

DC-Switch Disconnectors

光伏直流隔离开关

UKGD63 Series

叠加式光伏直流隔离开关

Stacked DC Isolating Switch for Photovoltaic



UKGD63系列光伏直流隔离开关,适用于额定电压DC1500V以下,或交流50Hz/60Hz,额定工作电压AC690V以下,额定电流63A以下的电力系统及相关配套设备中起到不频繁的接通和分断、隔离分断电路的作用,并为光伏系统分断和接通和隔离提供解决方案。

产品符合标准: GB/T 14048.3 、 GB/T 14048.1 、 IEC 60947.1 、 IEC 60947.3 。

The UKGD63 series photovoltaic DC isolation switch is suitable for power systems and related supporting equipment with rated voltage below DC1500V, AC 50Hz/60Hz, rated working voltage below AC690V, and rated current below 63A. It plays a role in infrequent connection and disconnection, isolation and disconnection circuits, and provides solutions for photovoltaic system disconnection and connection and isolation.

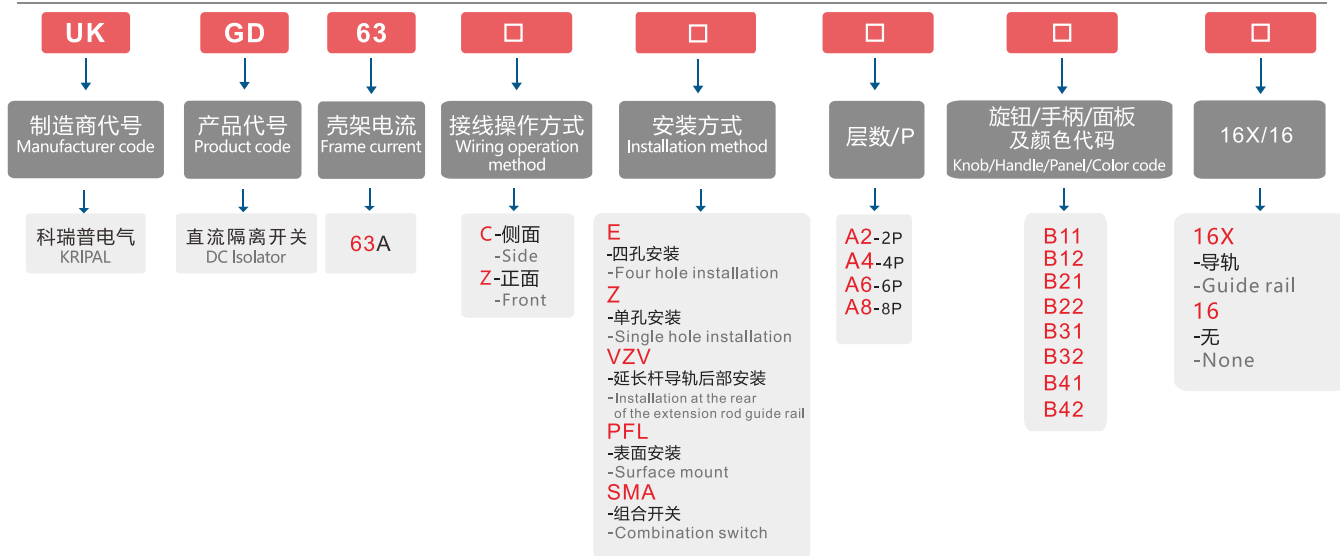
The product complies with standards: GB/T 14048.3, GB/T 14048.1, IEC 60947.1, IEC 60947.3.

DC-Switch Disconnectors

光伏直流隔离开关

Model Description

型号说明



Working conditions

正常的工作条件

- ◆ 周围空气温度: 温度上限不超过70℃下限不低于-25℃;(超出标准工作温度时, 请咨询本公司进行选用)
Surrounding air temperature: The upper limit of temperature should not exceed 70 °C, and the lower limit should not be lower than -25 °C; (When exceeding the standard operating temperature, please consult our company for selection)
- ◆ 海拔高度: 安装地点的海拔不超过 3000m,超过 3000m 使用时降容情况见下表
Altitude: The altitude of the installation site shall not exceed 3000m. (If it exceeds 3000m, the capacity reduction during use is shown in the table below)

海拔降容系数 Altitude reduction coefficient				
海拔 Altitude	2000	3000	4000	4500
工作电流修正系数 Correction factor for working current	1	0.95	0.93	0.9
工作电压修正系数 Correction factor for working voltage	1	0.9	0.83	0.8

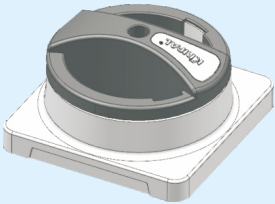
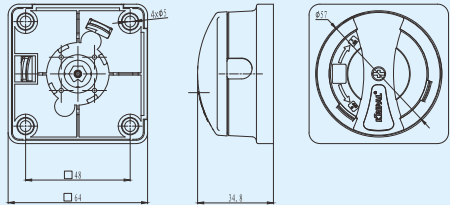
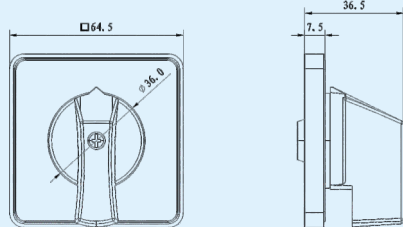
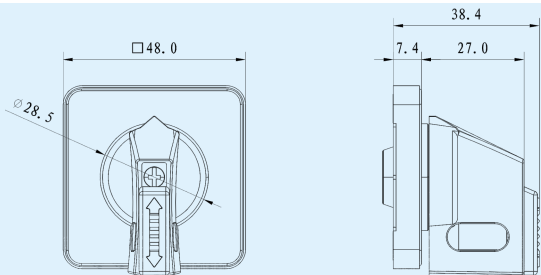
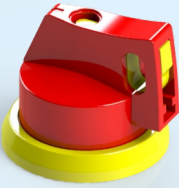
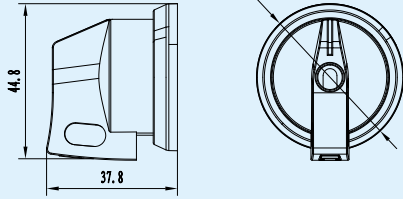
- ◆ 大气条件: 大气是清洁的(无爆炸危险的介质, 且介质中无足以腐蚀金属和破坏绝缘的气体与尘埃); 大气的相对湿度在周围空气温度+40℃时不超过50%, 在较低的温度下, 可以有较高的相对湿度(如温度为+20℃时, 相对湿度不超过90%); 对应温度变化产生在产品表面的凝露, 应注意采取适当的措施。
Atmospheric conditions: The atmosphere is clean (with no explosive medium and no gases or dust that can corrode metals or damage insulation). The relative humidity of the atmosphere is at a temperature of +40 °C in the surrounding air not exceeding 50%, at lower temperatures, there can be higher relative humidity (such as when the temperature is +20 °C, the relative humidity does not exceed 90%); The condensation generated on the surface of the product in response to temperature changes, Attention should be paid to taking appropriate measures.
- ◆ 请勿置于有爆炸性的介质中, 无足以腐蚀和破坏绝缘的气体与导电尘埃的环境;
Do not place in explosive media, environments without gases and conductive dust that can corrode and damage insulation;
- ◆ 使用环境无明显的冲击振动, 并无雨雪侵袭;
There is no obvious impact vibration or rain or snow invasion in the usage environment;
- 安装条件: 水平、垂直。
Installation conditions: horizontal and vertical.
- ◆ 安装类别: III类、IV类;
Installation category: Class III, Class IV;
- ◆ 污染等级: 3级
Installation category: Class III, Class IV;
- ◆ 防护等级: IP20 带防护外壳: IP66
Protection level: IP20 with protective casing: Ip66
- ◆ 安装方式: 面板安装、导轨安装(安装在TH35-7.5标准导轨上)、后部安装。
Installation methods: panel installation, rail installation (installed on TH35-7.5 standard rail), rear installation.

DC-Switch Disconnectors

光伏直流隔离开关

Knobs/handles/panels/Color codes

旋钮/手柄/面板/及颜色代码

手柄代码 Handle code	颜色代码 color code	尺寸 size
B1 	1 黑色 Black 2 红色 Red	
B2 	1 黑色 Black 2 红色 Red	
B3 	1 黑色 Black 2 红色 Red	
B4 	1 黑色 Black 2 红色 Red	

例: B11 B1代表序号; 1 代表: 黑色旋钮+灰色手柄套I+灰色手柄套II
 B12 B1代表序号; 2 代表: 红色旋钮+黄色手柄套I+黄色手柄套II
 其他同理

Example: B11 B1 represents the serial number; 1 represents: black knob + gray handle cover I + gray handle cover II
 B12 B1 represents the serial number; 2 represents: red knob+yellow handle cover I+yellow handle cover II
 Other similar situations

DC-Switch Disconnectors

光伏直流隔离开关

Technical parameters

技术参数

电气特性 Electrical characteristics			
额定工作电压(DC) Rated voltage	Ue	详见参数表	
额定工作电流(DC) Rated current	Ie	详见参数表	
约定自由空气发热电流 Free air heating current	Ith	63A	
额定冲击耐受电压 Rated impulse withstand voltage	Uimp	8kV	
额定短时耐受电流(1s) Rated short-time withstand current	Icw	780A	
额定短路接通能力 Rated short circuit making capacity	Icm	1220A	
额定限制短路电流 Rated limit short-circuit current		5000A	
安装和环境 Installation and Environment			
使用类别 Utilization category	DC-21B/PV2		
有载操作次数 Number of loaded operations	≥500		
无载操作次数 No load operation times	≥20000		
极数 Number of poles	2/3/4/6/8		
安装方式 Installation method	面板安装 Surface	标准TH35-7.5DIN导轨安装 DIN-Rail	后部安装 Rear
M4端子紧固螺丝拧紧力矩(min.-max.) Rated short circuit making capacity	1.2Nm	1.8Nm	
面板安装紧固螺母拧紧力矩(min.-max.) Rated limit short-circuit current	1.0Nm	1.5Nm	
黑色操作手柄的M3紧固螺丝拧紧力矩(min.-max.) Tightening torque of M3 fastening screw for black operating handle	0.5Nm	0.7Nm	
环境温度 Ambient temperature	-40℃ ~ +70℃		
储存温度 Storage temperature	-40℃ ~ +80℃		
最大允许湿度(无冷凝/20/℃) Maximum allowable humidity	90%		
污染等级 Pollution degree	2		
端口IP防护等级 Port IP protection level	IP20		
面板安装孔位置IP防护等级 IP protection level of panel mounting hole position	IP66		

DC-Switch Disconnectors

光伏直流隔离开关

型 号 Type	2极并联 2+2-pole 2poles in series +2 poles parallel	4极 4-pole	4极跳线 输入上面、输出底部 4-polewith jumpersInput on top output bottom	4极跳线 输入和输出底部 4-pole with jumpers Input and output bottom	4极跳线 输入和输出上 4-pole with jumpersInput and output on top
UKGD63	.. A2+2 .. A2+2 .. A2+2	..A4(2xA2) ..A4(2xA2) ..A4(2xA2)	..A4B ..A4B ..A4B	..A4O ..A4O ..A4O	..A4U ..A4U ..A4U
接线图 Wiring diagram					
转换示例 Switching example					

型 号 Type	6极 6-pole	3 + 2极串联3极 2极并联 3+2-pole 3 poles in series +2 poles parallel	8极 8-pole	4 + 2极串联3极 2极并联 4+2-pole 3 poles in series +2 poles parallel
UKGD63	... A6 ... A6 ... A6	..A3+2 ..A3+2 ..A3+2	... A8 ... A8 ... A8	..A4+2 ..A4+2 ..A4+2
接线图 Wiring diagram				
转换示例 Switching example				

DC-Switch Disconnectors

光伏直流隔离开关

接线方式	型号	DC-21B Rating						UL Ratings UL508i			串联极数	光伏回路数
		600V	800V	900V	1000V	1200V	1500V	500V	600V	1000V		
	UKGD63-1-A1	12A	8A	6A	4A						2	1
	UKGD63-2-A1											
	UKGD63-3-A1											
	UKGD63-1-A2	25A	20A	16A	16A	5A	32A	25A			2	1
	UKGD63-2-A2											
	UKGD63-3-A2											
	UKGD63-1-A3	20A	16A	13A	11A	9A	3A				2	2
	UKGD63-2-A3											
	UKGD63-3-A3											
	UKGD63-1-A2+2	50A							45A		2	1
	UKGD63-2-A2+2											
	UKGD63-3-A2+2											
	UKGD63-1-A4	32A	23A		16A	10A	5A	32A	25A		2	2
	UKGD63-2-A4											
	UKGD63-3-A4											
	UKGD63-1-A4B	40A	40A		40A	32A	16A	32A	32A	32A	4	1
	UKGD63-2-A4B											
	UKGD63-3-A4B											
	UKGD63-1-A4O	40A	40A		40A	32A	16A	32A	32A	32A	4	1
	UKGD63-2-A4O											
	UKGD63-3-A4O											
	UKGD63-1-A4U	40A	40A		32A	32A	16A	32A	32A	32A	4	1
	UKGD63-2-A4U											
	UKGD63-3-A4U											
	UKGD63-1-A6	32A	23A		16A	10A	5A	32A	25A		2	3
	UKGD63-2-A6											
	UKGD63-3-A6											
	UKGD63-1-A3+2	50A	50A						40A		2	1
	UKGD63-2-A3+2											
	UKGD63-3-A3+2											
	UKGD63-1-A6B	40A	40A		40A	32A	32A	40A	40A	40A	6	1
	UKGD63-2-A6B											
	UKGD63-3-A6B											
	UKGD63-1-A6O	40A	40A		40A	32A	32A	40A	40A	40A	6	1
	UKGD63-2-A6O											
	UKGD63-3-A6O											
	UKGD63-1-A6U	40A	40A		40A			32A	25A	20A	3	2
	UKGD63-2-A6U											
	UKGD63-3-A6U											
	UKGD63-1-A8	32A	23A	20A	16A	10A	5A	32A	25A		2	4
	UKGD63-2-A8											
	UKGD63-3-A8											
	UKGD63-1-A4+2	50A	50A		40A			40A	40A	32A	3	2
	UKGD63-2-A4+2											
	UKGD63-3-A4+2											