产晶资料

# 微型断路器 Miniature Circuit-Breakers

S 280 系列 (80-100 A)

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### 产品介绍 **Product Overview**



### 单个模块可达到100A 的保护 Protection up to 100A in One Module

随着S系列的新产品S280 80-100A的推 出,ABB如今可以从家庭到工业应用, 为客户提供一个完整的断路器家族,以 满足所有100A以下电路保护的要求。

S280系列的独特之处是: 用单个模块宽 度 (17.5mm) 的断路器就能够达到这些额 定电流值。它有1极、2极、3极和4极四种类型。根据

整个系列辅助元件(与S2...系列相同)与S280一同供应。这样,S280就可以实现多种 功能以及配置。

With the introduction of the new S280 80-100A in the S2.. range, ABB is now able to offer a complete system of circuit-breakers which are capable of meeting all the circuit protection requirements up to 100 A, from domestic to industrial applications.

Being the unique series on the market that reaches these rated currents in one module width, the new S280 is available in 1P-2P-3P-4P versions with breaking capacity of 6 kA according to IEC EN 60898 Standard and tripping characteristics C.

A whole family of auxiliary elements (the same as in the S2.. range) is supplied with the new S280, enabling numerous functions and configurations to be developed.



通过叉型母排,S280与其他S2...系列的MCB连接 The new S280 wired with other S2.. MCBs by a fork connection busbar



S280的侧面与S2...系列是相同的。并带有一个手柄,让操作更其轻松 The new S280 has the same profile of the S2.. range and is provided with a handle that makes movement easier



S280高品质得到IMQ和CCC的认可

In acknowledgement of their high level of quality, all the circuit-breakers in the S280 series have been awarded the IMQ and CCC approvals



S280是市场上唯一的单极模块可以达到100A的断路器 S280 MCBs are the unique series on the market in 1P-1 module width up to 100 A

S280



顶部/底部端子的规格是柔性线 $35~\text{mm}^2$ ; 刚性线 $50~\text{mm}^2$ 

Upper/lower size of terminals is 35 mm<sup>2</sup> for flexible cables/50 mm<sup>2</sup> for rigid cables

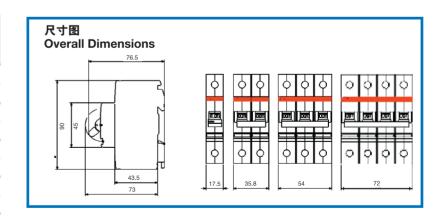


由于使用叉型和针型的隔离母排以及通用安装系统 (Unifix),因而ABB的接线系统让安装者和配装柜厂家的工作更轻松

Wiring with fork type and pin type insulated busbars and with Unifix, ABB rapid wiring system which facilitates the work of installers and panel builders

### 订货资料 Ordering Information

型号 Type	极数 Pole	额定电流 Rated current In [A]
S 281-C80	1P	80
S 281-C100	1P	100
S 282-C80	2P	80
S 282-C100	2P	100
S 283-C80	3P	80
S 283-C100	3P	100
S 284-C80	4P	80
S 284-C100	4P	100



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## 辅助元件及配件 Auxiliary Elements and Accessories

S280系列使用辅助元件及配件后可以得到多种不同的功能以及配置。

#### 辅助触点

辅助触点用来指示断路器处于"分断"还是"闭合"的位置。当断路器的状态因自动或手动而改变时,它会发出一个远程信号。

辅助触点有以下组合: 1 NO+1 NC, 2 NC, 2 NO, 2 NO+1 NC, 1 NO+2 NC, 3 NO, 3 NC (注: NO为常开触点, NC 为常闭触点)。

它们均使用Faston连接方式。

#### 信号触点

信号触点用来指示由于过载或短路引起的自动脱扣。手动断开时,它不会指示断路器所发生的变化。

并可以提供集成有信号触点与辅助触点的1/2模块。

#### 分励脱扣器

有两种不同的额定电压类型,它们用于远程使断路器脱 扣。

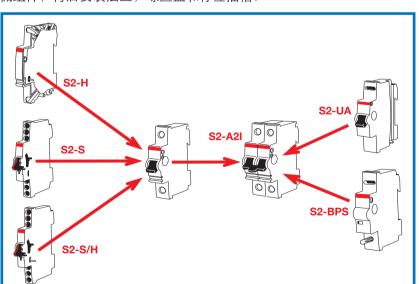
#### 欠压脱扣器

根据相关标准,欠压脱扣器用于当电压下降到额定值的 70%到35%时可保护负载。

在许多情况,它用于在安全可靠的条件下进行紧急断 电。它有6种不同额定电压值的类型。

#### 配件

S280同样有一个完整系列的配件(与S2...类别相同)。即使是在安装时发生的小问题,它们也可以很迅速、轻易地解决。它们包括:机械联锁,端子盖,相间隔板,机械组件,背后安装法兰,螺丝盖和标签插槽。





The new S 280 series can be coupled with auxiliary elements and accessories to obtain a variety of functions and configurations.

#### **Auxiliary contacts**

The auxiliary contacts indicate the "open" or "closed" position of the circuit-breaker enabling the tripping of a remote signal(e.g. luminous)at each manual or automatic change of state.

They are available in the 1 NO+1 NC, 2 NC, 2 NO, 2 NO+1 NC, 1 NO+2 NC, 3 NO, 3 NC versions and with Faston connections.

#### Signal contacts

The signal contacts indicate the automatic tripping of the circuit-breaker when caused by an overload or short-circuit. In the event of manual operation, they indicate no change in the state of the circuit-breaker.

A verson with auxiliary and signal contacts in 1/2 module is also available

#### **Shunt trips**

Available in two versions with different rated current, the shunt trips are used for remote tripping of the circuit-breakers.

#### Undervoltage releases

The undervoltage releases are used to protect the load

in the event of a voltage drop between 70% and 35% of its rated value, as established by the Standards. In many cases it is used to prompt an emergency outage in positive safety conditions.

They are available in six versions differing in the values of rated voltage.

#### Accessories

The new S 280 is also supplied with a complete series of accessories (the same as in the S 2.. range) which can quickly and easily resolve even the smallest problems during installation. The offer includes mechanical interlocks, terminal covers, false-pole spacers, mechanical

blocks, flanges for rear board mounting, screw protection covers, label carriers.

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# 技术资料 Technical Data

标准	Standards			IEC 60898 – IEC 60947-2
额定电流	Rated current, In		[A]	80, 100
级数	Poles			1P, 2P, 3P, 4P
额定电压	Rated voltage, Ue	单极 one-pole AC	[V]	230
		多极 multiple-pole AC	[V]	230/400
		单极 one-pole DC	[V]	60
		双极 two-pole DC	[V]	110
绝缘电压	Insulation voltage Ui		[V]	500
最大工作电压	Max. operating voltage, Ub max		[V]	440
最小工作电压	Min. operating voltage, Ub min		[V]	12 V a.c. – 12 V d.c.
额定频率	Rated frequency		[Hz]	5060
根据 IEC 60898 额定分断容量	Rated breaking capacity acc. to II	EC 60898 Icn	[A]	6000
根据 IEC 60947-2 额定分断容量	Rated breaking capacity acc.	极限 ultimate Icu	[kA]	10
2极- 230 V	to IEC 60947-2 2 poles- 230 V	运行 service lcs	[kA]	10
根据 IEC 60947-2 额定分断容	量Rated breaking capacity acc.	极限 ultimate Icu	[kA]	6
3和4极- 400 V	to IEC 60947-2 3, 4 poles – 400 '	V 运行 service lcs	[kA]	6
耐受电压	Voltage withstanding capacity	脉冲 impulse (1.2/50)	[kV]	5
		d frequency (50-60 Hz)	[kV]	3
热磁脱扣特性	Thermomagnetic release character	eristic	С	5 ln ≤ lm ≤ 10 ln
每极耗散功率	Dissipated power per pole	80 A	[W]	5
		100 A	[W]	6.75
每极内阻	Internal resistance per pole	80 A	[mOhm]	0.77
		100 A	[mOhm]	0.67
拨动开关	Toggle			黑色开关置于 ON-OFF 位置
				black sealable in ON-OFF position
电气寿命	Electrical life			4000
机械寿命	Mechanical life			10000
防护等级	Protection degree	外壳 housing		IP4X / IPXXD (已安装 installed)
- le tt / 7		端子 terminals		IP2X / IPXXB (正面 frontal)
自熄灭等级	Self-extiguishing degree			V0 thickness 1.6 UL 94 yellow paper
机械抗冲击能力	Mechanical shock resistance			至少可承受2次30g / 13 ms的冲击
				minimum 30g – 2 shocks – duration 13 ms
抗震能力	Resistance to vibrations acc. to IE	EC 68-2-6		5g,以0.8 In 251505 Hz 的频率转动20次
11 41 F 17		\D_ <del>\</del>		5g – 20 cycles at frequency 51505 Hz with load 0.8 In
热带气候	Tropicalization,	湿热 humid hea		28周期,55/95… 100 28 cycles with 55/95 … 100
根据IEC 68-2	acc. to IEC 68-2 恒定气候条件	constant climatic condition variable climatic condition		23/83 - 40/93 - 55/20 25/95 - 40/95
环境温度		variable cilitiatic condition		
	Ambient temperature [°C]		-25+55	
贮存温度	Storage temperature [°C]		-40+70 柔性35 flexible - 刚性50 rigid	
端子大小 上 / 下 安装方式	Terminal size upper/lower per cable [mm²]  Mountina		以快速安装装置卡在DIN 50022 (35 mm) 导轨上	
父衣月八	Mounting			以快速安装装直下住DIN 50022 (35 mm) 守机上 on DIN rail EN 50022 (35 mm) by means of rapid fixing device
	Tightoning torque			2.5
<u> </u>	Tightening torque [Nm]		90 x 68 x 17.5	
	Pole dimensions (HxDxW) [mm]			
每极重量	Pole weight		[9]	160

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