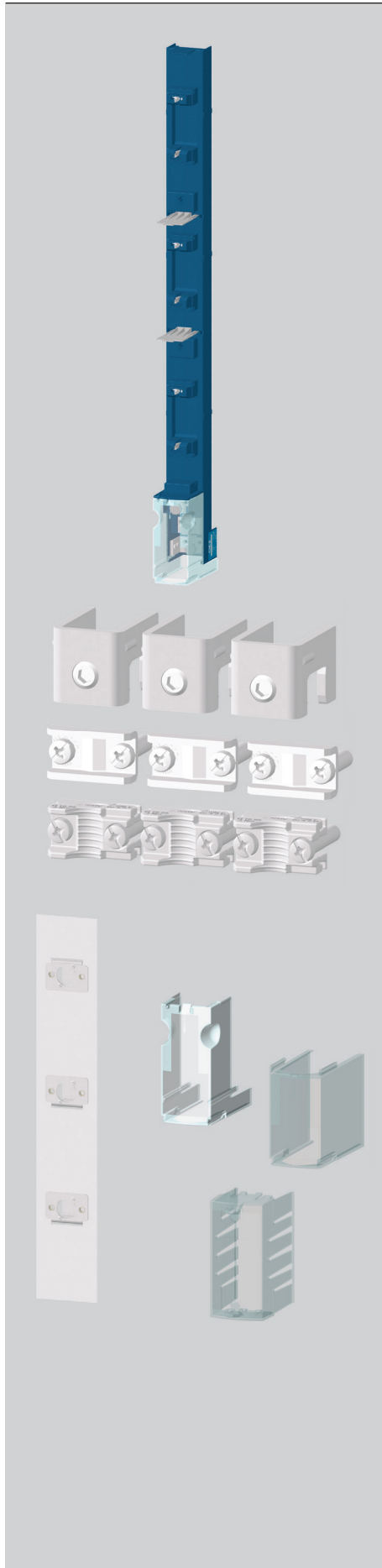


## FUSE-RAILS SIZE 00 UP TO 160 A



Fuse-rails FR00 are suitable for application in disconnecting cabinets or low-voltage distribution switchboards with busbar spacing 185 mm.

- Are intended for fuse-links size 000 or 00.
- Mounting width 50 mm.
- Modular design.
- Cable outlet bottom or top.
- Basic design with terminal screws M8/10 Nm for cable lugs max.  $\varnothing$  and busbars of width max. 25 mm.
- Possibility of direct mounting without busbar drilling - set CS-F00-3H.
- Outlet terminals - terminal screws M8 - clip terminal- CS-F00-3S - prismatic clamps- CS-F00-3P1.
- Wide range of accessories.

### Fuse-rails up to 160 A

Type	Product code	$I_n$ [A]	Description	Busbar spacing [mm]	Weight [kg]	Package [pcs]
FR00-3D/F	36161	160	design with terminal screws M8	185	1.330	1
FR00-3D/FC	36162		with built-in connecting space cover, design with terminal screws M8		1.360	1
FR00-3D/FC-RM1	38035		with built-in connecting space cover and measuring transformer, transformation ratio 100/5 A, power output 2.5 VA, class of accuracy 1, design with terminal screws M8		1.840	1
FR00-3D/FC-M1	36165		with built-in connecting space cover and measuring transformer, transformation ratio 200/5 A, power output 3.75 VA, class of accuracy 1, design with terminal screws M8		1.840	1
FR00-3D/FC-M05	36164		with built-in connecting space cover and measuring transformer, transformation ratio 200/5 A, power output 3.75 VA, class of accuracy 0.5, design with terminal screws M8		1.840	1
FR00-3D/FC-M05C	36166		with built-in connecting space cover and calibrated measuring transformer, transformation ratio 200/5 A, power output 3.75 VA, class of accuracy 0.5, design with terminal screws M8		1.840	1

### Connecting sets

Description	Type	Product code	Weight [kg]	Package [pcs]
<b>Connecting hooks – set of 3 pcs</b> , for fuse-rails FR00, busbar thickness $5 \div 12$ mm, busbar width $12 \div 35$ mm	CS-F00-3H	36169	0.105	1
<b>Clip terminal – set of 3 pcs</b> , for fuse-rails FR00, connection of Cu conductors of cross-section $1.5 \div 70$ mm <sup>2</sup> , torque 2.5 Nm	CS-F00-3S	36664	0.050	1
<b>Prismatic clamps – set of 3 pcs</b> , for fuse-rails FR00, connection of Cu/Al conductors of cross-section $10 \div 95$ mm <sup>2</sup> , torque 3 Nm	CS-F00-3P1	36665	0.104	1

### Accessories

Description	Type	Product code	Weight [kg]	Package [pcs]
<b>Adapter for busbars</b> for FR00-3D/... with spacing 185 mm, for connection of two fuse-rails, it enables compensation of mounting depth in combination with fuse-rails size 1, 2 and 3.	OD-F00-DA	36175	0.686	1
<b>Connecting space cover</b> for FR00-3D/..., intended for additional covering of fuse rail outlet connecting space.	OD-F00-KPD	36171	0.037	1
<b>Extension cover</b> for FR00 extends the cover of the connecting space by 80 mm. It is applied on OD-F00-KPD cover. It is possible to connect more extension covers in series.	OD-F00-DK	36173	0.041	1
<b>Fuse cover</b> for fuse-rail FR00-3D/..., set of 3 pcs	OD-FR00-K	36178	0.024	1

### Parameters

Type	FR00
Rated current	$I_n$ 160 A
Rated voltage (a.c./d.c.)	$U_n$ 690 V
Rated thermal current with disconnecting link ZP000	$I_{th}$ 240 A
Rated frequency	$f_n$ 40 ÷ 60 Hz
Rated insulation voltage	$U_i$ 1000 V a.c.
Short-circuit resistance with fuse-link 160 A, gG	120 kA
Fuse-link size	000 (00C), 00
Max. rated current of the fuse-link	$I_n$ 160 A
Max. power losses of the fuse-link	$P_v$ 12 W
Degree of protection	IP 20
Operating ambient temperature	-25 ÷ +55 °C
Standards	IEC 60269-1, -2

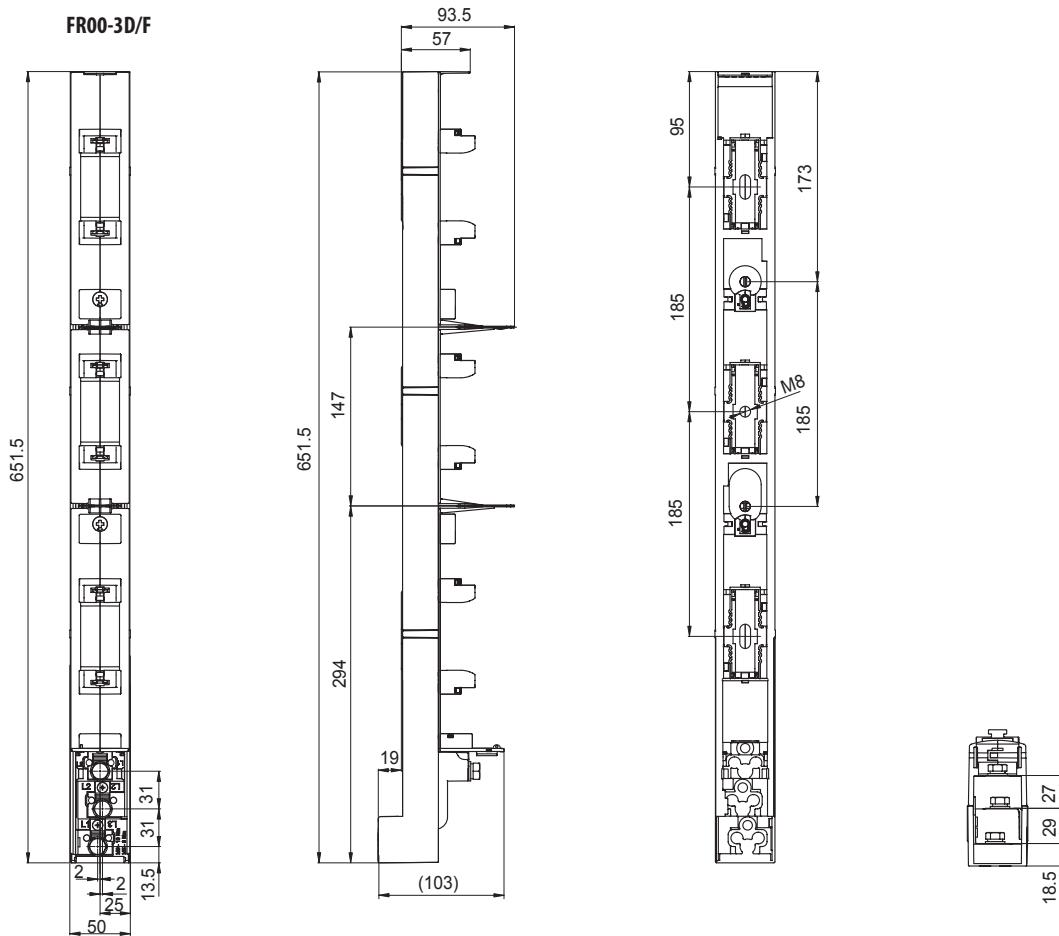
Approval marks



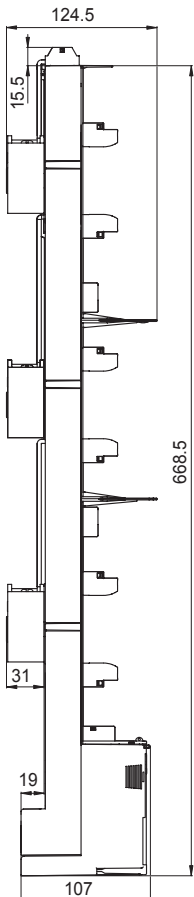
# FUSE-RAILS SIZE 00 UP TO 160

## Dimensions

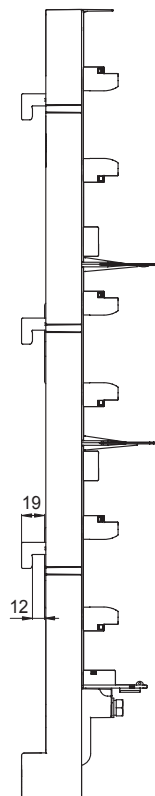
**FR00-3D/F**



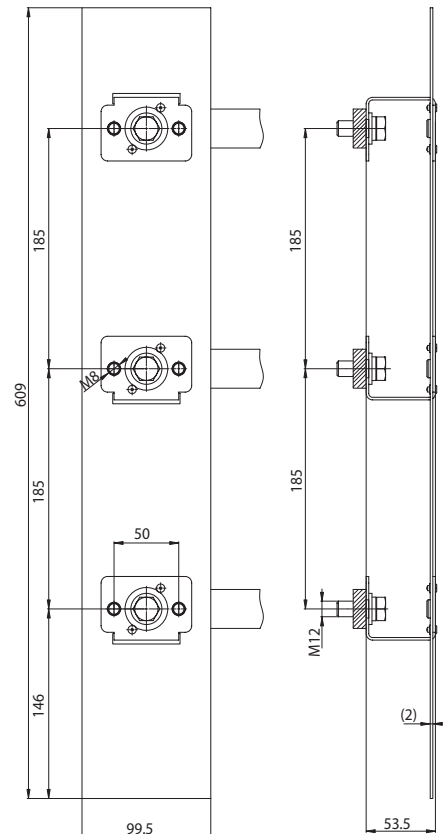
**FR00-3D/FC-M...**



**FR00-3D/F + CS-F00-3H**



**OD-F00-DA**



## MINIMAL CONNECTING CROSS-SECTION OF FUSE SWITCH-DISCONNECTORS

### Minimal connecting cross-section of cables of fuse switch-disconnectors for cylindrical fuse-links

Fuse-links $I_n$ [A]	Fuse switch-disconnectors for cylindrical fuse-links			Cable S [mm <sup>2</sup> ]	
	OPV10	OPV14	OPV22		
				Cu	Al
0.25	x	x		1	-
0.5	x	x		1	-
1	x	x		1	-
2	x	x		1	-
4	x	x		1	-
6	x	x		1	-
8	x	x		1	-
10	x	x		1.5	-
12	x	x		1.5	-
16	x	x	x	2.5	-
20	x	x	x	2.5	-
25	x	x	x	4	-
32	x	x	x	4	-
40		x	x	10	-
50		x	x	10	16
63		x	x	16	25
80			x	25	35
100			x	35	50
125			x	50	70

Note:

- 1) Applies to ambient temperature of switch-disconnectors max. 40 °C
- 2) Applies to HRC fuse-links PV10, PV14, PV22

### Minimal connecting cross-section of cables and busbars of fuse switch-disconnectors and fuse rails

Fuse-links $I_n$ [A]	Fuse switch-disconnectors and fuse-rails										Cable S [mm <sup>2</sup> ]		Busbar w x h	
	FH000	FH00	FH1	FH2	FH3	FD00 FR00	FD1 FR1	FD2 FR2	FD3 FR3					
										Cu	Al	Cu	Al	
4	x	x				x					1	-	-	-
6	x	x	x			x	x				1	-	-	-
8	x	x	x			x	x				1	-	-	-
10	x	x	x			x	x				1.5	-	-	-
12	x	x	x			x	x				1.5	-	-	-
16	x	x	x			x	x				2.5	-	-	-
20	x	x	x			x	x				2.5	-	-	-
25	x	x	x			x	x				4	-	-	-
32	x	x	x	x		x	x	x			4	-	-	-
35	x	x	x	x		x	x	x			6	-	-	-
40	x	x	x	x		x	x	x			10	-	-	-
50	x	x	x	x		x	x	x			10	16	-	-
63	x	x	x	x		x	x	x			16	25	-	-
80	x	x	x	x	x	x	x	x	x		25	35	-	-
100	x	x	x	x	x	x	x	x	x		35	50	20 x 2	25 x 2
125	x	x	x	x	x	x	x	x	x		50	70	25 x 2	25 x 3
160	x	x	x	x	x	x	x	x	x		70	95	25 x 3	25 x 4
200			x	x	x		x	x	x		95	120	25 x 4	25 x 5
224			x	x	x		x	x	x		95	120	25 x 4	25 x 5
250			x	x	x		x	x	x		120	150	25 x 5	25 x 6
315				x	x			x	x		150	185	32 x 5	32 x 6
350				x	x			x	x		185	240	32 x 6	32 x 8
400				x	x			x	x		240	2x 150	32 x 8	40 x 8
500					x				x		2x 150	2x 185	2x 30 x 5	2x 40 x 5
630					x				x		2x 185	2x 240	2x 40 x 5	2x 40 x 8

Note:

- 1) Applies to ambient temperature of switch-disconnectors max. 40 °C
- 2) Applies to HRC fuse-links PLN, PN, PHN