

Reed switches and mercury tilt switches

Detection

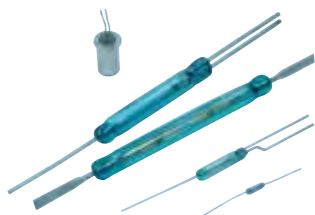
Clearance, position, level, presence

Switching

Telecom, tester, measurement

Reed Switches and Mercury Tilt Switches

Detecting a clearance, a position, a level in extrem environments without mechanical link between the moving parts and without maintenance, such is the daily challenge of the Reed contact submitted to a magnetic field in industrial sectors as various as money, space, control, telecom...



Sensitivity to be specified in the order

PRODUCT REFERENCE	Contact type	Max. switching voltage	Max. switching current	Max. switching power	Standard sensivity range	Cable length
AC01	1NO	30VDC	0,01A	0,25VA	5-20AT	6mm
AC03		100VDC	0,5A	12VA	10-35AT	10mm
AC05		100VDC	0,5A	12VA	10-35AT	14mm
AJ21		100VDC	0,4A	10VA	10-35AT	14 mm
AV10		7500VDC	0,2A	50VA	80-130AT	53,4 mm
AD22		250VDC	1,3A	80VA	40-105AT	52mm
AD81		250VDC	3A	120W	70-100AT	50mm
AI02		200VDC	0,5A	10W	15-30AT	10mm
AI43		200VDC	0,5A	10W	15-30AT	15mm
AI44		200VDC	2A	30W	15-35AT	20,5mm
CD29	change-over switch	250VAC	1A	25W	50-90AT	d 34,3mm
CD30		500VAC	3A	100VA	60-100AT	34,3mm
CG21		100VDC	0,25A	NC 3W/NO 8W	15-35AT	14,5mm
CG21V	100VDC	0,25A	NC 3W/NO 8W	15-35AT	14,5mm, "with bending"	
IB600099	tilt switch	240VDC	0,4A	60VA	---	mercury switch

Reed Relays in DIP enclosure



The most popular and the most industrial of the range. It offers all contact combinations. It is designed to switch inputs of telephony levels or PLC, signals from sensors or safety components.

Internal scheme top view	PRODUCT REFERENCE	Contact type	Characteristics of the bulb			Characteristics of the coil		Specifications	Dimensions mm
			Max. switching voltage	Max. switching current	Max. switching power	Voltage rating	R. coil at 20°C		
	D31A3100	1NO	100VDC	0,5A	10VA	5VDC	500 Ω	---	19,1 x 6,6 x 6,4
	D31A3110		100VDC	0,5A	10VA	5VDC	500 Ω	diode	
	D31A5100		100VDC	0,5A	10VA	12VDC	1 kΩ	---	
	D31A5110		100VDC	0,5A	10VA	12VDC	1 kΩ	diode	
	D31A6110		100VDC	0,5A	10VA	15VDC	2150 Ω	diode	
	D31A7100		100VDC	0,5A	10VA	24VDC	2150 Ω	---	
	D31B3110	1NC	100VDC	0,5A	10VA	5VDC	500 Ω	diode	19,1 x 6,6 x 6,4
	D31B5110		100VDC	0,5A	10VA	12VDC	1 kΩ	diode	
	D31C2100	change-over	100VDC	0,25A	3VA	5VDC	200 Ω	---	19,1 x 6,6 x 6,4
	D31C2110		100VDC	0,25A	3VA	5VDC	200 Ω	diode	
	D31C5100		100VDC	0,25A	3VA	12VDC	500 Ω	---	
	D31C5110		100VDC	0,25A	3VA	12VDC	500 Ω	diode	
	D31C7100		100VDC	0,25A	3VA	24VDC	2150 Ω	---	
	D31C7110		100VDC	0,25A	3VA	24VDC	2150 Ω	diode	
	D32A3100	2NO	100VDC	0,5A	10VA	5VDC	200 Ω	---	19,1 x 6,6 x 6,4
	D32A3110		100VDC	0,5A	10VA	5VDC	200 Ω	diode	
	D32A5100		100VDC	0,5A	10VA	12VDC	500 Ω	---	
	D71A2100	1NO	100VDC	0,5A	10VA	5VDC	380 Ω	---	19,1 x 6,6 x 5,5
	D71A2110		100VDC	0,5A	10VA	5VDC	380 Ω	diode	
	D71A5100		100VDC	0,5A	10VA	12VDC	530 Ω	---	

Reed Relays in SIP enclosure



Relays for high density component circuits : alarms, testers, industrial control.

Internal scheme top view	PRODUCT REFERENCE	Contact type	Characteristics of the bulb			Characteristics of the coil		Specifications	Dimensions mm
			Max. switching voltage	Max. switching current	Max. switching power	Voltage rating	R. coil at 20°C		
	D41A3100L	1NO	100VDC	0,5A	10VA	5VDC	500 Ω	---	19x (5 au 6) x 7,5
	D41A3110L		100VDC	0,5A	10VA	5VDC	500 Ω	diode	

High voltage relay

Dielectric strenght between contacts > 10KVDC and 14VDC between coil and contact.

PRODUCT REFERENCE	Contact type	Max. switching voltage	Max. switching current	Max. switching power	Voltage rating	R. coil at 20°C	Specifications	Dimensions mm
R1380L00	1NO	7500VDC	0,2A	50VA	6VDC	75 Ω	high voltage relay	65 x 15,2 x 16,9
R1329L00		7500VDC	0,2A	50VA	12VDC	300 Ω		
R1343L00		7500VDC	0,2A	50VA	24VDC	1200 Ω		
R1402L13	1NC	5000VDC	0,2A	50VA	12VDC	300 Ω		
R1446L13		5000VDC	0,2A	50VA	24VDC	1200 Ω		

These relays can be mounted on PCB or screwed on a base plate.

Reed D and R Relay Range

Relays with ferro-magnetoc shieldinf for telecom type applications



Internal scheme top view	PRODUCT REFERENCE	Contact type	Characteristics of the bulb			Characteristics of the coil		Specifications	Dimensions mm
			Max. switching voltage	Max. switching current	Max. switching power	Voltage rating	R. coil at 20°C		
	F51A2100	1NO	250VDC	0,4A	14VA	5VDC	345 Ω	comes in coated version ref. F81Ax100	30 x 9,5 x 10
	F51A5100		250VDC	0,4A	14VA	12VDC	2145 Ω		
	F51A7100		250VDC	0,4A	14VA	24VDC	7845 Ω		
	F81A2500	1NO mercury	500VDC	1A	50VA	5VDC	140 Ω	Position vertically	30 x 9,5 x 10
	F81A5500		500VDC	1A	50VA	12VDC	1000 kΩ		
	F81A7500		500VDC	1A	50VA	24VDC	2300 Ω		
	F61A2100	1NO	250VDC	0,4A	14VA	5VDC	345 Ω	Coil/contact insulation 4KV	30 x 9,5 x 11
	F61A5100		250VDC	0,4A	14VA	12VDC	2145 Ω		
	F61A7100		250VDC	0,4A	14VA	24VDC	7845 Ω		
	F72C2500	2 mercury wetted Change-over switch	500VDC	1A	50VA	5VDC	75 Ω	Position vertically	30 x 16,5 x 11
	F72C5500		500VDC	1A	50VA	12VDC	350 Ω		
	F72C7500		500VDC	1A	50VA	24VDC	1350 Ω		



Internal scheme top view	PRODUCT REFERENCE	Contact type	Characteristics of the bulb			Characteristics of the coil		Specifications	Dimensions mm
			Max. switching voltage	Max. switching current	Max. switching power	Voltage rating	R. coil at 20°C		
	R0292B00	1NO	100VDC	0,4A	12VA	4VDC	250 Ω	---	23 x 7,5 x 6,7
	R0293B08		100VDC	0,4A	12VA	5VDC	450 Ω		
	R0294B08		100VDC	0,4A	12VA	12VDC	1600 Ω		
	R0295B08		100VDC	0,4A	12VA	24VDC	2800 Ω		
	R0550B08	1NO	100VDC	0,4A	12VA	4VDC	500 Ω	DIL layout	20,2 x 10,1 x 7,2
	R0551B08		100VDC	0,4A	12VA	5VDC	500 Ω		
	R0552B08		100VDC	0,4A	12VA	12VDC	1000 Ω		
	R0553B08		100VDC	0,4A	12VA	24VDC	2150 Ω		
	R0250W00	change-over	100VDC	0,25A	3VA	4VDC	75 Ω	---	23 x 7,5 x 6,7
	R0251W00		100VDC	0,25A	3VA	6VDC	150 Ω		
	R0252W00		100VDC	0,25A	3VA	12VDC	500 Ω		
	R0253W00		100VDC	0,25A	3VA	24VDC	1800 Ω		
	R0115S06	1NO	250Veff	3A	100VA	6VDC	250 Ω	step 5,08	65 x 15,5 x 16
	R0116S06		250Veff	3A	100VA	12VDC	1000 kΩ		
	R0117S06		250Veff	3A	100VA	24VDC	4 kΩ		
	R0542B08	1NC	100VDC	0,4A	12VA	4VDC	200 Ω	DIL layout	20,2 x 10,1 x 7,2
	R0543B08		100VDC	0,4A	12VA	5VDC	200 Ω		
	R0544B00		100VDC	0,4A	12VA	12VDC	500 Ω		
	R0546B00		100VDC	0,4A	12VA	24VDC	2150 Ω		
	R0585B01	1NO bistable 2 coils	100VDC	0,2A	5VA	5VDC	2x500 Ω	diode	20,2 x 10,1 x 10
	R0582B01		100VDC	0,2A	5VA	12VDC	2x1500 Ω		
	R0861P12	mercury wetted Change-over switch	500VDC	2A	100VA	5VDC	335 Ω	position vertically	40,8 x 14,2 x 10,4
	R0760P00		500VDC	2A	100VA	12VDC	680 Ω		
	R0761P00		500VDC	2A	100VA	24VDC	2650 Ω		
	R0866P00	2 mercury wetted Change-over switch	500VDC	2A	100VA	5VDC	125 Ω	position vertically possible C.O.T	40,8 x 19,8 x 10,4
	R0720P00		500VDC	2A	100VA	12VDC	355 Ω		
	R0721P00		500VDC	2A	100VA	24VDC	800 Ω		

45 years of innovation :

celduc[®], a specialist in power techniques and electronics, can call upon many years of practical experience and is fully focused on serving its market and customers the world over. **celduc**[®] dates back to 1960 when the company was founded by Michel GUICHARD. Today it is split into two separate trading companies, **celduc**[®] **transfo** & **celduc**[®] **relais** to channel and focus its expertise into two separate market sectors.

celduc[®] **relais** is now structured into three strategic business units each with its own dedicated R&D and marketing teams. The three market sectors are solid state relays, magnetic proximity sensors and reed switches. By focusing on these separate areas, the company has pursued innovations that have enabled it to gain an unrivalled and long-standing reputation.

The Saint-Etienne-based **celduc**[®] group is a key factor in the prosperity of the Rhône-Alpes region and with over 60 % of its turn over exported, it is established as a truly international company. Well established in Europe, the company has an increasing stature in the USA and in ASIA.

celduc[®] relais products :

- > **Solid state relays** : (commonly known as SSR) represent 60% of the turn over of **celduc**[®] **relais**. These innovative and highly efficient components are used to control all types of loads used in many industries. The three major application areas are industrial heating and temperature control, motor control and/or public lighting control. Every day new applications calling for reliability, no noise and long life expectancies make use of our highly innovative solid state relays that provide the small but vital "extra" when compared to our competitor's products.
- > **Magnetic proximity sensors** : Used for monitoring or controlling levels, clearances, movement, position and as a tachometer to record speed of rotation, the sky is the limit for these versatile sensors. These sensors are used by both the general public and the major industrial organisations such as the automotive, aircraft and telecommunication industries. They are also used extensively in all automation applications of the manufacturing sector.
- > **"Reed" switches** : Our Reed switches are used in combination with magnetic proximity sensors and reed relays and have proved to be an out-and-out winner over the past 50 years. The range meets the demands of an increasing number of new applications thanks to their ease of operation, price, compact size and reliability.



Know-How :

Being a specialist in this field, **celduc**[®] **relais** not only manufactures one of the most comprehensive ranges of solid state relays available from any manufacturer but the company has also developed the very latest in terms of production equipment ensuring efficient manufacture to the highest standards. These products and resources keep the name of **celduc**[®] **relais** at the forefront as one of the biggest name in the industry. We have provided the solution to countless applications in homes, planes, satellites, plastic injection presses, motors, modems and many other applications.

Quality ISO9001 :

ISO9002 ratified since 1993, **celduc**[®] **relais** also boasts the year 2002 version of ISO 9001 accreditation. It is by stringent application of and adherence to the rules of this standard that ensures total control of our production and research programmes. Being tuned to and building products that meet the specific requirements of our customers is the "raison d'être".



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