



It's evolution - our new fuse switch disconnector

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 disconnector, the **ARS evo**. It is an outstanding product with features such as safety, functionality and flexibility.



- 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-paralell disconnector
- 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

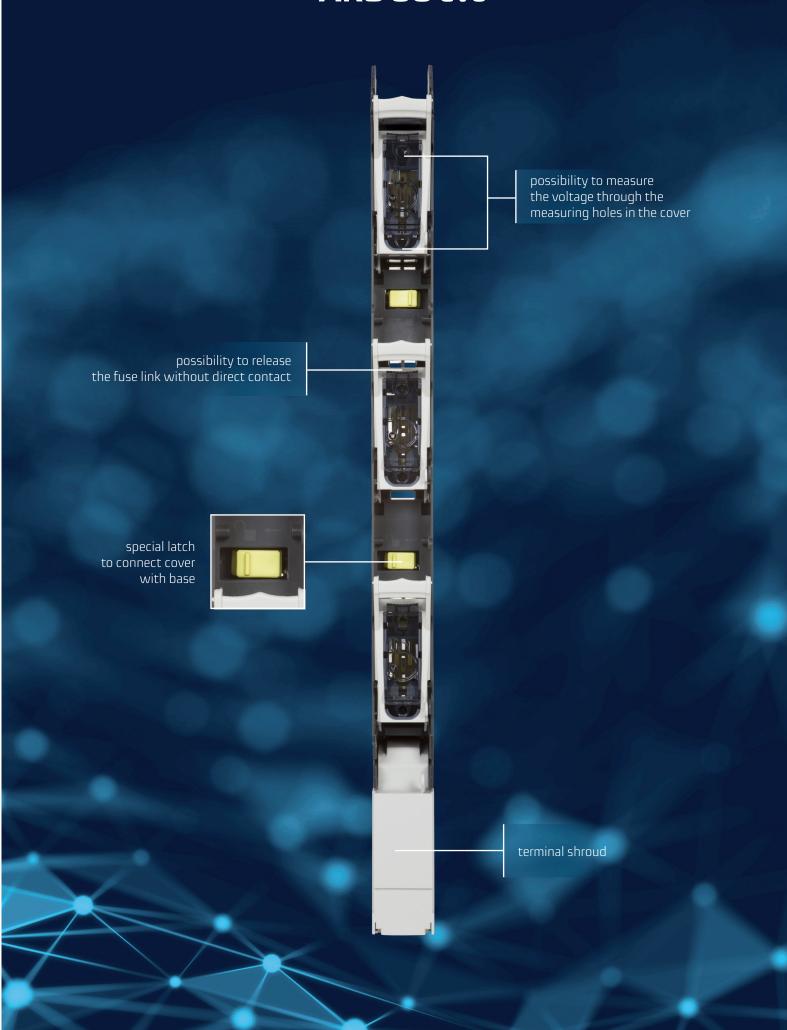


ARS 3-1 evo



ARS 3-6 evo

ARS 00 evo



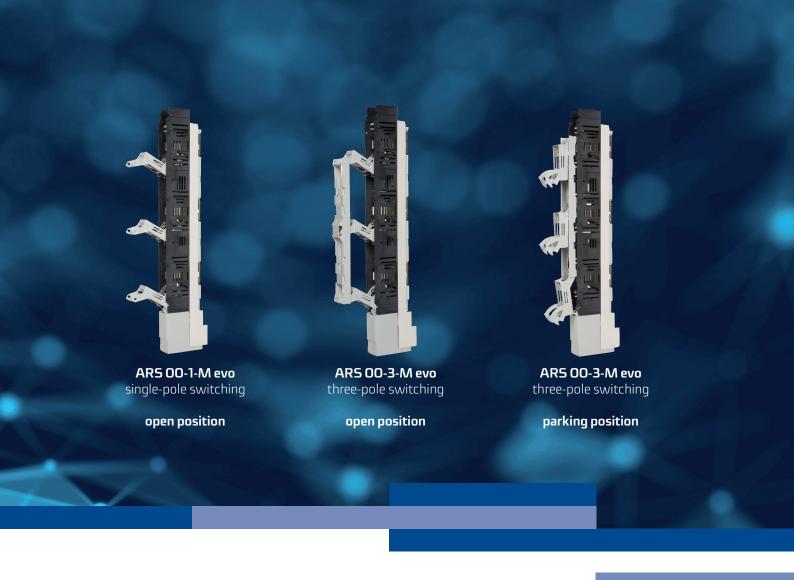


Table 1. Technical data of ARS 00 evo

Parameter			ARS 00	evo
Rated thermal current $I_{th}=I_{n}$		А	160	
Rated voltage U _n		V	690	
Utilization category		-	AC-23B	AC-22B
Rated operational voltage $U_{\rm e}$		V	400	690
Rated operational current I _e		А	160	
Rated short circuit making	690 V	LΛ	80	
current	500 V	kA	100	
Rated short circuit withstand	690 V	kA	80	
current	500 V	KA	100	
Rated insulation voltage U _i		V	1000	
Rated impulse with stand voltage $U_{\rm imp.}$		kV	8	
Rated frequency		Hz	50-60	
Mechanical durability		Number	1600	
Electrical durability		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 disconne	Article No.	
For installation on 185	5 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	5 mm busbar system; THREE-POLE SWITCHING – all phases simultaneously	
ARS 00-3 evo	cable terminals: bridge terminals (S) 4-70 mm²	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 mm²	re	4-70 mm ²	4 ÷ 95 mm²
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
Apator takes responsibility for technical quality of V-terminals manufactured only by the company. Minimum tightening torque (M8 screw) for screws fixing fuse switch disconnector 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



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 direct contact

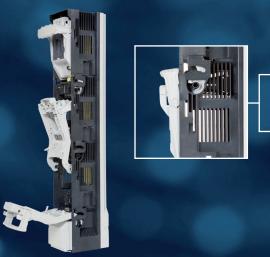






possibility to install a microswitch

terminal shroud integrated with cover





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	А	400	630	
Rated voltage U _n	V	690	690	
			single-pole switching	three-pole switching
Utilization category			AC 21B/690 V/630 A	
Otilization category		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 $\rm U_e$	V	690	69	0
Rated operational current I _e	А	400	63	0
Rated short circuit	kA	120 at 690 V	100 at	590 V
making current	KA	120 at 500 V	120 at 500 V	
Rated short circuit	kA	120 at 690 V	100 at	590 V
withstand current	NA	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 disconnect	ors ARS 2 evo – 400 A	
For installation on 185 n	nm 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 mm²	63-500700-612
ARS 2-1-2V evo	cable terminals: 2V-terminals: double V-clamps 240 mm²	63-500700-613
For installation on 185 n	nm 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 mm²	63-500700-712
ARS 2-6-2V evo	cable terminals: 2V-terminals: double V-clamps 240 mm²	63-500700-713
Fuse switch disconnect	ors ARS evo 3 – 630 A	
For installation on 185 n	nm 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 mm²	63-500700-622
ARS 3-1-2V evo	cable terminals: 2V-terminals: double V-clamps 240 mm²	63-500700-623
For installation on 185 n	nm 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 mm²	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 disconnecto	rs ARS evo 210			
For installation on 210 m	m 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 mm²	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 bu	ısbar 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 mm²	63-500700-715		
ARS 2-6-2V evo 210	cable terminals: 2V-terminals: double V-clamps 240 mm²	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 mm²	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 mm²	63-500700-725		
ARS 3-6-2V evo 210	cable terminals: 2V-terminals: double V-clamps 240 mm²	63-500700-726		

Table 7. Accessories

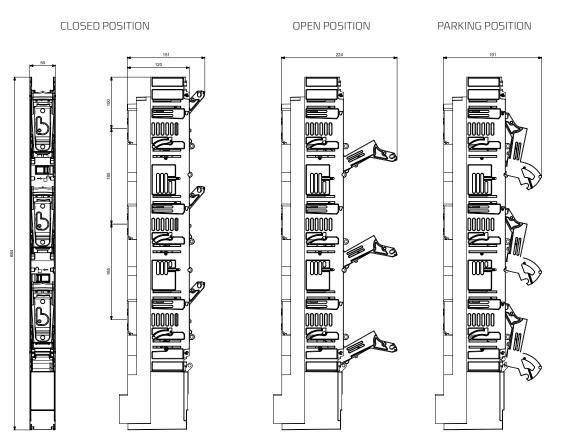
Description	Article No.	Picture
Extended terminal shroud	51-000331-001	
Terminal shroud for top connection	51-500700-109	
Hooked clamps for installation of ARS 2,3 evo on to busbar system without drilled holes. (set - 3 pcs.)	53-001462-004	111
NO - normally open microswitch	1115296318T	NO W
NC - normally closed microswitch	1115296319T	NC W

Table 8. ARS 2, 3 evo terminal clamps

Description	ARS V evo	ARS 2V evo		ARS Mevo
Clamp	V-clamp 35-300SW-B	V-clamp 2/50-3005W-B	V-clamp HS 2/50-240-C*	M-screw M12**
Drawing of clamp				
	V-clamp for direct fixing of conductor with bare end with crosssection of			
Cross – section	35 - 240 mm ²	50 - 240 mm ²	50 - 240 mm ²	Lug torminal
of conductors	→ 35 - 300 mm²	◆ 50 - 300 mm²	◆ 50 - 300 mm²	Lug terminal
		⊗ 50 - 185 mm²		
	◆ 35 - 240 mm²	◆ ◆ ◆ ◆ ◆ ◆ ◆ ◆ ◆ ◆ ◆ ◆ ◆ ◆ ◆ ◆ ◆ ◆ ◆	◆ 50 - 240 mm²	
Tightening torque	30 Nm	30 Nm	40 Nm	56 Nm

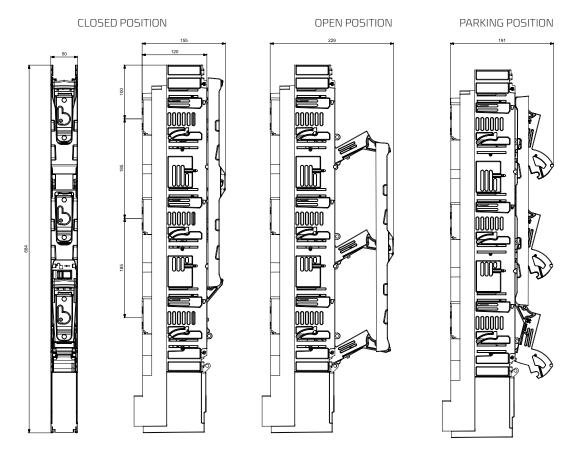
DIMENSIONS

ARS 00-1 evo

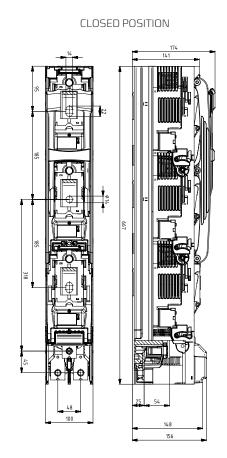


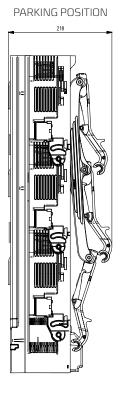
For stranded conductors using bare end of conductor/lug terminals is recommended
*) if the fuse switch disconnector with a 2V-type clamp is to be equipped with a steel V-clamp HS 2/50-240-C, it should be included in the order
**) bars of maximum width of 40 mm and maximum thickness of 8 mm can be fixed 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 – 56 Nm.

ARS 00-3 evo



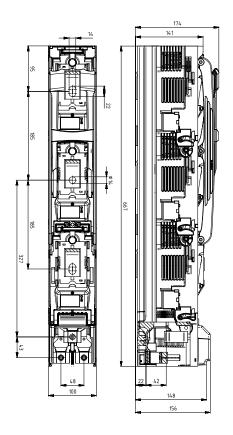
ARS 2-6-M evo, ARS 3-6-M evo

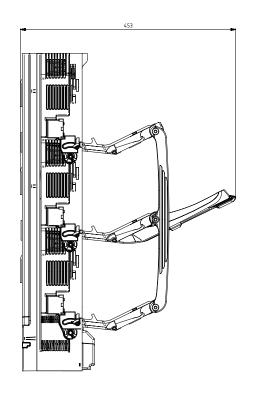




ARS 2-6-V evo, ARS 3-6-V evo

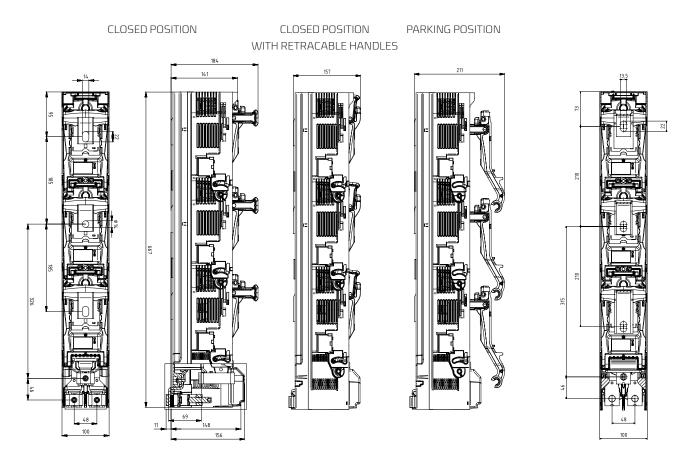
CLOSED POSITION OPEN POSITION





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

ARS 2,3 evo 210



KEY ACCOUNT MANAGER		
Rafał Kamiński (English, Russian) Central Europe, South East Europe	rafal.kaminski@apator.com	+48 506 009 338
Michael Roclawski (German, English) Germany, Austria, Switzerland	michael.roclawski@apator.com	+48 506 009 339
Krzysztof Zdrojewski (English) Middle East,South America, Asia, Africa	krzysztof.zdrojewski@apator.com	+48 506 009 309
Jevgenijus Samuchovas (Lithuanian, Russian) Eastern Europe, Baltic Countries	jevgenijus.samuchovas@apator.com	+370 62 842709
Josef Kalleder (Romanian, English) Romania, Rep. of Moldova	josef.kalleder@apator.com	+40 74 5267192
TECHNICAL SUPPORT		
Business Development Manager		
Łukasz Melkowski (English)	lukasz.melkowski@apator.com	+48 506 009 334



APATOR SA

ul. Gdańska 4a, lok C4, 87-100 Toruń, Poland

Correspondence address: Apator S.A. Centrum Ostaszewo 57C, 87-148 Łysomice, Poland

e-mail trade@apator.com head office phone +48 56 61 91 494, +48 56 61 91 627, fax +48 56 61 91 295

www.apator.com 2024.064.EN