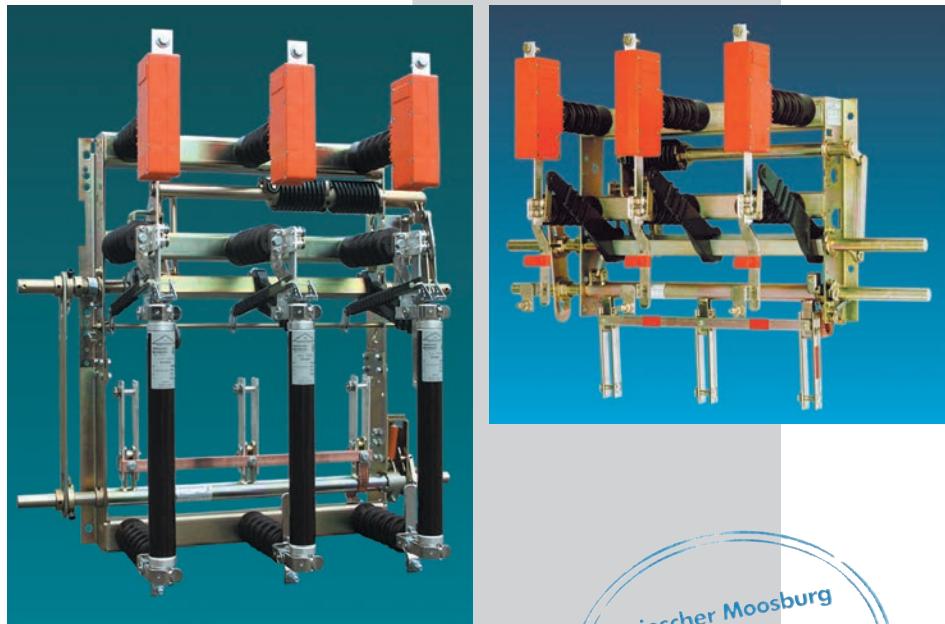


DRIESCHER
Indoor -
**Switch-Disconnector and
Switch-fuse combination H 27**

- Rated voltage
12 kV and 24 kV
- Rated current
630 A
- 3-pole design



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DRIESCHER - Indoor Switch-Disconnector and Switch-fuse combination H 27

acc. to EN 62271-103 and EN 62271-105



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Types of switch-disconnectors and switch-fuse combinations

H 27 F-EK for front-panel mounting
- without trip-free release*

H 27 F-EA for front-panel mounting
- with trip-free release*

H 27 F-SuT for front-panel mounting - with trip-free release*, with two separate cross-rails, respectively with mounted insulators and fuse holders.

H 27 EK for wall mounting and lateral mounting
- without trip-free release*

H 27 EA for wall mounting and lateral mounting
- with trip-free release*

H 27 SEA for wall mounting and lateral mounting
- with trip-free release*, with a cross-rail mounted below with mounted insulators and fuse holders.

H 27 SuT for lateral mounting - with trip-free release*, with a separate cross-rail with mounted insulators and fuse holders.

For switch-fuse combination, HV HBC fuse-links with a pin release force of at least 80 N must be used (DRIESCHER / SIBA; see page 8).

* see page 3, energy storage mechanism

Operating conditions

The use of switchgear under normal operating conditions is specified in the EN 62271-1 as follows:

- The maximum ambient temperature is 40 °C, the average value over a period of 24 h is max. 35 °C. The minimum ambient temperature is -5 °C. For our indoor switches the class "Minus 5 indoors" is specified.
- Solar radiation has no significant impact.
- The altitude at the place of installation is max. 1000 m above sea level.
- The ambient air is to have no significant contamination through dust, smoke, corrosive and/or flammable gasses, fumes or salts.

- The following conditions apply with regard to humidity:
 - average value of relative air moisture measured over 24 h is max. 95 %,
 - average value of water vapour pressure over 24 h is max. 2.2 kPa;
 - average value of the relative air moisture over a period of one month is max. 90%
 - average value of the water vapour pressure over one month is max. 1.8 kPa;

To each switch an instruction for transportation, mounting and putting into service is inclosed. This instruction which we certainly would send you in advance, has to be absolutely obeyed.

DRIESCHER-Indoor Switch-Disconnector and Switch-fuse combination H 27

Main advantages

- Compact construction
- High switching capacity
- Visible isolating distance after switching OFF

- Perfect functioning
- Simple operation
- High switching rate with a minimum maintenance

Energy storage mechanism

One of the robust, low-maintenance energy storage mechanisms of type EK or EA is mounted on the base frame, on which the three switch poles are installed. Many hundred thousands of these devices have already been used successfully.

The EK energy storage mechanism operates with only a single torsion spring for quick-make and quick-break operation without trip-free release. The torsion spring is tensioned for switching ON or OFF. After tensioning, the spring energy is released for the particular switching operation (ON or OFF).

The EA energy storage mechanism operates with two torsion springs for trip-free quick-make and quick-break operation. Both torsion springs are tensioned when the switch is closed.

The ON switch spring is tripped after tensioning and releases its energy for switching ON, while the OFF switch spring remains tensioned until it is released by the

tripping device, HV HBC (high-voltage, high-breaking capacity) fuse links with striker pin, or manually for switching OFF (trip-free release).

With non-manual release the operating shaft (13) remains in the ON position and must be moved to the neutral position "OFF" manually for reclosing.

Wall-mounting devices can be actuated via a linkage system operated by a detachable lever or by any of the actuators in brochure 774 (*Indoor actuators*).

Lateral mounted switches can be operated directly by fixing a sleeve for D-drives with internal twelve-sided polygon 24 on the operating shaft and using the detachable lever with hexagonal attachment (see brochure 773).

Front-panel mounted devices can be operated by means of a detachable lever via a driving pulley integrated in the switch.

Arc extinction

When closing the switch, the switch blade (5) with the arcing tip (6) is withdrawn from the contact jaw (2). The arc which occurs is extinguished in the enclosed, four-section arcing chamber (4), comprising pressure and expansion chambers. In the pressure chamber two extinguishing plates (3) are forced into the path of the arc by lateral spring pressure.

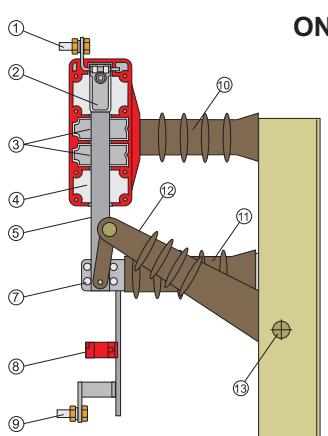
At low currents the arc is extinguished by deionizing

action due to the cooling effect of the walls. Arc extinction is achieved in the higher current ranges by the arc extinguishing gases produced in the pressure chamber flowing out into the expansion chamber. Due to this rational combination of arc quenching principles the entire current range of the load-break switch is effectively covered.

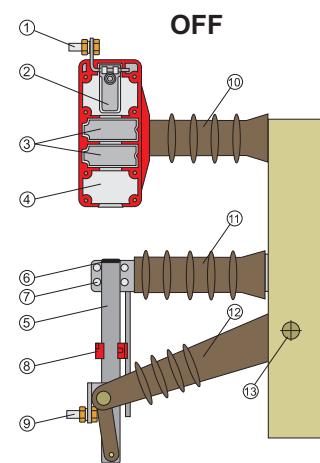
The arcing chambers require no maintenance.

Construction Switch-disconnector H 27

- 1 Upper connecting contact
- 2 Contact jaw
- 3 Extinguishing plates
- 4 Arcing chamber
- 5 Switch blade
- 6 Arcing tip
- 7 Roller guide contact
- 8 Guide lug
- 9 Lower connecting contact
- 10 Insulator above
- 11 Insulator below
- 12 Actuating rod
- 13 Operating shaft



ON



OFF

DRIESCHER - Indoor Switch-Disconnector and Switch-fuse combination H 27

Additional possibilities of mounting, equipment and actuation

All listed additional possibilities of mounting, equipment and actuation devices are optional available and to order separate:

- All types are deliverable with earthing switches mounted below and above.
 - By the types H 27 EK and EA the earthing switch is mounted, so that the earthing switch movement is outside the switch frame.
 - By the type H 27 SEA the earthing switch is mounted, so that the movement of the earthing switch is within the base frame. (No extra space is required, retrofit is possible).
 - By the type H 27 SuT the earthing switch is mounted on a separate insulator cross arm (Retrofit is possible). For the switch-fuse combination H 27 F-SuT, there is a separate earthing switch with built-in actuating disc to switch with plug-in lever.
- For all types a **mechanical interlocking** between switch-disconnector and earthing switch is possible.
- Shunt releases and tripping magnets can only be mounted on switches with trip-free release (see page 2) and are available for the following voltages: 110 V AC and 230 V AC or 24 V DC, 60 V DC, 110 V DC and 220 V DC.
- Signalling contacts for switch position indication or electrical interlocking can be mounted on all switches - including earthing switches.
- The actuation of the switch-disconnector and the switch-fuse combination H 27 can be performed manually with a plug-in lever or with a motor actuator, see *brochure 774*.
- For information about indoor actuating and equipment for example, insulating rod or pulling lug please see *brochure 774*.
- For further equipment, such as fuse tongs and switchsticks see *brochure 773*.
- For h.v.h.b.c. fuses please see *brochure 791*.

Technical data

according to EN 62271-103

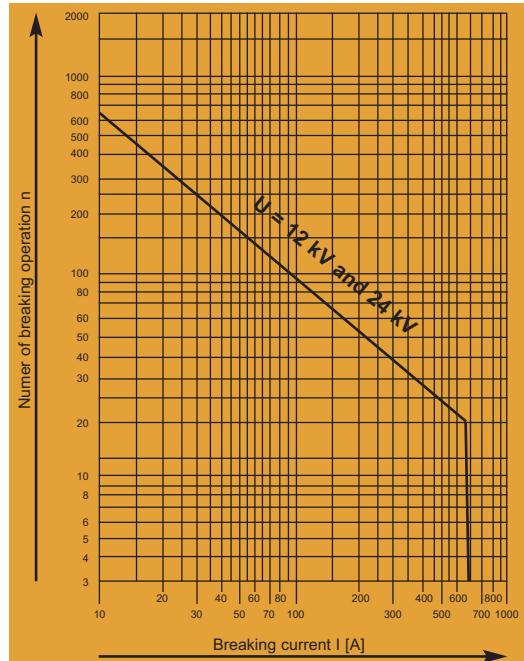
| | | | | |
|---|----------|----|------------------|-------------------|
| Rated voltage | U_r | kV | 12 | 24 |
| Rated frequency | f_r | Hz | 50 | 50 |
| Rated-(operating)-current | I_r | A | 630 | 630 |
| Rated-peak withstand current | I_p | kA | 50 ¹⁾ | 40 ¹⁾ |
| Rated-short-time current | I_k | kA | 20 ¹⁾ | 16 ¹⁾ |
| Rated-making current | I_{ma} | kA | 50 ¹⁾ | 40 ¹⁾ |
| Rated-breaking current | I_1 | A | 630 | 630 |
| Rated-loop breaking current | I_2 | A | 630 | 630 |
| Rated-transformer off-load breaking current | I_3 | A | | 10 |
| Rated-cable charging breaking current | I_{4a} | A | 10 | 35 |
| Rated-earth fault off-load breaking current | I_{6a} | A | 300 | 320 |
| Rated-cable charging breaking current under earth fault conditions | I_{6b} | A | 18 | 178 |
| Rated-impulse withstand voltage | U_p | kV | | |
| Phase - Phase / Phase - Earth across isolating distance | | | 75 | 125 ³⁾ |
| Phase - Phase / Phase - Earth across isolating distance | | | 85 | 145 |
| Rated-power frequency withstand voltage | U_d | kV | | |
| Phase - Phase / Phase - Earth across isolating distance | | | 28 | 50 |
| Electrical class | | | 32 | 60 |
| Mechanical life | | | E1 | E1 |
| | | | M1 | M1 |

1) These values also apply to earthing switches.

2) For mounted earthing switches ES-24-20 the following data is valid:

$I_k = 20 \text{ kA}$, $I_{ma} = 50 \text{ kA}$, $t_k = 3 \text{ s}$

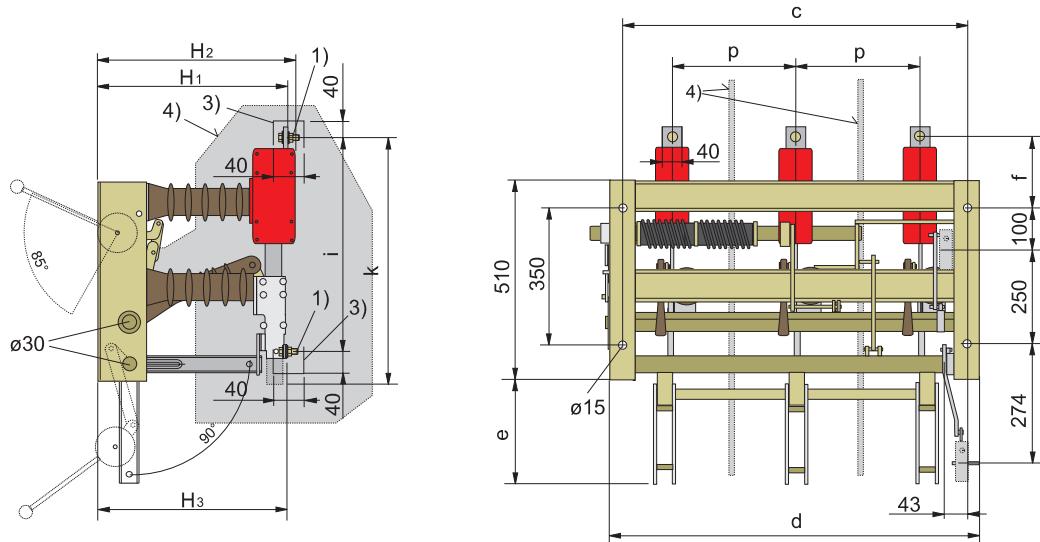
3) 95 kV for clearance between phases $p = 170 \text{ mm}$ without phase barrier.



Maintenance-free load breaking operations as a function of the breaking current at $\cos \varphi \geq 0,7$

DRIESCHER - Indoor Switch-Disconnector H 27

Indoor Switch-Disconnector H 27 F-EA and F-EK for front-panel mounting



1) hexagonal screw M12x40 with two span washers and nut

3) outside this zone, the connecting bar have to be insulated

4) phase barriers (only for 24 kV p = 170 mm)

insulation level without phase barriers: UP 95 kV

Fig. 1: Type H 27 F-EA with earthing switch mounted below

| Rated voltage Ur | Type | Rated current Ir | Rated short-time current lk | p | c | d | e | f | i | k | H ₁ | H ₂ | H ₃ | Drawing-no. |
|------------------|-----------|------------------|-----------------------------|-----|-----|-----|-----|-----|-----|-----|----------------|----------------|----------------|-------------|
| 12 kV | H 27 F-EK | 630 A | 20 kA | 155 | 465 | 500 | 117 | 103 | 493 | 545 | 310 | 324 | 314 | LN3-093700 |
| 12 kV | H 27 F-EA | 630 A | 20 kA | 155 | 465 | 500 | 117 | 103 | 493 | 545 | 310 | 324 | 314 | LN3-093699 |
| 24 kV | H 27 F-EK | 630 A | 16 kA | 170 | 495 | 530 | 202 | 186 | 616 | 688 | 385 | 401 | 388 | LN3-102411 |
| 24 kV | H 27 F-EK | 630 A | 16 kA | 225 | 605 | 640 | 202 | 186 | 616 | 688 | 385 | 401 | 388 | LN3-102413 |
| 24 kV | H 27 F-EK | 630 A | 20 kA | 170 | 495 | 530 | 202 | 161 | 591 | 663 | 390 | 406 | 394 | LN4-091398 |
| 24 kV | H 27 F-EK | 630 A | 20 kA | 225 | 605 | 640 | 202 | 161 | 591 | 663 | 390 | 406 | 394 | LN3-091278 |
| 24 kV | H 27 F-EA | 630 A | 16 kA | 170 | 495 | 530 | 202 | 156 | 586 | 663 | 385 | 401 | 388 | LN4-041924 |
| 24 kV | H 27 F-EA | 630 A | 16 kA | 225 | 605 | 640 | 202 | 156 | 586 | 663 | 385 | 401 | 388 | LN4-067888 |
| 24 kV | H 27 F-EA | 630 A | 20 kA | 170 | 495 | 530 | 202 | 161 | 591 | 663 | 390 | 406 | 394 | LN3-091399 |
| 24 kV | H 27 F-EA | 630 A | 20 kA | 225 | 605 | 640 | 202 | 161 | 591 | 663 | 390 | 406 | 394 | LN3-091286 |

| Rated voltage Ur | Type | Rated current Ir | Rated short-time current lk | p | without earthing switch | | | with earthing switch mounted below | | |
|------------------|-----------|------------------|-----------------------------|-----|-------------------------|-------------------|--|---------------------------------------|-------------------|--|
| | | | | | Part-no. | Weight approx. kg | Part-no. without mechanical interlocking | Part-no. with mechanical interlocking | Weight approx. kg | |
| 12 kV | H 27 F-EK | 630 A | 20 kA | 155 | 727 35000 | 38 | 727 35011 | 727 35014 | 42 | |
| 12 kV | H 27 F-EA | 630 A | 20 kA | 155 | 727 36000 | 38 | 727 36011 | 727 36014 | 42 | |
| 24 kV | H 27 F-EK | 630 A | 16 kA | 170 | 727 65150 | 46 | 727 65151 | 727 65154 | 44 | |
| 24 kV | H 27 F-EK | 630 A | 16 kA | 225 | 727 65350 | 44 | 727 65352 | 727 65351 | 44 | |
| 24 kV | H 27 F-EK | 630 A | 20 kA | 170 | 727 75150 | 46 | 727 75151 | 727 75152 | 51 | |
| 24 kV | H 27 F-EK | 630 A | 20 kA | 225 | 727 75350 | 49 | 727 75352 | 727 75351 | 51 | |
| 24 kV | H 27 F-EA | 630 A | 16 kA | 170 | 727 66150 | 46 | 727 66151 | 727 66154 | 46 | |
| 24 kV | H 27 F-EA | 630 A | 16 kA | 225 | 727 66300 | 48 | 727 66311 | 727 66314 | 54 | |
| 24 kV | H 27 F-EA | 630 A | 20 kA | 170 | 727 76150 | 48 | 727 76151 | 727 76154 | 46 | |
| 24 kV | H 27 F-EA | 630 A | 20 kA | 225 | 727 76300 | 51 | 727 76311 | 727 76314 | 53 | |

DRIESCHER - Indoor Switch-fuse combination H 27

Indoor Switch-fuse combination H 27 F-SuT for front-panel mounting

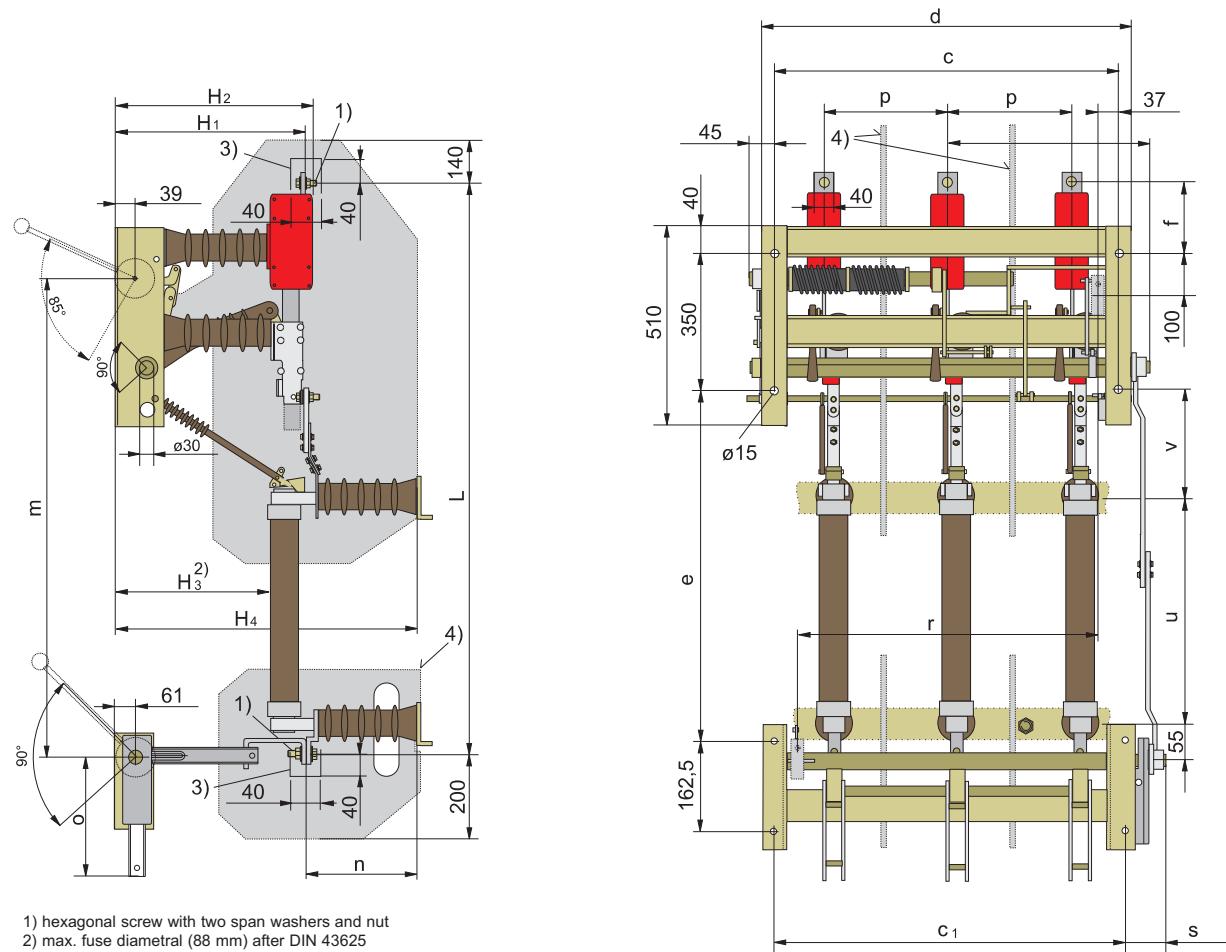


Fig. 2: Type H 27 F-SuT with separate earthing switch mounted below and two separate cross beam for insulators
All-pole disconnection of the switch-disconnector when a fuse operates.

| Rated voltage Ur | Type | Rated current ⁽⁶⁾ Ir | Rated current short-time I _k | Rated-current ⁽⁶⁾ short-time current I _k | p | c | c ₁ | d | e | f | H ₁ | H ₂ | H ₃ | H ₄ | L | m | n | o | r | s | u | v |
|------------------|------------|---------------------------------|---|--|-----|-----|----------------|-----|-----|-----|----------------|----------------|----------------|----------------|------|-----|-----|-----|----|-----|-----|---|
| 12 kV | H 27 F-SuT | 630/125 A | 20 kA | 155 | 465 | 471 | 500 | 567 | 103 | 310 | 324 | 225 | 472 | 1047 | 843 | 147 | 204 | 382 | 74 | 325 | 214 | |
| 24 kV | H 27 F-SuT | 630/125 A | 16 kA | 170 | 495 | 491 | 530 | 751 | 186 | 385 | 401 | 299 | 626 | 1291 | 1027 | 227 | 280 | 412 | 42 | 475 | 240 | |
| 24 kV | H 27 F-SuT | 630/125 A | 16 kA | 225 | 605 | 651 | 640 | 751 | 186 | 385 | 401 | 299 | 626 | 1291 | 1027 | 227 | 280 | 412 | 42 | 475 | 240 | |

| Rated voltage Ur | Type | Rated current ⁽⁶⁾ Ir | Rated-short-time current I _k | p | without earthing switch | | | with earthing switch below | | | Drawing-no. |
|------------------|------------|---------------------------------|---|-----|-------------------------|-------------------|--|---------------------------------------|-------------------|---------------------------------------|-------------|
| | | | | | Part-no. | Weight approx. kg | Part-no. without mechanical interlocking | Part-no. with mechanical interlocking | Weight approx. kg | Part-no. with mechanical interlocking | |
| 12 kV | H 27 F-SuT | 630/125 A | 20 kA | 155 | 727 37100 | 58 | 727 37111 * | 727 37111 ** | 64 | 727 37111 ** | LN3-093701 |
| 24 kV | H 27 F-SuT | 630/125 A | 16 kA | 170 | 727 67150 | 64 | 727 67171 * | 727 67171 ** | 70 | 727 67171 ** | LN3-102412 |
| 24 kV | H 27 F-SuT | 630/125 A | 16 kA | 225 | 727 67350 | 69 | 727 67351 * | 727 67351 ** | 75 | 727 67351 ** | LN3-102414 |

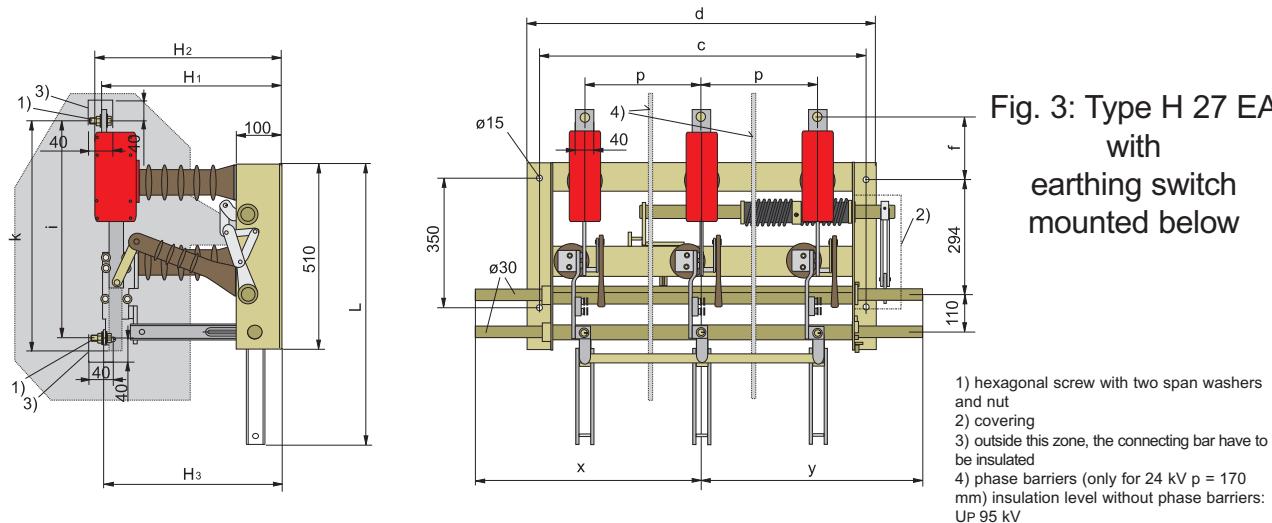
* with separate earthing switch

** with separate earthing switch and interlocking

⁽⁶⁾ Rated current of the fuse holder 125 A

DRIESCHER - Indoor Switch-Disconnector H 27

Indoor Switch-Disconneter H 27 EK and EA for wall mounting

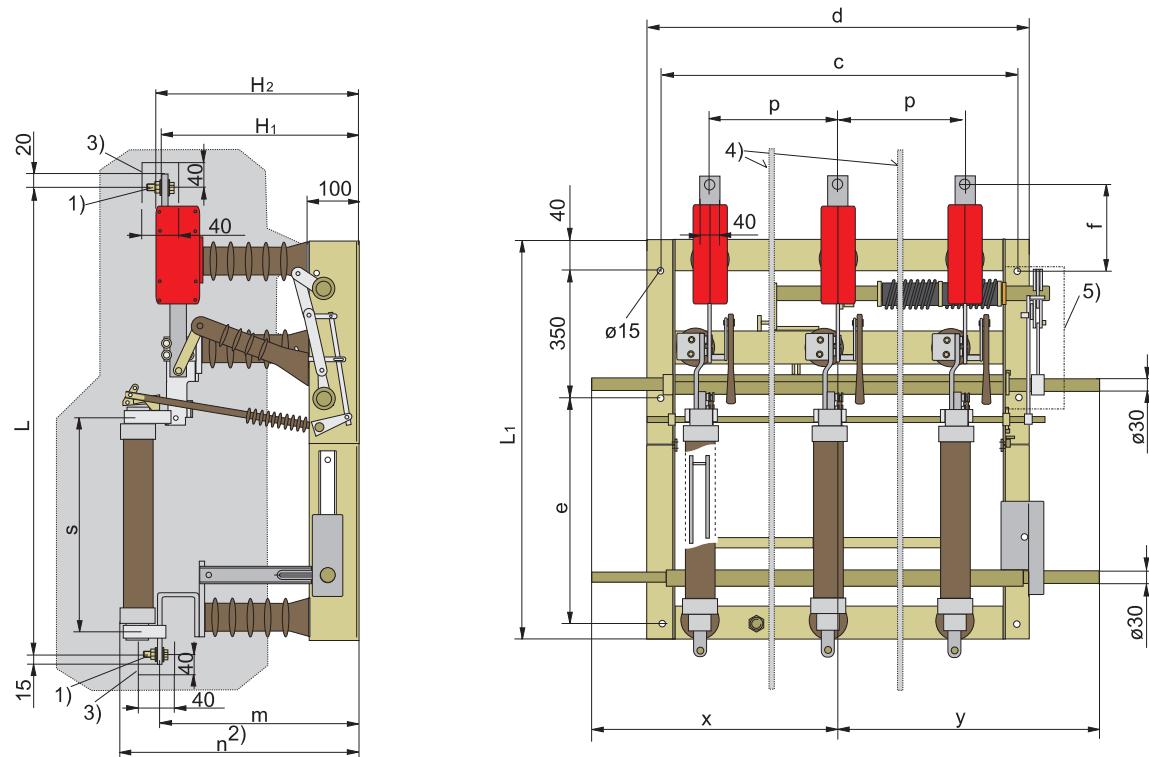


| Rated voltage Ur | Type | Rated current Ir | Rated-short-time current Ik | p | c | d | f | H1 | H2 | H3 | i | k | L | x | y |
|------------------|---------|------------------|-----------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 12 kV | H 27 EK | 630 A | 20 kA | 155 | 465 | 500 | 103 | 310 | 324 | 314 | 493 | 545 | 627 | 290 | 290 |
| 12 kV | H 27 EK | 630 A | 20 kA | 210 | 575 | 610 | 103 | 310 | 324 | 314 | 493 | 545 | 627 | 450 | 450 |
| 12 kV | H 27 EA | 630 A | 20 kA | 155 | 465 | 500 | 103 | 310 | 324 | 314 | 493 | 545 | 627 | 290 | 290 |
| 12 kV | H 27 EA | 630 A | 20 kA | 210 | 575 | 610 | 103 | 310 | 324 | 314 | 493 | 545 | 627 | 450 | 450 |
| 24 kV | H 27 EK | 630 A | 16 kA | 170 | 495 | 530 | 156 | 385 | 401 | 388 | 586 | 658 | 712 | 460 | 460 |
| 24 kV | H 27 EK | 630 A | 20 kA | 170 | 495 | 530 | 161 | 390 | 406 | 394 | 591 | 663 | 712 | 460 | 460 |
| 24 kV | H 27 EK | 630 A | 16 kA | 225 | 605 | 640 | 161 | 385 | 399 | 388 | 551 | 663 | 712 | 440 | 440 |
| 24 kV | H 27 EK | 630 A | 20 kA | 225 | 605 | 640 | 161 | 390 | 406 | 394 | 591 | 669 | 712 | 440 | 440 |
| 24 kV | H 27 EK | 630 A | 16 kA | 275 | 705 | 740 | 161 | 385 | 399 | 388 | 591 | 663 | 712 | 565 | 565 |
| 24 kV | H 27 EK | 630 A | 20 kA | 275 | 705 | 740 | 161 | 390 | 404 | 394 | 591 | 669 | 712 | 565 | 565 |
| 24 kV | H 27 EA | 630 A | 16 kA | 170 | 495 | 530 | 156 | 385 | 401 | 388 | 586 | 658 | 712 | 460 | 460 |
| 24 kV | H 27 EA | 630 A | 20 kA | 170 | 495 | 530 | 161 | 390 | 406 | 394 | 591 | 669 | 712 | 460 | 460 |
| 24 kV | H 27 EA | 630 A | 16 kA | 225 | 605 | 640 | 156 | 385 | 401 | 388 | 586 | 663 | 712 | 440 | 440 |
| 24 kV | H 27 EA | 630 A | 20 kA | 225 | 605 | 640 | 161 | 390 | 406 | 394 | 591 | 663 | 712 | 440 | 440 |
| 24 kV | H 27 EA | 630 A | 16 kA | 275 | 705 | 740 | 161 | 385 | 399 | 388 | 591 | 663 | 712 | 565 | 565 |
| 24 kV | H 27 EA | 630 A | 20 kA | 275 | 705 | 740 | 161 | 390 | 406 | 394 | 591 | 663 | 712 | 565 | 565 |

| Rated voltage Ur | Type | Rated current Ir | Rated-short-time current Ik | p | without earthing switch | | | with earthing switch mounted below | | | Part-no. without mechanical interlocking | Part-no. with mechanical interlocking | Weight approx. kg | Drawing-no. |
|------------------|---------|------------------|-----------------------------|-----|-------------------------|------------|-------------------|------------------------------------|----|------------|--|---------------------------------------|-------------------|-------------|
| | | | | | Part-no. | approx. kg | Weight approx. kg | | | | | | | |
| 12 kV | H 27 EK | 630 A | 20 kA | 155 | 727 31100 | 34 | 727 31111 | 727 31114 | 39 | LN3-093697 | | | | |
| 12 kV | H 27 EK | 630 A | 20 kA | 210 | 727 31400 | 41 | 727 31411 | 727 31414 | 46 | LN3-093703 | | | | |
| 12 kV | H 27 EA | 630 A | 20 kA | 155 | 727 32100 | 34 | 727 32111 | 727 32114 | 39 | LN3-093696 | | | | |
| 12 kV | H 27 EA | 630 A | 20 kA | 210 | 727 32400 | 41 | 727 32411 | 727 32414 | 46 | LN3-093702 | | | | |
| 24 kV | H 27 EK | 630 A | 16 kA | 170 | 727 61515 | 38 | 727 61511 | 727 61516 | 44 | LN3-091502 | | | | |
| 24 kV | H 27 EK | 630 A | 20 kA | 170 | 727 71500 | 38 | 727 71511 | 727 71514 | 44 | LN3-091503 | | | | |
| 24 kV | H 27 EK | 630 A | 16 kA | 225 | 727 61350 | 45 | 727 61311 | 727 61300 | 51 | LN3-106043 | | | | |
| 24 kV | H 27 EK | 630 A | 20 kA | 225 | 727 71300 | 45 | 727 71311 | 727 71314 | 51 | LN4-067886 | | | | |
| 24 kV | H 27 EK | 630 A | 16 kA | 275 | 727 61151 | 40 | 727 61152 | 727 61153 | 46 | LN3-102801 | | | | |
| 24 kV | H 27 EK | 630 A | 20 kA | 275 | 727 71100 | 48 | 727 71111 | 727 71114 | 54 | LN3-102803 | | | | |
| 24 kV | H 27 EA | 630 A | 16 kA | 170 | 727 62500 | 40 | 727 62511 | 727 62514 | 46 | LN3-091504 | | | | |
| 24 kV | H 27 EA | 630 A | 20 kA | 170 | 727 72500 | 47 | 727 72511 | 727 72514 | 53 | LN3-091505 | | | | |
| 24 kV | H 27 EA | 630 A | 16 kA | 225 | 727 62302 | 48 | 727 62301 | 727 62300 | 58 | LN4-067884 | | | | |
| 24 kV | H 27 EA | 630 A | 20 kA | 225 | 727 72300 | 51 | 727 72311 | 727 72314 | 62 | LN3-091543 | | | | |
| 24 kV | H 27 EA | 630 A | 16 kA | 275 | 727 62151 | 51 | 727 62153 | 727 62152 | 62 | LN4-039597 | | | | |
| 24 kV | H 27 EA | 630 A | 20 kA | 275 | 727 72100 | 53 | 727 72101 | 727 72111 | 65 | LN3-091501 | | | | |

DRIESCHER - Indoor Switch-fuse combination H 27

Indoor Switch-fuse combination H 27 SEA for wall mounting



- 1) hexagonal screw with two span washers and nut
 2) max. fuse diametral (88 mm) after DIN 43625
 3) outside this zone, the connecting bar have to be insulated
 4) phase barriers (only for 24 kV p = 170 mm)
 insulation level without phase barriers: UP 95 kV
 5) covering

Fig. 4: Type H 27 SEA with earthing switch mounted below
 All-pole disconnection of the switch-disconnector when a fuse operates.

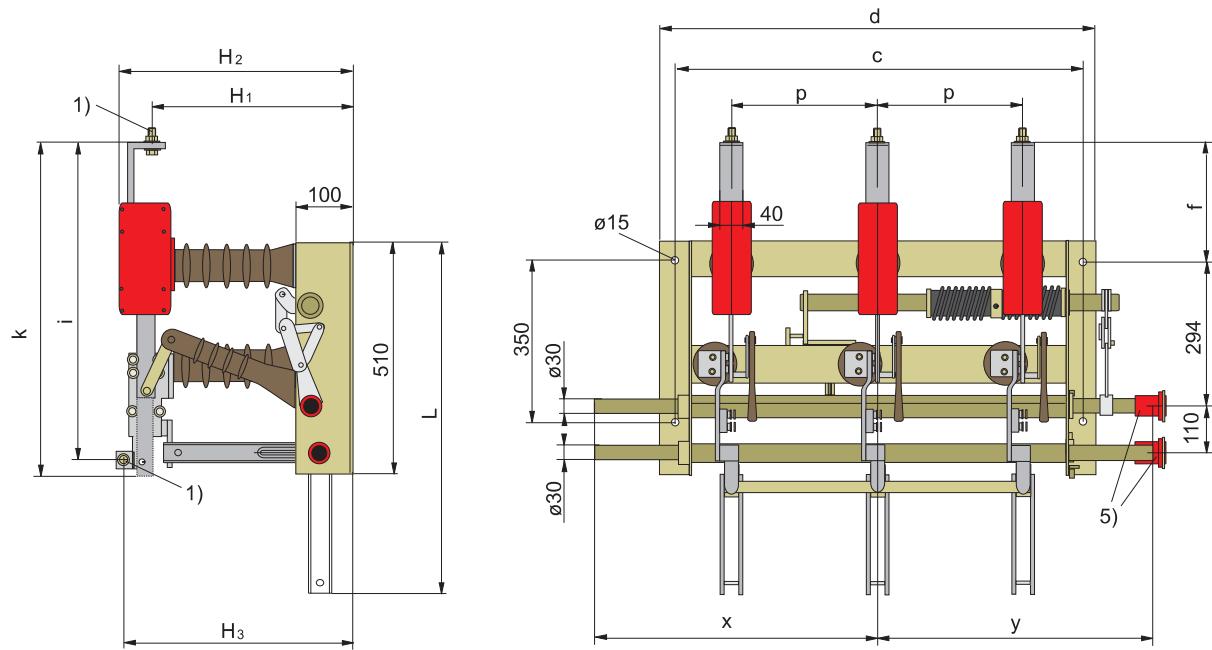
| Rated voltage Ur | Type | Rated current ⁶⁾ Ir | Rated-short-time current I _k | p | c | d | e | f | H ₁ | H ₂ | L | L ₁ | m | n | s | x | y |
|------------------|----------|--------------------------------|---|-----|-----|-----|-----|-----|----------------|----------------|------|----------------|-----|-----|-----|-----|-----|
| 12 kV | H 27 SEA | 630/125 A | 20 kA | 155 | 465 | 500 | 500 | 103 | 310 | 324 | 1013 | 925 | 254 | 354 | 325 | 340 | 340 |
| 12 kV | H 27 SEA | 630/125 A | 20 kA | 210 | 575 | 610 | 500 | 103 | 310 | 324 | 1013 | 925 | 254 | 343 | 325 | 450 | 450 |
| 24 kV | H 27 SEA | 630/125 A | 16 kA | 170 | 495 | 530 | 478 | 156 | 385 | 401 | 1040 | 903 | 388 | 493 | 475 | 460 | 460 |
| 24 kV | H 27 SEA | 630/125 A | 16 kA | 225 | 605 | 640 | 478 | 156 | 385 | 401 | 1040 | 903 | 388 | 493 | 475 | 440 | 440 |
| 24 kV | H 27 SEA | 630/125 A | 16 kA | 275 | 705 | 740 | 478 | 161 | 385 | 401 | 1045 | 903 | 388 | 493 | 475 | 565 | 565 |

| Rated voltage Ur | Type | Rated current ⁶⁾ Ir | Rated-short-time current I _k | without earthing switch | | | | with earthing switch mounted below | | | | Drawing-no. |
|------------------|----------|--------------------------------|---|-------------------------|-----------|-------------------|--|---------------------------------------|-------------------|------------|--|-------------|
| | | | | p | Part-no. | Weight approx. kg | Part-no. without mechanical interlocking | Part-no. with mechanical interlocking | Weight approx. kg | | | |
| 12 kV | H 27 SEA | 630/125 A | 20 kA | 155 | 727 33852 | 44 | 727 33861 | 727 33864 | 51 | LN3-095549 | | |
| 12 kV | H 27 SEA | 630/125 A | 20 kA | 210 | 727 33870 | 51 | 727 33871 | 727 33874 | 60 | LN3-095849 | | |
| 24 kV | H 27 SEA | 630/125 A | 16 kA | 170 | 727 63500 | 61 | 727 63511 | 727 63514 | 68 | LN3-090676 | | |
| 24 kV | H 27 SEA | 630/125 A | 16 kA | 225 | 727 63302 | 64 | 727 63301 | 727 63300 | 74 | LN4-067885 | | |
| 24 kV | H 27 SEA | 630/125 A | 16 kA | 275 | 727 63151 | 68 | 727 63152 | 727 63153 | 79 | LN4-039598 | | |

⁶⁾ Rated current of the fuse holder 125 A

DRIESCHER - Indoor Switch-Disconnect H 27

Indoor Switch-Disconnect H 27 EA and EK for lateral mounting



1) hexagonal screw with two span washers and nut
 5) drive box and clamping washer with ON / OFF indicator

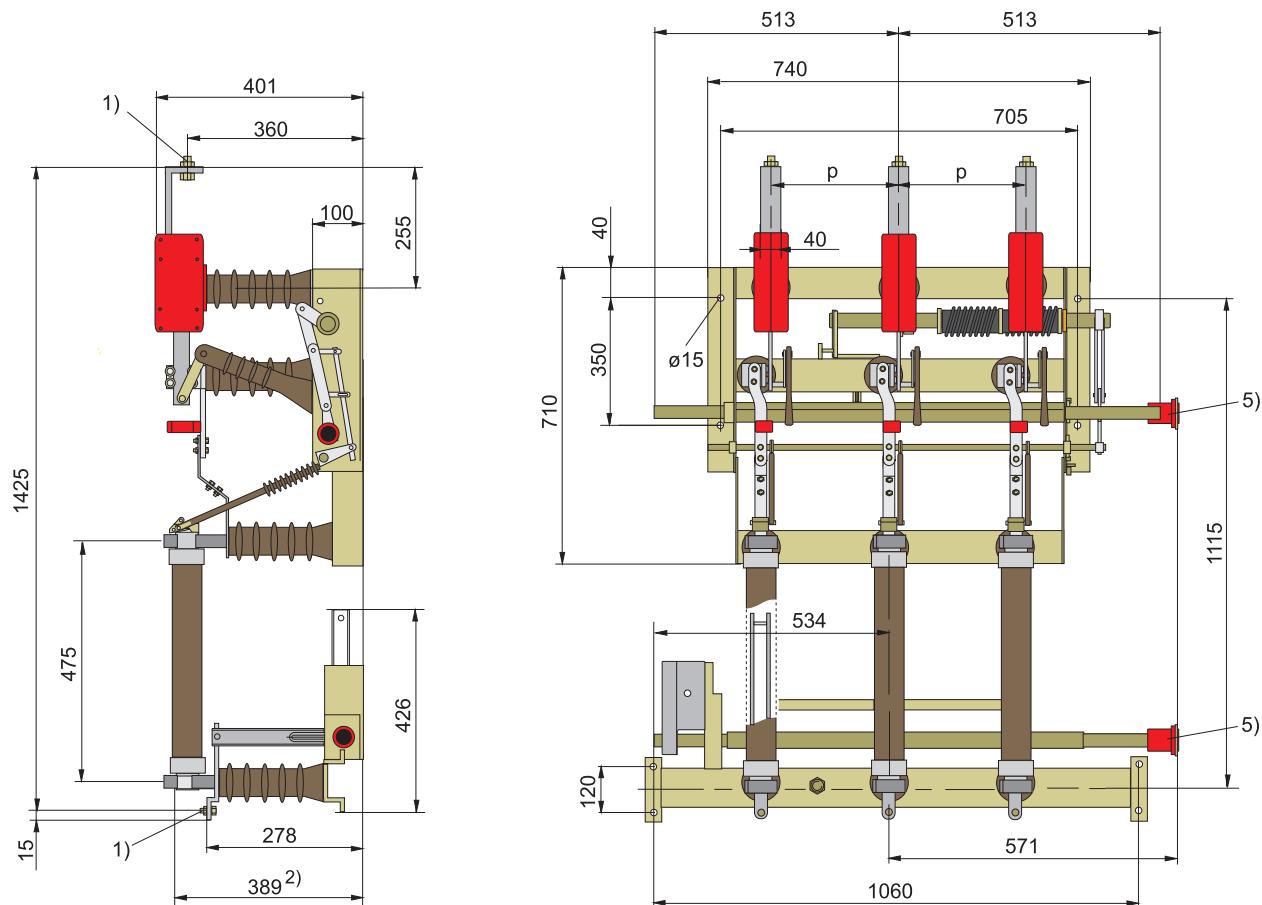
Fig. 5: Type H 27 EA with earthing switch mounted below

| Rated voltage Ur | Type | Rated current Ir | Rated short-time current Ik | p | c | d | f | H ₁ | H ₂ | H ₃ | i | k | L | x | y | Drawing no. |
|------------------|---------|------------------|-----------------------------|-----|-----|-----|-----|----------------|----------------|----------------|-----|-----|-----|-----|-----|-------------|
| 12 kV | H 27 EK | 630 A | 20 kA | 155 | 465 | 500 | 197 | 310 | 324 | 314 | 587 | 639 | 627 | 287 | 398 | LN3-095031 |
| 24 kV | H 27 EK | 630 A | 16 kA | 275 | 705 | 740 | 255 | 360 | 399 | 361 | 685 | 757 | 712 | 513 | 513 | LN3-102802 |
| 24 kV | H 27 EK | 630 A | 20 kA | 275 | 705 | 740 | 255 | 365 | 404 | 365 | 685 | 763 | 712 | 513 | 513 | LN3-102804 |
| 24 kV | H 27 EA | 630 A | 16 kA | 275 | 705 | 740 | 255 | 360 | 401 | 358 | 685 | 763 | 712 | 513 | 513 | LN4-044887 |
| 24 kV | H 27 EA | 630 A | 20 kA | 275 | 705 | 740 | 255 | 360 | 406 | 375 | 685 | 757 | 712 | 513 | 513 | LN3-091500 |

| Rated voltage Ur | Type | Rated current Ir | Rated short-time current Ik | p | without earthing switch | | | with earthing switch mounted below | | |
|------------------|---------|------------------|-----------------------------|-----|-------------------------|-------------------|--|---------------------------------------|-------------------|---------------------------------------|
| | | | | | Part-no. | Weight approx. kg | Part-no. without mechanical interlocking | Part-no. with mechanical interlocking | Weight approx. kg | Part-no. with mechanical interlocking |
| 12 kV | H 27 EK | 630 A | 20 kA | 155 | 727 31190 | 42 | 727 31294 | 727 31292 | 53 | 727 31292 |
| 24 kV | H 27 EK | 630 A | 16 kA | 275 | 727 61201 | 51 | 727 61203 | 727 61204 | 62 | 727 61204 |
| 24 kV | H 27 EK | 630 A | 20 kA | 275 | 727 71171 | 48 | 727 71175 | 727 71950 | 59 | 727 71950 |
| 24 kV | H 27 EA | 630 A | 16 kA | 275 | 727 62271 | 50 | 727 62211 | 727 62215 | 61 | 727 62215 |
| 24 kV | H 27 EA | 630 A | 20 kA | 275 | 727 72201 | 53 | 727 72203 | 727 72205 | 64 | 727 72205 |

DRIESCHER - Indoor Switch-fuse combination H27

Indoor Switch-fuse combination H 27 SuT for lateral mounting



1) hexagonal screw with two span washers and nut
2) max. fuse diametral (88 mm) after DIN 43625
5) drive box and clamping washer with ON / OFF indicator

Fig. 6: Type H 27 SuT with earthing switch mounted below and separate cross rail with mounted insulators

All-pole disconnection of the switch-disconnector when a fuse operates.
HV HBC-fuses are removable laterally !

| Rated voltage Ur | Type | Rated current ⁶⁾ Ir | Rated-short-time current Ik | p | without earthing switch | | | Drawing-no. |
|------------------|----------|--------------------------------|-----------------------------|-----|-------------------------|---------------------|-------------------|-------------|
| | | | | | Part-no. switch | Part-no. cross rail | Weight approx. kg | |
| 24 kV | H 27 SuT | 630/125 A | 16 kA | 275 | 727 63001 | 720 72104 | 74 | LN4-44233 |

| Rated voltage Ur | Type | Rated current ⁶⁾ Ir | Rated-short-time current Ik | p | with earthing switch mounted below | | |
|------------------|----------|--------------------------------|-----------------------------|-----|--|--------------------------------------|-------------------|
| | | | | | Part-no. without mechanical interlocking | Part-no with mechanical interlocking | Weight approx. kg |
| 24 kV | H 27 SuT | 630/125 A | 16 kA | 275 | on request * | on request ** | 88 |

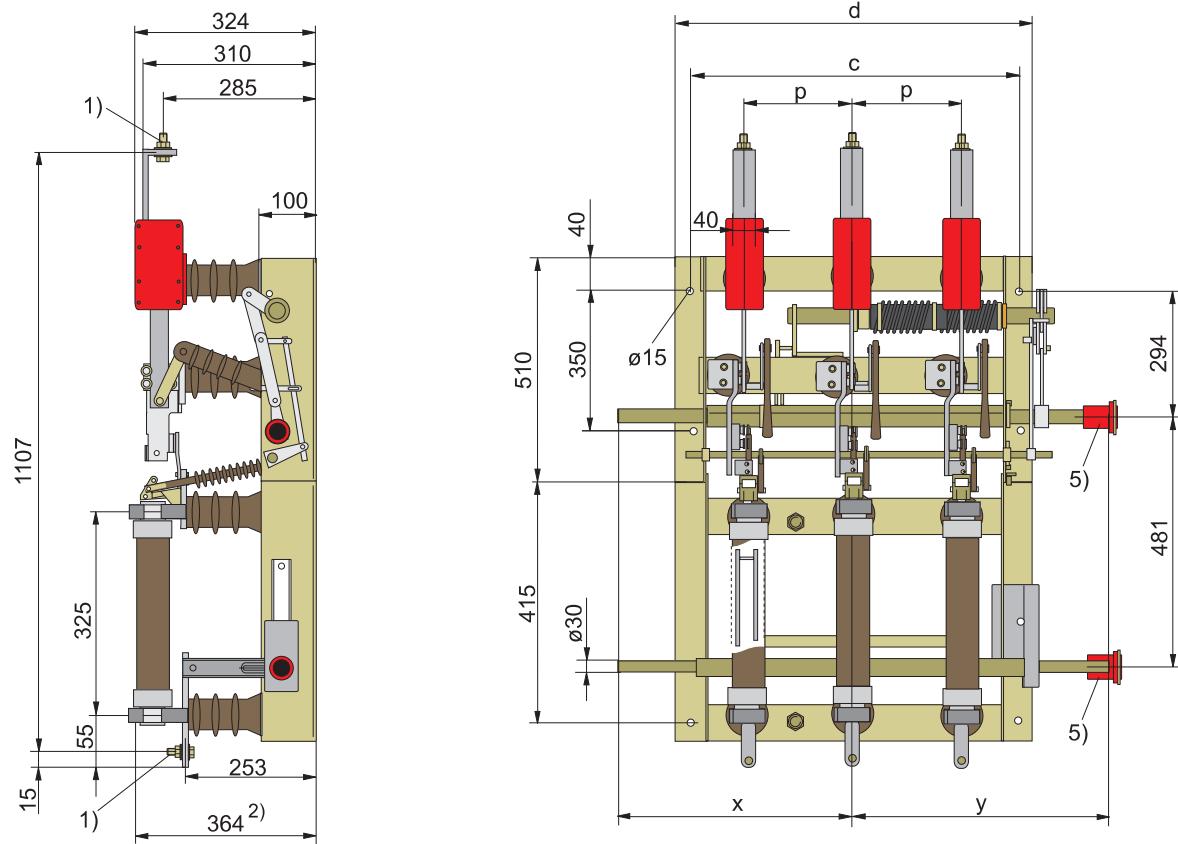
* with separate earthing switch

** with separate earthing switch and interlocking

⁶⁾ Rated current of the fuse holder 125 A

DRIESCHER - Indoor Switch-fuse combination H 27

Indoor Switch-fuse combination H 27 SEA for lateral mounting



- 1) hexagonal screw with two span washers and nut
- 2) max. fuse diametral (88 mm) after DIN 43625
- 5) drive box and clamping washer with ON / OFF indicator

Fig. 7: Type H 27 SEA with earthing switch mounted below
All-pole disconnection of the switch-disconnector when a fuse operates.
HV HBC-fuses are removable laterally !

| Rated voltage Ur | Type | Rated current ⁽⁶⁾ Ir | Rated-short-time current I _k | without earthing switch | | | | | Weight approx. kg | Drawing no. | |
|------------------|----------|---------------------------------|---|-------------------------|-----|-----|-----|-----|-------------------|-------------|------------|
| | | | | p | c | d | x | y | | | |
| 12 kV | H 27 SEA | 630/125 A | 20 kA | 155 | 465 | 500 | 287 | 398 | 727 33295 | 61 | LN3-094869 |
| 12 kV | H 27 SEA | 630/125 A | 20 kA | 210 | 575 | 610 | 450 | 450 | 727 33490 | 68 | LN3-107771 |

| Rated voltage Ur | Type | Rated current ⁽⁶⁾ Ir | Rated-short-time current I _k | with earthing switch mounted below | | | | | Weight ca. kg |
|------------------|----------|---------------------------------|---|--|---------------------------------------|-----------|----|--|---------------|
| | | | | Part-no. without mechanical interlocking | Part-no. with mechanical interlocking | | | | |
| 12 kV | H 27 SEA | 630/125 A | 20 kA | 155 | 727 33692 | 727 33297 | 77 | | |
| 12 kV | H 27 SEA | 630/125 A | 20 kA | 210 | 727 33492 | 727 33494 | 86 | | |

⁶⁾ Rated current of the fuse holder 125 A

Type Switch-fuse combination H 27

These switch-fuse combinations according to EN 62271-105 comprise a functional unit of switch disconnectors according to EN 62271-103 and back-up fuses according to EN 60282-1.

Switch-fuse combinations are used for switching on and off of distribution transformers in secondary substations. They additionally have the task of protecting these transformers against the impact of internal and external faults.

By means of the fuses the breaking capacity of the combination is extended beyond that of a simple

switch disconnector up to the rated short-circuit breaking current of the fuse.

The high-voltage high breaking capacity fuse, according to the statistics of the VDN (German Association of Electricity Network Operators) offers a reliable transformer protection. The h.v.h.b.c. fuse in combination with a switch disconnector provides a simple solution which is very economical and practical to procure and run.

This provides a clear advantage over a circuit breaker with the associated current transformers and overcurrent time protection.

Recommended protection for DRIESCHER - Switch-fuse combination in accordance with EN 62271-105

High-voltage high breaking capacity fuse link for Ur = 12 kV and 24 kV

Fuse Type STA and Type SSK

| Rated-transformer-power [kVA] | Rated current of the h.v.h.b.c. fuse | | | |
|-------------------------------|--------------------------------------|----------|-----------------------------------|----------|
| | 12 kV | | 24 kV | |
| | min. (A) | max. (A) | min. (A) | max. (A) |
| 50 | 6,3 | 6,3 | 6,3 | 6,3 |
| 80 | 10 | 10 | 6,3 | 6,3 |
| 100 | 10 | 16 | 6,3 | 10 |
| 125 | 16 | 20 | 10 | 16 |
| 160 | 20 | 25 | 10 | 20 |
| 200 | 25 | 31,5 | 16 | 20 |
| 250 | 31,5 | 40 | 16 | 25 |
| 315 | 31,5 | 50 | 20 | 25 |
| 400 | 40 | 50 | 25 | 31,5 |
| 500 | 50 | 63 | 25 | 40 |
| 630 | 63 | | 31,5 | 50 |
| 800 | 80, Type SSK | | 40 | 50 |
| 1000 | 100, Type SSK | | 50 | 63 |
| 1250 | 125, Type SSK and tripping delay* | | 63 | |
| 1600 | | | 80 | |
| 2000 | | | 100, Type SSK and tripping delay* | |
| 2500 | | | 125, Type SSK and tripping delay* | |

* Time of tripping delay of the switch: Ur 12 kV 250 ms +0/-50 ms
Ur 24 kV 500 ms +0/-50 ms

Suitable fuses: Type STA DRIESCHER Moosburg and Type SSK Siba Lünen

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

STROM • SICHER • SCHALTEN

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