head bolt (caulked) with nut, washer and spring washer
2) Hex head bolt with screw, washer and spring washer

• without earthing switch

Rated voltage	Rated current	Part-no.	p	a	b	c	d	e	l	≈ H ₁	≈ H ₂	x/y	Weight approx.	Drawing-no.
12 kV	400 A	same application as 24 kV											110 kg	LT3-091445
24 kV	400 A	766 52011	700	215	405	600	1465	520	1530	774	363	765	110 kg	LT3-091445
24 kV	400 A	766 52013	1000	215	405	600	2065	520	2130	774	363	1065	125 kg	LT3-091445
24 kV	400 A	766 52014	1200	215	405	600	2465	520	2530	774	363	1265	135 kg	LT3-091445
38,5 kV	400 A	766 82013	1000	265	455	650	2065	460	2130	774	443	1065	140 kg	LT3-091979
38,5 kV		766 82014	1200	265	455	650	2465	460	2530	774	443	1265	150 kg	LT3-091979

• with earthing switch at side with chamber

Rated voltage	Rated current	Part-no. with earthing switch	p	Weight approx.	Drawing-no.
12 kV	400 A	same application as 24 kV		115 kg	LT3-091445
24 kV	400 A	766 52111	700	125 kg	LT3-091445
24 kV	400 A	766 52113	1000	145 kg	LT3-091445
24 kV	400 A	766 52114	1200	160 kg	LT3-091445
38,5 kV	400 A	766 82113	1000	170 kg	LT3-091979
38,5 kV	400 A	766 82114	1200	170 kg	LT3-091979

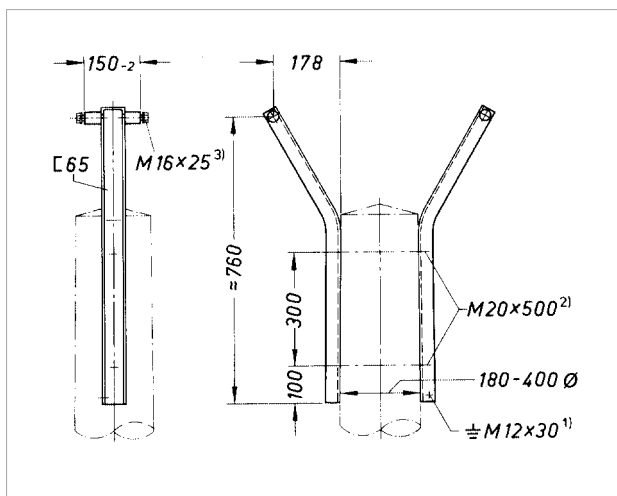
Equipment with auxiliary switches or motordrive only if ordered additionally.

Switches with rated current 630 A, please send inquiry (Connection with Cu-tensions straps with 4 layers).

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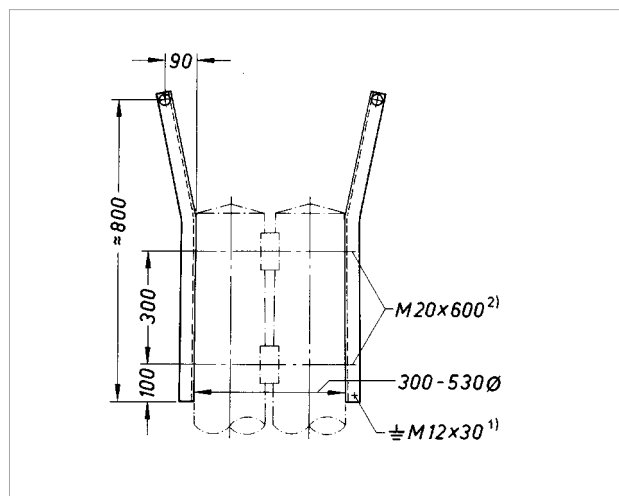
Mounting supports

for switch-disconnectors see on page 6



on single pole

Drawing no. FT 4-44328 • Part no. 760 10124
Weight (with accessories) approx. 14.4 kg



on double pole

Drawing no. FT 4-44328 • Part no. 760 10130
Weight (with accessories) approx. 15.4 kg

- 1) Hexagonal screw with nut and spring washer
2) Gewindebolt with nut and washers
3) Hexagonal screw and washer

Cu-tension straps (3 x 30 x 1, tin-plated) • Standard lengths

Part-no.	531 71004	531 71006	531 71009	531 71011
Lengths	1100 mm	1340 mm	1540 mm	1740 mm (special length)

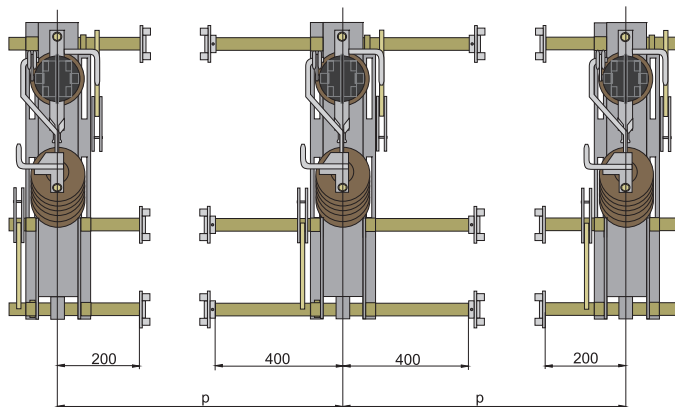
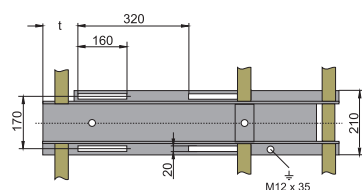
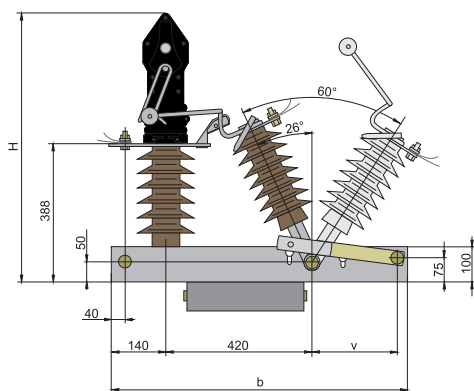
Switch mounting	Anchoring	For rated voltage kV	Straps lengths		quantity of straps each side and each pole • 400 A
			Fixed insulator side	Hinged insulator side	
On wooden or concrete pole	Single staying	12	1100	1340	1
On wooden or concrete pole	Single staying	24	1100	1340	1
On wooden or concrete pole	Single staying	36	1340	1540	1
On wooden or concrete pole	Double staying	12	1340	1340	1
On wooden or concrete pole	Double staying	24	1340	1340	1
On wooden or concrete pole	Double staying	36	1540	1640	1
On concrete cross-arms (wide span system)	Single staying	24	1340	1540	1
On concrete cross-arms (wide span system)	Single staying	36	1340	1540	1
On concrete cross-arms (wide span system)	Double staying	24	1540	1540	1
On concrete cross-arms (wide span system)	Double staying	36	1540	1540	1

Note: The tension straps with 3 layers 30 x 1 mm each are riveted together in the centre (page 13).

DRIESCHER - Outdoor Switch-Disconnecter FLA 15/97

FLA 15/97 wide span system for mounting on concrete cross-arms

For wide span system - comprising 3 single poles interconnected using coupling shafts



• without earthing switch

Rated voltage kV	Rated current A	Part-no.	p	≈ H	b	t	Weight approx. kg ²⁾	Drawing-no.
24	400	766 56051	of 1000 mm to 2400 mm stepped	719	670	100	97.0	LT3-091977
36	400	766 86051	by 200 mm respectively ³⁾	774	990	135	118.0	in planning

• with earthing switch

Rated voltage kV	Rated current A	Part-no.	Earthing switch	b	Weight approx. kg ²⁾	Drawing-no.
24	400	766 56151	Fixed insulator side	670	113	LT3-091977
24	400	766 56251	Hinged insulator side	840	119	LT3-091978
24	400	766 56351	Fixed and hinged insulator side	840	135	LT3-091978
36	400	766 86151	Fixed insulator side	990	134	in
36	400	766 86251	Hinged insulator side	990	134	planning
36	400	766 86351	Fixed and hinged insulator side	990	150	stage

2) The weights include the CU tension straps, but not the coupling shafts (for dimensions of Cu tension straps please refer to table on page 7)

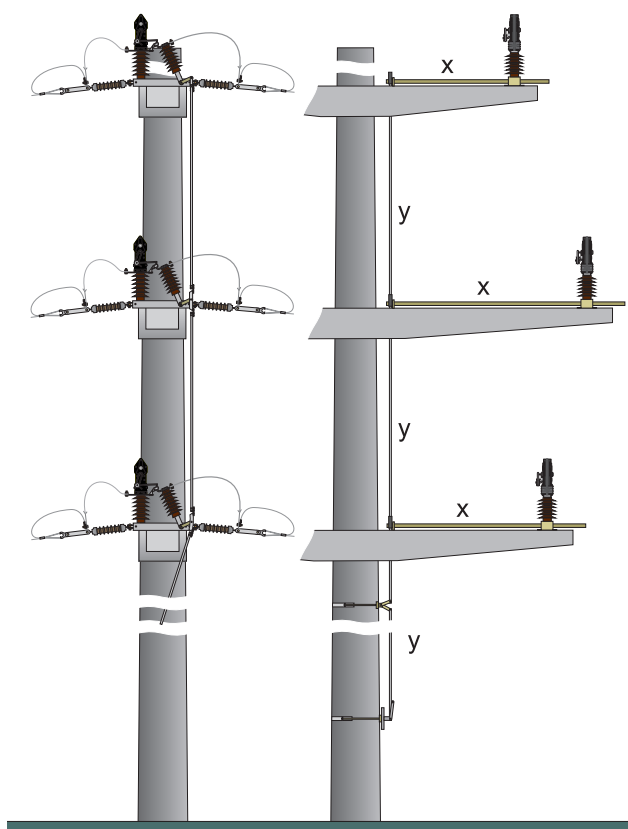
3) For dimensions and weights and part numbers of the coupling shafts please refer to following table

Coupling shafts for switch-disconnectors (wide span system)

Pole distance p	Shaft diameter	Part-no.	2 coupling shafts for switch without earthing switch Weight approx. kg	4 coupling shafts for switch with earthing switch Weight approx. kg	6 coupling shafts for switch with 2 earthing switches Weight approx. kg	Drawing-No. AZ 4-38254
1000	30	641 14460	4.5	9.0	13.5	
1200	30	641 14360	6.7	13.4	20.1	
1400	30	641 14370	8.9	17.8	26.7	
1600	30	641 14390	11.1	22.2	33.3	
1800	30	641 14400	13.3	26.6	39.9	
2000	40	641 14420	28.0	56.0	84.0	
2200	40	641 14430	32.0	64.0	96.0	
2400	40	641 14440	36.0	72.0	108.0	

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FLa 15/97 wide span system - arrangement according to system "Tonnenbild"



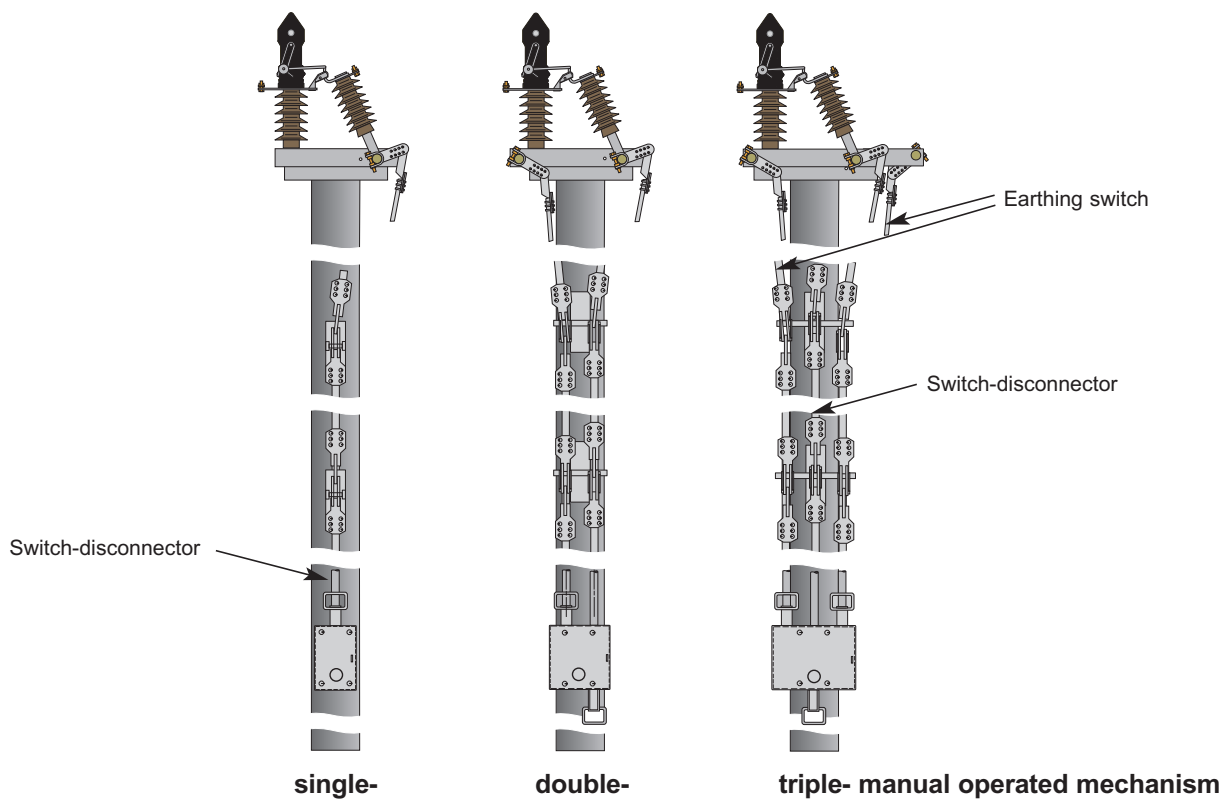
Switch-disconnectorswitch FLa 15/97 in Three-plane arrangement

- comprising 3 single poles which are mounted on cross-bars arranged one above the other
- Joint actuation of the 3 poles is implemented using a vertical operating linkage

The distances marked with x and y can be determined accordingly

Switch dimensions see page 8

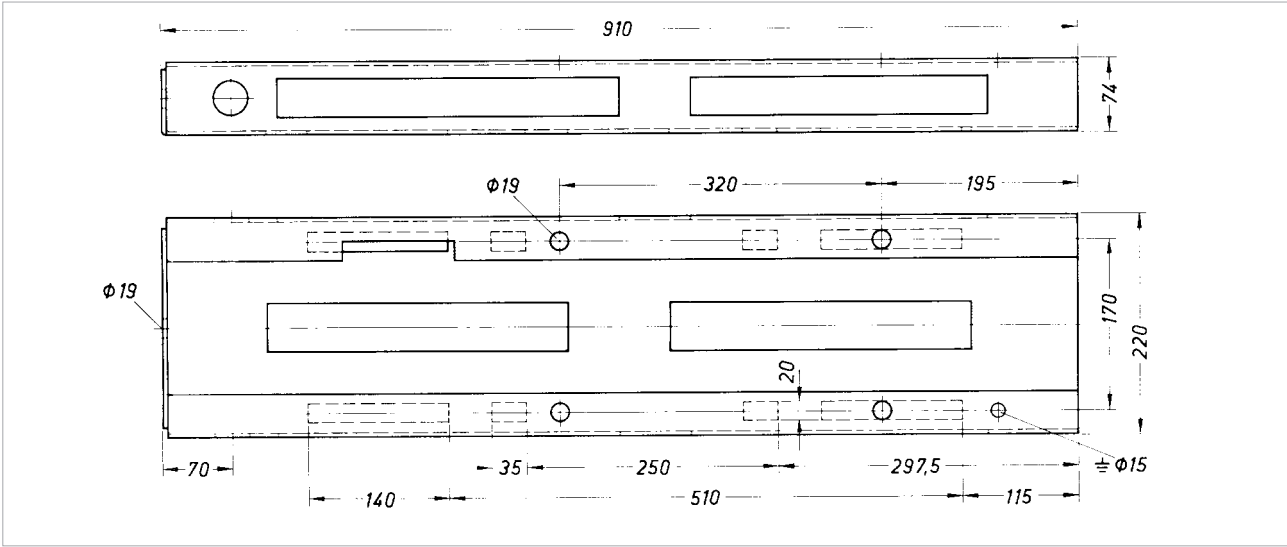
Arrangements of operating mechanisms for wide span system



DRIESCHER - Outdoor Switch-Disconnecter FLa 15/97

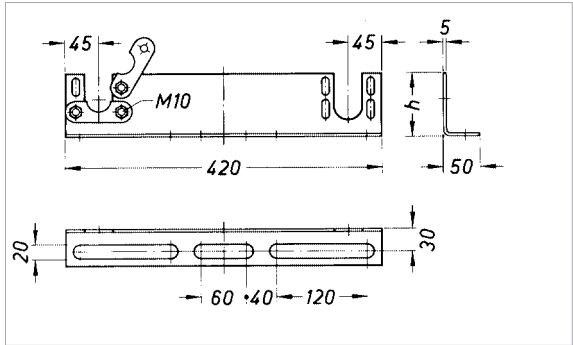
Underframe

for wide span system (drawing no. LH 3-43667) • Underframe fully assembled for three-pole switch-disconnector • rated voltage 24 kV
Part no. 760 20120 (drawing no. LH 4-44069), weight approx. 32 kg, for oversized concrete cross-arms



Support bearing

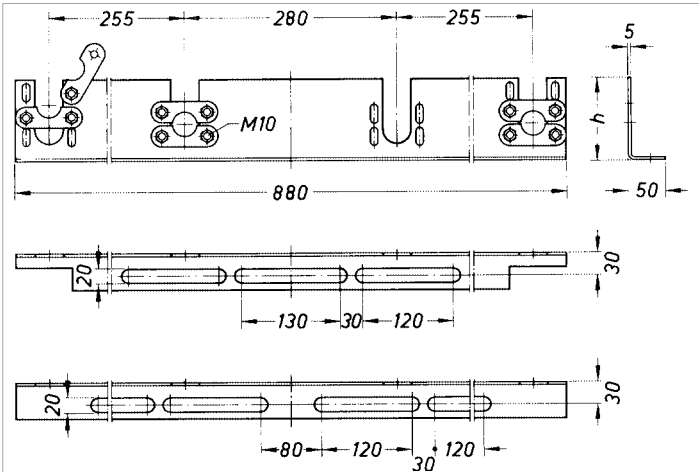
For switch-disconnectors without earthing switch for mounting on concrete cross arms (page 11) with appropriately cast threaded bushes



Underframe	Part-no.	h	Weight approx. kg	Drawing-no.
without	760 20105	85	1.9	LH 4-44099
with	760 20106	159	3.1	LH 4-44099

Support bearing

For switch-disconnectors with earthing switch for mounting on concrete cross-arms with appropriately cast threaded bushes



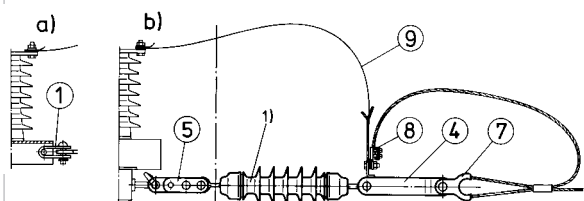
Rated voltage	Underframe	Part-no.	h	Weight approx. kg	Drawing-no.
24 kV	without	760 20110	85	1.9	LH 3-42752
24 kV	with	760 20104	159	3.1	LH 3-42753

Support bearing for switch-disconnectors with earthing switches, rated voltage 36 kV, on request

DRIESCHER - Outdoor Switch-Disconnecter FLa 15/97

Design of tension units

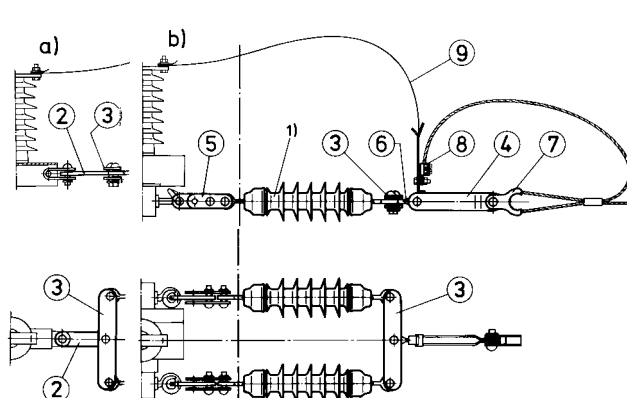
Single staying



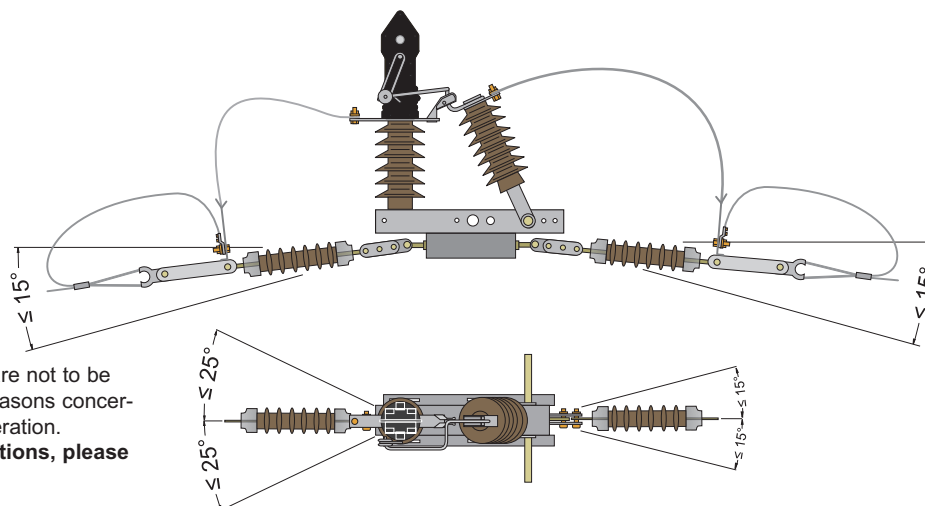
- a) for switches on wooden or concrete pole without top cross arm
b) for switches on concrete cross-arm (wide span system)

1) For the insulator, all types of tension insulators with pin eyes of pin sizes K 11 and K 16 can be used.

Double staying



Permissible tension angle

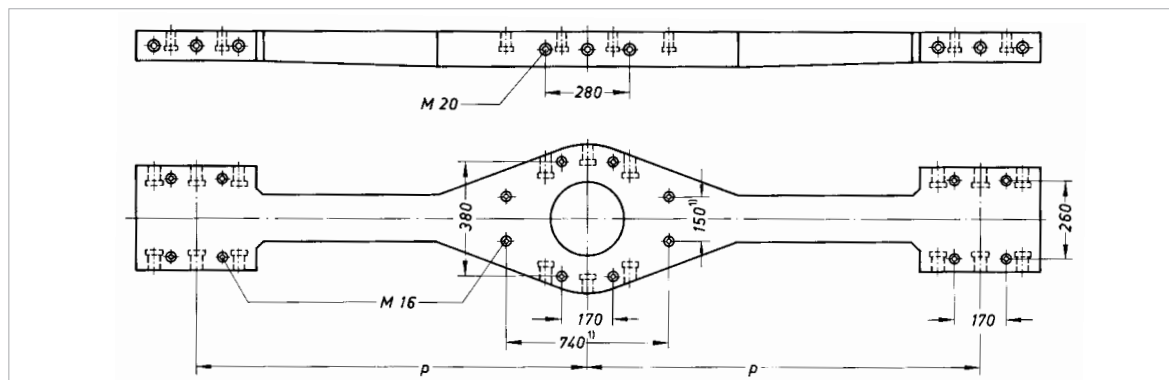


The specified angles are not to be exceeded based on reasons concerning the functional operation.

In the event of exceptions, please consult us first.

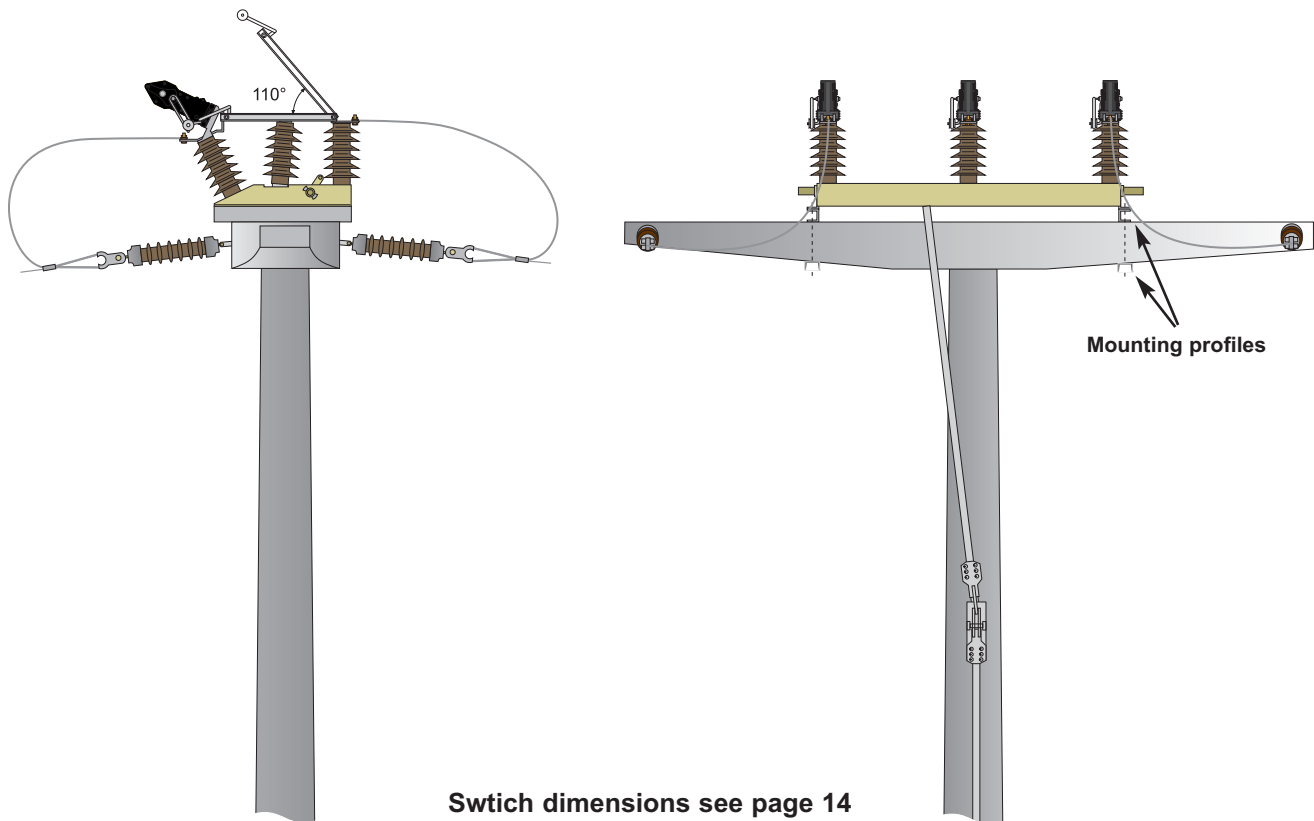
Concrete cross arm

For mounting an outdoor switch-disconnector FLa 15/60 with tension units



1) cast threaded bushes for shaft support bearings

Remark: For peak tensions (>30 kN) underframes are usually required for breaker pole mounting (see page 10).

DRIESCHER - Outdoor Switch-Disconnecter FLa 15/97-64W**FLa 15/97-64W (horizontal mounting)**

- Phase spacing $p = 500$ and $P = 700$ mm are possible
- For retrofitting existing concrete column lines
- With appropriate mounting profiles also possible for mounting on cross-bars
- Available with bird protection upon request

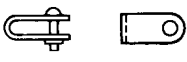
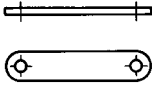
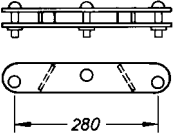
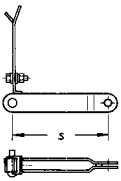
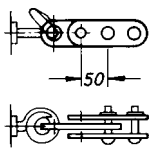


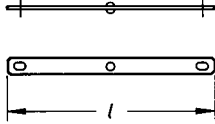
Attention:

With type FLa 15/97- 64 W (horizontal) always make sure that the insulator crank is applied right up to the dead center position in order to avoid any unintentional closing of the switch in the event of a defective operating mechanism. The switching angle is therefore 110° in this case. (Function of an over dead center switching)

Should you desire more detailed information, we would be pleased to forward this to you!

DRIESCHER - Outdoor Switch-Disconnecter FLA 15/97

Accessories for tension units

	Designation	Part-no.	Drawing-No.	Weight approx. kg
① 	Small suspension hinge for switch On wooden or concrete pole without top cross arm (see page 6) (suspended in switch frame)	2-760 10121	FT 4-17086	0,8
② 	Strap for spacer (required in addition)			
③ 	Spacer (required in addition)			
④ 	Forked strap s=100 mm for switch on wooden pole	2-775 43010	FT 4-38202/1	1,2
	Forked strap s=250 mm for horn-break switch in wide span system version	2-775 42010	FT 4-38202/2	1,9
⑤ 	Adjustable strap for switch on concrete pole with T-head cross arm in wide span system version (adjustable by 50 mm)	2-760 20111	FT 4-15728	2,1
⑥ 	Tensioning stiffener up to 70 mm ² (required in addition)			
⑦ 	Clamping cable lug 35 to 70 mm ² (required in addition)			
⑧ 	Cu tension straps 3 x 30 x 1 mm L= 1100 mm L= 1340 mm L= 1540 mm L= 1740 mm	2-531 71004 2-531 71006 2-531 71009 2-531 71011	WN 4-37028	0,9 1,1 1,3 1,4

DRIESCHER - Outdoor Switch-Disconnecter FLa 15/97-6400

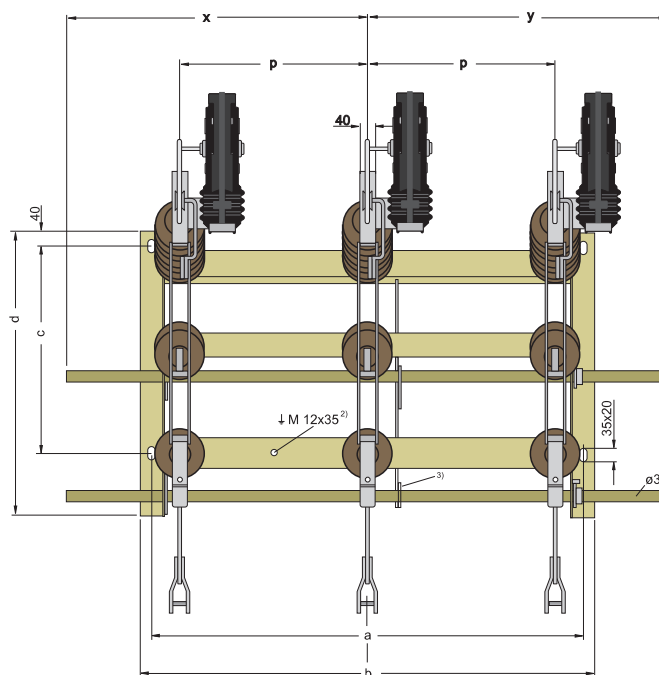
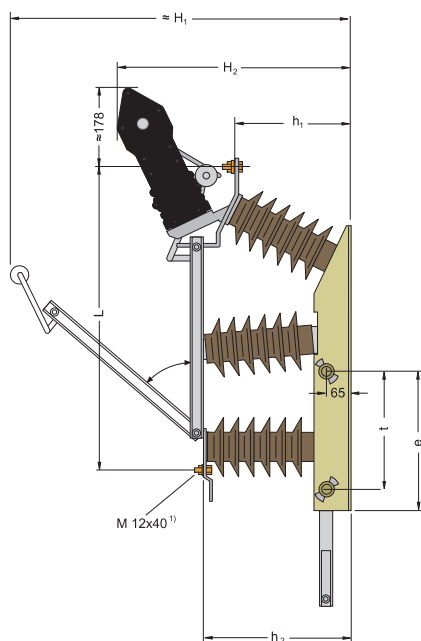
Technical data

Typ		FLa 15/97-6400			
Rated voltage	U_r	12 kV	24 kV	38,5 kV	36 kV
Rated current	I_r	630 A	630 A	630 A	1600 A
Rated mainly active load breaking current	I_1	630 A	630 A	630 A	1600 A
Rated distribution line closed-loop breaking current	I_{2a}	630 A	630 A	630 A	1600 A
Rated cable-charging breaking current	I_{4a}	25 A	25 A	28 A	28 A
Rated earth fault breaking current	I_{6a}	200 A	200 A	200 A	200 A
Rated cable breaking current under earth fault conditions	I_{6b}	32 A	32 A	32 A	32 A
Rated peak withstand current	I_p	63 kA	63 kA	63 kA	80 kA
Rated short time current (3 sec.)	I_k	25 kA	25 kA	25 kA	31,5 kA
Rated short-circuit making current	I_{ma}	10 kA	10 kA	16 kA ^{*)}	16 kA ^{*)}
Rated power frequency withstand voltage conductor - earth / conductor - conductor break gap	U_d	28 kV 32 kV	50 kV 60 kV	80 kV 90 kV	70 kV 80 kV
Rated lightning impulse withstand voltage conductor - earth / conductor - conductor break gap	U_p	75 kV 85 kV	125 kV 145 kV	180 kV 210 kV	170 kV 195 kV
Mechanical class		M2	M2	M2	M2
Electrical class		E1	E1	E1	E1

The mounted earthing switches are laid out for a rated short time current from 16 kA/1s.
Higher values on request.

^{*)} Closing operation by the vacuum interrupter.

FLa 15/97-6400



- 1) Hex head bolt (caulked) with nut, washer and spring washer
- 2) Hex head bolt with screw, washer and spring washer
- 3) Support bearing for earthing switch shaft (only for 36 kV)

DRIESCHER - Outdoor Switch-Disconnecter FLa 15/97-6400

FLa 15/97-6400

• without earthing switch

Rated voltage	Rated current	Part no.	p	a	b	c	d	e	L	≈ H ₁	≈ H ₂	h ₁	h ₂	x/y	Weight approx.
12 kV	630 A	767 34002	400	950	1010	500	710	360	741	845	345	261	322	700	100 kg
24 kV	630 A	767 64003	500	1150	1210	550	760	375	793	923	575	311	392	800	110 kg
38,5 kV	630 A	767 94004	700	1550	1610	750	960	450	1044	1162	731	390	472	950	130 kg
36 kV	1600 A	767 74000	700	1550	1610	750	960	450	1096	1182	729	381	522	950	150 kg

• with earthing switch, mechanical interlocking

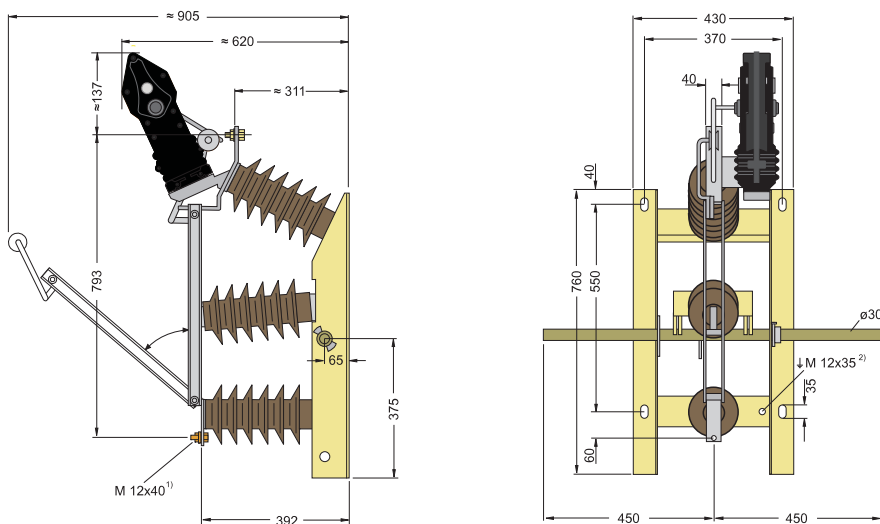
Rated voltage	Rated current	Part no. with earthing switch	p	t	Weight approx.	Drawing no.
12 kV	630 A	767 34502	400	315	115 kg	LT3-091444
24 kV	630 A	767 64503	500	315	125 kg	LT3-090964
38,5 kV	630 A	767 94504	700	390	145	LT3-091894
36 kV	1600 A	767 74100	700	390	165	LT3-102380

Attention!

- Switch angle of the switch-disconnector 90°
- Also possible for horizontal mounting (switch angle 110°, see page 13)
- Equipment with auxiliary switches or motordrive only if ordered additionally.

Single pole outdoor switch-disconnector FLa 15/97 - 6400

for earth fault neutralizer



1) Hex head bolt (caulked) with nut, washer and spring washer

2) Hex head bolt with screw, washer and spring washer

Rated voltage kV	Rated current A	Part no.	Rated mainly active load breaking current A	Weight kg	Drawing no.
24	630	767 62 001	630	43	LT3-091997

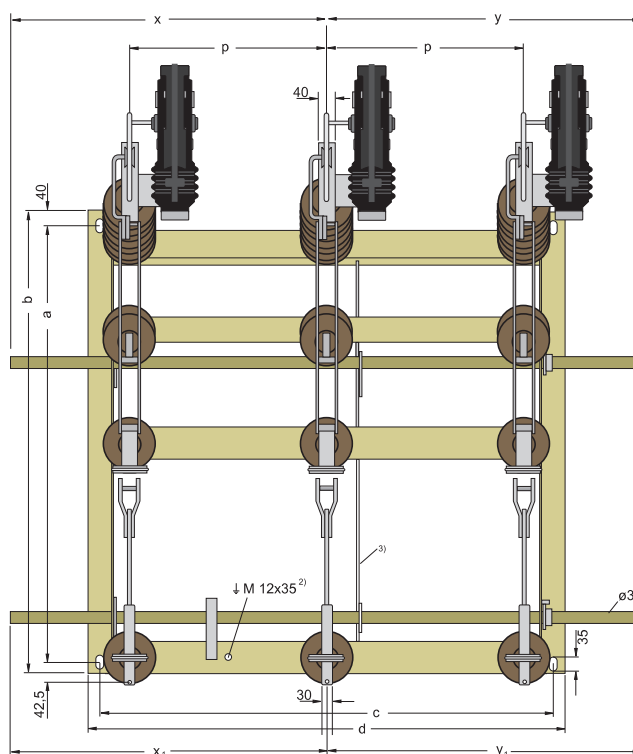
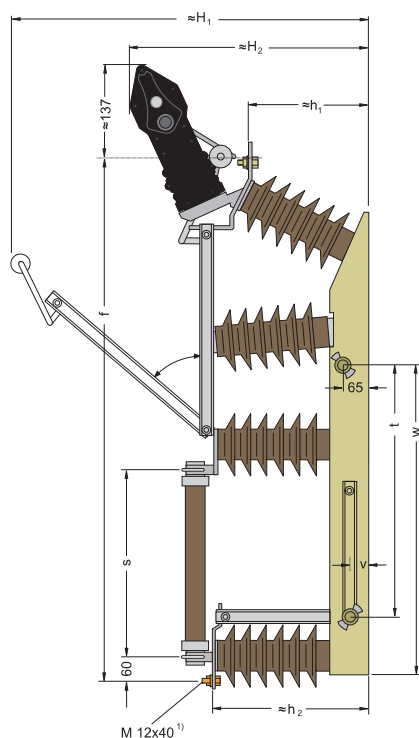
Technical data analog FLa 15/97-6400, Rated voltage 24 kV

Equipment with auxiliary switches or motordrive (Brochure 776) only if ordered additionally.

DRIESCHER - Outdoor Switch-Disconnecter FLa 15/97-6410

FLa 15/97-6410

with fuse holders mounted upright below for HV-HBC fuses of up to 125 A rated current



- 1) Hex head bolt (caulked) with nut, washer and spring washer
 2) Hex head bolt with screw, washer and spring washer
 3) Support bearing for earthing switch shaft (only for 36 kV)
 4) Rated current of the fuse holder 125 A

• without earthing switch

Rated voltage kV	Rated current ⁴⁾ A	Part-no.	p	a	b	c	d	f	≈H ₁	≈H ₂	≈h ₁	h ₂	w	x	y	Weight approx.
12	400/125	767 26002	400	905	967	950	1010	1128,5	845	526	261	322	617	700	700	110 kg
24	400/125	767 56003	500	1105	1167	1150	1210	1330,5	923	575	311	392	782	800	800	135 kg
36	630/125	767 99004	700	1400	1462	1550	1610	1676,5	1162	731	390	472	952	950	950	185 kg
36	1250/125	767 79004	700	1400	1462	1550	1610	1676,5	1182	731	390	472	952	1125	1125	195 kg

• with earthing switch, mechanical interlocking

Rated voltage kV	Rated current ⁴⁾ A	Part-no.	p	s	t	v		x ₁	y ₁	Weight approx.	Drawing-no.
12	400/125	767 26502	400	293	487,5	75	for missing dimensions refer to table above	700	700	121 kg	LT3-092001
24	400/125	767 56103	500	443	632,5	65		800	800	148 kg	LT3-091994
36	630/125	767 99104	700	537	802,5	65		950	950	200 kg	LT3-106881
36	1250/125	767 79504	700	537	802,5	65		1125	1125	210 kg	LT3-102219

Equipment with auxiliary switches or motor drives (Brochure 776) only if ordered additionally.

DRIESCHER - Outdoor Switch-Disconnecter FLA 15/97-6410 SA

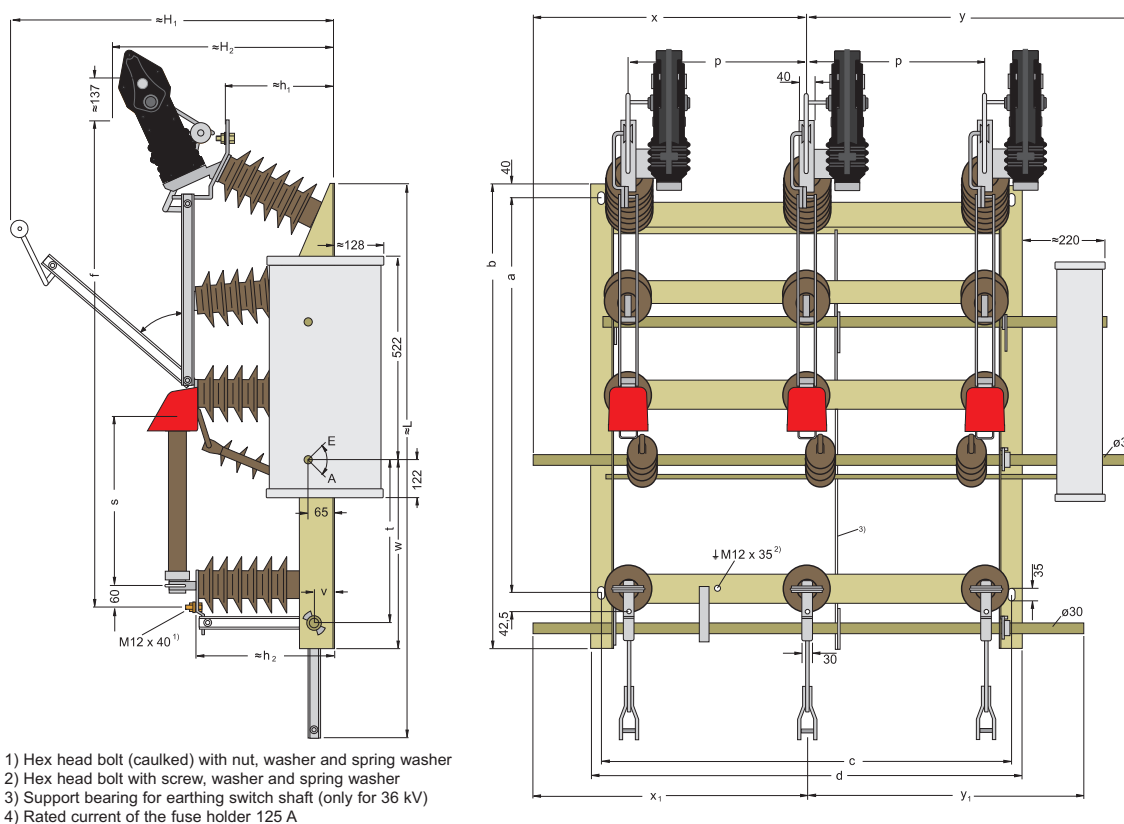
FLA 15/97-6410 SA with fuse holders mounted below

with fuse holders mounted below for pin operated HV-HBC fuses of up to 125 A rated current

The SA special version of the outdoor fused switch-disconnector FLA 15/6410 which has been well-proven over decades under very versatile operating conditions, has a disconnecting energy storage mechanism which carries out all-pole interruption of the switch if a HV-HBC fuse operates (with a tripping impact force of 120 N).

It is therefore possible to also benefit **from the advantages of the HV-HBC fuses** in outdoor applications as well. The energy storage mechanism (patent application filed) is designed in such a way that no additional

effort has to be applied when manually operated using the hand crank. Following a disconnection through operation of the fuse (SA) the stored energy mechanism is tensioned in the OFF position after the return of the operating mechanism. After changing the fuse and switching on, the switch is ready to interrupt again. Stored energy mechanism and interrupting mechanism are securely housed in a hot galvanised steel plate housing which is also vented. Transparent covers protect the release mechanism at the upper contact clips of the HV-HBC fuses respectively.



• without earthing switch

Rated voltage kV	Rated current ⁴⁾ A	Part no.	p	a	b	c	d	f	$\approx H_1$	$\approx H_2$	$\approx h_1$	h_2	w	x	y	Weight kg	Drawing no.
12	400/125	767 26910	400	905	1097	950	1010	1128,5	845	526	261	322	367	700	815	115	LT3-092003/2
24	400/125	767 59003	500	1105	1297	1150	1210	1330,5	923	574	307	392	532	800	915	151	LT3-102791/2
36	400/125																in planning stage

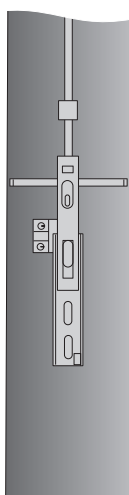
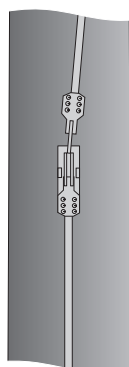
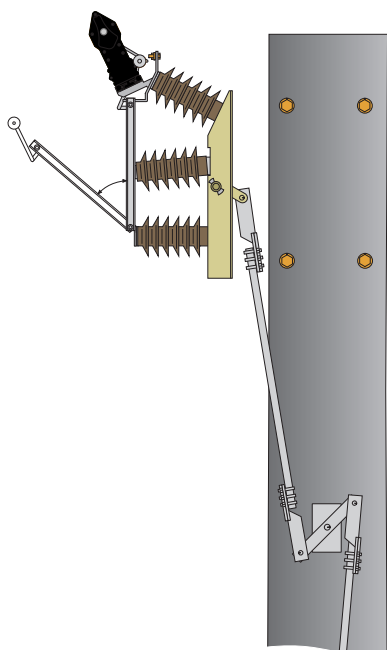
• with earthing switch

Rated voltage kV	Rated current ⁴⁾ A	Part no.	p	s	t	v	x_1	y_1	Weight kg	Drawing no.
12	400/125	767 26913	400	293	307	75	700	700	127	LT3-092003/2
24	400/125	767 59103	500	443	472	65	800	800	168	LT3-102791/2
36	400/125									in planning stage

Equipment with auxiliary switches only if ordered additionally.

DRIESCHER - Outdoor Switch-Disconnecter FLa 15/97-6400

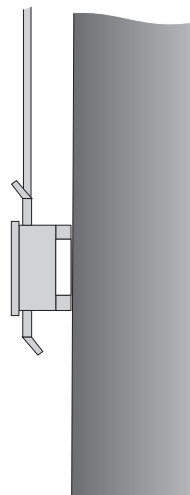
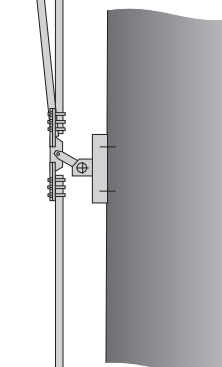
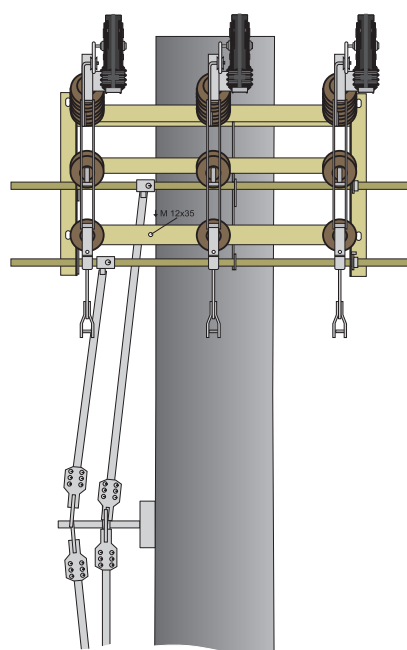
Arrangements of operatings (examples)



FLa 15/97-6400

- without earthing switch

- single manually operated mechanism



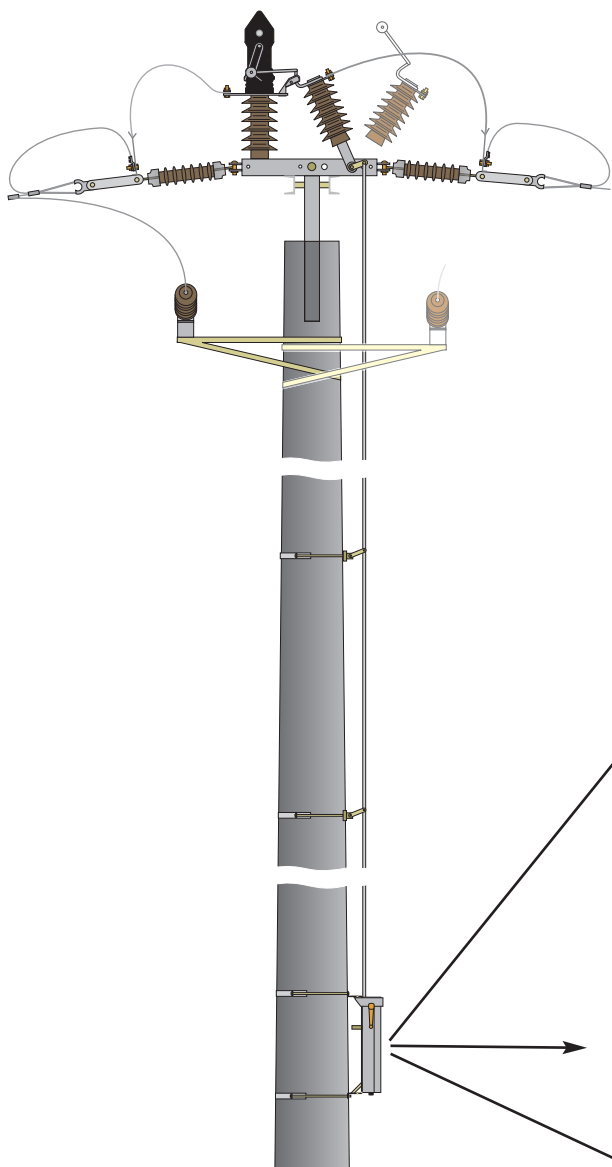
FLa 15/97-6400

- with earthing switch

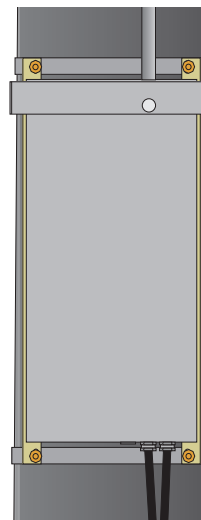
- double manually operated mechanism

DRIESCHER - Outdoor Switch-Disconnecter FLa 15/97

Operators (see brochure 776)



Example 1:
Motordrive UM90 for
remote control (drawing)



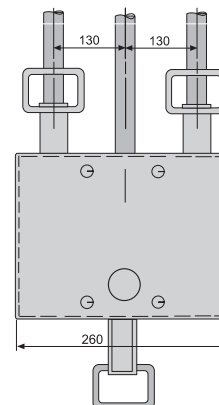
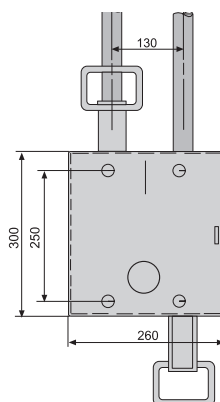
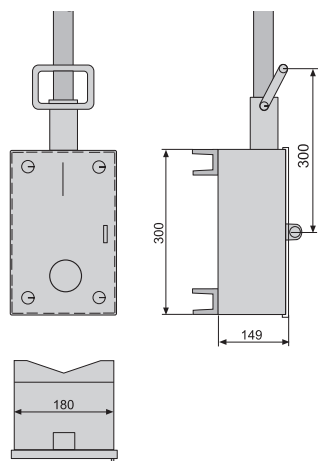
Example 2:
control unit with mounted
motordrive UM20
for radio control



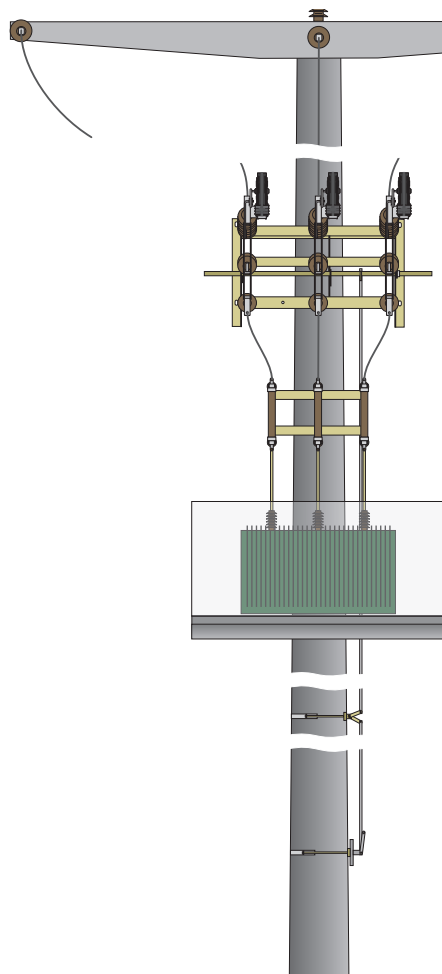
single
manually operated mechanism

Example 3:
double
manually operated mechanism

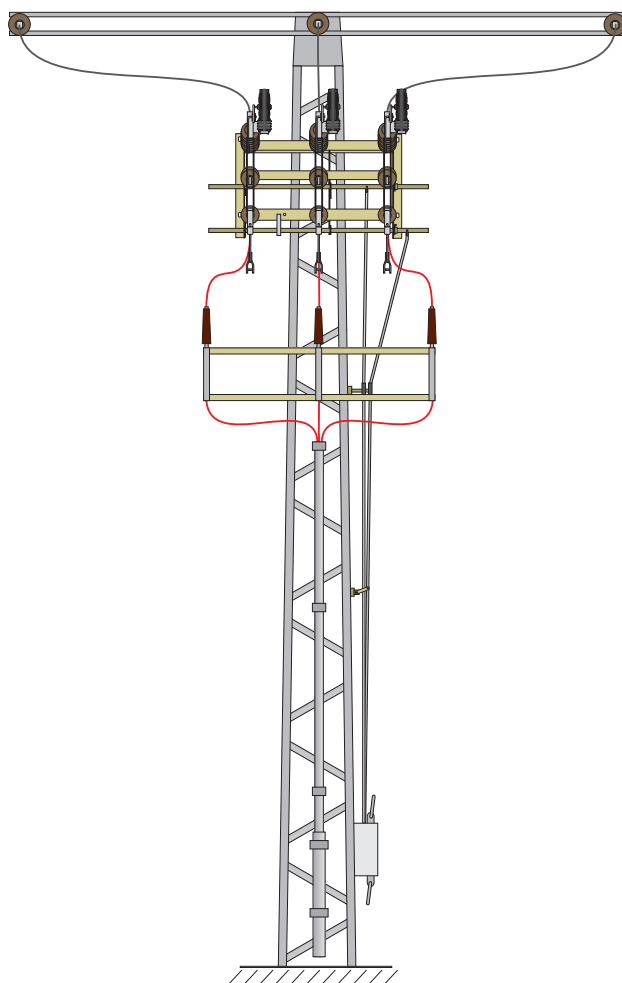
triple
manually operated mechanism



Examples of use



Example 1:
FLA 15/97 -6400 for transformer stations



Example 2:
FLA 15/97 -6400 for outgoing cable
with earthing switch

Dimensions, weights, diagrams and descriptions in this brochure are non-binding. Subject to change without notice.

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