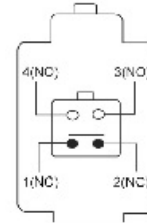


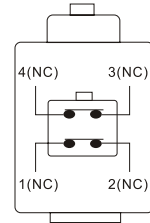
# LL1D4D-N, LL1D4D-R Limit Switch 行程开关



## 接触形式 Contact Type



一开一闭型  
1NC+1NO Type



二闭型  
2NC Type

防护等级 protection degree	IP65	
寿命life	机械性 mechanical	1,500万次以上
	电气性 electrical	15万次以上(慢动作是AC250V 10A阻抗负载)(快动作请参考特性曲线)
容许操作速度 operation speed	1mm ~ 0.5m/s(LL1D4D-1120N型)	
接点间隙 (contactor gap)	2X0.5mm (快动作snap action) 2X2.0mm (慢动作slow action)	
容许操作频度 operation frequency	机械性 mechanical	120times/min
	电气性 electrical	30times/min
额定周波数 rated cycle	50/60Hz	
绝缘阻抗 Insulation resistance	同极端子间及各端子和非充电金属部间 between the same terminal of same pole, every terminals, and non-charged metal parts 100MΩ以上(DC500V)	
接触阻抗 contact resistance	25MΩ以下(初期值initial value)	
电压耐受 voltage withstand	同极端子间 same terminal	AC1,000V 50/60Hz 1min(快动作)/Uimp 4KV(慢动作)
	共极端子间 terminal in same pole	Uimp 4KV(慢动作)
	各端子和非充电金属部间 terminal and non-charged metal	AC2,500V 50/60Hz 1min(快动作)/Uimp 4kV(慢动作)
	额定绝缘电压(Ui) rated isolation voltage	400V max.(EN60947-5-1)
闭路时逆起电压 completed-circuit opposite voltage	1500V max.(EN60947-5-1)	
污染度(使用环境) dustiness	污染度3(EN60947-5-1)	
附带条件短路电流 proviso short circuit current	100A(EN60947-5-1)	
额定密闭热电流(Ithe) rated obtrated thermocurrent	10A(EN60947-5-1)	
感电保护等级 electrification protection degree	Class II (双重绝缘double insulation)	
振动 vibration	误动作 misoperation	10~55Hz 补振幅amplitude 0.75mm
冲击 impact	耐久 endurance	1,000m/s <sup>2</sup> (约100G以上)
	误动作 misoperation	300m/s <sup>2</sup> (约30G以上)
使用周围温度 temperature	-30~+70°C(但不可结冰with no ice)	
使用周围湿度 humidity	< 95%RH	

型号mode	接点contactor	接触形式 contact type	动作型式 operation type	备注remarks
LL1D4D-□1□N	INC/INO (Snap Action)	13-14 11-12 Za	breakover 11-12 13-14 行程 →	虽然有安全凸轮强制 开离功能,但未取得 强制开离认证。 Security cam force to open and shut, but didn't obtained the certificate.
LL1D4D-□5□N	INC/INO (Slow Action)	11-12 23-24 Zb	breakover 11-12 23-24 行程 →	只限NC接点(11-12) 有强制开离功能,并 有认证(可作为共极使用) Only NC contactor have mandatory open and shut function, have certificate
LL1D4D-□A□N	INC/INO (Slow Action)	11-12 21-22 Zb	breakover 11-12 21-22 行程 →	两个NC接点(11-12、 21-22)有强制开离功能, 并有认证(可作为共极使用) The two NC contactors have mandatory open and shut function, have certificate

### 快速动作 Snap Action(1NC/1NO)慢速动作Slow Action(2NO)

动作特性 operation specialty	型号mode	LL1D4D-□120N LL1D4D-□A20N	LL1D4D-□121N LL1D4D-□A21N	LL1D4D-□122N LL1D4D-□A22N	LL1D4D-□127N LL1D4D-□A27N
动作需要的力量 operation strength	OF最大	4.90N{500gf}	4.22N{430gf}	4.90N{500gf}	4.22N{430gf}
复归力severt	RF最小	0.49N{50gf}	0.42N{43gf}	0.49N{50gf}	0.4N{43gf}
动作前的移动 move before operation	PT	18° ~ 27°	18° ~ 27°	18° ~ 27°	18° ~ 27°
动作后的移动 move after operation	OT最小	40°	40°	40°	40°
应差的移动 movement differential	MD最大	14°	14°	14°	14°
动作位置 operation position	OP	-	-	-	-
全体的动作 group move	TT	(70°)	(70°)	(70°)	(70°)
强制动作前的移动 move before force operation	POT最小	50°	50°	50°	50°
强制动作前的力量 strength before force operation	POF最小	19.61N{2,000gf}	19.61N{2,000gf}	19.61N{2,000gf}	19.61N{2,000gf}

### 慢速动作Slow Action(1NC/2NO)

动作特性 operation specialty	型号mode	LL1D4D-□520N	LL1D4D-□521N	LL1D4D-□522N	LL1D4D-□527N
OF 最大max		4.90N{500gf}	4.22N{430gf}	4.90N{500gf}	4.22N{430gf}
RF 最小min		0.49N{50gf}	0.42N{43gf}	0.49N{50gf}	0.42N{43gf}
PT		18° ~ 27°	18° ~ 27°	18° ~ 27°	18° ~ 27°
PT (2nd)		44°	44°	44°	44°
OT 最小min		40°	40°	40°	40°
OP		-	-	-	-
TT		(70°)	(70°)	(70°)	(70°)
POT 最小min		50°	50°	50°	50°
POF 最小min		19.61N{2,000gf}	19.61N{2,000gf}	19.61N{2,000gf}	19.61N{2,000gf}