SWITCHGEAR

ARS pro
vertical fuse switch disconnectors

- fibre glass extra strenghtened, self extinguishing thermoplastics of V0 flammability class
- double clearance between open contacts
- arc chutes with deionization plates over every contact
- reversibility - top/bottom cable terminal connection
- wide range of accesories

APATOR

GENERAL NFORMATION

ARS vertical fuse switch disconnectors are designed for distribution of electricity and protection against short circuits and overloads in three phase alternative current circuits. They are intended for direct installation on horizontal or vertical busbar systems.

ARS pro fuse switch disconnectors meet technical requirements of electricity boards and are conforming to EN 60947-1, EN 60947-3, IEC 60947-1, IEC 60947-3 standards. ARS pro fuse switch disconnectors are dedicated for applications which require reliability and safety like low voltage distribution boards installed in transformer substations, industrial low voltage distribution boards and cable cabinets.

Removal of the fuse links provides clearly noticeable, large isolating distances in the circuit.

ARS fuse switch disconnectors are designed to perform the following functions:

- protection,
- energy distribution,
- earthing,
- switching,
- touch protection.

CONSTRUCTION

ARS pro fuse switch disconnectors are manufactured in two versions:

- one pole switching (separately each pole)
- three pole switching (three poles at the same time)

ARS pro fuse switch disconnectors have manually operated handle therefore making and breaking operations should be done with determined movement.

ARS pro fuse switch disconnectors are available in following sizes (according to rated current): 00 (160 A); 2 (400 A); also available are versions 910A and 1250A.

ARS pro fuse switch disconnectors (size 2-400A; 910A ; 1250A) are designed for installation on 185 mm busbar system.

ARS 00/100 mm pro fuse switch disconnector (size 00) is designed for installation on 100 mm busbar system. By using the adapter, it is possible to mount the ARS 00 / 100mm pro switch disconnector on busbar system with a spacing of 185 mm.

All plastic parts of fuse switch disconnector ARS pro are made of halogen free, fibre glass strengthened, self extinguishing materials. Thanks to the application of flame retardants the highest flammability class – V0 was achieved. Fuse switch disconnectors made from such termoplastics self-extinguish in specified time after ignition source is removed. Also dripping of flaming parts of plastic does not occur.

Silver plated contacts provide low power loss. Depending on clamp type, ARS pro fuse switch disconnectors enable user to connect circular or sector-shaped conductors with bare ends or conductors with lug terminals. Arc chutes equipped with steel deionization plates are installed over each contact. ARS pro fuse switch disconnectors are designed for using current transformers and ammeters. Protection degree of IP30 from the front is provided. In opened position Ars pro provide protection degree IP20. Additionally offered accesories enable to install tARS fuse switch disconnectors of different sizes on common busbar systems and facilitate operation. All sizes of ARS pro fuse switch disconnectors are provided complete with clamps (i. e. screws, V-terminals, 2V-terminals) and shrouds for cable terminals.

Table 15. TECHNICAL DATA ARS pro

Parameters			ARS 00/100 mm pro	ARS 400 pro	ARS 630 pro	ARS 630 kVA pro	RWS 600 pro	RWS 750 pro	RWS 1250 pro	ARS 1250 pro
Rated thermal current $I_{th}=I_n$ with fuse links		A	160	400	630	910	-	-	-	1250
Rated thermal current I_{th} with solid links		A	-	-	-	-	600	750	1250	-
Rated voltage U_n		V	690	690	690	400	690	500	400	400
Utilization category		690 V	AC-22B	AC-22B	AC-22B	-	AC-22B	-	-	
		500 V				-		AC-22B	-	-
		400 V	AC-23B			AC-22B			AC-22B	AC-21B
Rated switching current I_e		A	160	400	630	910	600	750	1250	1250
Rated short-circuit making current	690 V	kA	25	100	100	-	-	-	-	-
	500 V			120	120	-				-
	400 V					50				100
Rated short-circuit withstand current	690 V	kA	100	100	100	-	-	-	-	-
	500 V			120	120	-				-
	400 V					50				100
Rated insulation voltage U_i		V	1000	1000	1000	1000	1000	1000	1000	1000
Rated impulse withstand voltage $U_{imp.}$		kV	8	12	12	12	12	12	12	12
Rated short time withstand current I_{cw}		kA	-	-	-	-	15[3]	15[3]	15/20[2]	-
Rated frequency		Hz	50-60	50-60	50-60	50-60	50-60	50-60	50-60	50-60
Mechanical durability	Number of cycles		1600	1000	1000	600	1000	1000	600	600
Electrical durability			200	200	200	100	200	200	100	100
IP degree of protection		IP	30	30	30	30	30	30	30	30
Fuse links size		-	00	1, 2	3	gTr 630 kVA[1]	solid-links TM 2	solid-links TM 3	solid-links TM 3 -1250 A	3

[1] fuse link gTr 630 kVA, DIN 43620, VDE 0636/2011, wielkość NH3
[2] with mechanical lock
[3] use of mechanical lock recommended

OPERATING CONDITIONS

- to be installed in the room free of any dust, aggressive or explosive gases,
- altitude up to 2000 meters above sea level,
- outdoor – in cabinets with protection degree > IP 34,
- ambient temperature from -25 °C to +55 °C,
- relative humidity of the air should not be higher than 50% at temperature of +40°.

FUNCTIONALITY

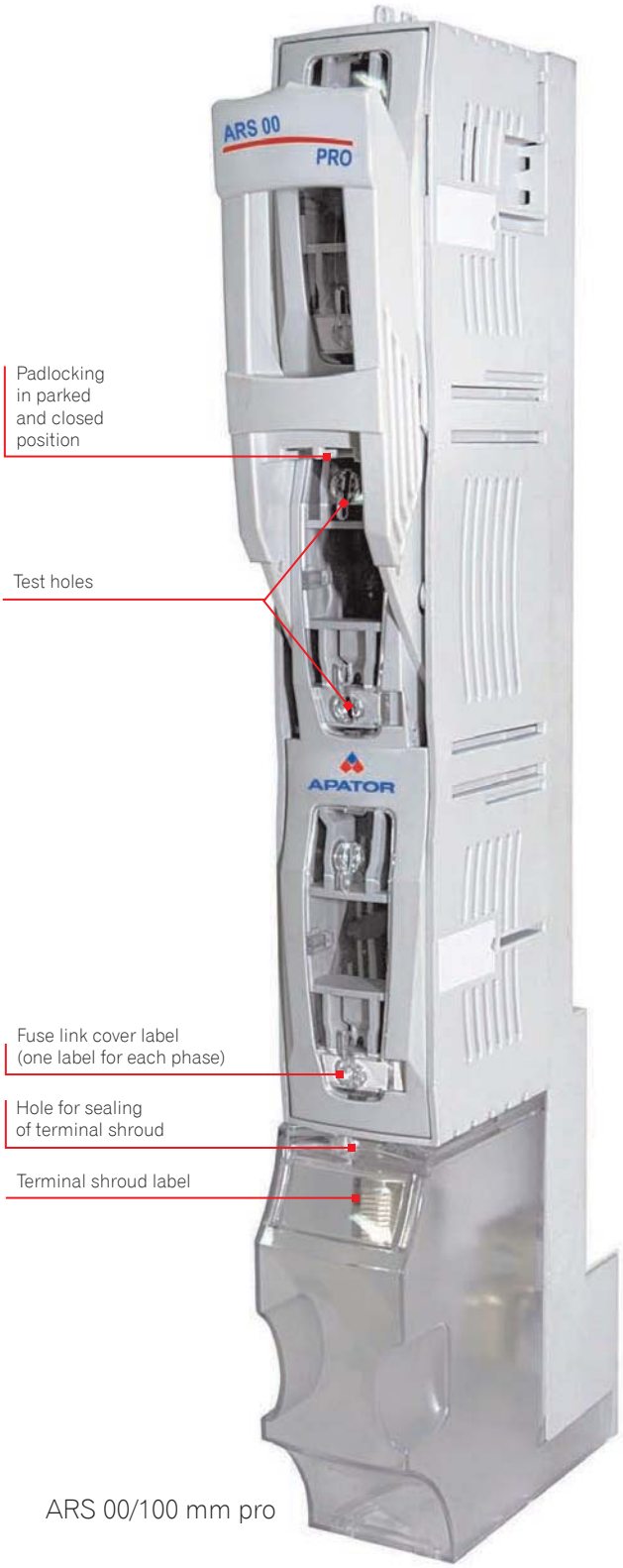
- making and breaking operations should be done with determined movement,
- parallelly moving, double contact system,
- designed for installation on to 100 mm or 185 mm busbar system,
- two versions: single pole switching (separately each pole) or triple pole switching (three poles at the same time),
- Width 50 mm (ARS 00/100 mm pro); width 100 mm (ARS 400 pro, ARS 630 pro, RWS 600 pro, RWS 750 pro, RWS 1250 pro) or 200 mm (ARS 1250 pro),
- suitable for top cable terminal connection,
- possible connection of conductors with lug terminals (screw terminals) or circular/sector-shaped conductors with bare ends (V-terminals, 2V-terminals) using V-clamps
- Voltage test is performed through test holes leading to blade contacts,
- possible installation of various types of earthing devices.

FUSE SWITCH DISCONNECTOR ARS 00/100mm pro (160 A, 690 V)

For installation on to 100 mm busbar system

Fuse switch disconnector's width 50 mm

Three pole switching - all phases simultaneously



ARS 00/100 mm pro

ARS 00/100 mm pro (160 A, 690 V)

Table 16. TECHNICAL DATA

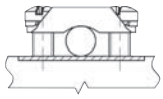
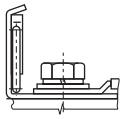
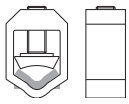
Parameters		ARS 00/100 mm pro	
Rated thermal current $I_{th}=I_n$	A	160	
Rated voltage U_n	V	690	
Utilization category	-	AC-22B	AC-23B
Rated switching voltage U_e	V	690	400
Rated switching current I_e	A	160	
Rated short circuit making current	kA	25	
Rated short circuit withstand current	kA	100	
Rated 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		200	
IP degree of protection	IP	30	
Fuse links size	-	00	

Accesories on page 58

Table 17. VERSIONS

Version of ARS 00/100 mm pro		Weight	Article No.
three pole switching - all phases simultaneously (for installation on to 100 mm busbar system)			
ARS 00/100 mm pro	cable terminals: bridge terminals with bridge clamps (S) 4-70 mm², screw terminals with M8 screws	1,3 kg	63-811628-041
ARS 00/100 mm-V pro	cable terminals: V-terminals with V-clamps 25-120SW	1,5 kg	63-811628-061
ARS 00/100 mm-V pro	cable terminals: V-terminals, without V-clamps	1,3 kg	63-811628-071

Table 18. ARS 00/100 mm pro TERMINAL CLAMPS

Description	ARS 00/100 mm pro			
Clamp	S-bridge clamp 2 x M5 x 25	M8 screw*	V-clamp 25-120 SW	HM 10-120
Picture of clamp				 ***
Drawing of clamp				
Cross –section of conductors	4 - 70 mm²	Conductor with lug terminal max 185 mm²	re ● 16 mm² - 95 mm² se ◆ 25 mm² - 120 mm² rm ⊗ 16 mm² - 95 mm² sm ◈ 25 mm² - 120 mm²	re ● 10 mm² - 70 mm² se ◆ 20 mm² - 120 mm² rm ⊗ 10 mm² - 70 mm² sm ◈ 25 mm² - 95 mm²
Tightening torque	3 Nm**	12 Nm**	20 Nm**	15 Nm**

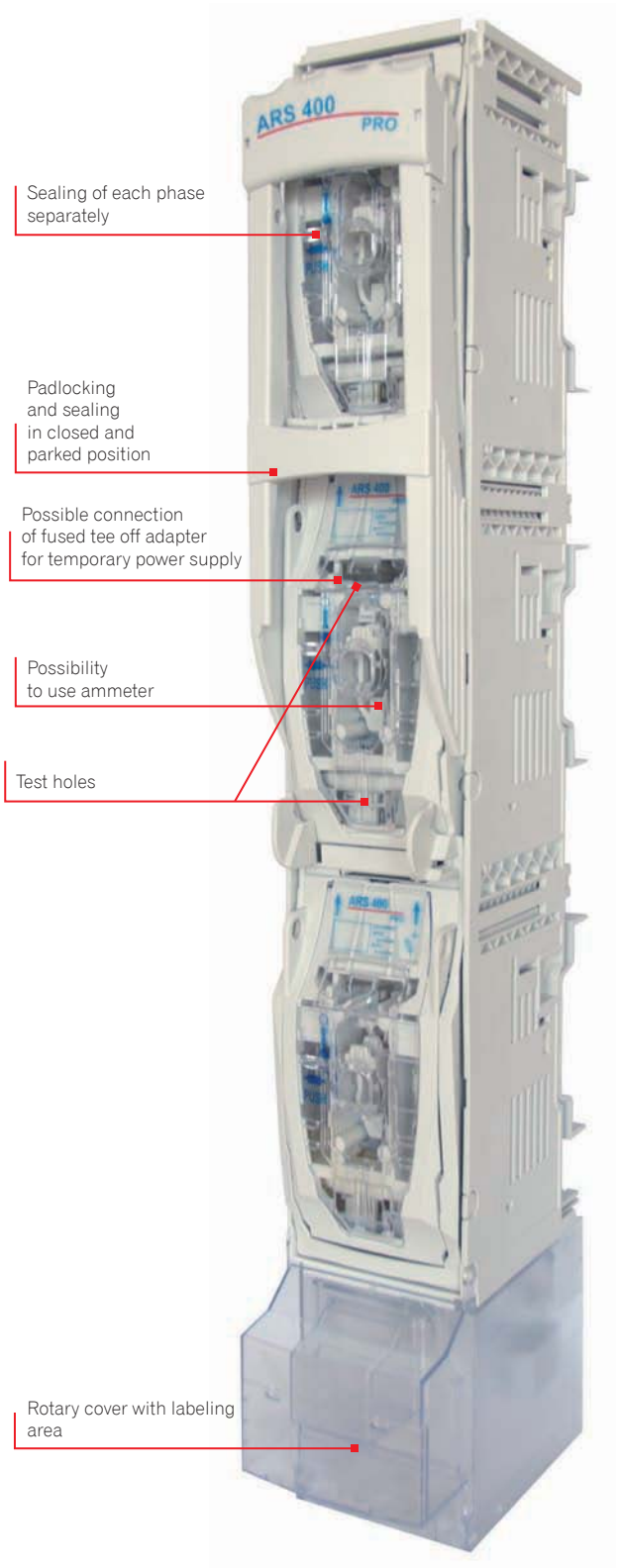
For stranded conductors using cable ferrules is recommended
*) Bars of maximum width of 20 mm and maximum thickness of 5 mm can be fixed to M type screw terminals.
**) using tension wrench is recommended
***) fuse switch disconnectors with V-terminals are equipped with steel V-clamp HM 10-120 on request
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

FUSE SWITCH DISCONNECTOR ARS 400 pro (400 A, 690 V)
ARS 630 pro (630 A, 690 V)

For installation on to 185 mm busbar system

Fuse switch disconnector's width 100 mm

Three pole switching - all phases simultaneously or one pole switching - each phase independently



FUSE SWITCH DISCONNECTOR
ARS 400 pro (400 A, 690 V)

Designed for operation with NH1 and NH2 fuse links

ARS 400-1-M pro

ARS 400-6-M pro

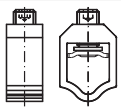
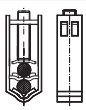
Table 19. TECHNICAL DATA

Parameters			ARS 400 pro
Rated thermal current $I_{th}=I_n$		A	250(NH1), 400(NH2)
Rated voltage U_n		V	690
Utilization category		-	AC-22B
Rated switching voltage U_e		V	690
Rated switching current I_e		A	250(NH1), 400(NH2)
Rated short circuit making current	U_e=690 V	kA	100
	U_e=500 V		120
Rated short circuit withstand current	U_e=690 V	kA	100
	U_e=500 V		120
Rated insulation voltage U_i		V	1000
Rated impulse withstand voltage $U_{imp.}$		kV	12
Rated frequency		Hz	50-60
Mechanical durability	Number of cycles		1000
Electrical durability			200
IP degree of protection		IP	30
Fuse links size		-	1, 2

Table 20. VERSIONS

Version		Weight	Article No.
for installation on 185 mm busbar system, ONE POLE SWITCHING - each phase independently			
ARS 400-1-V pro	cable terminals: V-terminals: V-clamps 240 mm²	5,2 kg	63-001968-011
ARS 400-1-M pro	cable terminals: screw terminals: pressed nuts M10	4,9 kg	63-001968-021
ARS 400-1-2V pro	cable terminals: 2V-terminals: double V-clamps 240 mm²	5,8 kg	63-001968-031
for installation on 185 mm busbar system, THREE POLE SWITCHING - all phases simultaneously			
ARS 400-6-V pro	cable terminals: V-terminals: V-clamps 240 mm²	5,2 kg	63-001971-011
ARS 400-6-M pro	cable terminals: screw terminals: pressed nuts M10	4,9 kg	63-001971-021
ARS 400-6-2V pro	cable terminals: 2V-terminals: double V-clamps 240 mm²	5,8 kg	63-001971-031

Table 21. ARS 400 pro TERMINAL CLAMPS

Description	ARS 400-x-V pro		ARS 400-x-2V pro		ARS 400-x-M pro		
Clamp	V-clamp 35-300SW-B		V-clamp HS 2/35-240-C		M10 screw (pressed nut)		
Drawing of clamp	Cross-section of conductors		Cross-section of conductors			Cross-section of conductors	Lug terminal
	V-clamp for direct fixing of conductor with bare end with crosssection of:						
	35 - 185 mm² 	35 - 240 mm² 	35 - 185 mm² 	35 - 240 mm² 			
	35 - 240 mm² 	35 - 300 mm² 	35 - 240 mm² 	35 - 300 mm² 			
Tightening torque	30 Nm		40 Nm		32 Nm		

For stranded conductors using cable ferrules is recommended

*) 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

FUSE SWITCH DISCONNECTOR
ARS 630 pro (630 A, 690 V)

Designed for operation with NH3 fuse links

ARS 630-1-M pro ARS 630-6-M pro

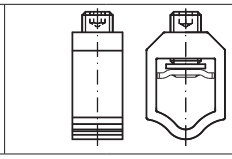
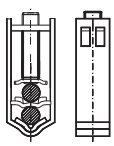
Table 22. TECHNICAL DATA

Parameters			ARS 630 pro
Rated thermal current $I_{th}=I_n$		A	630
Rated voltage U_n		V	690
Utilization category		-	AC-22B
Rated switching voltage U_e		V	690
Rated switching current I_e		A	630
Rated short circuit making current	U_e=690 V	kA	100
	U_e=500 V		120
Rated short circuit withstand current	U_e=690 V	kA	100
	U_e=500 V		120
Rated insulation voltage U_i		V	1000
Rated impulse withstand voltage $U_{imp.}$		kV	12
Rated frequency		Hz	50-60
Mechanical durability	Number of cycles		1000
Electrical durability			200
IP degree of protection		IP	30
Fuse links size		-	3

Table 23. VERSIONS

Version		Weight	Article No.
for installation on 185 mm busbar system, one pole switching - each phase independently			
ARS 630-1-V pro	cable terminals: V-terminals: V-clamps 240 mm²	5,8 kg	63-011801-011
ARS 630-1-M pro	cable terminals: screw terminals: pressed nuts M12	5,5 kg	63-011801-021
ARS 630-1-2V pro	cable terminals: 2V-terminals: double V-clamps 240 mm²	6,4 kg	63-011801-031
for installation on 185 mm busbar system, THREE POLE SWITCHING - all phases simultaneously			
ARS 630-6-V pro	cable terminals: V-terminals: V-clamps 240 mm²	5,8 kg	63-011802-011
ARS 630-6-M pro	cable terminals: screw terminals: pressed nuts M12	5,5 kg	63-011802-021
ARS 630-6-2V pro	cable terminals: 2V-terminals: double V-clamps 240 mm²	6,4 kg	63-011802-031

Table 24. ARS 630 pro TERMINAL CLAMPS

Description	ARS 630 x-V pro		ARS 630 x-2V pro	
Clamp	V-clamp 35-300SW-B		V-clamp HS 2/35-240-C	
Drawing of clamp	Cross-section of conductors 		Cross-section of conductors 	
	V-clamp for direct fixing of conductor with bare end with crosssection of:			
	35 - 185 mm²	35 - 240 mm²	35 - 185 mm²	35 - 240 mm²
	35 - 240 mm²	35 - 300 mm²	35 - 240 mm²	35 - 300 mm²
Tightening torque	30 Nm		40 Nm	

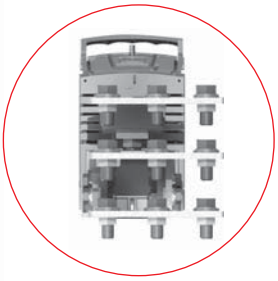
Description	ARS 630-x-2V pro		ARS 630-x-M pro		
Clamp	V-clamp 2/35-300SW-B		M–screw M12* (pressed nut)		
Drawing of clamp	Cross-section of conductors			Cross-section of conductors	Lug terminal
	V-clamp for direct fixing of conductor with bare end with crosssection of:				
	35 - 185 mm²	35 - 240 mm²			
	35 - 240 mm²	35 - 300 mm²			
Tightening torque	30 Nm		56 Nm		

For stranded conductors using cable ferrules is recommended
*)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

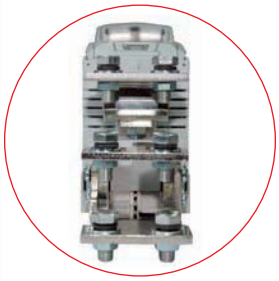
FUSE SWITCH DISCONNECTOR ARS 630 kVA pro

Fuse switch disconnector ARS 630 kVA pro is dedicated for protection of transformers up to 630 kVA.
Fuse switch disconnector is designed for operation with NH fuse links of size 3, with gTr characteristic.

ARS 630 kVA pro



Cable terminal:
three pressed nuts M12



Cable terminal:
two pressed nuts M12

Table 25. TECHNICAL DATA

Parameters		ARS 630 kVA pro
Rated thermal current $I_{th}=I_n$	A	910
Rated voltage U_n	V	400
Utilization category	-	AC-22B
Rated switching voltage U_e	V	400
Rated switching current I_e	A	910
Rated short circuit making current	kA	50
Rated short circuit withstand current	kA	50
Rated insulation voltage U_i	V	1000
Rated impulse withstand voltage $U_{imp.}$	kV	12
Rated frequency	Hz	50-60
Mechanical durability	Number of cycles	600
Electrical durability		100
IP degree of protection	IP	30
Weight	kg	9,8
Fuse links size	-	gTr 630 kVA[1)]

Accesories on page 58

[1)] Fuse link gTr 630 kVA, DIN 43620, VDE 0636/2011, the volume of NH3

Table 26. VERSIONS

Versions of 630 kVA pro		Article No.
one pole switching - each phase independently		
ARS 630 kVA-1-2M pro	cable terminals: screw terminals with two pressed nuts M12/pole, width 100 mm	63-811860-001
ARS 630 kVA-1-3M pro	cable terminals: screw terminals with three pressed nuts M12/pole, width 200 mm	63-811860-002
three pole switching - all phases simultaneously		
ARS 630 kVA-6-2M pro	cable terminals: screw terminals with two pressed nuts M12/pole , width 100 mm	63-811722-011
ARS 630 kVA-6-3M pro	cable terminals: screw terminals with three pressed nuts M12/pole , width 200 mm	63-811722-021

Recommended tightening torque (M12 screw) for screws fixing fuse switch disconnector to busbar system – 56Nm, screws and nuts property class 8.8.

Table 27. ARS 630 kVA pro TERMINAL CLAMPS

Description	ARS 630 kVA pro
Clamp	pressed nuts M12
Drawing of clamp	
Cross-section of conductors	Cable lugs, max 300 mm^2
Tightening torque	56 Nm

SWITCH DISCONNECTOR RWS 600 pro (600 A, 690 V)

Switch disconnector designed for operation with solid links of size 2.

Table 28. TECHNICAL DATA

Parameters			RWS 600 pro
Rated thermal current $I_{th}=I_n$		A	600
Rated voltage U_n		V	690
Utilization category		-	AC-22B
Rated switching voltage U_e		V	690
Rated switching current I_e		A	600
Rated insulation voltage U_i		V	1000
Rated impulse withstand voltage $U_{imp.}$		kV	12
Rated short time withstand current I_{cw}		kA	15[1)]
Rated frequency		Hz	50-60
Mechanical durability	Number of cycles		1000
Electrical durability			200
IP degree of protection		IP	30
Fuse links size		-	2

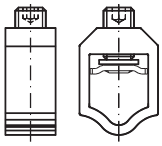
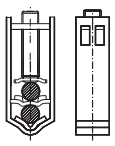
Accesories on page 59

[1)] use of mechanical lock recommended

Table 29. VERSIONS

Version		Weight	Article No.
for installation on 185 mm busbar system, THREE POLE SWITCHING - all phases simultaneously			
RWS 600-6-V pro	cable terminals: V-terminals: V-clamps 240 mm²	5,8 kg	63-002228-001
RWS 600-6-M pro	cable terminals: screw terminals: pressed nuts M12	5,7 kg	63-002228-002
RWS 600-6-2V pro	cable terminals: 2V-terminals: double V-clamps 240 mm²	6,4 kg	63-002228-003

Table 30. RWS 600 pro TERMINAL CLAMPS

Description	RWS 600-6-V pro		RWS 600-6-2V pro	
Clamp	V-clamp 35-300SW-B		V-clamp HS 2/35-240-C	
Drawing of clamp	Cross-section of conductors		Cross-section of conductors	
	V-clamp for direct fixing of conductor with bare end with crosssection of:			
	35 - 185 mm²	35 - 240 mm²	35 - 185 mm²	35 - 240 mm²
	35 - 240 mm²	35 - 300 mm²	35 - 240 mm²	35 - 300 mm²
Tightening torque	30 Nm		40 Nm	

<table>
<tr><th>Description</th><th colspan="2">RWS 600-6-2V pro</th><th colspan="3">RWS 600-6-M pro</th></tr>
<tr><td>Clamp</td><td colspan="2">V-clamp 2/35-300SW-B</td><td colspan="3">M–screw M12*</td></tr>
<tr><td rowspan="4">Drawing of clamp</td><td>Cross-section of conductors</td><td>  </td><td rowspan="4">  </td><td rowspan="4">Cross-section of conductors</td><td rowspan="4">Lug terminal</td></tr>
<tr><td colspan="2">V-clamp for direct fixing of conductor with bare end with crosssection of:</td></tr>
<tr><td>35 - 185 mm²  </td><td>35 - 240 mm² ●</td></tr>
<tr><td>35 - 240 mm²  </td><td>35 - 300 mm² ◆</td></tr>
<tr><td>Tightening torque</td><td colspan="2">30 Nm</td><td colspan="3">56 Nm</td></tr>
</table>

For stranded conductors using cable ferrules is recommended
*)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

SWITCH DISCONNECTOR RWS 750 pro (750 A, 500 V)

Switch disconnector designed for operation with solid links of size 3.

Table 31. TECHNICAL DATA

Parameters			RWS 750 pro
Rated thermal current $I_{th}=I_n$		A	750
Rated voltage U_n		V	500
Utilization category		-	AC-22B
Rated switching voltage U_e		V	500
Rated switching current I_e		A	750
Rated insulation voltage U_i		V	1000
Rated impulse withstand voltage $U_{imp.}$		kV	12
Rated short time withstand current I_{cw}		kA	15[1)]
Rated frequency		Hz	50-60
Mechanical durability	Number of cycles		1000
Electrical durability			200
IP degree of protection		IP	30
Fuse links size		-	3

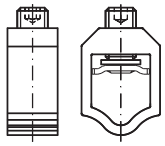
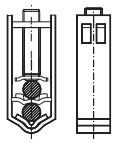
Accesories on page 59

[1)] use of mechanical lock recommended

Table 32. VERSIONS

Version		Weight	Article No.
for installation on 185 mm busbar system, THREE POLE SWITCHING - all phases simultaneously			
RWS 750-6-V pro	cable terminals: V-terminals: V-clamps 240 mm²	6,6 kg	63-002229-001
RWS 750-6-M pro	cable terminals: screw terminals: pressed nuts M12	6,5 kg	63-002229-002
RWS 750-6-2V pro	cable terminals: 2V-terminals: double V-clamps 240 mm²	7,2 kg	63-002229-003

Table 33. RWS 750 pro TERMINAL CLAMPS

Description	RWS 750-6-V pro				RWS 750-6-2V pro			
Clamp	V-clamp 35-300SW-B				V-clamp HS 2/35-240-C			
Drawing of clamp	Cross-section of conductors				Cross-section of conductors			
	V-clamp for direct fixing of conductor with bare end with crosssection of:							
	35 - 185 mm²		35 - 240 mm²		35 - 185 mm²		35 - 240 mm²	
	35 - 240 mm²		35 - 300 mm²		35 - 240 mm²		35 - 300 mm²	
Tightening torque	30 Nm				40 Nm			

Description	RWS 750-6-2V pro		RWS 750-6-M pro		
Clamp	V-clamp 2/35-300SW-B		V-clamp M12*		
Drawing of clamp	Cross-section of conductors			Cross-section of conductors	Lug terminal
	V-clamp for direct fixing of conductor with bare end with crosssection of:				
	35 - 185 mm²	35 - 240 mm²			
	35 - 240 mm²	35 - 300 mm²			
Tightening torque	30 Nm		56 Nm		

For stranded conductors using cable ferrules is recommended
*)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

SWITCH DISCONNECTOR RWS 1250 pro

Main switch-disconnector 1250 A, equipped with TM3 1250A solid-links
Switch-disconnector's width 100 mm
For installation on 185 mm busbar system

Table 34. TECHNICAL DATA

Parameters			RWS 1250 pro
Rated thermal current $I_{th}=I_n$		A	1250
Rated voltage U_n		V	400
Utilization category		-	AC-22B
Rated switching voltage U_e		V	400
Rated switching current I_e		A	1250
Rated insulation voltage U_i		V	1000
Rated impulse withstand voltage $U_{imp.}$			12
Rated short time withstand current I_{cw}			15/20[1)]
Rated frequency		Hz	50-60
Mechanical durability	Number of cycles		600
Electrical durability			100
Stopień ochrony IP		IP	30
IP degree of protection		kg	11
Fuse links size		-	TM3-1250A

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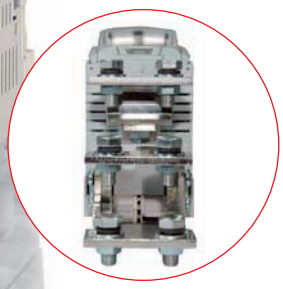
[1)] with mechanical lock

RWS 1250 pro



Cable terminal: two pressed nuts M12

Table 35. VERSIONS

Version		Article No.
for installation on 185 mm busbar system, THREE POLE SWITCHING - all phases simultaneously		
RWS 1250 - 6 - 2M pro	cable terminals: screw terminals with two pressed nuts M12/pole, width 100 mm	63-811828-011
RWS 1250 - 6 - 3M pro	cable terminals: screw terminals with three pressed nuts M12/pole, width 200 mm	63-811828-021
RWS 1250 - 6 - T pro	power supply connection at the back of the switch disconnector, feeding rail's length = 120 mm, feeding rails designed for fixing with M12 screws	63-811861-001
RWS 1250 - 6 - T pro	power supply connection at the back of the switch disconnector, feeding rail's length = 170 mm, feeding rails designed for fixing with M12 screws	63-811861-002
RWS 1250 NL pro	coupling switch-disconnector with lateral busbar terminals; cable terminals: screw terminals with pressed nuts M12, lateral busbar terminal - left side	63-811862-005
RWS 1250 NR pro	coupling switch-disconnector with lateral busbar terminals; cable terminals: screw terminals with pressed nuts M12, lateral busbar terminal - right side	63-811862-001

Tabela 36. RWS 1250 pro TERMINAL CLAMPS

Description	RWS 1250 pro
Clamp	pressed nuts M12
Drawing of clamp	
Cross-section of conductors	Cable lugs, max 300 mm^2
Tightening torque	56 Nm

cable terminals: screw terminals with three pressed nuts M12/pole

RWS 1250 pro with outgoing terminals at the back of the switch

FUSE SWITCH DISCONNECTOR ARS 1250 pro

Fuse switch disconnector's width 200 mm

Table 37. TECHNICAL DATA

Parameters		ARS 1250 pro
Rated thermal current $I_{th}=I_n$	A	1250
Rated voltage U_n	V	400
Utilization category	-	AC-21B
Rated switching voltage U_e	V	400
Rated switching current I_e	A	1250
Rated short circuit making current	kA	100
Rated short circuit withstand current	kA	100
Rated insulation voltage U_i	V	1000
Rated impulse withstand voltage $U_{imp.}$	kV	12
Rated frequency	Hz	50-60
Mechanical durability	Number of cycles	600
Electrical durability		100
IP degree of protection	IP	30
Fuse links size	-	3

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ARS 1250-1-M pro

ARS 1250-6-M pro

Table 38. VERSIONS

Version ARS 1250 pro		Weight	Article No.
for installation on to 185 mm busbar system, fuse disconnector's width – 200 mm			
one pole switching - each phase independently			
ARS 1250-1-3M pro	mechanically and electrically coupled two ARS 3 pro fuse switch disconnectors, cable terminals: screw terminals with three pressed screw M12/pole	16,3 kg	63-811757-011
ARS 1250-1-4M pro	mechanically and electrically coupled two ARS 3 pro fuse switch disconnectors, cable terminals: screw terminals with four pressed screw M12/pole	17 kg	63-811757-021
three pole switching - all phases simultaneously			
ARS 1250-6-3M pro	mechanically and electrically coupled two ARS 3 pro fuse switch disconnectors, cable terminals: screw terminals with three pressed screw M12/pole	16,3 kg	63-811756-011
ARS 1250-6-4M pro	mechanically and electrically coupled two ARS 3 pro fuse switch disconnectors, cable terminals: screw terminals with four pressed screw M12/pole	17 kg	63-811756-021

Recommended tightening torque (M12 screw) for screws fixing fuse switch disconnector to busbar system – 56Nm, screws and nuts property class 8.8

Table 39. ARS 1250-x-M pro TERMINAL CLAMPS

Description	ARS 1250-x-M pro
Clamp	three pressed nuts M12
Drawing of clamp	
Cross-section of conductors	Cable lugs, max 300 mm^2
Tightening torque	56 Nm

M3 type cable terminals: screw terminals with three pressed screw M12/pole

M3 type cable terminals: screw terminals with four pressed screw M12/pole

FUSE SWITCH DISCONNECTOR WITH LATERAL BUSBAR TERMINAL

(separation, coupling of busbar systems)

Table 40. TECHNICAL DATA

Parameters			ARS 400 pro
Rated thermal current $I_{th}=I_n$		A	400
Rated voltage U_n		V	690
Utilization category		-	AC-22B
Rated switching voltage U_e		V	690
Rated switching current I_e		A	400
Rated short circuit making current	U_e=690 V	kA	100
	U_e=500 V		120
Rated short circuit withstand current	U_e=690 V	kA	100
	U_e=500 V		120
Rated insulation voltage U_i		V	1000
Rated impulse withstand voltage $U_{imp.}$		kV	12
Rated frequency		Hz	50-60
Mechanical durability	Number of cycles		1000
Electrical durability			200
IP degree of protection		IP	30
Fuse links size		-	1, 2

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Table 41. VERSIONS WITH LATERAL BUSBAR TERMINAL

Version		Weight	Article No.
Fuse switch disconnectors ARS 400 pro - 400A			
for installation on 185 mm busbar system, ONE POLE SWITCHING - each phase independently			
ARS 400-1-NL pro	cable terminals: screw terminals : pressed nuts M12; lateral busbar terminals - left side	5,1 kg	63-811837-011
ARS 400-1-NR pro	cable terminals: screw terminals : pressed nuts M12; lateral busbar terminals - right side	5,1 kg	63-811837-031
for installation on 185 mm busbar system, THREE POLE SWITCHING - all phases simultaneously			
ARS 400-6-NL pro	cable terminals: screw terminals : pressed nuts M12; lateral busbar terminals - left side	5,1 kg	63-811838-011
ARS 400-6-NR pro	cable terminals: screw terminals : pressed nuts M12; lateral busbar terminals - right side	5,1 kg	63-811838-031

Table 42. ARS 400 pro WITH LATERAL BUSBAR TERMINALS TERMINAL CLAMPS

Description	ARS 400-x-NL	ARS 400-x-NR
Clamp	M12 screw	M12 screw
Drawing of clamp		
Lateral busbar terminal	Left side	Right side
Tightening torque	56 Nm	56 Nm