

DC Series For Pv Combiner Box



光伏汇流箱直流元器件



YRL7-63DC无极性直流断路器

YRL7-63DC Non-Polarity DC Circuit Breaker

► 应用 Application

YRL7-63DC光伏直流断路器辅助保护器设计用于在已提供或不需要分支电路保护的电器或电气设备内提供过电流保护。直流电流控制装置。

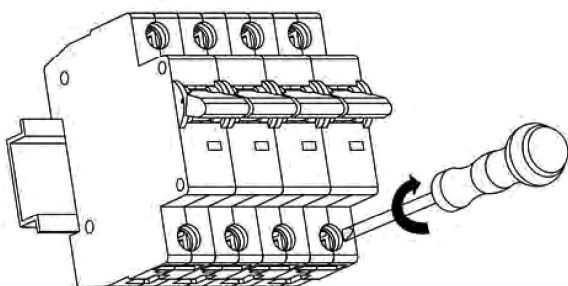
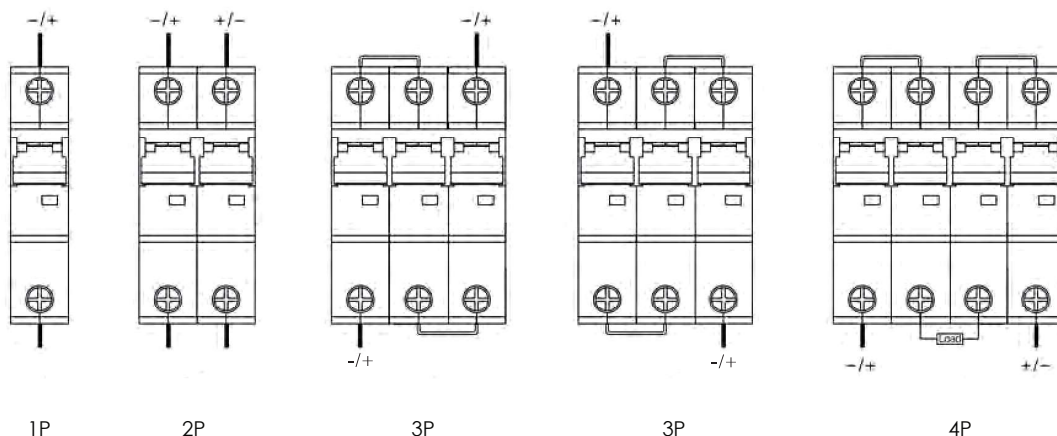
YRL7-63DC PV DC breaker supplementary protectors are designed to provide overcurrent protection within appliances or electrical equipment, where a branch circuit protection is already provided or not required. Devices are designed for direct current (DC) control circuit applications.



► 规格 Specifications

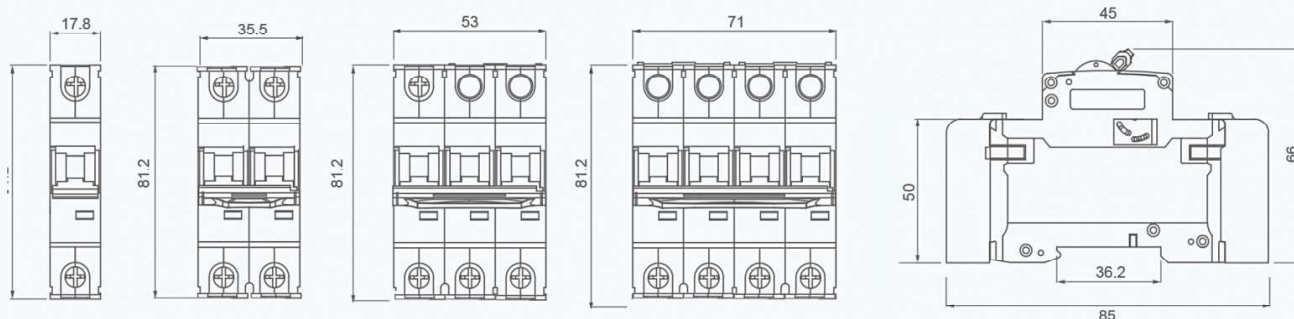
YRL7-63DC光伏系列断路器 YRL7-63DC PV Series Circuit Breaker		YRL7-63DC			
框架度额定电流 (A) Frame degree rated current(A)		63			
电气性能 Electrical performance					
Ue额定工作电压 (V DC) Ue Rated operating voltage(V DC)		1P:300V/250V	2P:550V,600V,800V	3P:750V/900V	4P:1000V/1200V
额定电流 (A) Rated Current In (A)		6 -10 -16 -20 -25 -32 -40 -50 -63			
额定绝缘电压Ui (V DC) Rated insulation voltage Ui(V DC)		2P: 800V 4P: 1200V			
额定冲击电压Uimp (kV) ated Impact voltage Uimp (kV)		8			
极限分断能力Icu (kA) Ultimate breaking capacity Icu (kA)		6	6	6	6
分断能力Ics (%Icu) Run breaking capacity Ics (%Icu)		100%	100%	100%	100%
曲线类型 Curve type		C			
行程类型 Trip type		热磁 Thermal-magnetic			
机械 MECHANICAL	实际平均值 Actual average value	20000			
	标准值 Standard value	8500			
电气 ELECTRIC	实际平均值 Actual average value	2500			
	标准值 Standard value	1500			
控制和指示 Control and indication					
分励脱扣器(SHT) Shunt release (SHT) Mx		选项 Option			
欠压脱扣器 (UNT) Undervoltage release (UNT)					
辅助触点 (AX) Auxiliary contact (AX) OF					
报警触点 (AL) Alarm contact (AL) SD					
接线容量 (mm²) Wiring capacity (mm²)		In≤32A,1.5~16 mm² I≥40A,6-25mm²			
环境温度 (°C) Ambient temperature (°C)		-20 ~70			
海拔 Altitude		≤2000			
相对湿度 Relative humidify		≤95%			
污染程度 Pollution Level		3			
安装环境 Installation Environment		无明显冲击振动 No obvious shock and vibration			
安装类别 Installation category		三级 Class III			
安装 Installation		DIN标准轨 DIN Standard rail			
尺寸 (宽) x (高) x (深) Dimensions(W)x(H)x(Deep)	宽 (W)	17.5	35	52.5	70
	高 (H)	80	80	80	80
	深 (Deep)	71	71	71	71
重量 (kg) Weight (kg)		0.13	0.26	0.39	0.53

► 接线图 Wiring diagram



额定电流 (A) Rated Current (A)						导线截面积 (mm²) Sectional area of wire (mm²)	连接线拧紧力矩 (N.m) Tightening torque of connection wire(N.m)
1	2	3	4	5	6	1	电源侧和负载侧均为2.0 N.m Both the power side and load side are 2.0 N.m
10						1.5	
16 20						2.5	
25						4	
32						6	
40 50						10	
63						16	

► 产品尺寸 Dimension



► 过电流跳闸特性 Over current tripping characteristic

试验 Test	试验电流 Test Current	初始状态 Initial State	有限时间 Limited Time	预期结果 Expected Result	评论 Remarks
a	1.05I _n	冷态 Cold state	1小时 t 1h	不跳闸 Non-tripping	电流在5秒内上升 The current is rising within 5s
b	1.3I _n	在a号测试之后 Right after test number a	<1小时 t<1h	跳闸 Tripping	
c	7I _n	冷态 Cold state	t≤s	不跳闸 Non-tripping	
d	10I _n	冷态 Cold state	t 0.1s	跳闸 Tripping	

► 不同环境温度下使用的电流校正值

Current correction values used at different ambient temperatures

额定电流 (A) Rated current(A) 环境温度 Ambient temperature 固定 电流(A) Fixed current(A)	-35℃	-30℃	-20℃	-10℃	0℃	10℃	20℃	30℃	40℃	50℃	60℃	70℃
3A	3.9	3.78	3.69	3.57	3.42	3.3	3.12	3	2.88	2.79	2.64	2.49
6A	7.2	7.56	7.38	7.14	6.84	6.6	6.24	6	5.76	5.64	5.28	4.98
10A	13.2	12.7	12.5	12	11.5	11.1	10.6	10	9.6	9.3	8.9	8.4
16A	21.12	20.48	20	19.2	18.4	17.76	16.96	16	15.36	14.88	14.24	13.44
20A	26.4	26.4	25	24	23	22.2	21.2	20	19.2	18.6	17.8	16.8
25A	33	32	31.25	30	28.75	27.75	26.5	25	24	23.25	22.25	21
32A	42.56	41.28	40	38.72	37.12	35.52	33.93	32	30.72	29.76	28.16	26.88
40A	53.2	51.2	50	48	46.4	44.8	42.4	40	38.4	37.2	35.6	33.6
50A	67	65.5	63	60.5	58	56	53	50	48	46.5	44	41.5
63A	83.79	81.9	80.01	76.86	73.71	70.56	66.78	63	60.48	58.9	55.44	52.29

► 在不同海拔高度使用的电流修正系数

Current correction factor used at different altitudes

额定电流 I _n (A) Rated current I _n (A)	不同海拔高度修正系数 Different altitude correction factors		
	≤2000m	2000~3000m	≥3000m
3, 6, 10, 16, 20, 25, 32, 40, 50, 63A	1.0	0.9	0.8

► 特性曲线 Characteristic Curve

