



It's evolution - our new
fuse switch disconnecter
ARS evo

Based on our long experience in the field of switchgear, we have developed a structurally wellthought-out solution in the form of a fuse switch disconnecter, the **ARS evo**. It is an outstanding product with features such as safety, functionality and flexibility.



Safety

- stable and safe power distribution network
- parking position
- the fuse link can be released without touching it
- special construction allows better heat dissipation



Functionality

- easy to install
- non-parallel disconnecter
- 2 versions of switching: single-pole and three-pole



Flexibility

- retractable handle
- reversibility – top/bottom cable terminal connection
- padlock can be installed in open/closed position

Versions of ARS evo



ARS 00-1 evo



ARS 00-3 evo



ARS 2-1 evo



ARS 2-6 evo

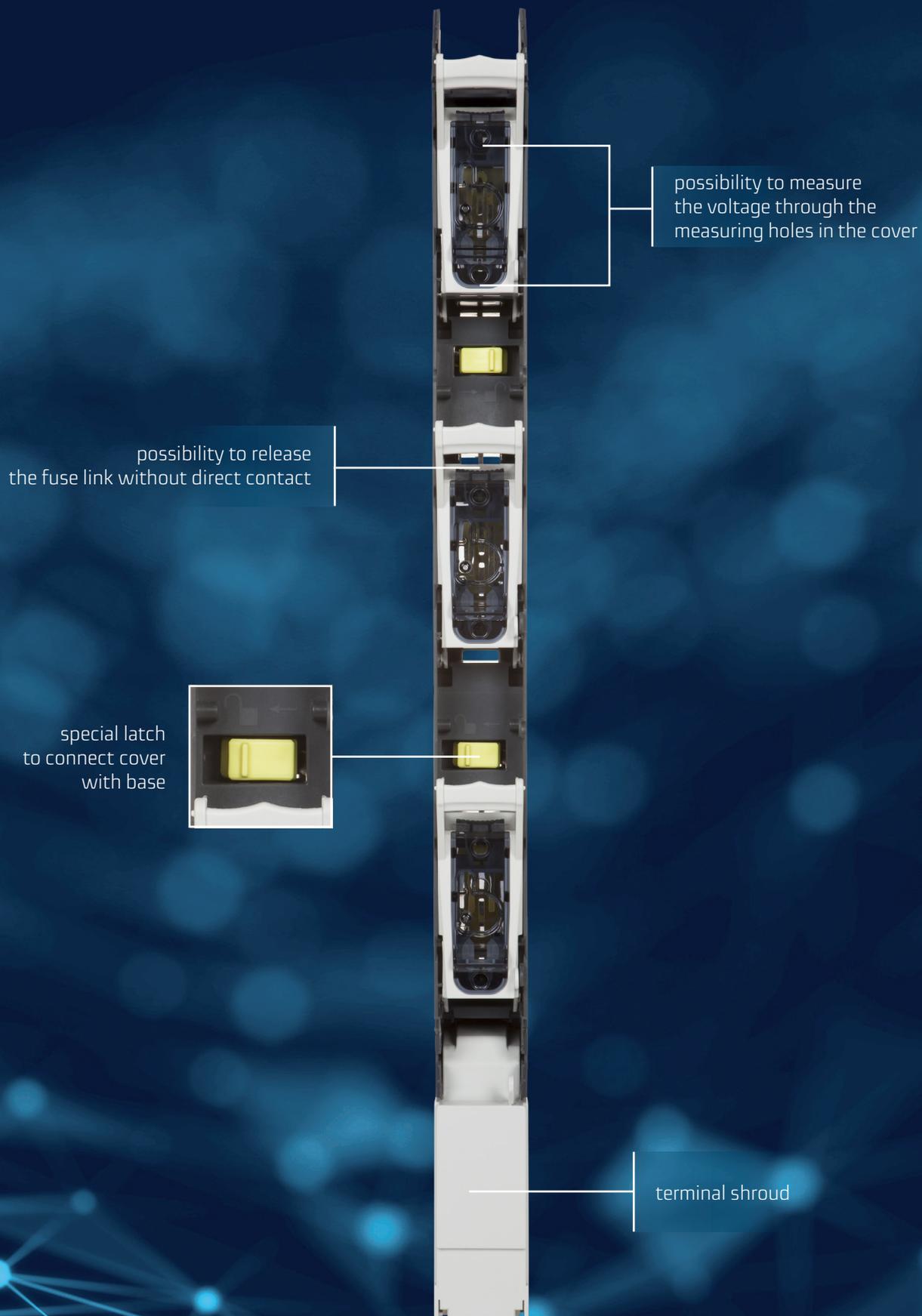


ARS 3-1 evo



ARS 3-6 evo

ARS 00 evo





ARS 00-1-M evo
single-pole switching

open position



ARS 00-3-M evo
three-pole switching

open position



ARS 00-3-M evo
three-pole switching

parking position

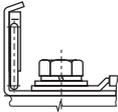
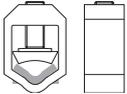
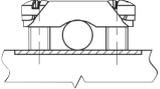
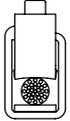
Table 1. Technical data of ARS 00 evo

Parameter	ARS 00 evo	
Rated thermal current $I_{th}=I_n$	A	160
Rated voltage U_n	V	690
Utilization category	-	AC-23B AC-22B
Rated operational voltage U_e	V	400 690
Rated operational current I_e	A	160
Rated short circuit making current	690 V 500 V	kA 80 100
Rated short circuit withstand current	690 V 500 V	kA 80 100
Rated insulation voltage U_i	V	1000
Rated impulse withstand voltage U_{imp}	kV	8
Rated frequency	Hz	50-60
Mechanical durability	Number of cycles	1600
Electrical durability	Number of cycles	200
IP degree of protection	-	30
Fuse links size	-	00
Max. permis. power loss per fuse-link NH 00	W	12

Table 2. Versions of ARS 00 evo

Fuse switch disconnecter ARS 00 evo – 160 A		Article No.
For installation on 185 mm busbar system; SINGLE-POLE SWITCHING – each phase independently		
ARS 00-1 evo	cable terminals: bridge terminals (S) 4-70 mm ²	63-500750-601
ARS 00-1-V evo	cable terminals: V-terminals: V-clamps 25-150 SW B	63-500750-602
ARS 00-1-M evo	cable terminals: M8 screw terminals	63-500750-603
ARS 00-1-2T evo	cable terminals: double frame clamp	63-500750-607
For installation on 185 mm busbar system; THREE-POLE SWITCHING – all phases simultaneously		
ARS 00-3 evo	cable terminals: bridge terminals (S) 4-70 mm ²	63-500750-701
ARS 00-3-V evo	cable terminals: V-terminals: V-clamps 25-150 SW B	63-500750-702
ARS 00-3-M evo	cable terminals: M8 screw terminals	63-500750-703
ARS 00-3-2T evo	cable terminals: double frame clamp	63-500750-707

Table 3. ARS 00 evo terminal clamps

Description	ARS 00-M evo	ARS 00-V evo	ARS 00 evo	ARS 00 2T evo
Clamp	M8 screw*	V-clamp 25-150 SW B	S-bridge clamp 2 x M5 x 20	double frame clamp
Picture of clamp				
Drawing of clamp				
Cross –section of conductors	Conductor with lug terminal max. 185 mm ²	re ● 16 mm ² -95 mm ² se ◆ 25 mm ² -150 mm ² rm ⊗ 16 mm ² -95 mm ² sm ⊕ 25 mm ² -120 mm ²	4-70 mm ²	4 ÷ 95 mm ²
Tightening torque	12 Nm**	20 Nm**	3 Nm**	5 Nm**

For stranded conductors using cable ferrules is recommended

*) bars of maximum width of 20 mm and maximum thickness of 5 mm can be fixed to M type screw terminals

**) using tension wrench is recommended

Aparator takes responsibility for technical quality of V-terminals manufactured only by the company. Minimum tightening torque (M8 screw) for screws fixing fuse switch disconnecter to busbar system – 12 Nm, recommended tightening torque for screws and nuts with property class 8.8 – 21 Nm.

Table 4. Accessories

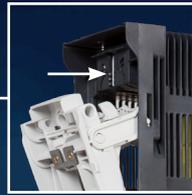
Description	Article No.	Picture
Extended terminal shroud	51-823245-001	

ARS evo

retractable handle
in the single-pole switching version

possibility to release
the fuse link without direct contact

special screw
to connect cover
with base



arc chamber
with deionization
plates over upper
contacts

possibility to measure
the voltage through the
measuring holes in the cover



possibility
to install a
microswitch

terminal shroud
integrated with cover





ARS 2-1-V evo
single-pole switching

closed position
parking position
open position



ARS 3-1-M evo
single-pole switching

in the closed position
there is possibility
to retract the handle



ARS 2-6-2V evo
three-pole switching

open position



ARS 3-6-M evo
three-pole switching

parking position

Table 5. Technical data of ARS 2, 3 evo

Parameter		ARS 2 evo		ARS 3 evo	
Rated thermal current $I_{th}=I_n$	A	400		630	
Rated voltage U_n	V	690		690	
Utilization category			single-pole switching	three-pole switching	
			AC 21B/690 V/630 A	AC 22B/690 V/630 A	
		AC 22B/690 V/400 A	AC 22B/500 V/630 A	AC 22B/690 V/630 A	
		AC 23B/400 V/400 A	AC 23B/400 V/630 A	AC 23B/400 V/630 A	
Rated operational voltage U_e	V	690		690	
Rated operational current I_e	A	400		630	
Rated short circuit making current	kA	120 at 690 V		100 at 690 V	
		120 at 500 V		120 at 500 V	
Rated short circuit withstand current	kA	120 at 690 V		100 at 690 V	
		120 at 500 V		120 at 500 V	
Rated insulation voltage U_i	V	1000		1000	
Rated impulse withstand voltage U_{imp}	kV	12		12	
Mechanical durability	Number	1000		1000	
Electrical durability	of cycles	200		200	
IP degree of protection	-	30		30	
Fuse link size	-	NH1, NH2		NH1, NH2, NH3	
Max. power dissipation per fuse link	-	NH1 - 32 W, NH2 - 34 W		NH1 - 32 W, NH2 - 48 W, NH3 - 48 W	

Table 6. Versions of ARS 2, 3 evo

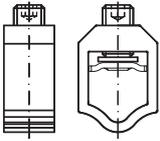
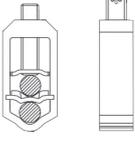
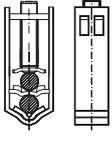
Version		Article No.
Fuse switch disconnectors ARS 2 evo – 400 A		
For installation on 185 mm busbar system; SINGLE-POLE SWITCHING – each phase independently		
ARS 2-1-M evo	cable terminals: screw terminals: nuts M12/ bolts M12	63-500700-611
ARS 2-1-V evo	cable terminals: V-terminals: V-clamps 240 mm ²	63-500700-612
ARS 2-1-2V evo	cable terminals: 2V-terminals: double V-clamps 240 mm ²	63-500700-613
For installation on 185 mm busbar system; THREE-POLE SWITCHING – all phases simultaneously		
ARS 2-6-M evo	cable terminals: screw terminals: nuts M12/ bolts M12	63-500700-711
ARS 2-6-V evo	cable terminals: V-terminals: V-clamps 240 mm ²	63-500700-712
ARS 2-6-2V evo	cable terminals: 2V-terminals: double V-clamps 240 mm ²	63-500700-713
Fuse switch disconnectors ARS evo 3 – 630 A		
For installation on 185 mm busbar system; SINGLE-POLE SWITCHING – each phase independently		
ARS 3-1-M evo	cable terminals: screw terminals: nuts M12/ bolts M12	63-500700-621
ARS 3-1-V evo	cable terminals: V-terminals: V-clamps 240 mm ²	63-500700-622
ARS 3-1-2V evo	cable terminals: 2V-terminals: double V-clamps 240 mm ²	63-500700-623
For installation on 185 mm busbar system; THREE-POLE SWITCHING – all phases simultaneously		
ARS 3-6-M evo	cable terminals: screw terminals: nuts M12/ bolts M12	63-500700-721
ARS 3-6-V evo	cable terminals: V-terminals: V-clamps 240 mm ²	63-500700-722
ARS 3-6-2V evo	cable terminals: 2V-terminals: double V-clamps 240 mm ²	63-500700-723

Version		Article No.
Fuse switch disconnectors ARS evo 210		
For installation on 210 mm busbar system; SINGLE-POLE SWITCHING – each phase independently		
ARS 2-1-M evo 210	cable terminals: screw terminals: nuts M12/ bolts M12	63-500700-614
ARS 2-1-V evo 210	cable terminals: V-terminals: V-clamps 240 mm ²	63-500700-615
ARS 2-1-2V evo 210	cable terminals: 2V-terminals: double V-clamps 240 mm ²	63-500700-616
For installation on 210 busbar system; THREE-POLE SWITCHING – all phases simultaneously		
ARS 2-6-M evo 210	cable terminals: screw terminals: nuts M12/ bolts M12	63-500700-714
ARS 2-6-V evo 210	cable terminals: V-terminals: V-clamps 240 mm ²	63-500700-715
ARS 2-6-2V evo 210	cable terminals: 2V-terminals: double V-clamps 240 mm ²	63-500700-716
For installation on 210 mm busbar system; SINGLE-POLE SWITCHING – each phase independently		
ARS 3-1-M evo 210	cable terminals: screw terminals: nuts M12/ bolts M12	63-500700-624
ARS 3-1-V evo 210	cable terminals: V-terminals: V-clamps 240 mm ²	63-500700-625
ARS 3-1-2V evo 210	cable terminals: 2V-terminals: double V-clamps 240 mm ²	63-500700-626
For installation on 210 mm busbar system; THREE-POLE SWITCHING – all phases simultaneously		
ARS 3-6-M evo 210	cable terminals: screw terminals: nuts M12/ bolts M12	63-500700-724
ARS 3-6-V evo 210	cable terminals: V-terminals: V-clamps 240 mm ²	63-500700-725
ARS 3-6-2V evo 210	cable terminals: 2V-terminals: double V-clamps 240 mm ²	63-500700-726

Table 7. Accessories

Description	Article No.	Picture
Extended terminal shroud	51-000331-001	
Terminal shroud for top connection	51-500700-109	
Hooked clamps for installation of ARS 2,3 evo on to busbar system without drilled holes. (set - 3 pcs.)	53-001462-004	
NO - normally open microswitch	1115296318T	
NC - normally closed microswitch	1115296319T	

Table 8. ARS 2,3 evo terminal clamps

Description	ARS V evo	ARS 2V evo		ARS M evo
Clamp	V-clamp 35-300SW-B	V-clamp 2/50-300SW-B	V-clamp HS 2/50-240-C*	M-screw M12**
Drawing of clamp				
Cross – section of conductors	V-clamp for direct fixing of conductor with bare end with crosssection of			
	● 35 - 240 mm ²	● 50 - 240 mm ²	● 50 - 240 mm ²	Lug terminal
	◐ 35 - 300 mm ²	◐ 50 - 300 mm ²	◐ 50 - 300 mm ²	
	◑ 35 - 185 mm ²	◑ 50 - 185 mm ²	◑ 50 - 185 mm ²	
◒ 35 - 240 mm ²	◒ 50 - 240 mm ²	◒ 50 - 240 mm ²		
Tightening torque	30 Nm	30 Nm	40 Nm	56 Nm

For stranded conductors using bare end of conductor/lug terminals is recommended

*) if the fuse switch disconnecter with a 2V-type clamp is to be equipped with a steel V-clamp HS 2/50-240-C, it should be included in the order

**) bars of maximum width of 40 mm and maximum thickness of 8 mm can be fixed to M type screw terminals when protective barrier between phases is installed
 Apator takes responsibility for technical quality of V-terminals manufactured only by the company. Minimum tightening torque M12 screw for screws fixing fuse switch disconnecter to busbar system – 32 Nm, recommended tightening torque for screws and nuts with property class 8.8 – 56 Nm.

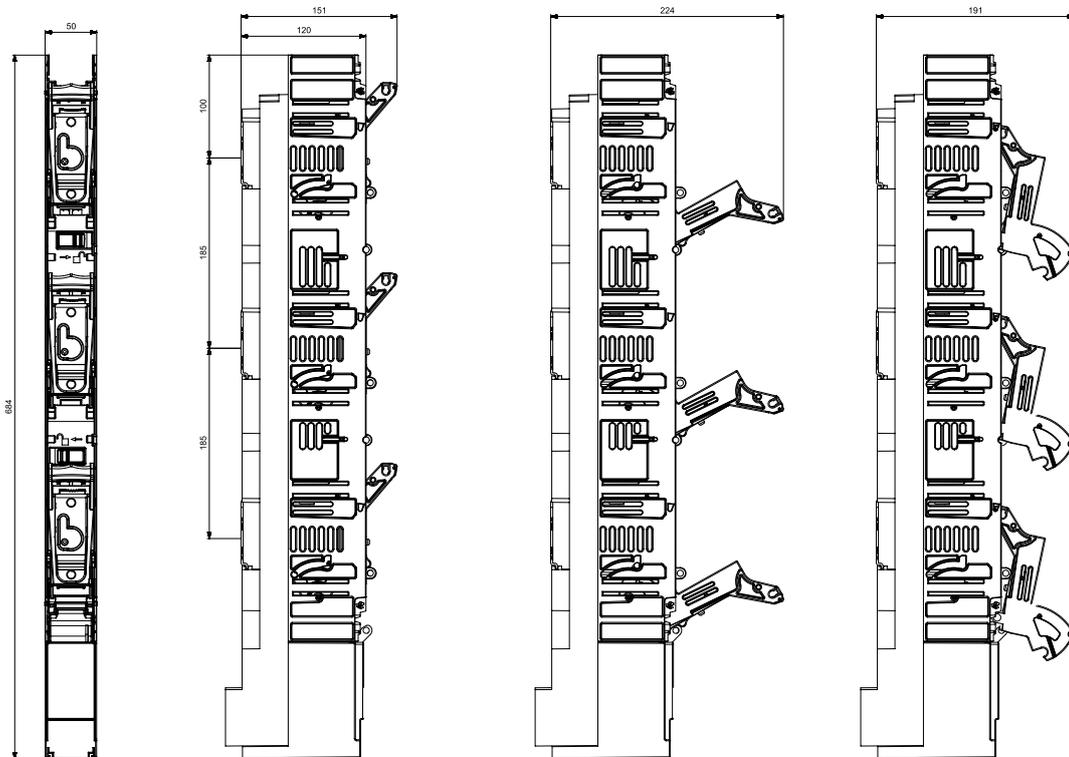
DIMENSIONS

ARS 00-1 evo

CLOSED POSITION

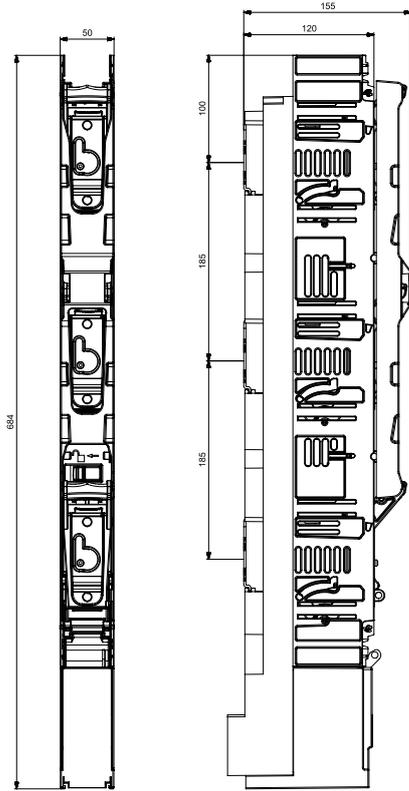
OPEN POSITION

PARKING POSITION

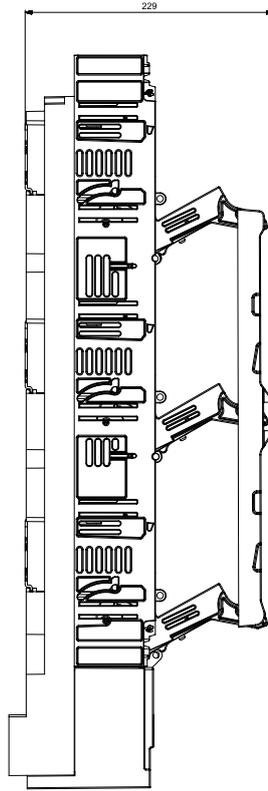


ARS 00-3 evo

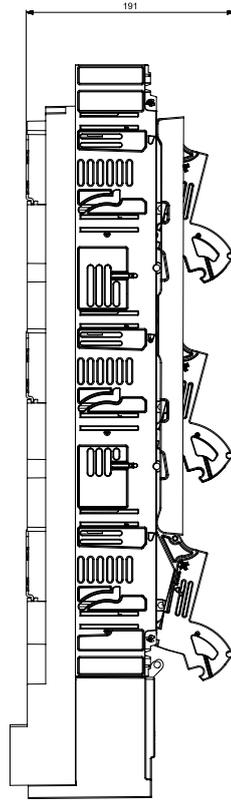
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OPEN POSITION

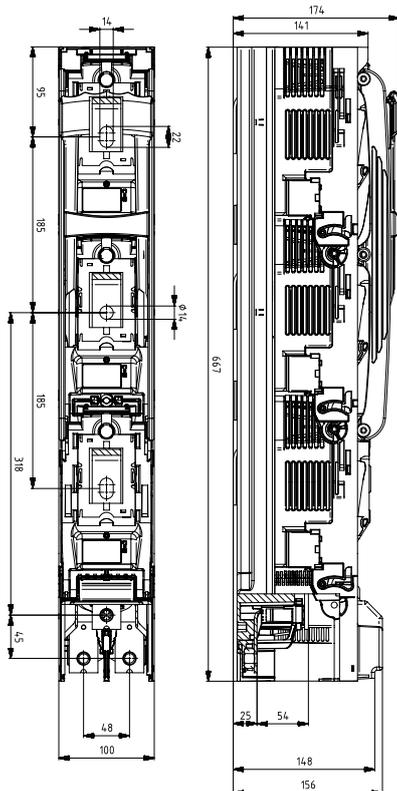


PARKING POSITION

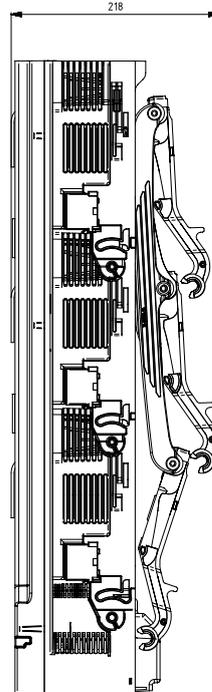


ARS 2-6-M evo, ARS 3-6-M evo

CLOSED POSITION

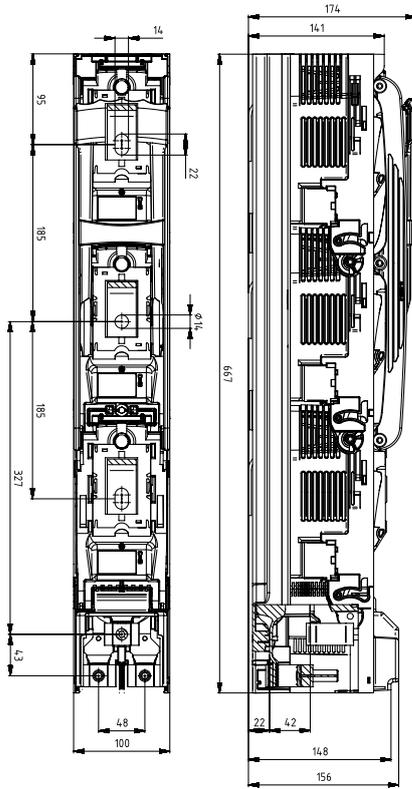


PARKING POSITION

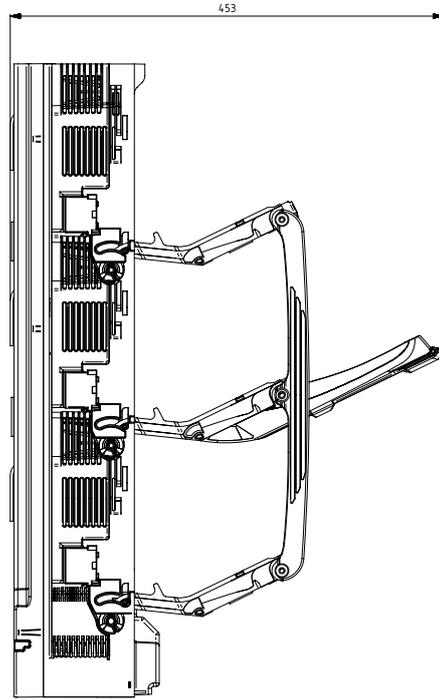


ARS 2-6-V evo, ARS 3-6-V evo

CLOSED POSITION

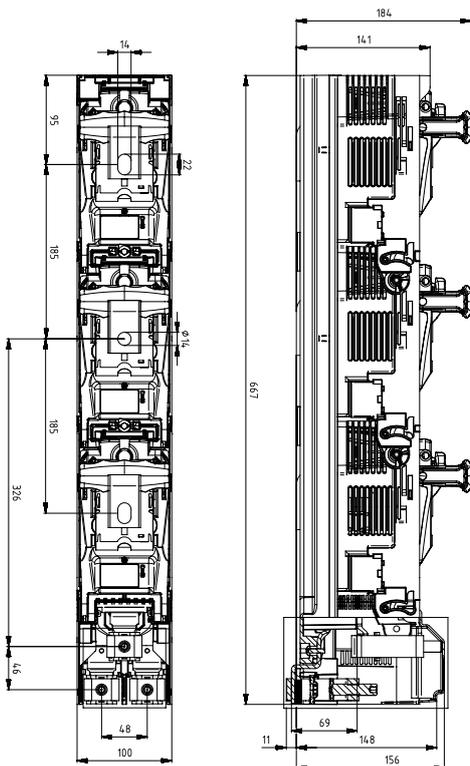


OPEN POSITION

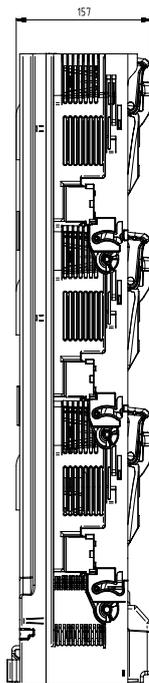


ARS 2-1-2V evo, ARS 3-1-2V evo

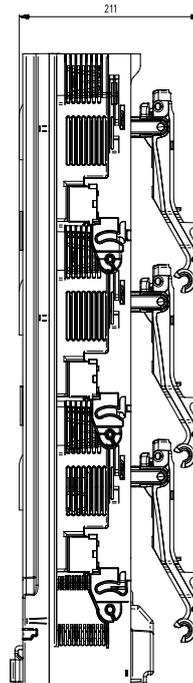
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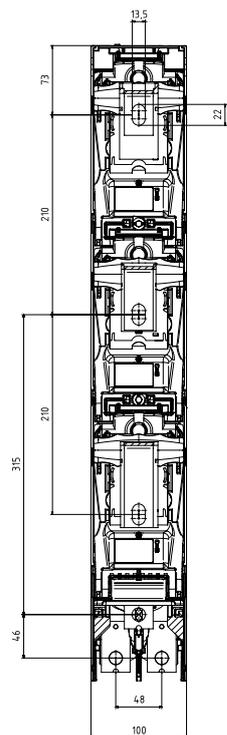
CLOSED POSITION WITH RETRACTABLE HANDLES



PARKING POSITION



ARS 2,3 evo 210



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