

条形熔断器隔离开关 GS

Vertical design fuse switches and disconnectors GS

特点 / Features

全兼容 / FULLY COMPATIBLE

条形熔断器隔离开关与早期的产品完全兼容，而且外形尺寸也和以前的产品一样。所以，能够安装在市场上现有的各种低压开关柜中。这种条形熔断器隔离开关也适用于600毫米和650毫米的正面操作电气柜。

条形熔断器隔离开关的设计、测试，都符合IEC 60947-3标准的要求，技术参数也与世界主要电力公司保持一致。

GS is 100% compatible with the previous range. It maintains the same external dimensions so they can be assembled in any already installed LV panels in the market. The fuse switches are also valid for 600mm and 650mm front frame panels.

It has also been designed and tested according to IEC 60947-3 standard and in accordance with the specifications of the main electric utilities all around the world.



着眼未来 / ADAPTED TO FUTURE

这种新一代的条形熔断器隔离开关，着眼于未来的市场需求，适合使用于智能电网。因此，这种开关的参数和附件结构，可以用于独立的/集成的量具、熔断器监控等部件，实现远程监测功能。

This new generation of three pole vertical fuse switches are prepared to meet the market's future requirements with regard to implementation of smart grids. For such purpose, it incorporates features and accessories for remote supervision such as integrated or independent metering sets, Fuse Supervision Control, etc.



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特点 / Features

安全与操作 / SAFETY & HANDLING

安装、操作各种尺寸的电气柜时，都能提高安全性。

Increased safety in installation and handling to all sizes.



拆卸熔断器时更加安全、操作更加方便。

外置挂锁孔，防止意外接触。

Safety and comfort in the removal of the fuse.

External unlocking tag avoids risk of accidental contacts.

透明盖板预留了从熔断器的触刀上测量电压的通道

Cover including provision to allow direct access to the blade of the fuse in order to make voltage testing.



开关面板易于安装

Easy to install the switching case.

可以经母线接入窗口的进行带电安装。

Installation in live panels possible by means of busbar access window.

手柄空间大。

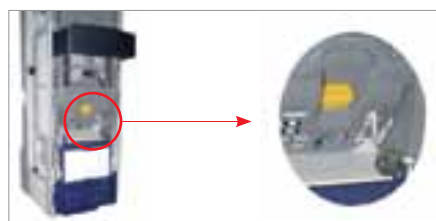
Big space in the handle.

挂锁装置 / PROVISION FOR PADLOCK



每一相在合闸位置带挂锁。

Closed position with padlock in each phase.



每一相都可配密封铅。

Provision for installing a sealing plumb for each phase and sealing plumb in the card holder.



分闸位置可带挂锁。

Open position with padlock in DT.



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特点 / Features

附件 / ACCESSORIES

更多的附件提高了条形熔断器隔离开关的性能。

Wide range of accessories that provides additional advantages inside the new TRIVER⁺.

可以通过熔断器与电流互感器的组合及特殊电流表来持久或临时性地测量电流

Permanent or temporary metering by means of a combined set of fuse - current transformer - ammeter.



用微动开关来显示合闸/分闸状态。内置LED的熔断指示器。

*Microswitch which enables open / close indicator.
LED - Integrated blown fuse indicator.*

顶部/底部插槽。

Top / Bottom card holders



提供带熔断器保护的辅助电源（熔断器的最大电流为160A），可以用作临时电源，不需要额外安装熔断器固定装置。

Fuse protected auxiliary supply (up to 160A fuses) used to provide temporary supply with no need for installing an additional fuse rail.



接地装置，带触刀的一端连接在出线端，带绝缘触刀的一端连接另一端。

It is possible to connect earthing kits for outgoing cables. The blade of the earthing link is located in the position of the fuse in the base. The base is earthed by means of a copper braid.



不同的接线端，可以连接各类电缆。

Large range of terminals adapted to fit several type of cable terminations

条形熔断器隔离开关 GS
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范围 / Range

条形熔断器隔离开关，GS00, NH00, 160A
fuse switches, GS00, NH-00, 160 A

订货号 Reference	型号 Type	操作方式 Switching	出线方式 Connections	熔断器规格 Fuse-Link	母线中心距 Busbar spacing
23511802	GS00-31K/N	单极分动 One pole	顶部/底部 Top / Bottom reversible	NH - 00	100mm
23512202	GS00-31K/T				
23611802	GS00-33K/N	三极联动 Three pole	顶部/底部 Top / Bottom reversible	NH - 00	
23612202	GS00-33K/T				
43510100	GS00-31D/N	单极分动 One pole	顶部/底部 Top / Bottom reversible	NH - 00	185mm
51104305	GS00-31D/T				
43710100	GS00-33D/N	三极联动 Three pole	顶部/底部 Top / Bottom reversible	NH - 00	
71104305	GS00-33D/T				



注：N表示螺栓 T表示端子 K表示100mm D表示185mm
附件 / Accessories : P. 07

技术参数 / Technical Data: P. 11
尺寸图 / Dimension drawings: P. 08-09

条形熔断器隔离开关 GS
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范围 / Range

条形熔断器隔离开关, GS1/2/3, NH1/2/3, 250/400/630A。
fuse switches, GS1/2/3,NH1/2/3, 250/400/630A。

订货号 Reference	型号 Type	电流 Current	操作方式 Switching	出线方式 Connections	熔断器规格 Fuse-link	母排中心距 Busbar spacing
51104800	GS1-31D/N	250A	单极分动 One pole	顶部/底部 Top / Bottom reversible	NH-1	185mm
52104800	GS2-31D/N	400A			NH-2	
53104800	GS3-31D/N	630A			NH-3	
71104800	GS1-33D/N	250A	三极联动 Three pole	顶部/底部 Top / Bottom reversible	NH-1	
72104800	GS2-33D/N	400A			NH-2	
73104800	GS3-33D/N	630A			NH-3	
71100500	GS1-33D/T	250A			NH-1	
72100500	GS2-33D/T	400A			NH-2	
73100500	GS3-33D/T	630A			NH-3	



注：N表示螺栓 T表示端子 K表示100mm D表示185mm
附件 / Accessories : P. 07

技术参数 / Technical Data: P. 13
尺寸图 / Dimension drawings: P. 09-10

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范围 / Range

条形熔断器隔离开关，GS3, NH3, 910 A
fuse switches, GS3, NH3, 910 A

订货号 Reference	型号 Type	操作方式 Switching	出线端子 Terminal type	出线方式 Connections	熔断器规格 Fuse-link
58130402	GS3-31/910A	单极分动 One pole	M12螺栓 M12 inserted nut	顶部/底部 Top / Bottom reversible	NH-3 g Tr
58133600	GS3-31/910A-T		ø14mm	顶部 / Top	
78130402	GS3-33/910A	三极联动 Three pole	M12螺栓 M12 inserted nut	顶部/底部 Top / Bottom reversible	
78133600	GS3-33/910A-T		ø14mm	顶部 / Top	

*带连接罩子/ With connection cover



附件 / Accessories : P. 07

技术参数 / Technical Data: P. 13

尺寸图 / Dimension drawings: P. 10

条形熔断器隔离开关 GS
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条形熔断器隔离开关 GS -- 附件
ACCESSORIES fuse switches, GS

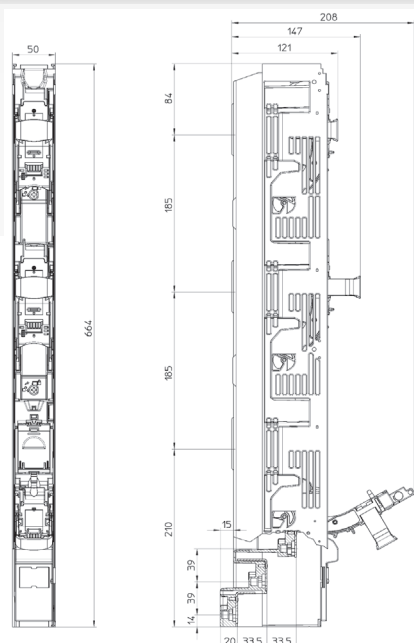
产品 Item	描述 Description	订货号 Reference	型号 Type
	保护罩 (上) Top protection cover	4230412	TC-GS00
	保护罩 (下) Bottom protection cover	4230409	BC-GS00
	保护罩 connection cover	4230408	CC-GS00
	保护罩 Connection cover for NH-1/2/3 GS 400/ 630A	4380425	CC-GS123
	保护罩 Connection cover for GS 910 A and top outgoing terminals	2804103	CC-GS3/910
	适配器 Double adapter plate from 100mm to 185 mm busbar spacing	4230101	AP-185/100
	开关状态指示 Micro-switch (open / closed indicator)	1013402	MS-GS00
		1013406	MS-GS123
	挂购 Hook-on clamp (set of 3)	4230801	HC-GS00
	挂购 Hook-on clamp (set of 3)	4150820	HC-GS123
	相间隔板 Central barrier for outgoing terminals	4150426	CB-80
	母线支架 Busbar support 185mm, 3 pole for drilled flat busbars	04380811	CB185/100
	母线盖板 Front cover for busbars: 50mm width with fixing brackets	4130803	FC/50
	滚花螺母 Nut	GM08	42310080
		GM12	43804012

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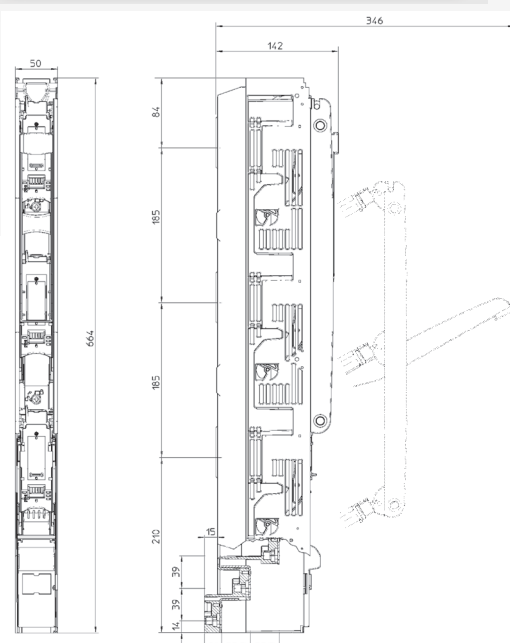
条形熔断器隔离开关, GS00, NH00, 160A, 母排中心距185mm —— 尺寸

fuse switches, GS00, NH00, 160A, 185 mm busbar spacing

单极分动GS00 / 1pole switching



三极联动GS00 / 3 pole switching

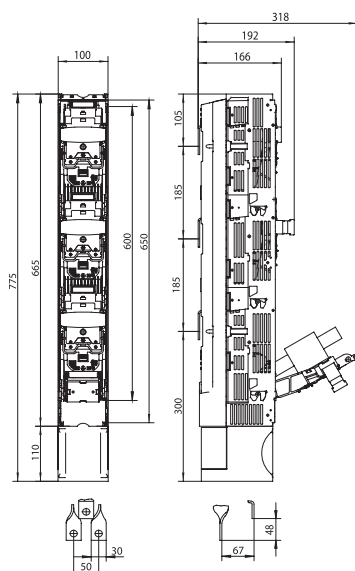


条形熔断器隔离开关, GS1/2/3, NH1/2/3 — 尺寸

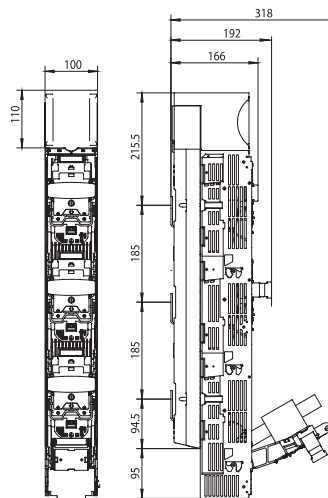
fuse switches, GS1/2/3,NH1/2/3

单极分动 GS / GS 1 pole switching

底部出线 / Bottom connection



顶部出线 / Top connection



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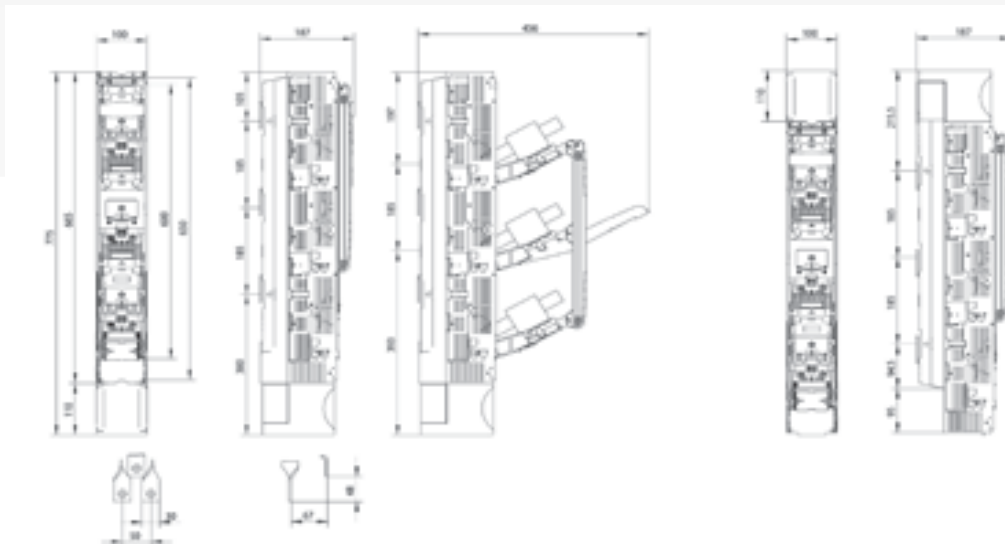
条形熔断器隔离开关，GS1/2/3, NH1/2/3 — 尺寸

fuse switches, GS1/2/3, NH1/2/3

三极联动 GS / GS 3 pole switching

底部出线 / Bottom connection

顶部出线 / Top connection



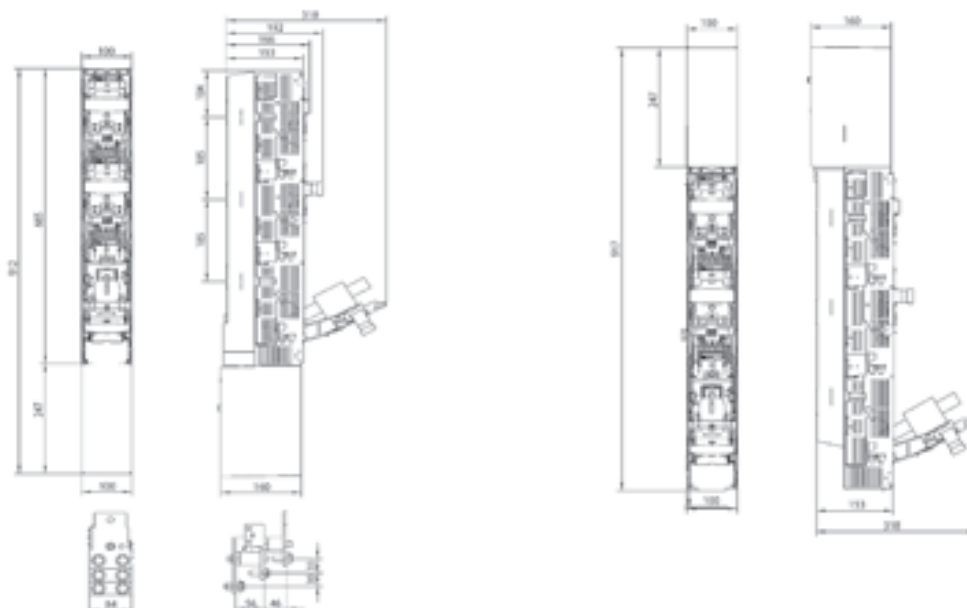
条形熔断器隔离开关，GS3, NH3, 910A — 尺寸

fuse switches, GS3, NH3, 910A

单极分动 GS / GS 1 pole switching

底部出线 / Bottom connection

顶部出线 / Top connection



技术参数 / Technical Data

条形熔断器隔离开关 GS 00—160A, 1—250A

Vertical design fuse switches GS 00—160A, 1—250A

标准 IEC / EN 60947		型号 Type →	GS						
			160A (100 mm)		160A (185 mm)		250 A		
电气特性 Electrical characteristics	额定电压 Rated operational voltage	U _e (V)	AC 500	AC 690	AC 500	AC 690	AC 400	AC500	AC 690
	额定电流 Rated operational current	I _e (A)	160	100	160	160	250	250	250
	约定熔断器发热电流 Conventional free air thermal current with fuses	I _{th} (A)	160	100	160	160	250	250	250
	约定隔离刀片发热电流 Conventional free air thermal current with solid links	I _{th} (A)	210				400		
	额定频率 Rated frequency	(Hz)	50		50		40-60		
	额定冲击电压 Rated insulation voltage	U _i (V)	1000		1000		1000		
	短路分断电流 Rated conditional short-circuit current	(kA _{eff})	50		80		80		
	使用类别 Utilization category	—	AC-22B				AC-23B		AC-22B
	额定合闸能力 Rated making capacity	(A)	480	300	480	480	2500		750
	额定分闸能力 Rated breaking capacity	(A)	480	300	480	480	2000		750
	额定冲击耐受电压 Rated impulse withstand voltage	U _{imp} (kV)	8				20kV		
	带电操作次数 Operating cycles with current	—	200	300	200	200	200		
	总功率损耗 Total power loss at I _{th} (without fuse)	P _v (W)	20	13	22	22	25		
机械特性 Mechanical characteristics	重量 Weight	(kg)	1,520		2,260		5,120		
	母排中心距 Busbar distance	(mm)	100		185		185		
	正面操作 Panel front opening	(mm)	600/650				600/650		
	不带电操作次数 Operating cycles without current	—	1400	1700	1400	1700	1400		
熔断器 Fuse links	尺码见IEC/EN 60269 Size to IEC / EN 60269	—	000/00				1		
	最大额定电流 (gL/gG) Max. rated current (gL/gG)	I _n (A)	160	100	160	160	250		
	最大允许熔断器的功率损耗 Max. permis. power loss per fuse-link	P _v (W)	12	12	12	12	23		

技术参数 / Technical Data

条形熔断器隔离开关 GS00-160A, GS1-250

Vertical design fuse switches GS00—160A, GS1—250

标准 IEC / EN 60947			型号/ Type ➔	GS		
				160A (100mm)	160A (185mm)	250 A
接线端子 Terminals	螺栓连接 Bolt terminal	直径 Diameter	—	M8/M10	M8	M10/M12
		线径 Cable lug (S/DIN 46235)	(mm²)	10-95	10-120	2x25-300
		扭矩 Torque	(Nm)	12		32
	端子连接 Prism terminal	线径 Terminal cross section	(mm²)	16-95		50-300
		扭矩 Torque	(Nm)	2.5		25
	“V”型端子连接 V-terminal	线径 Terminal cross section	(mm²)	—	10-95	35-185
		扭矩 Torque	(Nm)	—	15	32
	棱型端子连接 Bridge clamp	线径 Terminal cross section	(mm²)	6-70		
		扭矩 Torque	(Nm)	2,5		
防护等级 Protection degree	正面操作 Front operated switchgear fitted		—	IP 30		
工作条件 Operating Conditions	周围环境 Ambient temperature		(°C)	-25 至+55 *(1) -25 to +55 *(1)		
	额定工作方式 Rated operating mode		—	连续工作 continuous operation		
	操作方式 Actuation		—	手动操作 manual dependiente		
	海拔 Altitude		(m)	不大于2000 / up to 2000		
	污染等级 Pollution degree		—	3		3
	过电压等级 Overvoltage category		—	III		IV

*(1) 正常使用温度35°C，在55°C时工作电流要降容

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

技术参数 / Technical Data

条形熔断器隔离开关 GS2-400A, GS3-630A, GS3-910A

Vertical design fuse switches GS2-400A,GS3-630A,GS3-910A

标准 IEC / EN 60947-3		型号/ Type ➔	GS					
			400 A			630 A		910 A
电气特性 Electrical characteristics	额定电压 Rated operational voltage	U _e (V)	AC 400	AC 500	AC 690	AC 500	AC 690	AC 400
	额定电流 Rated operational current	I _e (A)	400	400	400	630	630	910
	约定熔断器发热电流 Conventional free air thermal current with fuses	I _{th} (A)	400	400	400	630	630	910
	约定隔离刀片发热电流 Conventional free air thermal current with solid links	I _{th} (A)	510			800		1250
	额定频率 Rated frequency	(Hz)	40-60					
	额定冲击电压 Rated insulation voltage	U _i (V)	1000					
	短路分断电流 Rated conditional short-circuit current	(kA _{eff})	80					50
	使用类别 Utilization category	—	AC-23B	AC-22B		AC-22B		AC-22B
	额定合闸能力 Rated making capacity	(A)	4000	1200		1890		2730
	额定分闸能力 Rated breaking capacity	(A)	3200	1200		1890		2730
	额定冲击耐受电压 Rated impulse withstand voltage	U _{imp} (kV)	20kV					
	带电操作次数 Operating cycles with current	—	200					100
	总功率损耗 Total power loss at I _{th} (without fuse)	P _v (W)	52	52	32	98	62	200
机械特性 Mechanical characteristics	重量 Weight	(kg)	5,430			6,240		12,974
	母排中心距 Busbar distance	(mm)	185					
	正面操作 Panel front opening	(mm)	600/650					
	不带电操作次数 Operating cycles without current	—	800	800	1400	800	800	500
熔断器 Fuse links	尺码见IEC/EN 60269 Size to IEC / EN 60269	—	2			3		3
	最大额定电流 (gL/gG) Max. rated current (gL/gG)	I _n (A)	400			630		910(gTr)
	最大允许熔断器的功率损耗 Max. permis. power loss per fuse-link	P _v (W)	34			48		70

技术参数 / Technical Data

条形熔断器隔离开关 GS2-400A, GS3-630A, GS3-910A
Vertical design fuse switches GS2-400A, GS3-630A, GS3-910A

标准 IEC / EN 60947-3			型号/ Type →	GS		
				400A	630A	910A
接线端子 Terminals	螺栓连接 Bolt terminal	直径 Diameter	--	M10/M12		M12
		线径 Cable lug (S/DIN 46235)	(mm²)	2x25-300		2x95-300
		扭矩 Torque	(Nm)	32		32
	“V”型端子连接 V-terminal	线径 Terminal cross section	(mm²)	50-300		
		扭矩 Torque	(Nm)	25		
	接线端子 Bimetallic terminal	线径 Terminal cross section	(mm²)	35-185		
		扭矩 Torque	(Nm)	32		
防护等级 Protection degree	正面操作 Front operated switchgear fitted		--	IP30		
工作条件 Operating Conditions	周围环境 Ambient temperature		(°C)	-25 至+55 *(1) -25 to +55 *(1)		
	额定工作方式 Rated operating mode		--	连续工作 continuous operation		
	操作方式 Actuation		--	手动操作 manual dependiente		
	海拔 Altitude		(m)	不大于2000 / up to 2000		
	污染等级 Pollution degree		--	3		
	过电压等级 Overvoltage category		--	IV		

*(1) 正常使用温度35°C，在55°C时工作电流要降容
*(1) 35°C normal temperature, at 55°C with reduced operating current