



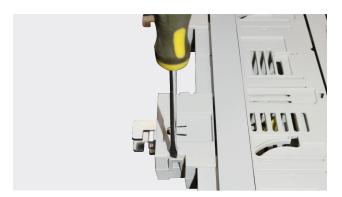
## smartARS pro disconnectors

on IP20 busbar



## Hook adapter for assembling smartARS pro disconnectors on IP20 busbar

**smartARS 00 pro** disconnectors enable changing the drain direction from the top as in the user manual.







**smartARS 2,3 pro** disconnectors can be used with a hook adapter for assembling disconnectors on IP20 busbar. To change the drain direction from the top, rotate the hook and plate by 180° as in the user manual.







Table 1. Versions

Label	Description	Catalogue number
smartARS 00-1-V-W-H pro	cable terminal: V-terminals: V-clamp 25-150 SW	63-106562-011
smartARS 00-1-W-H pro	cable terminal: bridge clamps (S) 4-70 mm and M8-screw	63-106562-012
smartARS 00-3-V-W-H pro	cable terminal: V-terminals: V-clamp 25-150 SW	63-106562-021
smartARS 00-3-W-H pro	cable terminal: bridge clamps (S) 4-70 mm and M8-screw	63-106562-022
smartARS 2-1-V-H pro	cable terminal: V-terminals: V-clamp 240 mm <sup>2</sup>	63-106562-211
smartARS 2-1-M-H pro	cable terminals: pressed nuts M12	63-106562-213
smartARS 2-1-2V-H pro	cable terminals: 2V-terminals: double V-clampos 240 mm²	63-106562-215
smartARS 2-6-M-H pro	cable terminals: pressed nuts M12	63-106562-223
smartARS 2-6-2V-H pro	cable terminals: 2V-terminals: double V-clampos 240mm²	63-106562-225
smartARS 3-1-V-H pro	cable terminal: V-terminals: V-clamp 240 mm <sup>2</sup>	63-106562-312
smartARS 3-1-M-H pro	cable terminals: pressed nuts M12	63-106562-314
smartARS 3-1-2V-H pro	cable terminals: 2V-terminals: double V-clampos 240 mm <sup>2</sup>	63-106562-316
smartARS 3-6-V-H pro	cable terminal: V-terminals: V-clamp 240 mm²	63-106562-322
smartARS 3-6-M-H pro	cable terminals: pressed nuts M12	63-106562-324
smartARS 3-6-2V-H pro	cable terminals: 2V-terminals: double V-clampos 240 mm²	63-106562-326

Table 2. Technical data

Parameter			smartAR	S 00 pro	smart	ARS 2 pro	sma	rtAR5 3 ¡	oro
Rated thermal current $I_{th} = I_n$		А	160		250 (NH1), 400 (NH2)		630		
Rated thermal current $I_{th}=I_n$ with solid links		А	210		600		750		
Rated voltage U <sub>n</sub>		V	690		690		690		
Utilization category		-	AC-22B 690	AC-23B 400	AC-22B	AC-23B	AC-23B	AC-22B	AC-21B
Rated switching voltage U <sub>e</sub>		V	69	90	690	400	400	500	690
Rated switching current I <sub>e</sub>		А	16	0	250 (NH1), 400 (NH2)		630		
Rated short circuit making	690 V	/ kA	8	D	100		80		
current	500 V	KA	10	0	120		120		
Rated short circuit withstand	690 V	kA	8	D	100		100		
current	500 V	KA	10	0	120				
Rated insulation voltage U <sub>i</sub>		V	100	00	1000		1000		
Rated impulse withstand voltage U <sub>imp.</sub>		kV	17	2	12		12		
Rated frequency		Hz	50-	60	5	0-60		50-60	
Mechanical durabilit		Number	1600		1000		1000		
Electrical durability		of cycles	20	00		200		200	
IP degree of protection		-	30		30		30		
Fuse links size		-	0	D		1, 2		3	

Table 3. smartARS 00 pro terminal clamps

Description	smartARS 00 pro						
Clamp	S-bridge clamp 2 x M5 x 25	M8 screw*	V-clamp 25-150 SW	HM 10-120			
Picture of clamp				***			
Drawing of clamp							
Cross –section of conductors	4 - 70 mm²	Lug terminal max 185 mm²	re ● 16 mm² - 95 mm² se ◆ 25 mm² - 150 mm² rm ❸ 16 mm² - 95 mm² sm ጭ 25 mm² - 150 mm²	re			
Tightening torque	3 Nm**	12 Nm**	20 Nm**	15 Nm**			

\*\*\*) 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.

Table 4. smartARS 2,3 pro terminal clamps

Description		5 2-x-V pro 5 3-x-V pro	smartARS 2-x-2V pro smartARS 3-x-2V pro		smartARS 2-x-2V pro smartARS 3-x-2V pro		smartARS 2-x-M pro smartARS 3-x-M pro	
Clamp	V–clamp 35	5-300SW-B	V–clamp	V-clamp 2/50-300SW-B		V-clamp HS 2/50-240-C*		
Picture of clamp								
Cross –	V-clamp for direct fixing of conductor with bare end with crosssection of							
section of	35 - 185 mm² 🛞	35 - 240 mm²	50 - 185 mm²		50 - 185 mm²	50 - 240 mm <sup>2</sup>	Lug terminal	
conductors	35 - 240 mm² 🗫	35 - 300 mm <sup>2</sup>	50 - 240 mm <sup>2</sup>	50 - 300 mm²	50 - 240 mm² 🐝	50 - 300 mm <sup>2</sup>		
Tightening torque	30 Nm		30 Nm		40 Nm		56 Nm	

For stranded conductors using cable ferrules is recommended



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

<sup>\*\*)</sup> using tension wrench is recommended

<sup>\*)</sup> 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.

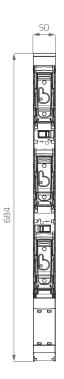
Table 5. Accessories

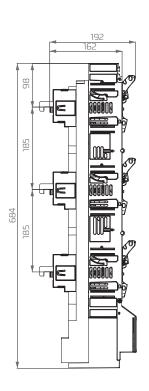
Label	Description	Catalogue number
Hook adapter	Hook adapter for smartARS 2,3 pro disconnectors for assembling the disconnector on IP20 busbar	53-106562-180

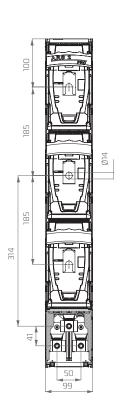
## Dimensional drawings

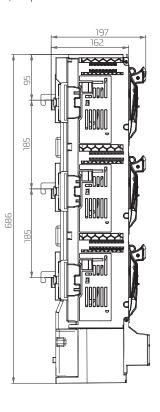
smartARS 00-W-H pro

smartARS 2,3-H pro









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