

LAUBE TECHNOLOGY

MERCURY WETTED REED RELAYS

<u>CONTACT FORM</u>	<u>CURRENT</u>	<u>PART SERIES</u>	<u>PAGE #'S</u>
(1A) SPST-NO	3 AMP	F81A.500	164~165 (Link)
(1C) SPDT	5 AMP	R0861P12	166~167 (Link)
(2-1C) 2-SPDT	3 AMP	F72C.500	168~169 (Link)

REED RELAY / MERCURY CONTACT

F81A . 500

For printed circuit board

One normally open mercury contact

In metal cover

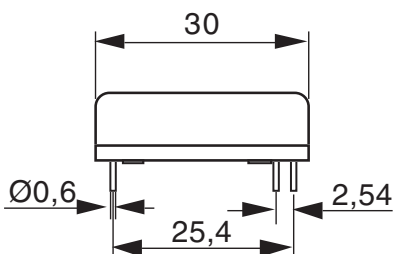
Vertical operating position $\pm 30^\circ$



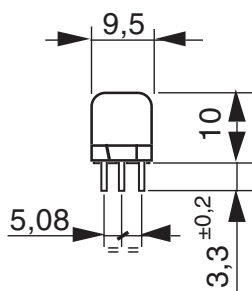
Main characteristics

Maximum switching voltage	500 VDC (or peak)
Maximum switching current	1A
Nominal current	3 A
Contact rating	50 VA
Contact material	Mercury

REF.	Marking
F81A2500	F81A2500
F81A5500	F81A5500
F81A7500	F81A7500



Dimensions in mm



Wiring : top view step 2,54 mm

Control data

REF.	F81A	2 500	5 500	7 500
Maximum voltage (V)		7,5	18	36
Nominal voltage (V)		5	12	24
Operate voltage to secure the function from -40 to + 85 °C (V)		3,5	8,4	16,8
Release voltage (V)		0,4	1	2
Power dissipated on the coil at 20 °C (mW)		180	144	250

Electrical data

Initial contact resistance

- coil resistance at 20 °C
- variation 10 % each 25 °C

(100 mA/ 12 VAC) ≤ 100 mΩ

F81A	2 500	5 500	7 500
	140Ω	1000Ω	2300Ω

Hold-on voltage

- across contacts 1000 Vac
- between coil and contacts 2000 Vac
- between case and contacts 1000 Vac
- between case and coil 1000 Vac

Insulation resistance

- across contacts 10⁸ Ω
- between coil and contacts 10¹⁰ Ω
- between case and contacts 10¹⁰ Ω
- between case and coil 10⁹ Ω

Max switching time

Test process ---> Coil voltage: nominal voltage

Max. operate time	normally open	3 ms
Max. release time	normally closed	3 ms

Electrical life time

consult us

Mechanical life expectancy

>1. 10⁹ op

Physical data

Operating temperature

- 40 ~ + 85 °C

Storage temperature

- 40 ~ + 100 °C

Weight

4,6 gr. max.

Shocks (11ms)

30 g

Vibrations (10 to 500 Hz)

10 g

REED RELAY / 1 CHANGE OVER MERCURY CONTACT

For printed circuit board

1 change over mercury contact

In metal cover

Vertical operating position $\pm 30^\circ$

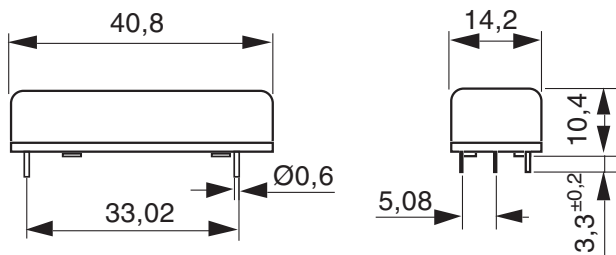
R0861 P12
R076 . P00



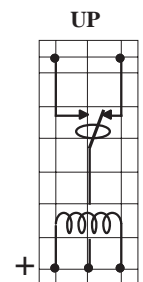
Main characteristics _____

Maximum switching voltage	500 VDC (or peak)
Maximum switching current	2A
Nominal current	5 A max
Contact rating	100 VA
Contact material	Mercury

REF.	Marking	N°RCM
R0861P12	133 R05 861 RCM	019
R0760P00	133 R12 760	/
R0761P00	133 R24 761	/



Dimensions in mm



Wiring : top view step 5,08 mm

Control data _____

REF.	R0861	R0760	R0761
Maximum voltage (V)	10	18	30
Nominal voltage (V)	5	12	24
Operate voltage to secure the function from -40 to + 85 °C (V)	2,8	5,7	13
Release voltage (V)	0,4	1	2
Power dissipated on the coil at 20 °C (mW)	75	215	215

Electrical data _____

Initial contact resistance

(100 mA/ 12 VAC) ≤ 30 mΩ

REF.	R0861	R0760	R0761
	335Ω	680Ω	2650Ω

-coil resistance at 20 °C
-variation 10 % each 25 °C

Hold-on voltage

- across contacts 1000 Vac
- between coil and contacts 1000 Vac
- between case and contacts 1000 Vac
- between case and coil 1000 Vac

Insulation resistance

- across contacts 10⁸ Ω
- between coil and contacts 10⁸ Ω
- between case and contacts 10⁸ Ω
- between case and coil 10⁸ Ω

Max switching time

Test process ---> Coil voltage: nominal voltage

Max. operate time	normally open	4 ms
Max. release time	normally closed	4 ms

Electrical life time

consult us

Mechanical life expectancy

>1. 10⁹ op

Physical data _____

- Operating temperature - 25 ~ + 70 °C
- Storage temperature - 40 ~ + 100 °C
- Weight 14 gr. max.
- Shocks (11ms) 30 g
- Vibrations (10 to 500 Hz) 10 g

REED RELAY / 2 CHANGE OVER MERCURY CONTACTS

For printed circuit board

2 change over mercury contacts

In metal cover

Vertical operating position $\pm 30^\circ$

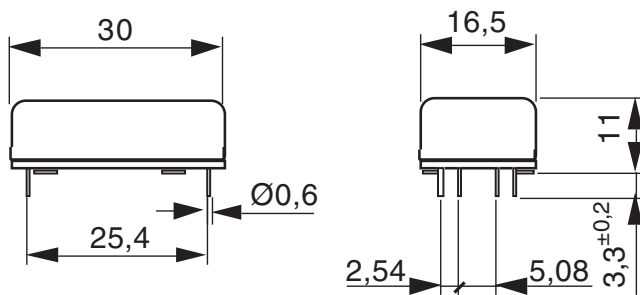
F72C . 500



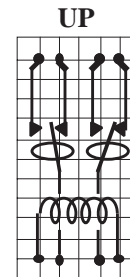
Main characteristics

Maximum switching voltage	500 VDC (or peak)
Maximum switching current	1A
Nominal current	3 A
Contact rating	50 VA
Contact material	Mercury

REF.	Marking
F72C2500	F72C2500
F72C5500	F72C5500
F72C7500	F72C7500



Dimensions in mm



Wiring : top view step 2,54 mm

Control data

REF.	F72C	2 500	5 500	7 500
Maximum voltage (V)		6	14	26
Nominal voltage (V)		5	12	24
Operate voltage to secure the function from -40 to + 85 °C (V)		3,75	9	18
Release voltage (V)		0,4	1	2
Power dissipated on the coil at 20 °C (mW)		333	411	426

Electrical data _____

Initial contact resistance

	(100 mA/ 12 VAC) ≤ 150 mΩ			
-coil resistance at 20 °C	F72C	2 500	5 500	7 500
-variation 10 % each 25 °C		75Ω	350Ω	1350Ω

Hold-on voltage

- across contacts	1000 Vac
- between coil and contacts	1000 Vac
- between case and contacts	1000 Vac
- between case and coil	1000 Vac

Insulation resistance

- across contacts	10⁸ Ω
- between coil and contacts	10¹⁰ Ω
- between case and contacts	10¹⁰ Ω
- between case and coil	10¹⁰ Ω

Max switching time

	Test process---> Coil voltage:nominal voltage		
max. operate time	normally open		3 ms
max. release time	normally closed		3 ms

Electrical life time

consult us

Mechanical life expectancy

>1. 10⁹ op

Physical data _____

Operating temperature	- 25 ~ + 70 °C
Storage temperature	- 40 ~ + 100 °C
Weight	9 gr. max.
Shocks (11ms)	30 g
Vibrations (10 to 500 Hz)	10 g