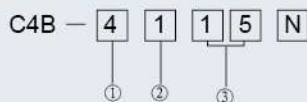




### 特点 Features

- 强制断开动作装置 (仅 NC 接点), 可以在发生像接点熔断等故障时断开接点
- 强化顶部密封结构, 以提高密封性能
- 内藏接点座具有速动型: 1NC/1NO; 慢动型: 1NC/1NO、2NC
- Forced open action device (NC contacts only), to disconnect the contact when the contact has fusing and other failures
- Strengthened top seal structure improves the sealing performance
- Built-in contact holder has fast-action type: 1NC / 1NO; Slow-action: 1NC / 1NO and 2NC

### 型号说明 Model Number Structure



项目 Item	代号 Code	说明 Description
① 导管 / 连接器尺寸 Conduit / connector size	1	Pg13.5 (1 导管型) Pg13.5 (1 conduit type)
	4	M20 (1 导管型) M20 (1 conduit type)
② 内藏开关 Built-in switch	1	1NC/1NO (速动型) 1NC/1NO (quick-action type)
	5	1NC/1NO (慢动型) 1NC/1NO (slow-action type)
	A	2NC (慢动型) 2NC (slow-action type)
③ 头部及传动杆 Head and driving rod	11	滚珠摆杆型 (树脂摆杆, 树脂滚珠) Roller lever (resin lever, resin ball)
	12	可调滚珠摆杆, Form-Lock (金属摆杆, 金属滚珠) Adjustable roller lever, Form-Lock (metal lever, metal ball)
	15	滚珠摆杆型 (金属滚珠) Roller lever (metal ball)
	16	可调滚珠摆杆, Form-Lock (树脂滚珠) Adjustable roller lever, Form-Lock (resin ball)
	17	可调棒式摆杆, Form-Lock (长条杆) Adjustable stick lever, Form-Lock (long lever)
	18	可调滚珠摆杆, Form Lock (金属摆杆, 橡胶滚珠) Adjustable roller lever, Form Lock (metal lever, rubber ball)
	70	顶滚珠柱塞型 Top ball plunger type
	71	滚珠柱塞型 Ball plunger type
	72	滚珠柱塞型 Ball plunger type
	81	线圈弹簧型 Coil spring type
	87	塑料棒型 Plastic stick type
86	金属棒型 Metal stick type	

注: 导管连接器尺寸常规默认为 M20x1.5.

NOTE: The default size of conduit connector is M20x1.5.

### 额定值 Ratings

额定电压 (V) Rated voltage (V)	非感性负载 (A) Non-inductive load (A)				感性负载 (A) Inductive load (A)			
	阻性负载 Resistive load		灯负载 Lamp load		感性负载 Inductive load		电动机负载 Motor load	
	NC	NO	NC	NO	NC	NO	NC	NO
AC	125	10	3	1.5	10		5	2.5
	250	10	2	1	10		3	1.5
	400	10	1.5	0.8	3		1.5	0.8
DC	8	10	6	3	10			6
	14	10	6	3	10			6
	30	6	4	3	6			4
	125	0.8	0.2	0.2	0.8			0.2
	250	0.4	0.1	0.1	0.4			0.1

注 1. 上述数值表示恒定电流。

注 2. 所谓感性负载, 是功率因数 0.4 以上 (交流), 时间常数 7ms 以下 (直流的负载)。

注 3. 所谓灯负载就是有 10 倍浪涌电流的负载。

注 4. 所谓电动机负载, 就是有 6 倍浪涌电流的负载。

Note1. The above values represent constant current.

2. The so-called inductive load refers to the load with power factor of 0.4 or more (AC) and the time constant below 7ms (DC).

3. The so-called lamp load refers to the load with 10 times of surge current.

4. The so-called motor load is the load with 6 times of surge current.

### 规格 Specifications

保护等级 Protection level	IP66	
寿命 Life	电气 Electrical	50 万次以上 (AC250V 10A、电阻负载) More than 500,000 times (AC250V 10A, resistive load)
操作速度 Operating speed	1mm-0.5m/s	
操作频率 Operating frequency	机械 Mechanical	120 次/min 120 times/min
	电气 Electrical	30 次/min 30 times/min
额定频率 Rated frequency	50/60Hz	
绝缘电阻 Insulation resistance	同极端子之间、及端子与不带电金属部之间 100MΩ 以上 (DC500V 兆欧表) 100MΩ or more (DC500V Megameter) between homopolars, and between terminals and uncharged metal parts	
接触电阻 Contact resistance	25mΩ 以下 (初期值) 5mΩ or less (initial value)	
耐电压 Withstand voltage (EN60947-5-1)	同极端子间: 2.5kV(速动型)/4kV(慢动型) Between homopolar terminals: 2.5kV(quick-action type)/4kV(slow-action type)	
	异极端子间: 4kV(慢动型) Between heteropolar terminals: 2.5kV(slow-action type)	
	带电金属部之间: 4kV Between charged metal parts: 4kV	
	各端子与不带电金属部之间: 6kV Between terminals and uncharged metal parts: 6kV	
额定绝缘电压 (Ui) Rated insulation voltage (Ui)	600V(EN60947-5-1)	
开闭时逆电压 Reverse voltage when on/off	1500V max (EN60947-5-1)	
污染度 (使用环境) Pollution degree (environmental conditions)	污染度 3(EN60947-5-1) Pollution degree 3 (EN60947-5-1)	
防触电保护等级 Electric shock protection grade	Class I (带接地端子) Class I (with ground terminal)	
振动 Vibration	误动作 Malfunction	10 - 55Hz 0.75mm 单振幅 10 - 55Hz 0.75mm single amplitude
	耐久 Duration	1,000m/s <sup>2</sup>
冲击 Impact	耐久 Duration	1,000m/s <sup>2</sup>
	误动作 Malfunction	300m/s <sup>2</sup>
环境温度 Ambient temperature	使用时: -20~+80℃ (没有结冰) Using: -20~+80℃ (With no icing)	
环境湿度 Ambient humidity	95%RH 以下 Less than 95% RH	
质量 Weight	约 250g About 250g	

注 1. 上述值为初始值。

注 2. 有些型号中可能与上述内容不同, 请另外垂询。

\*1. 该保护结构基于标准 (EN69047-5-1) 规定的测试方法, 请根据使用环境、使用条件来事先确认密封性。

\*2. 寿命的条件为环境温度 5 - 35℃、环境湿度 40 - 70%RH 时的数值。

Note 1. The above are initial values.

Note 2. Values of some models may be different from the above, please contact us for details.

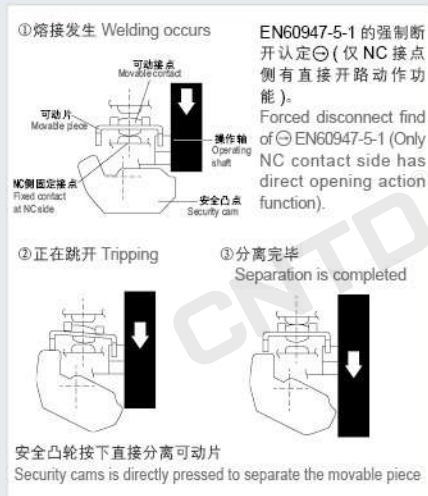
\*1. The protection structure is tested based on method predetermined by standard (EN69047-5-1), please confirm the sealing in advance according to the operating environment and conditions.

\*2. The conditions of life are the values under the ambient temperature of 5~35℃ and humidity of 40 to 70% RH. For other detailed conditions, please contact us.

### 强制断开机构 Forced Disconnecting Mechanism

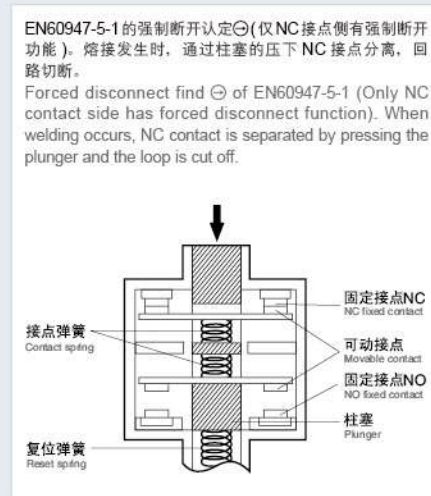
#### ■ 1NC、1NO 接点 (速动型)

1NC and 1NO contacts (quick-action type)



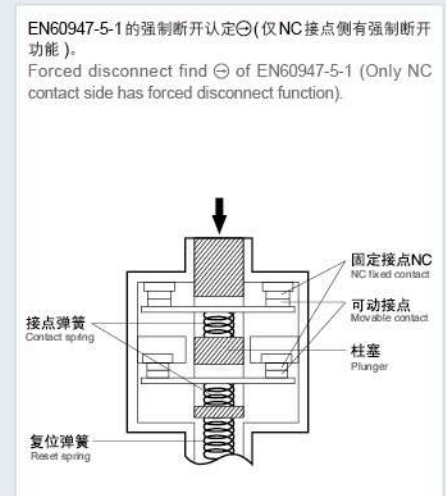
#### ■ 1NC、1NO 接点 (慢动型)

1NC and 1NO contacts (slow-action type)



#### ■ 2NC 接点 (慢动型)

2NC contacts (slow-action type)



### 接点形式 Contact form

型号 Model	接点 Contact	接点形式 Contact form	动作模式 Operation mode	说明 Explanation
C4B-□1□N	1NC/1NO (速动型) 1NC/1NO (Quick-action type)			仅 NC 接点 (11-12) 带强制断开功能, 取得认证 (端子 No.11-12、13-14 不可作异极使用) Only NC contact (11-12) has forced disconnect function and got the certification (terminal No.11-12,13-14 can not be used as different heteropoles)
C4B-□5□N	1NC/1NO (慢动型) 1NC/1NO (Slow-action type)			仅 NC 接点 (11-12) 带强制断开功能, 取得认证 (端子 No.11-12、13-14 不可作异极使用) Only NC contact (11-12) has forced disconnect function and got the certification (terminal No.11-12,13-14 can not be used as different heteropoles)
C4B-□A□N	2NC (慢动型) 2NC (Slow-action type)			两个 NC 接点 (11-12、21-22) 带强制断开功能, 取得认证 (端子 No.11-12、21-22 可以作异极使用) Two NC contacts (11-12, 21-22) have forced disconnect function and got the certification (terminal No.11-12,21-22 can be used as different heteropoles)

### 动作特性 Operating Characteristics

动作特性		型号 Model	C4B-□□11N	C4B-□□15N	C4B-□□16N *1	C4B-□□17N *2	C4B-□□18N *2	C4B-□□70N	C4B-□□71N	C4B-□□81N	C4B-□□86N	C4B-□□87N
动作力 Action force	OF 最大 Max.		9.41N	9.41N	9.41N	2.12N	9.41N	18.63N	18.63N	1.47N	1.47N	1.47N
回复力 Restore force	RF 最小 Min.		1.47N	1.47N	1.47N	0.29N	1.47N	1.96N	1.96N			
预行程 Pretravel	PT		21° ± 3°	21° ± 3°	21° ± 3°	21° ± 3°	21° ± 3°	2mm	2mm	15	15	15
	PT (2nd) *3 *5		(45°)	(45°)	(45°)	(45°)	(45°)	(3mm)	(3mm)			
过行程 Overtravel	OT 最小 Min.		50°	50°	50°	50°	50°	5mm	5mm			
响应差的行程 Poor response travel	MD 最大 Max. *4		12°	12°	12°	12°	12°	1mm	1mm			
强制断开预行程 Forced disconnected pretravel	DOT 最小 Min. *3*6		35°	35°	35°	35°	35°	3.2mm	3.2mm			
		*4*6	55°	55°	55°	55°	55°					
强制断开力 Forced disconnected force	DOF 最小 Min. *6		19.61N	19.61N	19.61N	19.61N	19.61N	49.03N	49.03N			
总行程 Total travel	TT *5		(75°)	(75°)	(75°)	(75°)	(75°)	(7mm)	(7mm)			
自由位置 Free position	FP 最大 Max.							38mm	51mm			
动作位置 Action position	OP							35 ± 1mm	48 ± 1mm			

注 2NC 接点 ON/OFF 动作的同时性有差异, 使用时请确认。

\*1. 摆杆长度为 31.5mm 时的特性值。

\*2. 杆长为 140mm 时的特性值。

\*3. 仅慢动型。

\*4. 仅速动型。

\*5. 参考值。

\*6. 为了保证安全使用请务必加以确保。

Note The simultaneity of ON / OFF operation of 2NC contacts have difference, please make sure before using it.

\*1. The property value when length of lever is 31.5mm.

\*2. The property value when length of lever is 140mm.

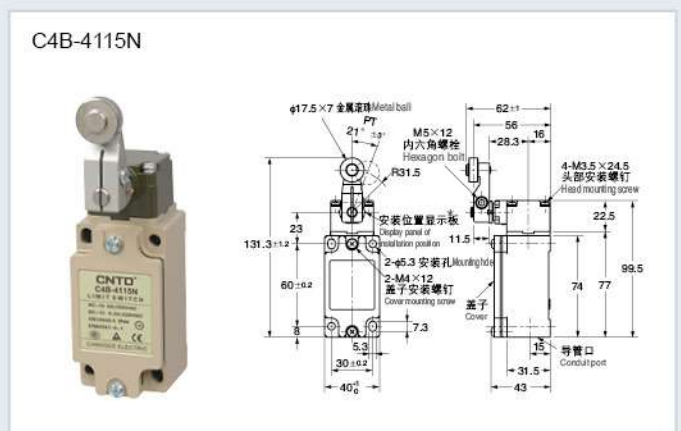
\*3. Only for slow-action type.

\*4. Only for quick-action type.

\*5. Reference values.

\*6. Please make sure in order to ensure the safe use.

### 外观和尺寸 Appearance and Dimension



# C4B-□N 立式安全限位开关 Vertical Safety Limit Switch

## 外观和尺寸 Appearance and Dimension

