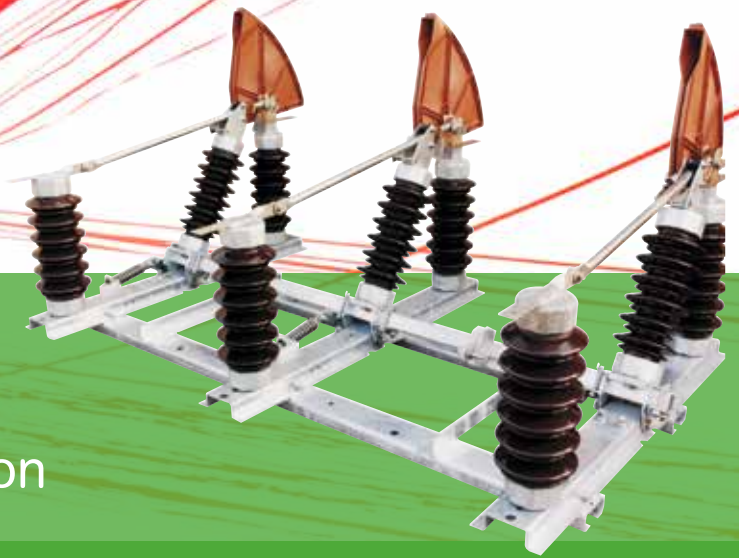


SBC range

Medium Voltage Distribution



Load break switch
up to 36 kV
2020 Catalogue

se.com

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Schneider
Electric

A new path for achieving your electrical installations

A comprehensive offer

The SBC Load Break Switch range is part of a comprehensive offer of products that are perfectly coordinated to meet all medium voltage electrical distribution requirements. All of these products have been designed to work together: electrical, mechanical and communication compatibility.

The electrical installation is thus both optimised and has improved performance:

- Better service continuity
- Increased personnel and equipment safety
- Guaranteed upgradeability
- Efficient monitoring and control

You therefore have all the advantages at hand in terms of knowhow and creativity for achieving optimised, safe, upgradeable and compliant installations.

Tools for facilitating the design and installation

With Schneider Electric, you have a complete range of tools to help you get to know and install the products whilst complying with current standards and good working practices. These tools, technical sheets and guides, design software, training courses, etc are regularly updated.

**Schneider Electric is associating itself
with your know-how and your creativity
to produce optimised, safe, upgradeable
and compliant installations**

For a real partnership with you

A universal solution doesn't exist because each electrical installation is specific. The variety of combinations on offer allows you to truly customise the technical solutions.

You are able to express your creativity and put your know-how to best advantage when designing, manufacturing and exploiting an electrical installation.

SBC range

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The switch-disconnectors SBC range is visible breaking, vertical break design and principally used in rural distribution networks. They are suitable for horizontal or vertical mounting on metal, concrete or wooden single or double poles.

The SBC and SBCP disconnectors is that the SBC types have a load breaking head comprising a chamber and fast opening auxiliary blade.

This arrangement combines the high speed action of the auxiliary blade with the cooling and confining effect of the enclosure to restrict the arc and limit the production of gases.

As a result, an external arc is avoided with benefits to the environment and added safety for operating staff.

The polymeric insulators provides better resistance to chemicals, salty environments and highly polluted areas.

Furthermore, due to the material lightness it makes them easier to pack, to carry and to assembly.

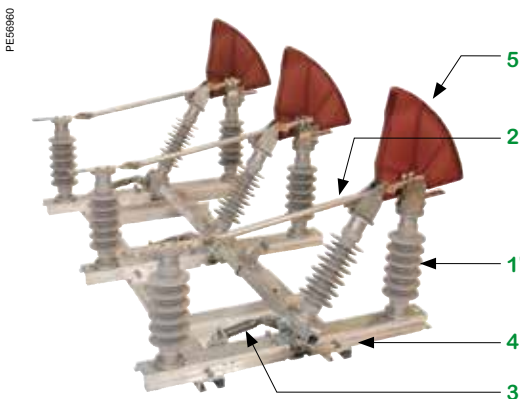
In any case, for a safer transportation and easier packing the disconnectors are manufactured of independent phases, and packaged by bolting to a close-boarded pallet.

The installed phases are secured to a common base and operated by a single drive mechanism.

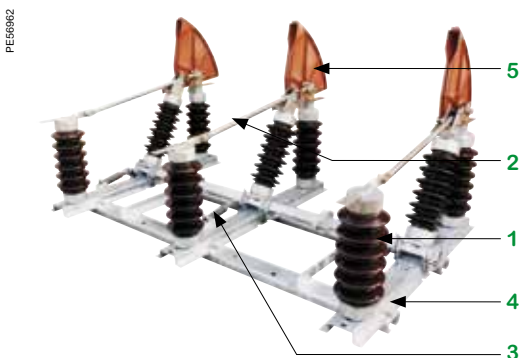
- SBC and SBCP switch disconnectors are manufactured under IEC 60265-1 and IEC-62271 102.

25 years experience and 30.000 units installed all over the world in all climate conditions.

SBCP 36/400 CB



SBC 36/400 CB



Packing

All switch disconnectors are packed in wooden crates, with their phases disassembled from the three-pole frame. The frames and the rest of the hardware necessary for the erection (including the assembly, setting into service and maintenance instructions) are packed in the same crate. The transmission tubes are bundled separately.

The packaging meets the international standard requirements and have compact dimensions (2.150 x 1.350 x 980 mm). Each packaging contains 4 SBC. This allows 32 SBC in a 20' container and 80 SBC in a 40' container.

Configuration

1 Porcelain insulators. Brown glazed porcelain, cylindrical type (with galvanised end fittings). Shed profile is designed for polluted environments.

1' Polymeric insulator grey colored.

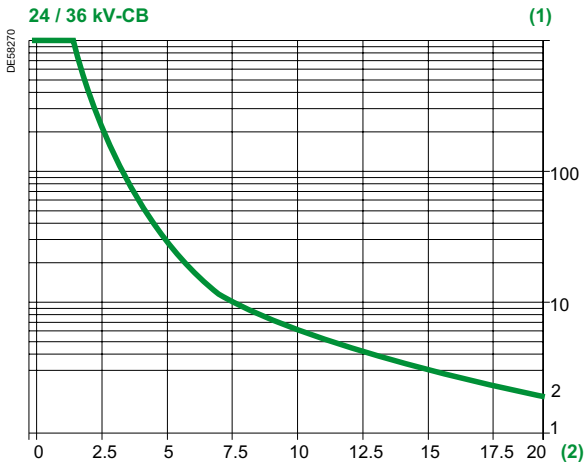
2 Current carrying parts electrolytic copper with suitable treatment for each current level. Contacts are punctual type, with no flexible leads, self cleaning effect during operation, requires minimum effort to operate the disconnector.

3 Brisk closing device (CB) with porcelain insulators, only available for horizontal mounting. This device gives a short circuit making capacity up to 20 kA (optional).

4 Ferrous parts. Frame and bases are manufactured from cold rolled steel sheet. Frames, operating rods and the rest of pieces, such as screws, bolts, etc., are protected by hot dip galvanising or stainless steel.

5 Load breaking head composed by a fast opening auxiliary blade and gas assisted arc-extinction chamber.

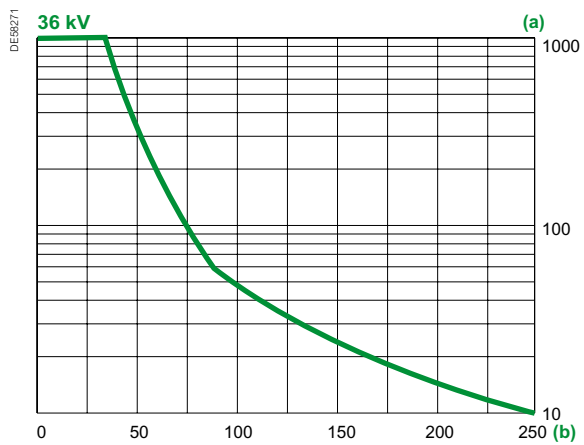
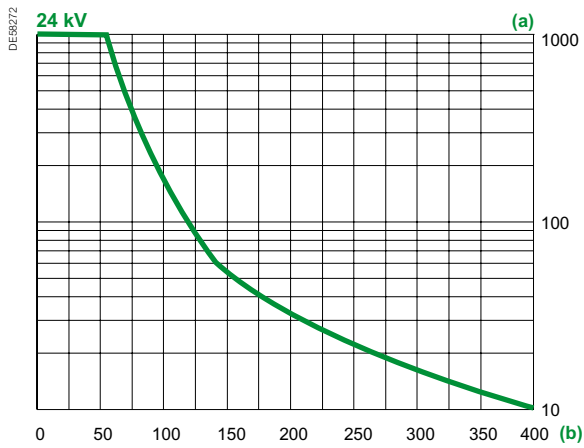
Short-circuit making capacity (optional)



(1) Number of short-circuit making operations
 (2) Short-circuit making capacity

References	Rated voltage kV	Rated current A	Creepage distance mm	Withstand voltage		Power frequency wet kV	Impulse kV	Power frequency wet kV	Impulse kV	Short time withstand current (RMS) kA/1s	Peak withstand current kA	Short-circuit making capacity (*) kA
				To earth and between poles kV	Across isolating distance kV							
Porcelain insulator												
SBC-24/400 SBC-24/400 CB	24	400	870	50	125	60	145	16	40	20		
SBC-24/630 SBC-24/630 CB		630										
SBC-36/400 SBC-36/400 CB	36	400	870	70	170	80	195	16	40	20		
SBC-36/630 SBC-36/630 CB		630										
Polymeric insulator												
SBCP-24/400 SBCP-24/400 CB	24	400	900	50	125	60	145	16	40	20		
SBCP-24/630 SBCP-24/630 CB		630										
SBCP-36/400 SBCP-36/400 CB	36	400	900	70	170	80	195	16	40	20		
SBCP-36/630 SBCP-36/630CB		630										

(*) On request. CB only (see chart).

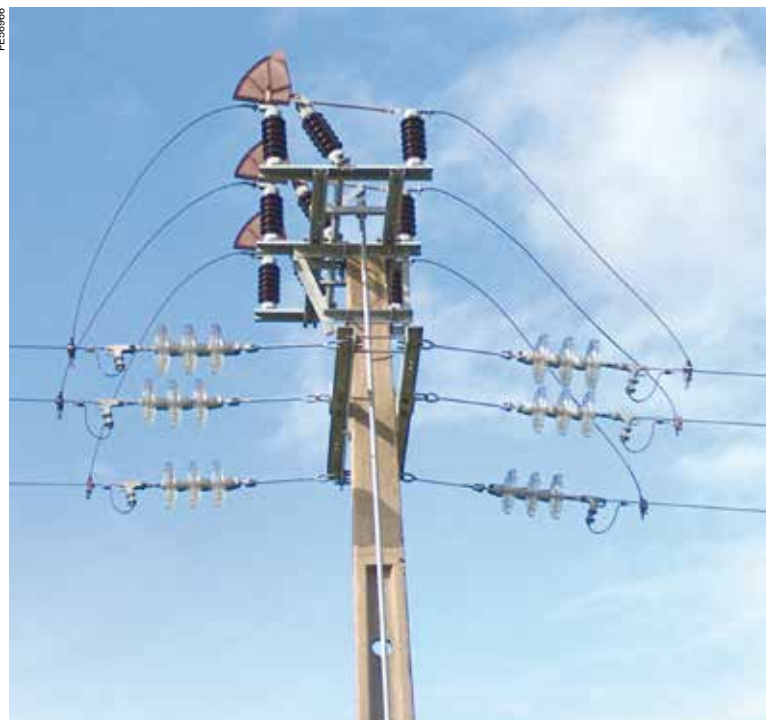


The electrical endurance is represented in this diagram, which provides an approximate number of the breaking operations that the SBC/SBCP can make.

- (a) Number of load breaking operations
- (b) Rated current (A)

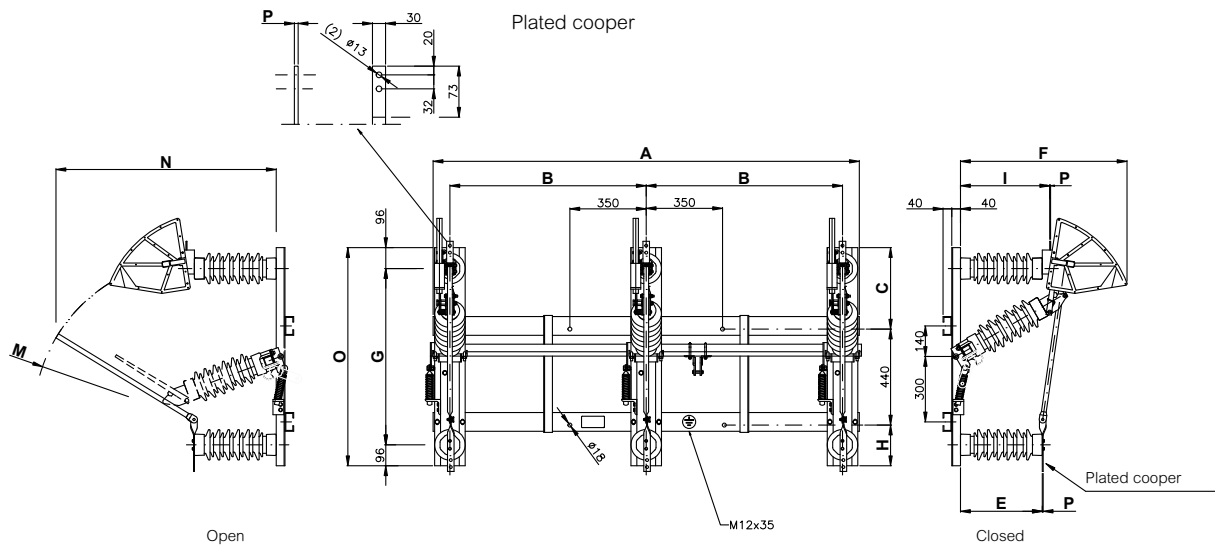
Electrical endurance

Breaking capacity (A rms.)	Cos φ	24 kV	36 kV
Mainly active load	0,7	400	250
Closed-loop	0,3	250	250
Cable charging	0,2	10	10
Line charging	0,2	10	10



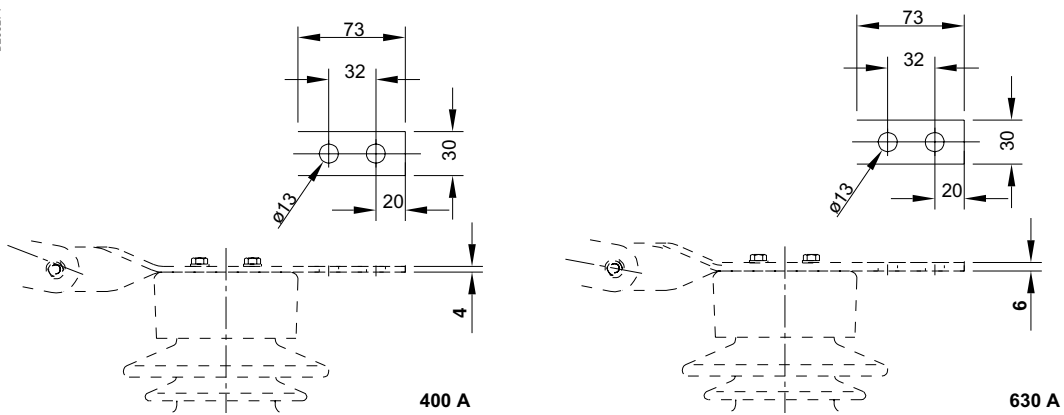
SBC switch-disconnector

DE68273ES



Connecting terminals (tin plated copper)

DE68274



References	Weight (Kg)	References	Weight (Kg)	Dimensions (mm)											
				A	B	C	E	F	G	H	I	M	N	O	P
SBC-24/400 SBC-24/630	125 126	SBC-24/400CB SBC-24/630CB	129 130	1594	720	359	375	815	808	201	409	734	1085	1000	4
SBC-36/400 SBC-36/630	125 126	SBC-36/400CB SBC-36/630CB	129 130	1594	720	359	375	815	808	201	409	734	1085	1000	4
SBCP-24/400 SBCP-24/630	104 105	SBCP-24/400CB SBCP-24/630CB	108 109	1594	720	359	375	815	808	201	409	734	1085	1000	4
SBCP-36/400 SBCP-36/630	104 105	SBCP-36/400CB SBCP-36/630CB	108 109	1594	720	359	375	815	808	201	409	734	1085	1000	4

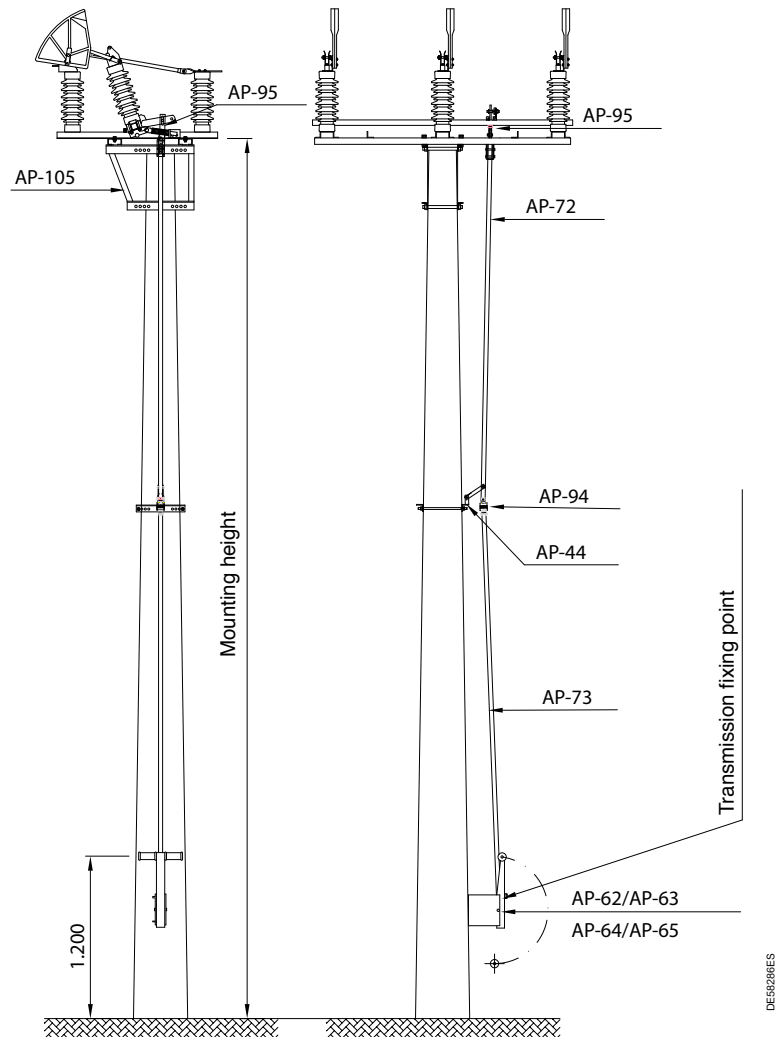
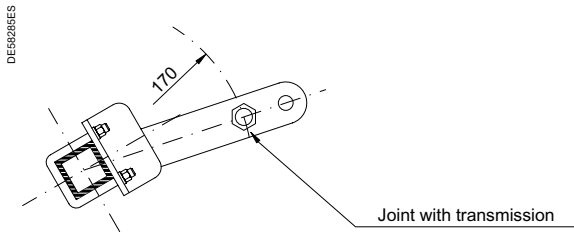
Horizontal mountings

On 1 post

SBC range

Mounting Type 1

Lever placing for horizontal assembly



State always mounting height.

Pieces of the manual operating mechanism

Mounting	References	Description
1	AP-65	Command
	AP-72	Transmission
	AP-44	Support
	AP-94	Coupling
	AP-73	Transmission
	AP-95	Bride
	AP-105	Support

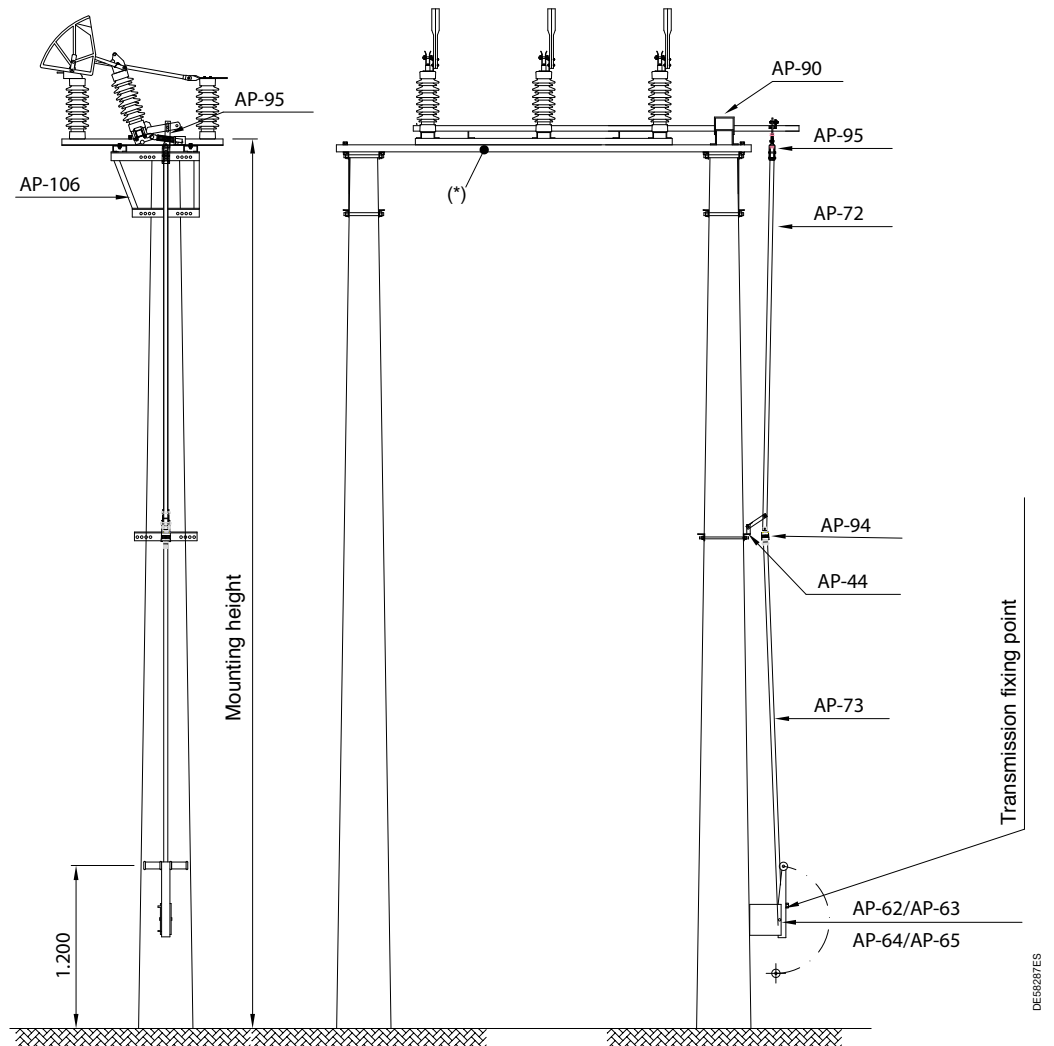
Different elements for the manual operating mechanism, on request.

Horizontal mountings

On 2 posts

SBC range

Mounting Type 2



State always mounting height.
 * Not supplied by Schneider Electric

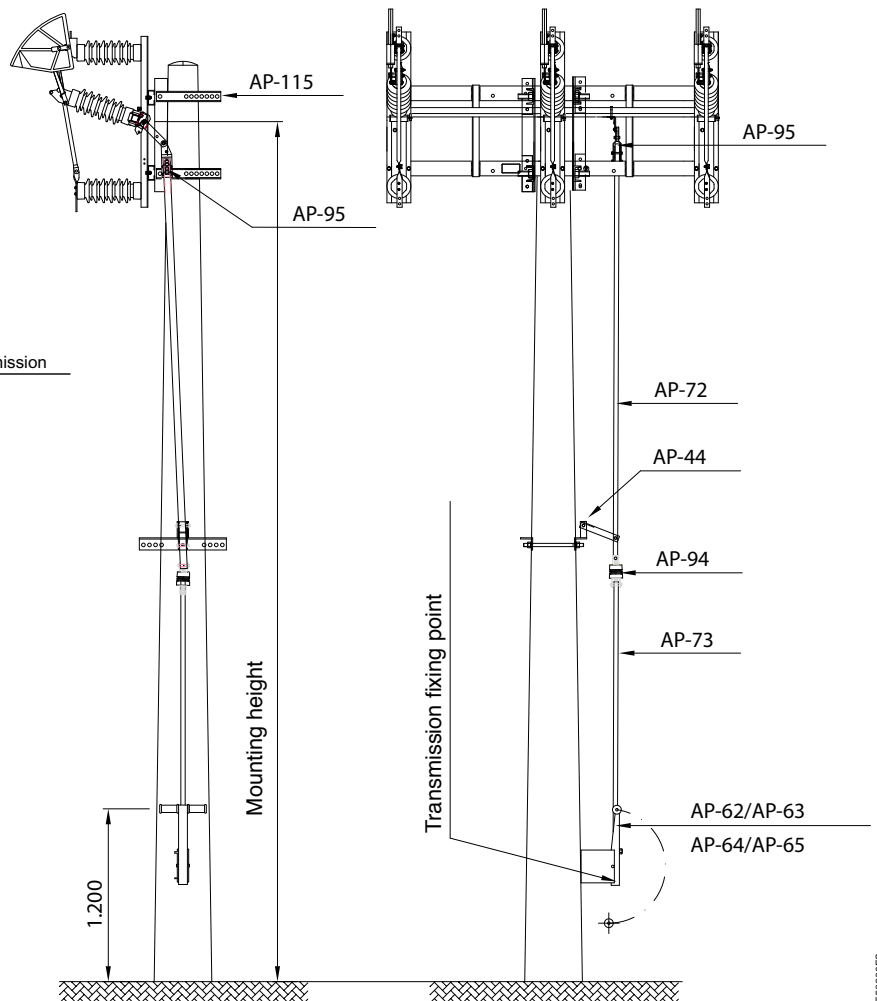
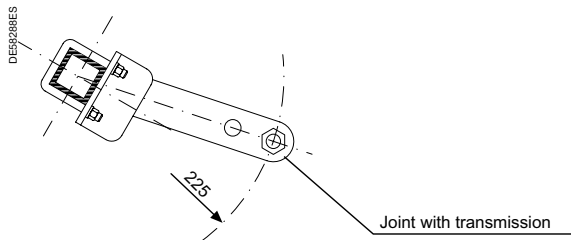
Pieces of the manual operating mechanism

Mounting	References	Description
2	AP-65	Command
	AP-72	Transmission
	AP-44	Support
	AP-94	Coupling
	AP-73	Transmission
	AP-95	Bride
	AP-90	Prolongation
	AP-106	Support

Different elements for the manual operating mechanism, on request.

Mounting Type 3

Lever placing for vertical assembly



State always mounting height.

Pieces of the manual operating mechanism

Mounting	References	Description
3	AP-65	Command
	AP-72	Transmission
	AP-44	Support
	AP-94	Coupling
	AP-73	Transmission
	AP-95	Bride
	AP-115	Support

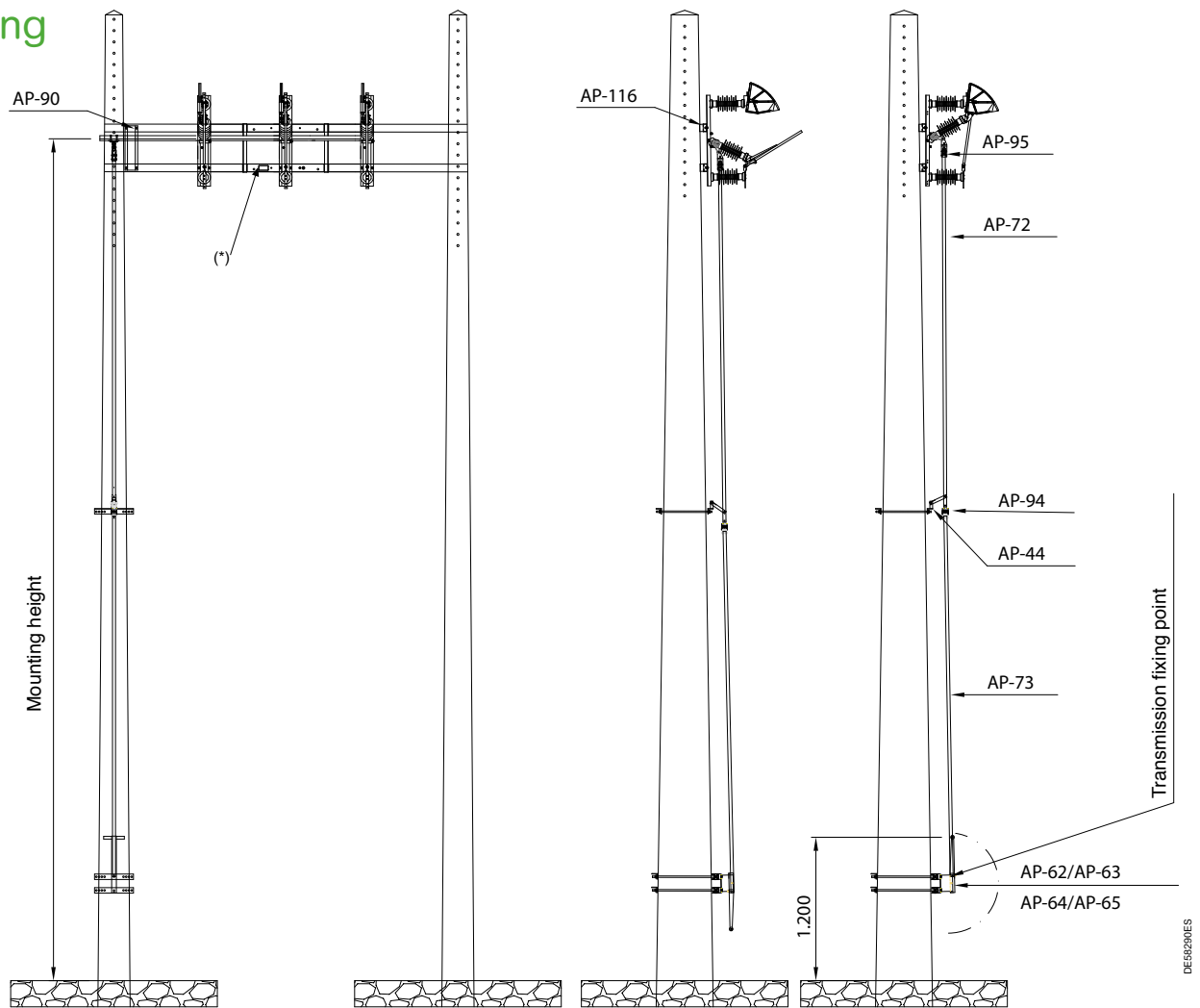
Different elements for the manual operating mechanism, on request.

Vertical mountings

On 2 posts

SBC range

Mounting Type 4



State always mounting height.
 (*) Not supplied by Schneider Electric

Pieces of the manual operating mechanism

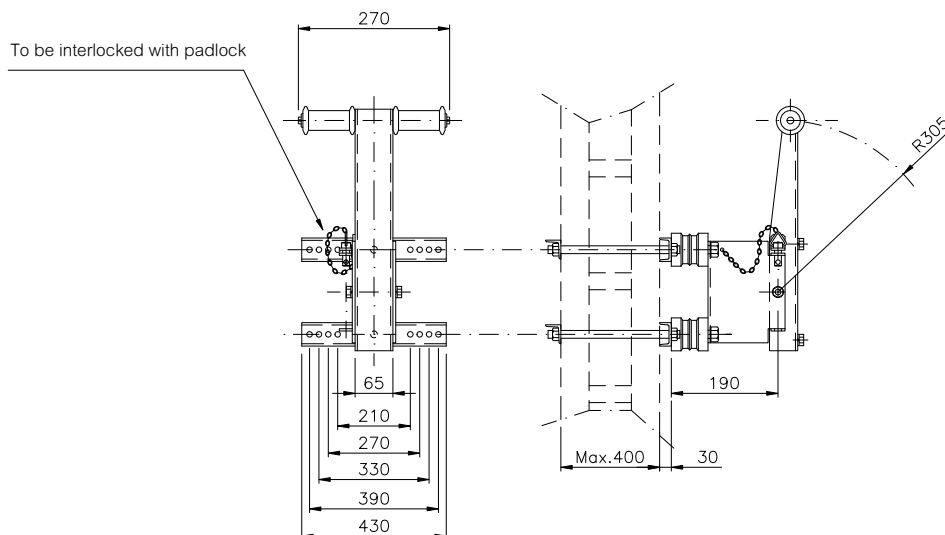
Mounting	References	Description
4	AP-65	Command
	AP-72	Transmission
	AP-44	Support
	AP-94	Coupling
	AP-73	Transmission
	AP-95	Bride
	AP-90	Prolongation
	AP-116	Support

Different elements for the manual operating mechanism, on request.

Mounting on concret, wooden or metallic post

Support on fittings with insulators

DE69275ES

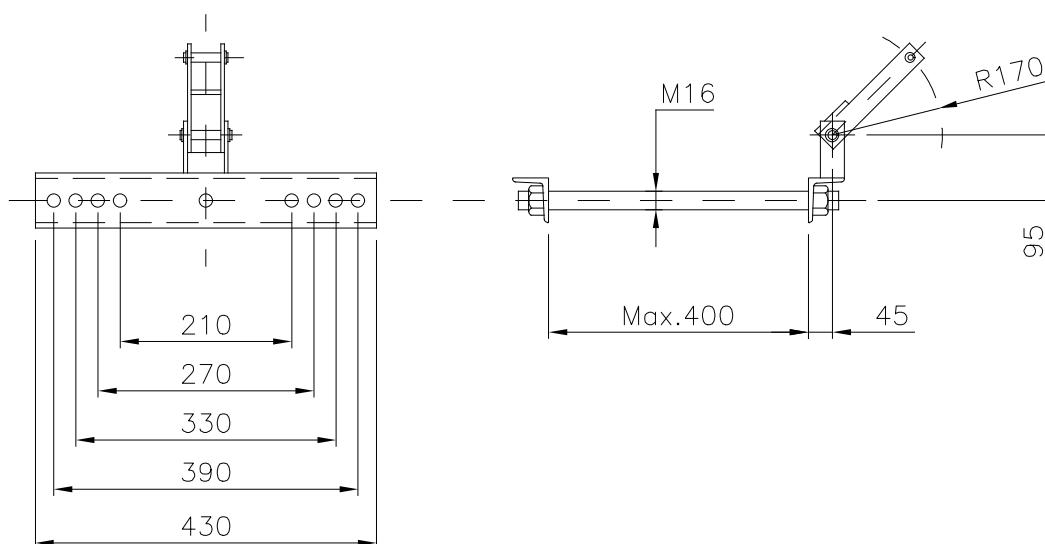


REF. AP-65(1)

Intermediate supports

With fittings

DE69277ES



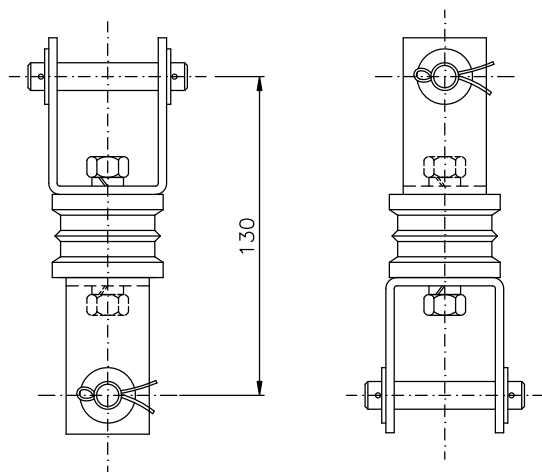
REF. AP-44(1)

(1) Supplied with necessary rods, nuts and washers.

Intermediate couplings

Standard

DE69278

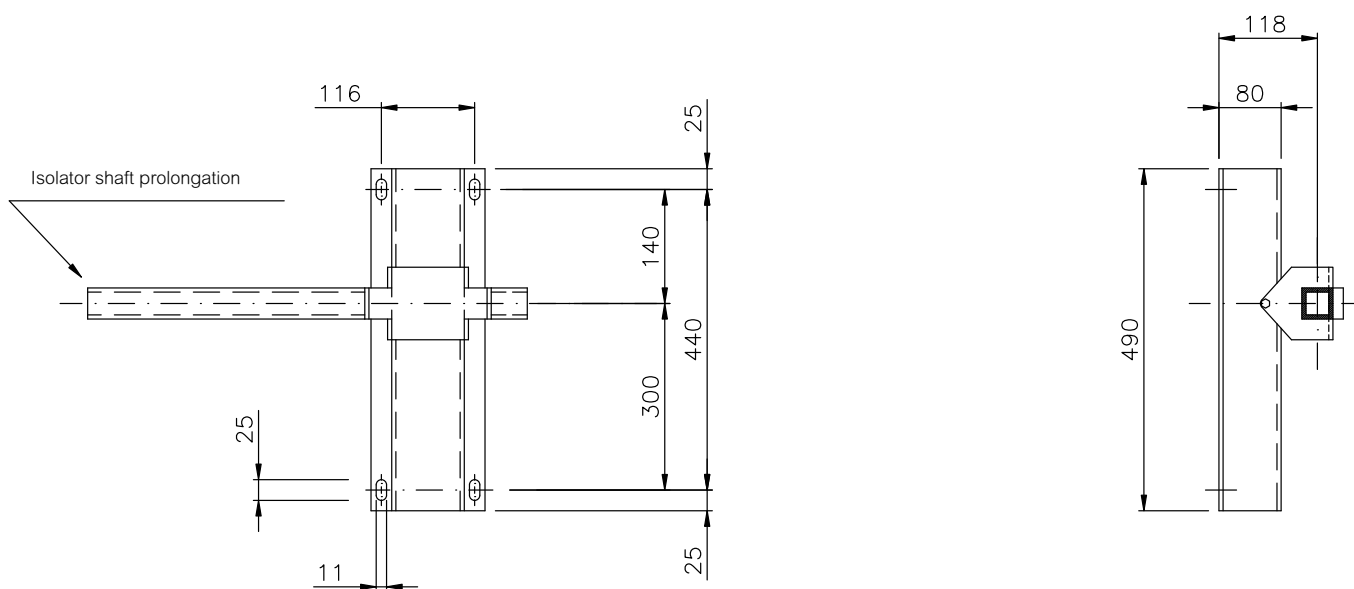


REF. AP-94

Shaft prolongations

With fittings

DE59200ES

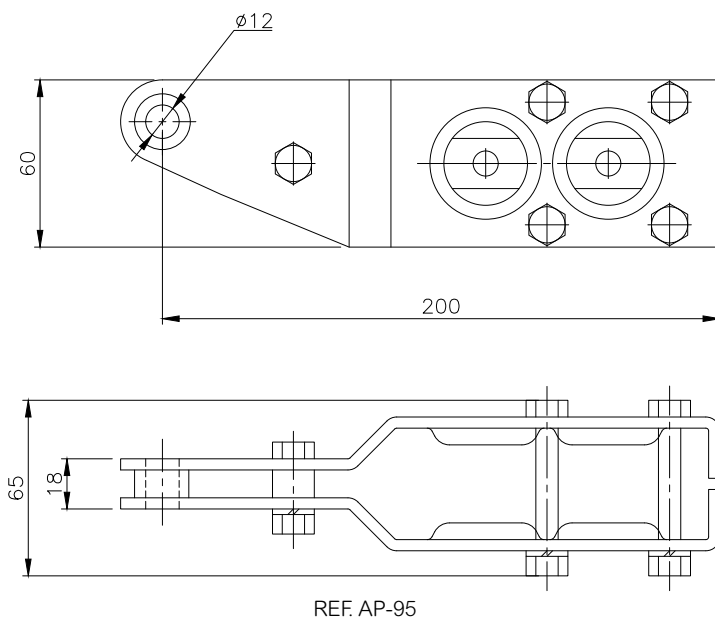


REF. AP-90⁽¹⁾

(1) The maximum length of the shaft prolongation is 4 metres.

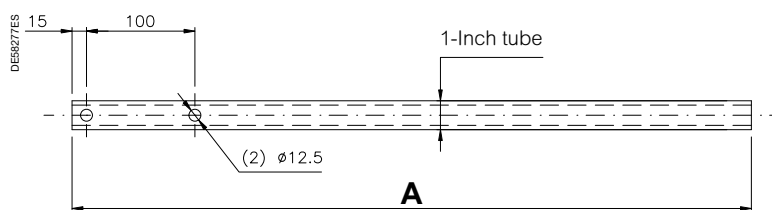
Bride

DE59281ES

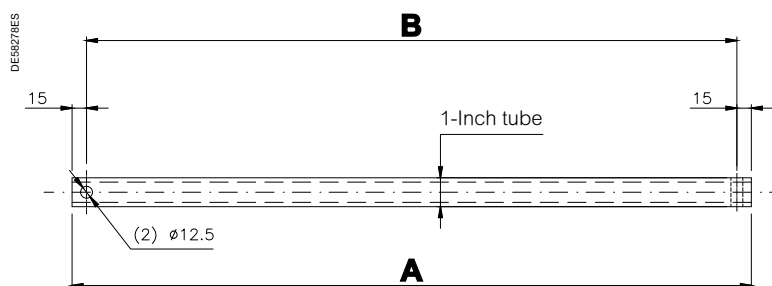


Lower transmission

References		Dimensions (mm)	
		A	B (max.)
AP-72/4	AP-73/4	4000	3970
AP-72/5	AP-73/5	5000	4970
AP-72/6	AP-73/6	6000	5970



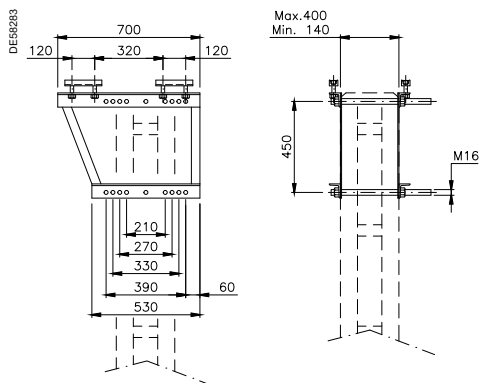
Mounting height (*)	Necessary transmissions	
	Top	Lower
5 m	AP-72/4 y AP-95	-
6 m	AP-72/5 y AP-95	-
7 m	AP-72/6 y AP-95	-
9 m	AP-72/4 y AP-95	AP-73/4
10 m	AP-72/4 y AP-95	AP-73/5
11 m	AP-72/5 y AP-95	AP-73/5
12 m	AP-72/5 y AP-95	AP-73/6
13 m	AP-72/6 y AP-95	AP-73/6



(*) Any other specified height on request.

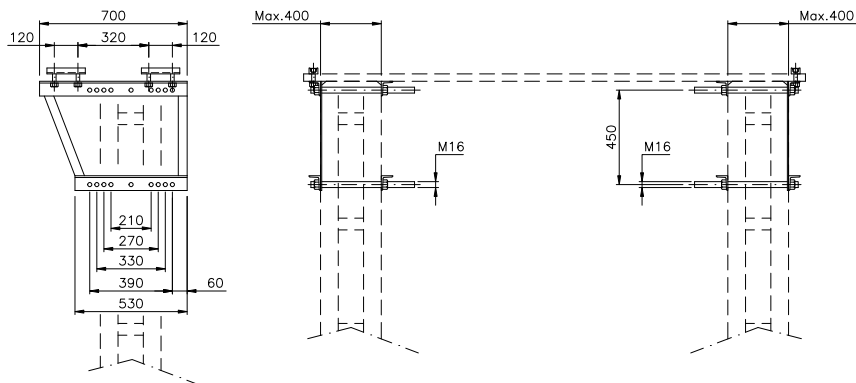
Supports for horizontal mounting

On one post



REF. AP-105(1)

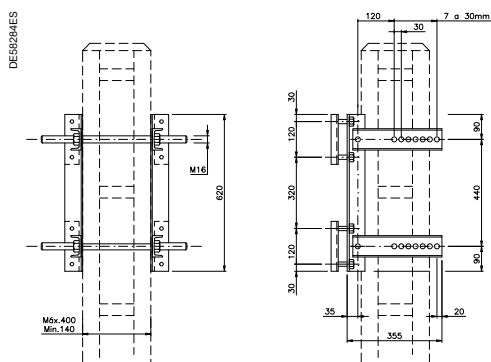
On two posts



REF. AP-106(2)

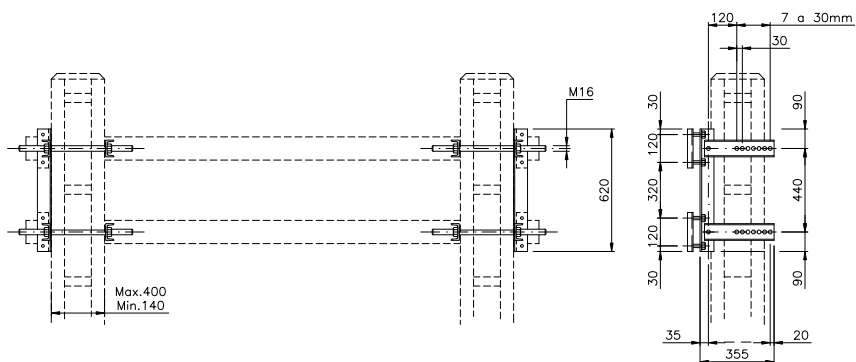
Supports for vertical mounting

On one post



REF. AP-115(1)

On two posts



REF. AP-116(2)

- (1) Supplied with necessary rods, nuts and washers.
- (2) Set formed by two supports, one for the right side and other for the left side.

Only one of the boxes (ticked or filled by the needed value) have to be considered between each horizontal line.

Gama SBC

Choice of equipment

Rocking type three pole switch-disconnector Ref. SBC Quantity ⁽¹⁾

Standard equipment

Rated voltage 24 kV 36 kV

Rated current 400 A 630 A

Options

Insulator Polymeric Porcelain

Mounting type Horizontal Vertical

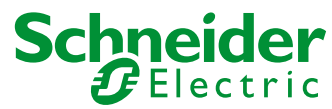
Post type Single post Double post

Mounting height (meters)

CB: short-circuit making capacity up to 20 kA (Available only with horizontal mounting) No Si

(1) The SBC's will be delivered in a 4 pack units.

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07-2020
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