



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 well-thought-out solution in the form of a fuse switch disconnecter, the **ARS evo**. This 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

Variantes of ARS evo



ARS 00-1-M evo



ARS 00-3-M evo



ARS 2-1 evo



ARS 2-6 evo

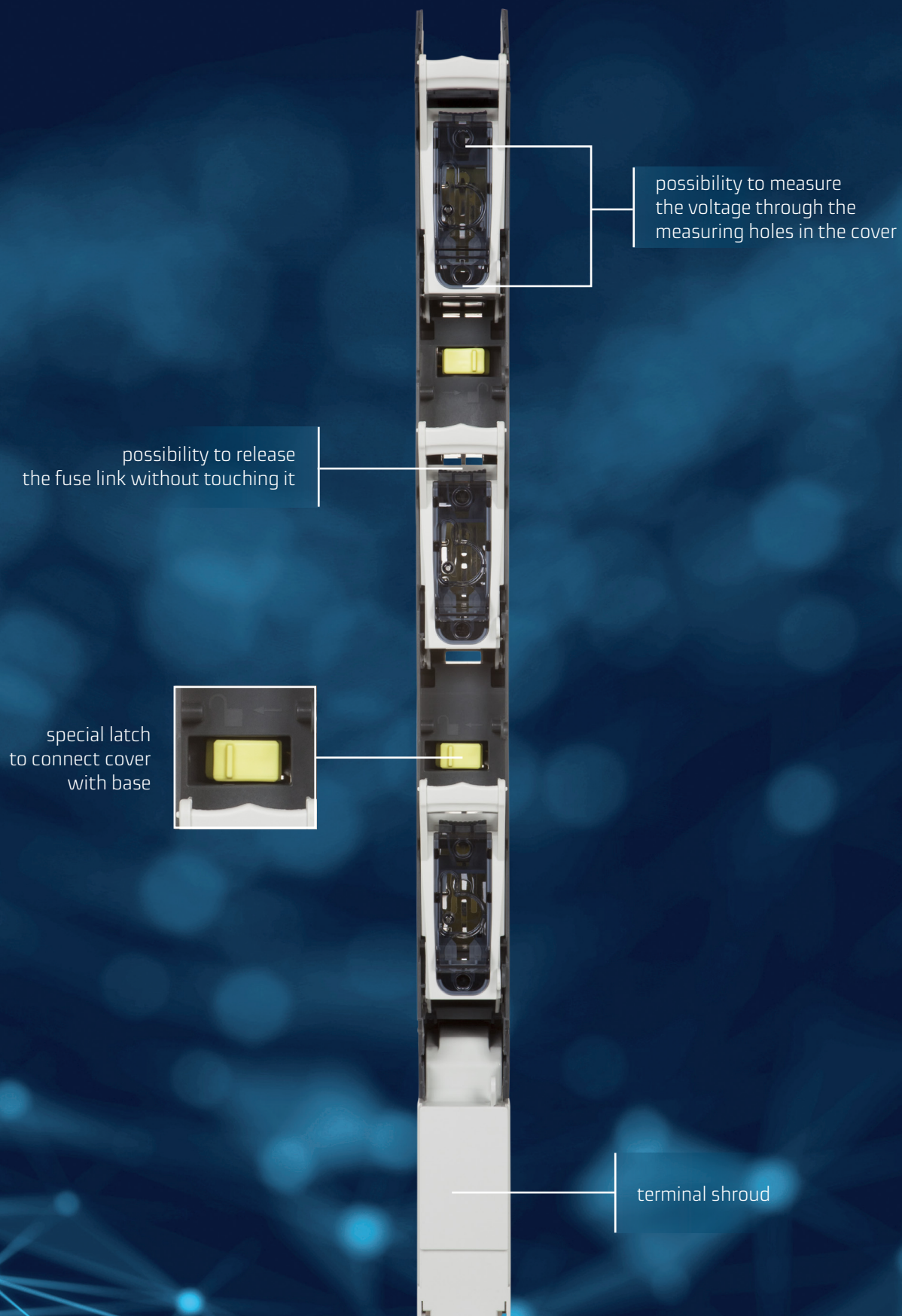


ARS 3-1 evo



ARS 3-6 evo

ARS evo 00





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




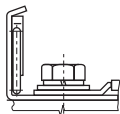
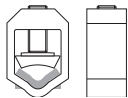
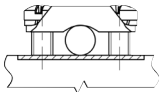
Table 1. Technical data

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 switching voltage U_e	V	400	690
Rated switching current I_e	A	160	
Rated short circuit making current	690 V	kA	80
	500 V		100
Rated short circuit withstand current	690 V	kA	80
	500 V		100
Rated insulation voltage U_i	V	1000	
Rated impulse withstand voltage $U_{imp.}$	kV	8	
Rated frequency	Hz	50-60	
IP degree of protection	-	30	
Fuse links size	-	00	

Table 2. Versions

Fuse switch disconnecter ARS 00 evo – 160A		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 25-150SW	63-500750-602
ARS 00-1-M evo	cable terminals: M8 screw terminals	63-500750-603
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	63-500750-703
ARS 00-3-V evo	cable terminals: V-terminals: V-clamps 25-150SW	63-500750-702
ARS 00-3-M evo	cable terminals: M8 screw terminals	63-500750-703

Table 3. ARS 00 evo terminal clamps

Description	ARS 00-M evo	ARS 00-V evo	ARS 00 evo
Clamp	M8 screw*	V-clamp 25-150 SW	S-bridge clamp 2 x M5 x 25
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 -150 mm ²	4-70 mm ²
Tightening torque	12 Nm**	20 Nm**	3 Nm**

For stranded conductors using cable ferrules is recommended

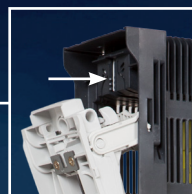
*) bars of maximum width of 20 mm and maximum thickness of 5 mm can be fixed to M type screw terminals

**) 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.

ARS evo

retractable handle
in the single-pole switching version



arc chamber
with deionization
plates over upper
contacts

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

possibility to release
the fuse link without touching it

special screw
to connect cover
with base



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

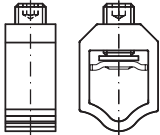
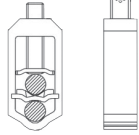
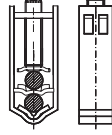

Table 4. Technical data

Parameter		ARS 2 evo		ARS 3 evo	
Rated thermal current $I_{th}=I_n$	A	400		630	
Rated voltage U_e	V	690		690	
Utilization category			single-pole switching	three-pole switching	
			AC 21B/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 of cycles	1000		1000	
Electrical durability		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 - 36 W		NH1 32 W, NH2 - 48 W, NH3 - 48 W	

Table 5. Versions of ARS 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
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
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 3-1-2V 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 3-6-2V evo	cable terminals: 2V-terminals: double V-clamps 240 mm ²	63-500700-723

Table 6. Terminal clamps ARS evo

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			Lug terminal
	● 35 - 240 mm ²	● 50 - 240 mm ²	● 50 - 240 mm ²	
	◐ 35 - 300 mm ²	◐ 50 - 300 mm ²	◐ 50 - 300 mm ²	
	◑ 35 - 185 mm ²	◑ 50 - 185 mm ²	◑ 50 - 185 mm ²	
Tightening torque	30 Nm	30 Nm	40 Nm	32 Nm

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

*) if the fuse switch disconnector 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 disconnector to busbar system – 32 Nm, recommended tightening torque for screws and nuts with property class 8.8 – 32 Nm.

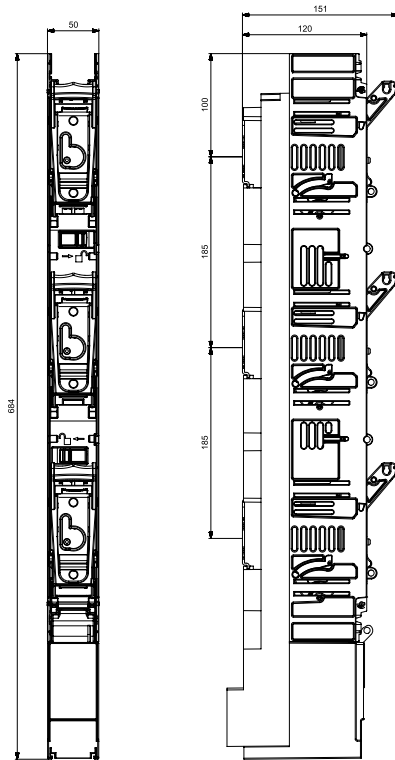
Table 7. Accessories

Description	Article No.	Picture
Terminal shroud for top connection	51-500700-109	
NO - normally open microswitch	1115296318T	 NO
NC - normally closed microswitch	1115296319T	 NC

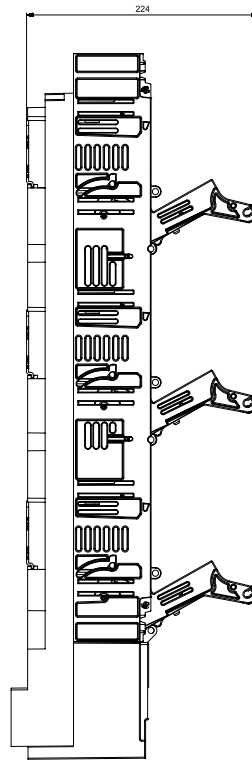
DIMENSIONS

ARS 00-1 evo

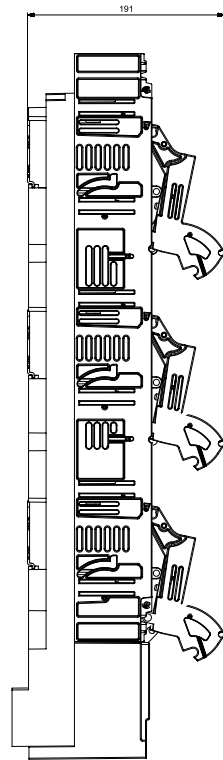
CLOSED POSITION



OPEN POSITION

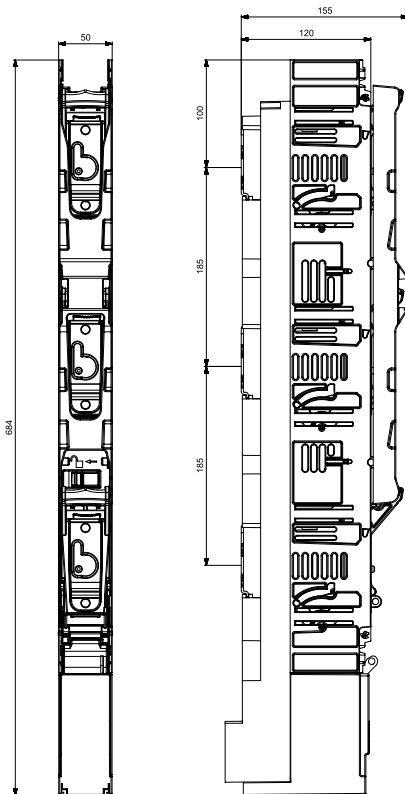


PARKING POSITION

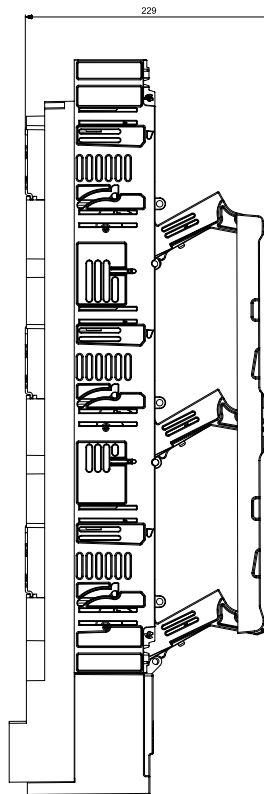


ARS 00-3 evo

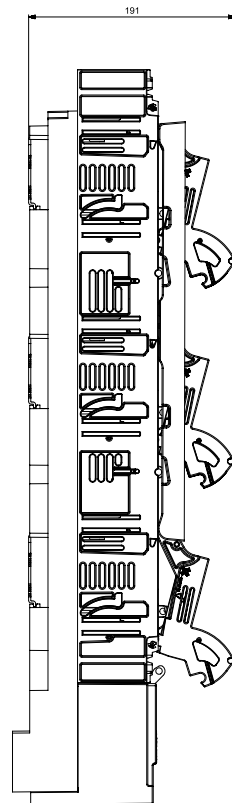
CLOSED POSITION



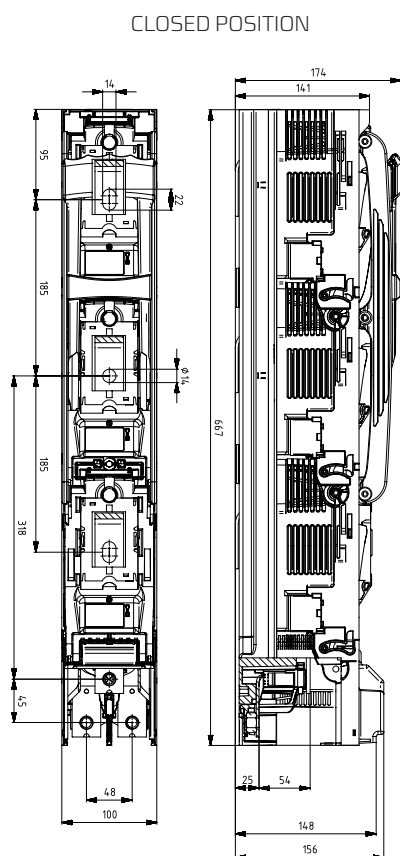
OPEN POSITION



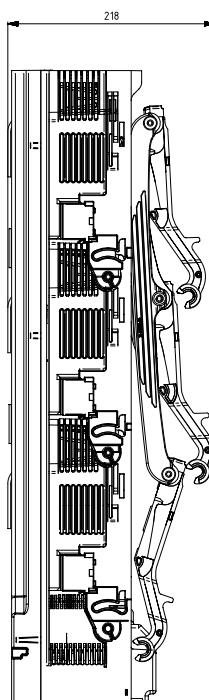
PARKING POSITION



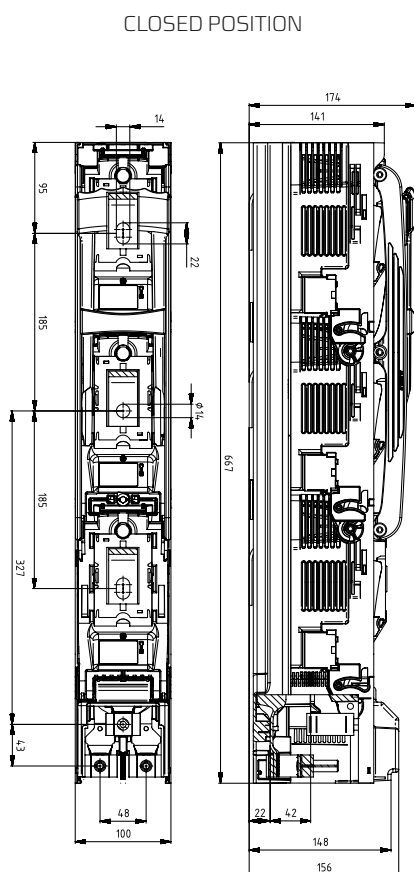
ARS 2-6-M evo



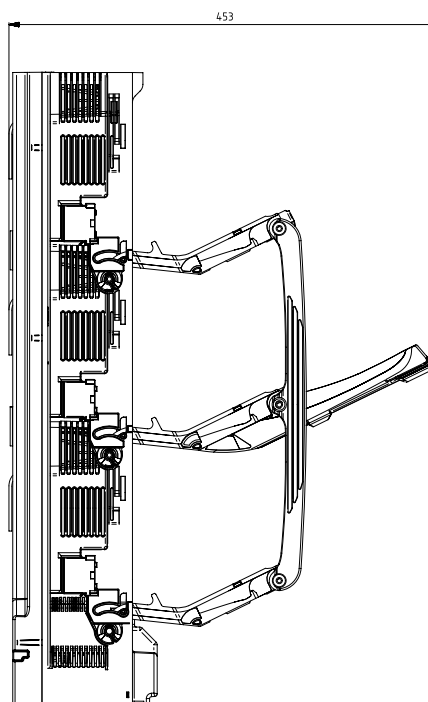
PARKING POSITION



ARS 2-6-V evo

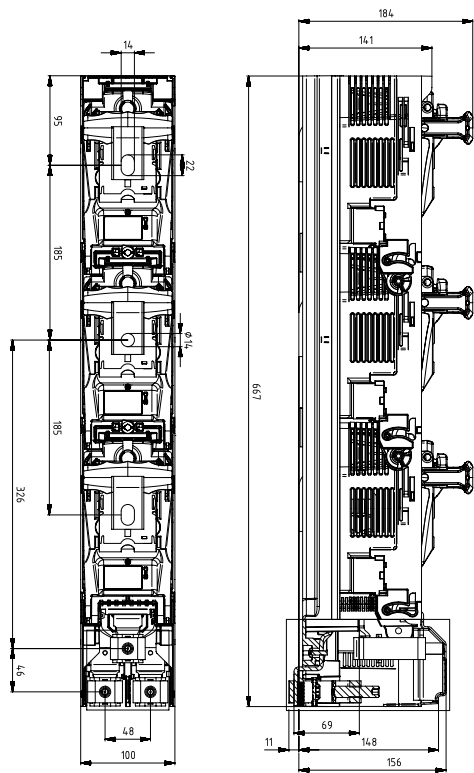


OPEN POSITION

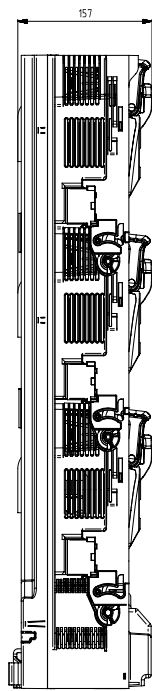


ARS 3-1-2V evo

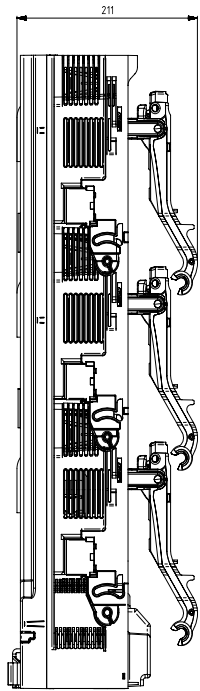
CLOSED POSITION



CLOSED POSITION
WITH RETRACABLE HANDLES



PARKING POSITION



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