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Vertical design fuse rails TRIVER / NH-Sicherungsleisten TRIVER**Range / Produktpalette****Type 415 fuse rails BTVA/BTVA-P, NH 1/2/3, 250/400/630 A, 185mm busbars spacing**

415

Typ 415 NH-Sicherungsleisten, BTVA/BTVA-P, NH 1/2/3, 250/400/630 A, 185mm
Sammelschienenabstand

Reference Artikelnummer	Type Typ	Current Nennstrom	Protection Schutz	Connections Anschluss	Fuse-link Sicherungseinsatz	Busbar spacing Sammelschienenabstand
415.11.10.XX.YY	BTVA	250 A	Without protection ohne Schutzabdeckung	Top / Bottom reversible Oben / Unten	NH-1	185mm
415.12.10.XX.YY		400 A			NH-2	
415.21.10.XX.02	BTVA-P	250 A	100mm protection mit Schutzabdeckung 100mm	Top / Bottom reversible Oben / Unten	NH-1	
415.22.10.XX.02		400 A			NH-2	
415.23.10.XX.02		630 A			NH-3	
415.31.10.XX.02	BTVA-P	250 A	120mm protection mit Schutzabdeckung 120mm	Top / Bottom reversible Oben / Unten	NH-1	
415.32.10.XX.02		400 A			NH-2	
415.33.10.XX.02		630 A			NH-3	



Terminals / Anschlüsse XX Code: page/Seite ???
Accessories / Zubehör YY Code: page/Seite ???

Technical Data / Technische Daten: page/Seite ???
Dimension drawings / Abmessungen: page/Seite ???

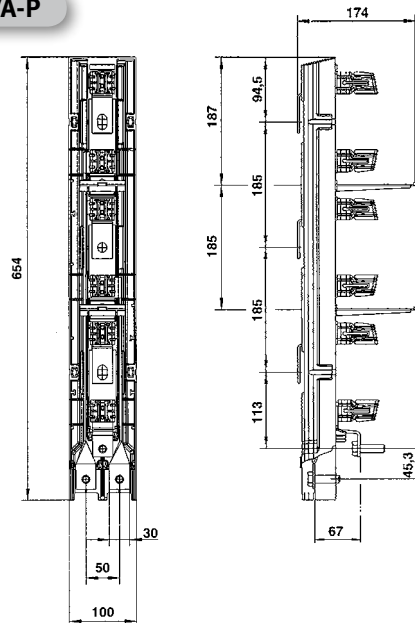
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Vertical design fuse rails TRIVER / NH-Sicherungsleisten TRIVER

415

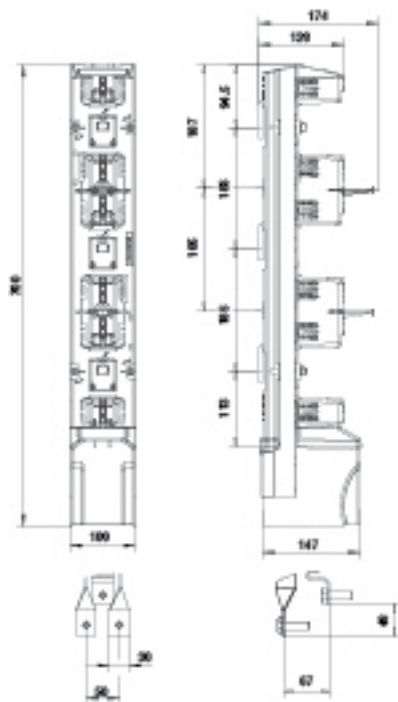
Dimensions fuse rails BTVA/BTVA-P, NH 1/2/3, 250/400/630 A, 185mm busbars spacing**Abmessungen** NH-Sicherungsleisten, BTVA/BTVA-P, NH 1/2/3, 250/400/630 A, 185mm Sammelschienenabstand

BTVA / BTVA-P



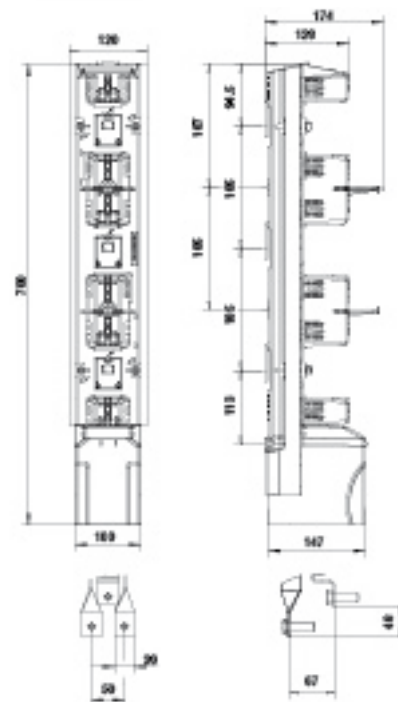
BTVA-P

Width / Breite 100mm

BTVA-P NH 1/2
BTVA-P NH 3x=118 y=164
x=128 y=174

BTVA-P

Width / Breite 120mm

BTVA-P NH 1/2
BTVA-P NH 3x=118 y=164
x=128 y=174

Vertical design fuse switches NH-1/2/3 BTVC 250/400/630 A

One pole switching - reversible

Reference	Type	Current	Switching	Connections	Fuse link
428.51.10.XX.YY	BTVC	250 A	one pole	top / bottom reversible	NH - 1
428.52.10.XX.YY	BTVC	400 A			NH - 2
428.53.10.XX.YY	BTVC	630 A			NH - 3

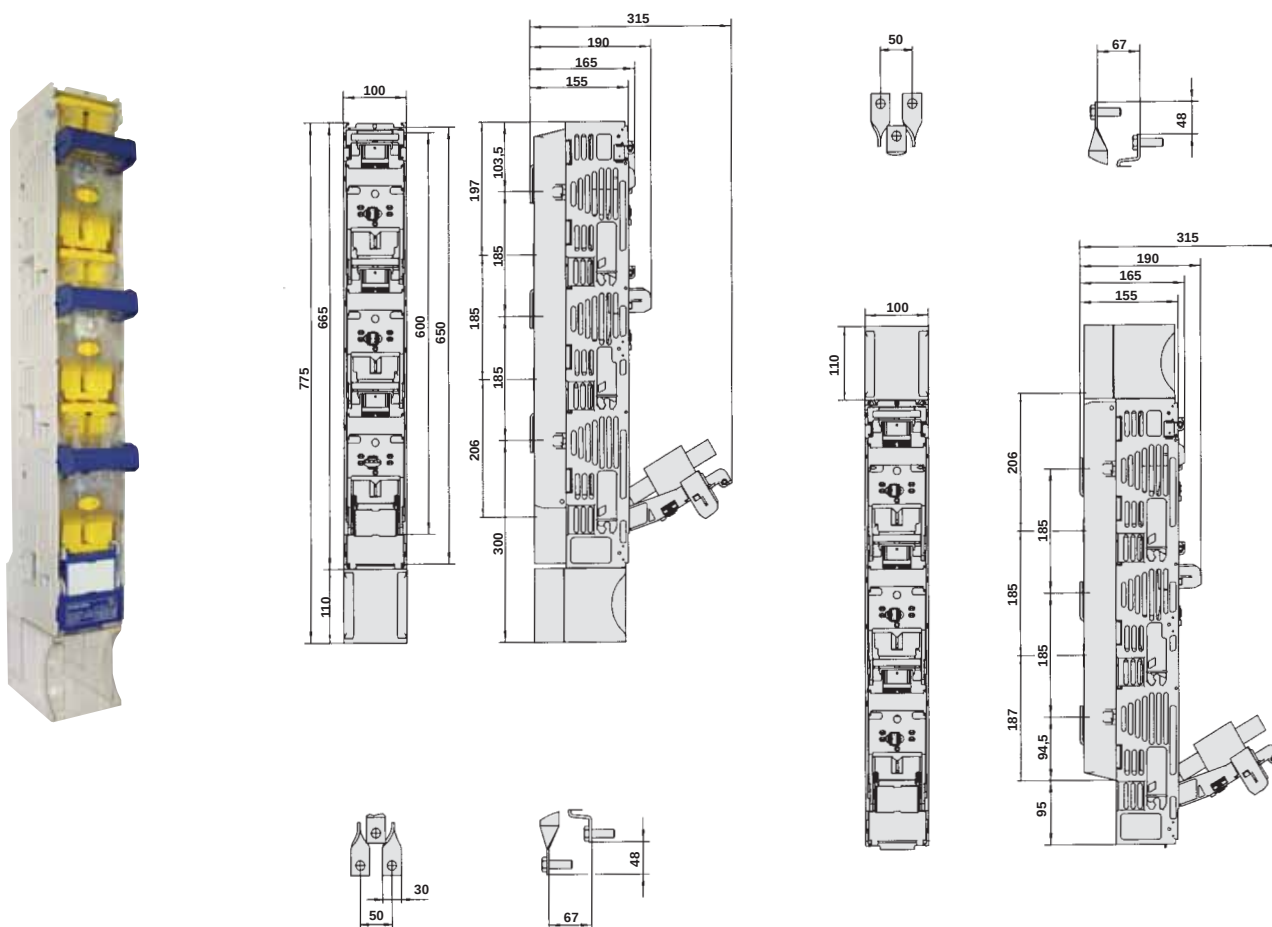
XX: add code for terminal type (see page 33)

YY: add code for accessories (see page 34-35)

BTVC

Bottom connection

Top connection



Vertical design fuse switches NH-1/2/3 BTVC-E 250/400/630 A

One pole switching - reversible - with retractable handle

Reference	Type	Current	Switching	Connections	Fuse link
428.41.10.XX.YY	BTVC-E	250 A	one pole	top / bottom reversible	NH - 1
428.42.10.XX.YY	BTVC-E	400 A	with retractable		NH - 2
428.43.10.XX.YY	BTVC-E	630 A	handle		NH - 3

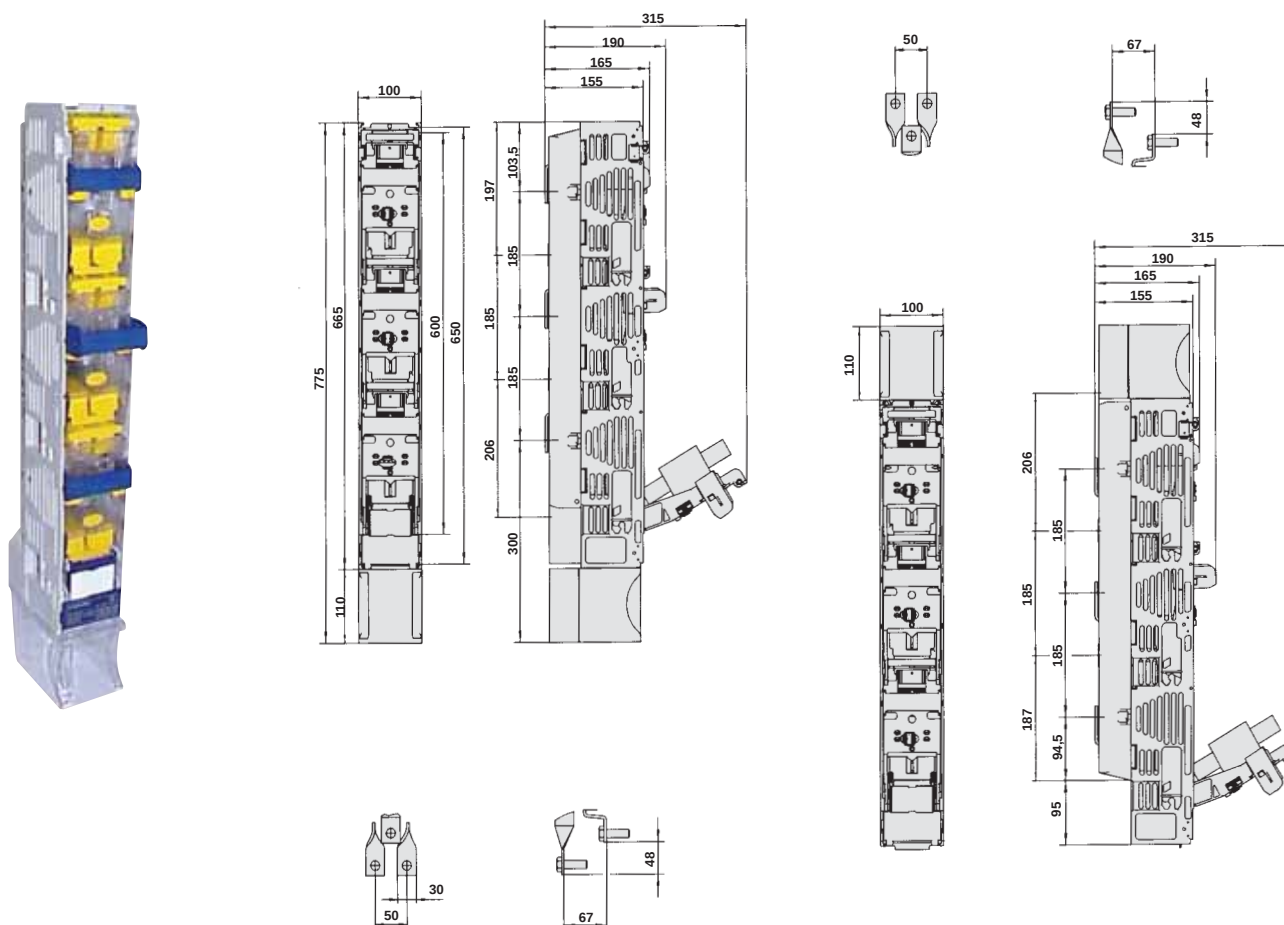
XX: add code for terminal type (see page 33)

YY: add code for accessories (see page 34-35)

BTVC-E

Bottom connection

Top connection



Vertical design fuse switches NH-1/2/3 BTVC-DT 250/400/630 A

Three pole switching - reversible

Reference	Type	Current	Switching	Connections	Fuse link
428.61.10.XX.YY	BTVC-DT	250 A	three pole	top / bottom reversible	NH - 1
428.62.10.XX.YY	BTVC-DT	400 A			NH - 2
428.63.10.XX.YY	BTVC-DT	630 A			NH - 3
428.91.10.XX.YY	BTVC-BC	250 A	three pole with locking device	top / bottom reversible	NH - 1
428.92.10.XX.YY	BTVC-BC	400 A			NH - 2
428.93.10.XX.YY	BTVC-BC	630 A			NH - 3

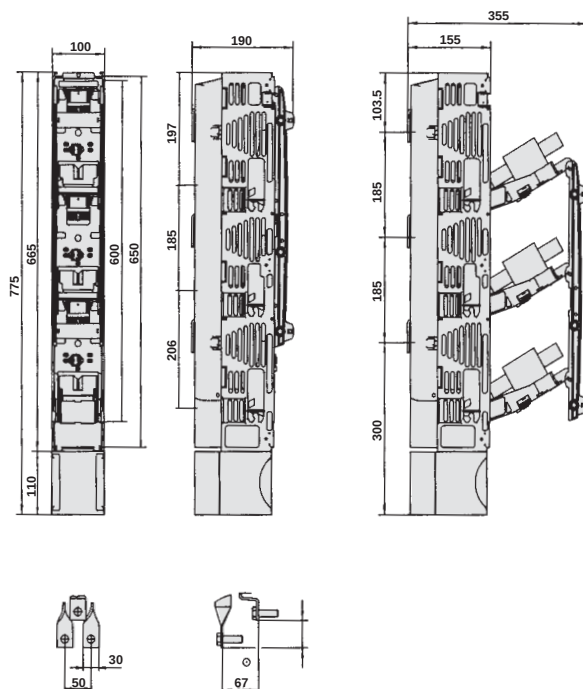
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YY: add code for accessories (see page 34-35)

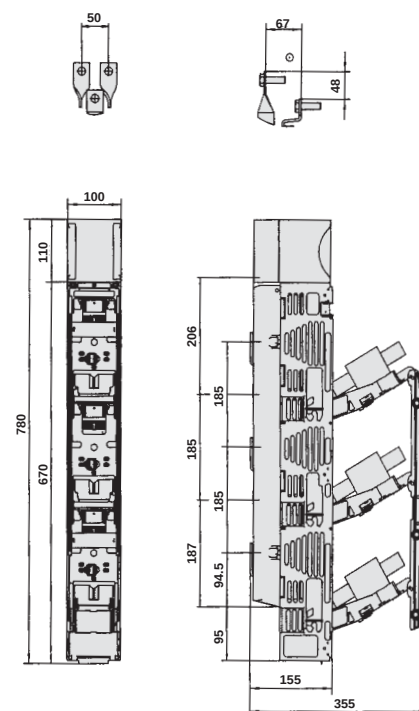
BTVC-DT and BTVC-BC



Bottom connection



Top connection



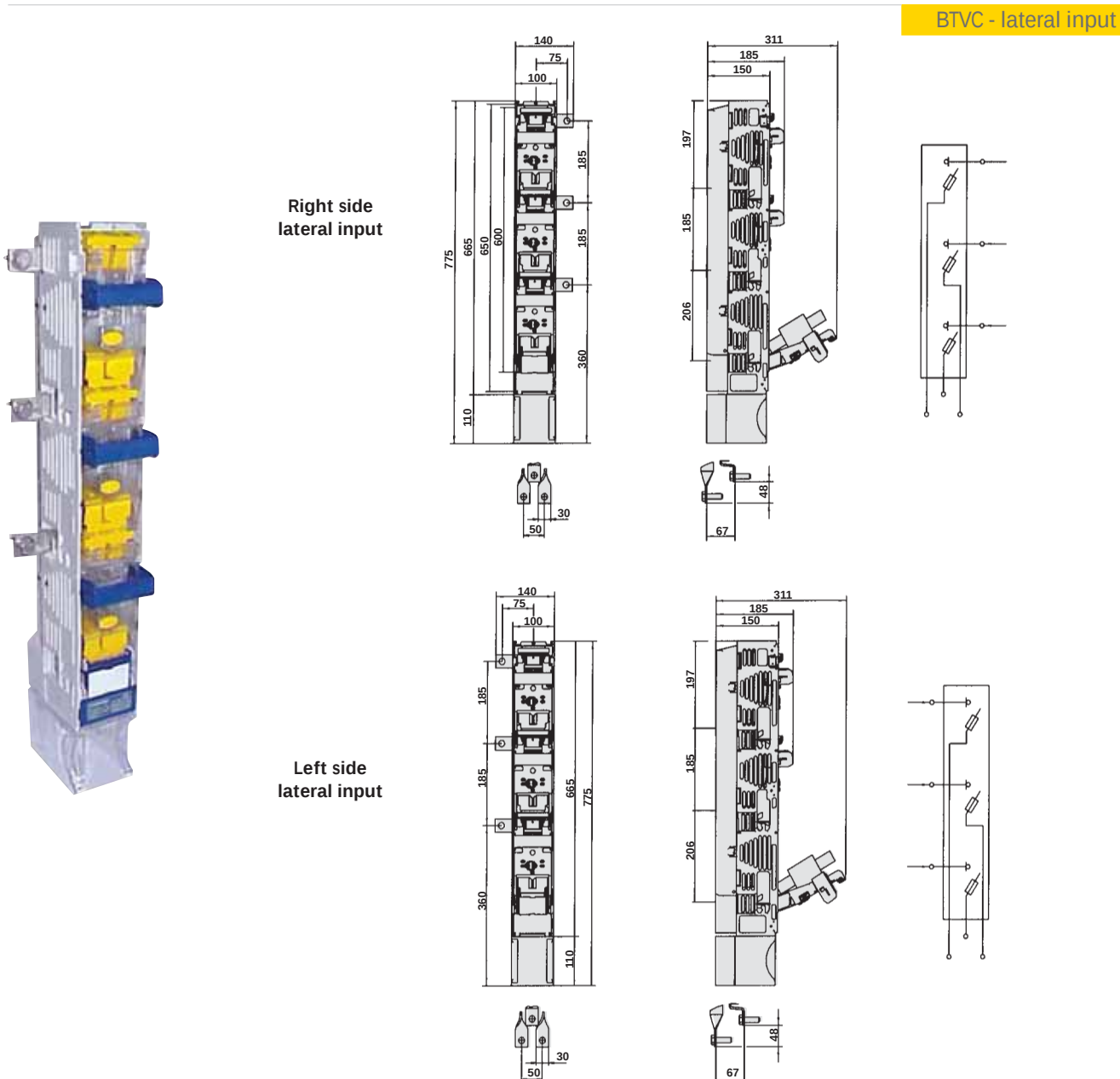
Vertical design fuse switches NH-1/2/3 BTVC/BTVC-DT 250/400/630 A

One pole switching - lateral input

Reference	Type	Current	Switching	Connections	Incoming connection	Fuse link
428.51.62.XX.YY	BTVC lateral input	250 A	one pole	top / bottom reversible	right side M12 nut	NH - 1
428.52.62.XX.YY		400 A				NH - 2
428.53.62.XX.YY		630 A				NH - 3
428.51.63.XX.YY	BTVC lateral input	250 A	one pole	top / bottom reversible	left side M12 nut	NH - 1
428.52.63.XX.YY		400 A				NH - 2
428.53.63.XX.YY		630 A				NH - 3
428.61.62.03.YY	BTVC-DT lateral input	250 A	three pole	top / bottom reversible	right side M12 nut	NH - 1
428.62.62.03.YY		400 A				NH - 2
428.63.62.03.YY		630 A				NH - 3
428.61.63.03.YY	BTVC-DT lateral input	250 A	three pole	top / bottom reversible	left side M12 nut	NH - 1
428.62.63.03.YY		400 A				NH - 2
428.63.63.03.YY		630 A				NH - 3

XX: add code for terminal type (see page 33)

YY: add code for accessories (see page 34-35)



Vertical design fuse switches NH-1/2/3 BTVC/BTVC-DT 250/400/630 A

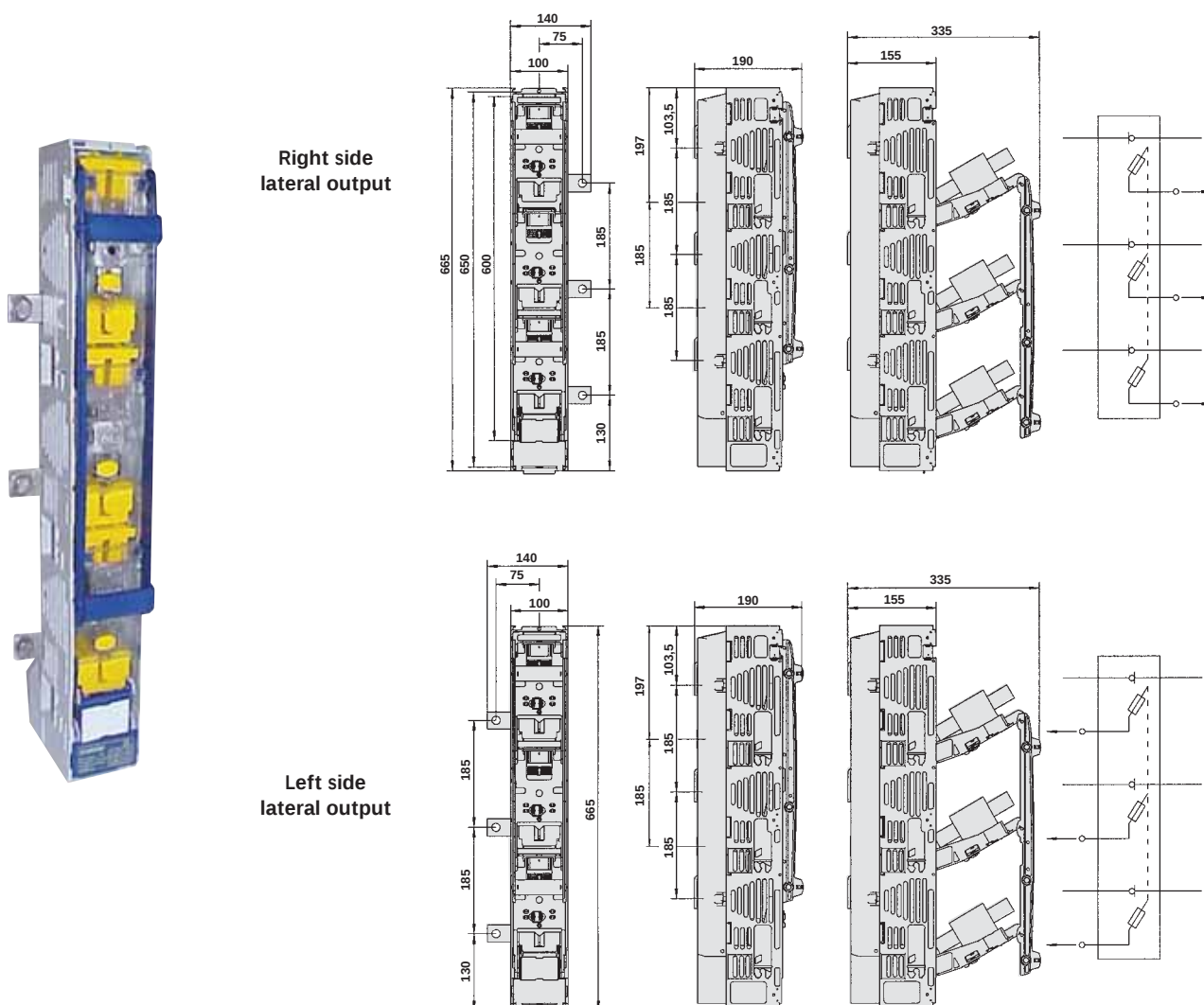
Three pole switching - lateral output

Reference	Type	Current	Switching	Terminal type	Connections	Fuse link
428.51.60.XX.YY	BTVC lateral output	250 A	one pole	M12 inserted nut	right side	NH - 1
428.52.60.XX.YY		400 A				NH - 2
428.53.60.XX.YY		630 A				NH - 3
428.51.61.XX.YY	BTVC lateral output	250 A	one pole	M12 inserted nut	left side	NH - 1
428.52.61.XX.YY		400 A				NH - 2
428.53.61.XX.YY		630 A				NH - 3
428.61.60.XX.YY	BTVC-DT lateral output	250 A	three pole	M12 inserted nut	right side	NH - 1
428.62.60.XX.YY		400 A				NH - 2
428.63.60.XX.YY		630 A				NH - 3
428.61.61.XX.YY	BTVC-DT lateral output	250 A	three pole	M12 inserted nut	left side	NH - 1
428.62.61.XX.YY		400 A				NH - 2
428.63.61.XX.YY		630 A				NH - 3

XX: add code for terminal type (see page 33)

YY: add code for accessories (see page 34-35)

BTVC-DT - lateral output

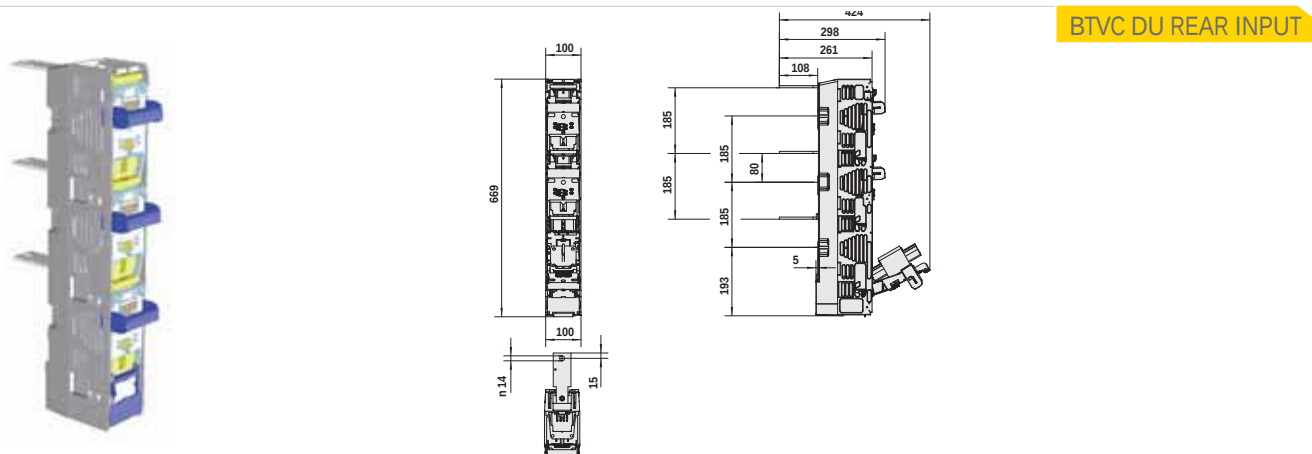
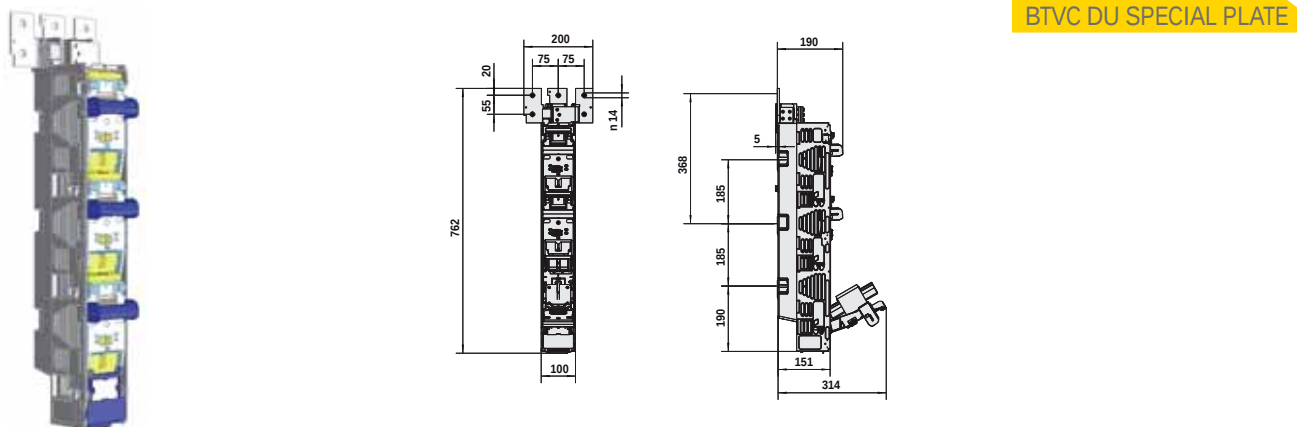
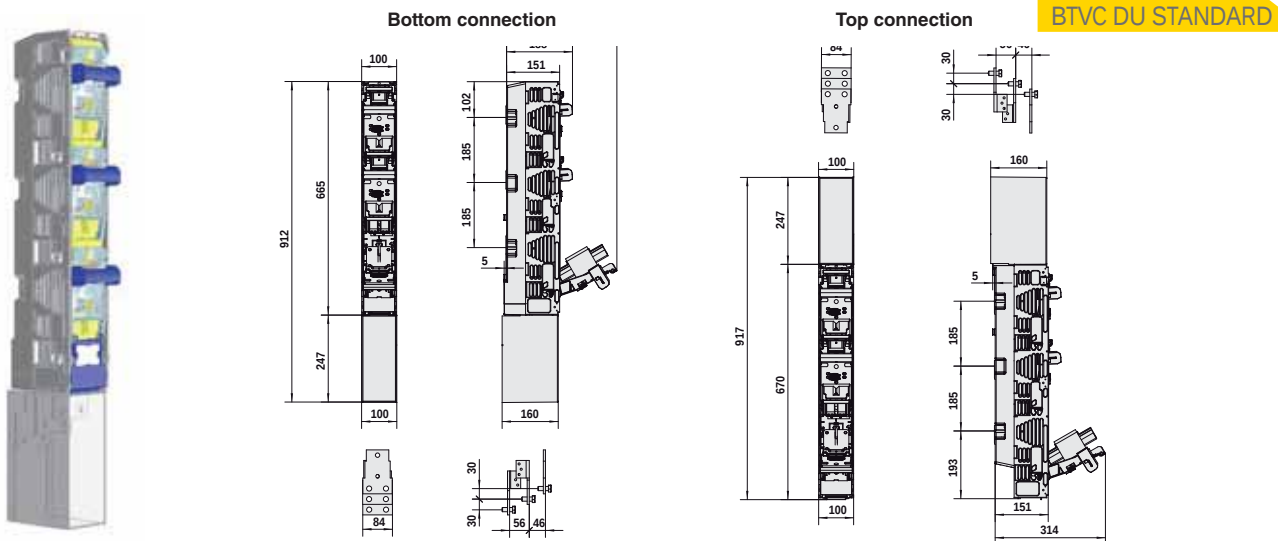


Vertical design fuse switches NH-3 BTVC DU 910 A

One pole switching

Reference	Type	Current	Switching	Terminal type	Connections	Fuse link
428.58.13.04.02*	BTVC DU	910 A	one pole	M12 inserted nut	top / bottom reversible	NH - 3 g Tr
428.58.13.36.00	BTVC DU	910 A	one pole	Ø14 special plate	top	NH - 3 g Tr
428.58.16.08.00	BTVC DU	910 A	one pole	Ø14 rear plate	rear	NH - 3 g Tr

* with connection over (see page 34)



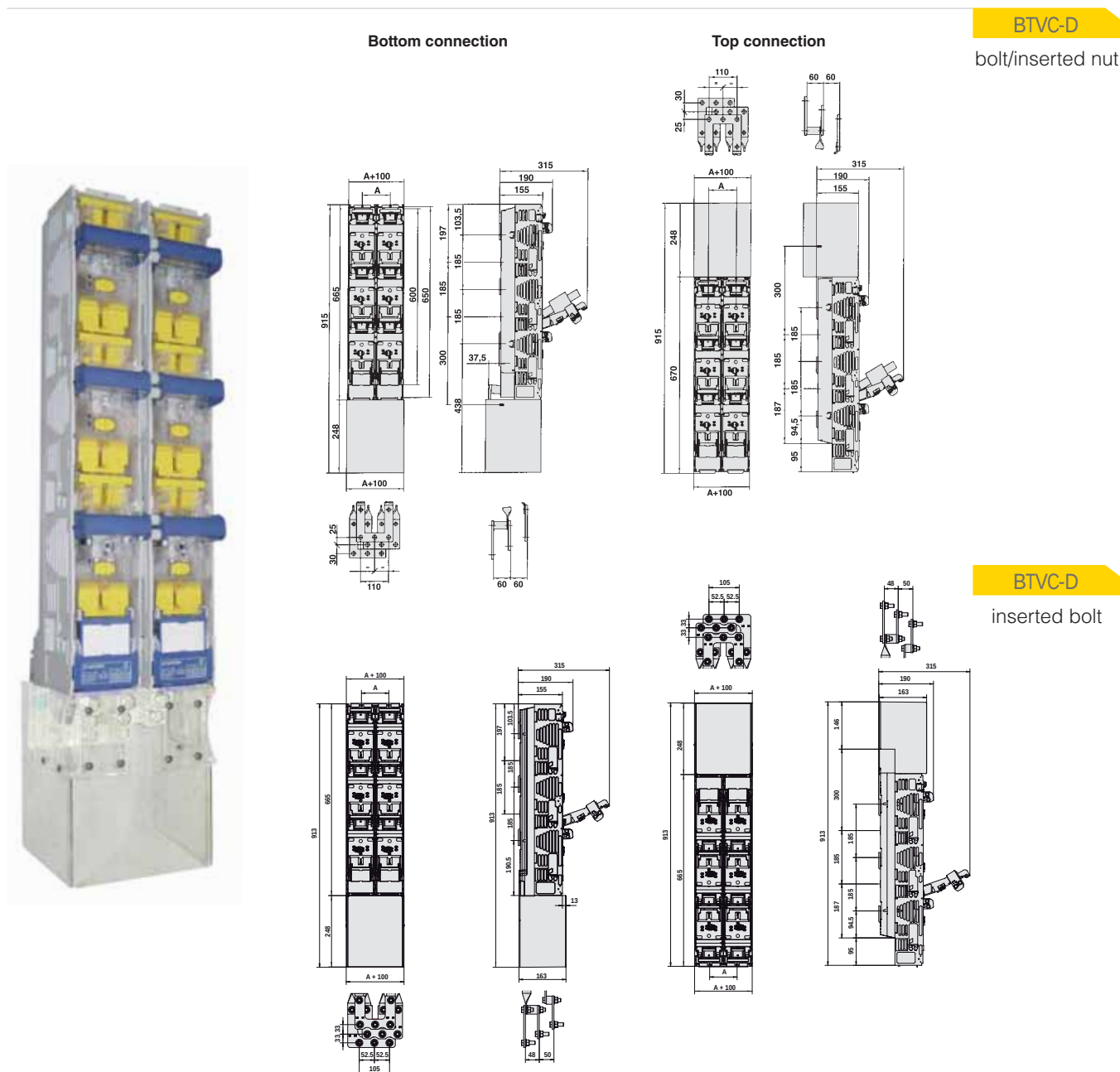
Vertical design double fuse switches NH-2/3 BTVC-D 800/1260 A

One pole switching - reversible

Reference	Type	Current	Switching	Terminal type	Connections	Fuse link
428.54.70.XX.YY	BTVC-D	800 A	100	M12 bolt/inserted nut	top / bottom reversible	NH - 2
428.54.71.XX.YY	BTVC-D		105			
428.54.72.XX.YY	BTVC-D		110			
428.56.70.XX.YY	BTVC-D	1260 A	100	M12 bolt/inserted nut	top / bottom reversible	NH - 3
428.56.71.XX.YY	BTVC-D		105			
428.56.72.XX.YY	BTVC-D		110			
428.56.84.03.02	BTVC-D	1260 A	100	M12 inserted bolt	top / bottom reversible	NH - 3
428.56.82.03.02			110			

XX: add code for terminal type (see page 33)

YY: add code for accessories (see page 34-35)



Technical data TRIVER LV fuse rails & fuse switches

Vertical design fuse rails NH-1/2/3
BTVA 250 / 400 / 630 A (fuse rails reference 415)

IEC / EN 60269			Type ➔	BTVA / BTVA-P Type 415					
				250 A		400 A		630 A	
Electrical characteristics	Rated operational voltage		U _e (V)	AC 500	AC 690	AC 500	AC 690	AC 500	AC 690
	Rated operational current		I _e (A)	250	200	400	315	630	500
	Conventional free air thermal current with fuses		I _{th} (A)	250	200	400	315	630	500
	Conventional free air thermal current with solid links		I _{th} (A)	320		510		800	
	Rated frequency		(Hz)	50					
	Rated conditional short-circuit current		(kA _{eff})	50					
	Test voltage		(kV)	3					
	Total power loss at I _{th} (without fuse)		P _V (W)	25	16	52	32	98	62
Mechanical characteristics	Weight		(kg)	3,110		3,610		4,380	
	Busbar distance		(mm)	185					
Fuse links	Size to IEC / EN 60269		--	1		2		3	
	Max. rated current (gL/gG)		I _n (A)	250	200	400	315	630	500
	Max. permis. power loss per fuse-link		P _V (W)	32		45		60	
Terminals	Bolt terminal	Diameter	--	M10/M12					
		Cable lug (S/DIN 46235)	(mm²)	2x25-300					
		Torque	(Nm)	32					
	V-terminal	Terminal cross section	(mm²)	50-300					
		Torque	(Nm)	25					
	Bimetallic terminal	Terminal cross section	(mm²)	35-185					
		Torque	(Nm)	32					
	Protection level	Front operated switchgear fitted		--	IP20				
Operating Conditions	Ambient temperature		(°C)	-25 to +55 *(1)					
	Rated operating mode		--	continuous operation					
	Actuation		--	dependant manual operation					
	Mounting position		--	vertical / horizontal					
	Altitude		(m)	up to 2000					
	Pollution degree		--	3					
	Overvoltage category		--	IV					

*(1) 35°C normal temperature, at 55°C with reduced operating current

Technical data TRIVER LV fuse rails & fuse switches

Vertical design fuse switches NH-1/2/3 - one / three pole switching
BTVC / BTVC-DT 250 / 400 / 630 A (fuse switches reference 428)

IEC / EN 60947			Type →	BTVC / BTVC-DT Type 428							
				250 A			400 A			630 A	
Electrical characteristics	Rated operational voltage		U _e (V)	AC 400	AC 500	AC 690	AC 400	AC 500	AC 690	AC 500	AC 690
	Rated operational current		I _e (A)	250	250	200	400	400	315	630	500
	Conventional free air thermal current with fuses		I _{th} (A)	250	250	200	400	400	315	630	500
	Conventional free air thermal current with solid links		I _{th} (A)	400	400		510	510		800	
	Rated frequency		(Hz)	40-60							
	Rated insulation voltage		U _i (V)	AC 1000							
	Rated conditional short-circuit current		(kA _{eff})	80							
	Utilization category		--	AC-23B	AC-22B		AC-23B	AC-22B		AC-22B	AC-21B
	Rated making capacity		(A)	2500	1200	600	4000	1890	945	1890	750
	Rated breaking capacity		(A)	2000	1200	600	3200	1890	945	1890	750
	Rated impulse withstand voltage		U _{imp} (kV)	20kV							
	Operating cycles with current		--	200							
	Total power loss at I _{th} (without fuse)		P _v (W)	25	25	16	52	52	32	98	62
Mechanical characteristics	Weight		(kg)	5,120			5,430			6,240	
	Busbar distance		(mm)	185							
	Panel front opening * (see picture on page 50)		(mm)	600/650							
	Operating cycles without current		--	1400	1400	1400	800	800	1400	800	800
Fuse links	Size to IEC / EN 60269		--	1			2			3	
	Max. rated current (gL/gG)		I _n (A)	250	250	200	400	400	315	630	500
	Max. permis. power loss per fuse-link		P _v (W)	23			34			48	
Terminals	Bolt terminal	Diameter	--	M10/M12							
		Cable lug (S/DIN 46235)	(mm²)	2x25-300							
		Torque	(Nm)	32							
	V-terminal	Terminal cross section	(mm²)	50-300							
		Torque	(Nm)	25							
	Bimetallic terminal	Terminal cross section	(mm²)	35-185							
		Torque	(Nm)	32							
Protection level	Front operated switchgear fitted		--	IP20							
Operating Conditions	Ambient temperature		(°C)	-25 to +55 *(1)							
	Rated operating mode		--	continuous operation							
	Actuation		--	dependant manual operation							
	Mounting position		--	vertical / horizontal							
	Altitude		(m)	up to 2000							
	Pollution degree		--	3							
	Overvoltage category		--	IV							

*(1) 35°C normal temperature, at 55°C with reduced operating current

Technical data TRIVER LV fuse rails & fuse switches

Vertical design fuse switches NH-3 BTVC 910 A

Vertical design double fuse switches NH-2/3 BTVC-D 800 / 1260 A (fuse switches reference 428)

IEC / EN 60947			Type ➡	BTVC 910 A	BTVC-D Type 428			
					800 A		1260 A	
Electrical characteristics	Rated operational voltage		U _e (V)	AC 400	AC 500	AC 690	AC 500	AC 690
	Rated operational current		I _e (A)	910	800	630	1260	1000
	Conventional free air thermal current with fuses		I _{th} (A)	910	800	630	1260	1000
	Conventional free air thermal current with solid links		I _{th} (A)	1250	960	750	1500	1200
	Rated frequency		(Hz)	50	40-60			
	Rated insulation voltage		U _i (V)	1000	AC 1000			
	Rated conditional short-circuit current		(kA _{eff})	50	50			
	Utilization category		--	AC-22B	AC-22B	AC-21B	AC-21B	AC-20B
	Rated making capacity		(A)	2730	2400	945	2400	--
	Rated breaking capacity		(A)	2730	2400	945	2400	--
	Rated impulse withstand voltage		U _{imp} (kV)	20	20			--
	Operating cycles with current		--	100	100			--
	Total power loss at I _{th} (without fuse)		P _V (W)	200	110	70	200	130
Mechanical characteristics	Weight		(kg)	12,974	14,536		15,722	
	Busbar distance		(mm)	185	185			
	Panel front opening * (see picture on page 50)		(mm)	600/650	600/650			
	Operating cycles without current		--	500	500			
Fuse links	Size to IEC / EN 60269		--	3	2		3	
	Max. rated current (gL/gG)		I _n (A)	910(gTr)	400	315	630	500
	Max. permis. power loss per fuse-link		P _V (W)	70	34	45	48	60
Terminals	Bolt terminal	Diameter	--	M12	M12			
		Cable lug (S/DIN 46235)	(mm²)	2x95-300	3x95-300			
		Torque	(Nm)	32	32			
Protection level	Front operated switchgear fitted		--	IP20				
Operating Conditions	Ambient temperature		(°C)	-25 to +55 *(1)				
	Rated operating mode		--	continuous operation				
	Actuation		--	dependant manual operation				
	Mounting position		--	vertical / horizontal				
	Altitude		(m)	up to 2000				
	Pollution degree		--	3				
	Overvoltage category		--	IV				

*(1) 35°C normal temperature, at 55°C with reduced operating current