

PICKERING SERIES 10, 20, 40 & 50

pickering

General purpose reed relays
Mercury wetted reed relays
High power reed relays

Pickering Electronics Limited
 Stephenson Road
 Clacton-on-Sea
 CO15 4NL
 England

Telephone (UK) 01255 428141
 (International) +44 1255 428141

Fax. (UK) 01255 475058
 (International) +44 1255 475058

Pickering Series 10, Series 20, Series 40 and Series 50 were among the first products manufactured by Pickering Electronics. While most new designs are based around our later product ranges, these series remain widely used in established designs where size is not critical. They are of particular interest where multi-pole arrangements are required or where higher power levels are to be switched. All these relays are constructed in chromium plated, pressed cases which eliminate problems due to stray magnetic fields. Up to 4 switches per package are available in these ranges in either Form A (energize to make) or Form C (changeover) configurations. It is possible to combine Form A and Form C switches in the same package. Please contact our Sales Office for details.



Series 10 General Purpose Reed Relays

These relays are designed for applications where size is not critical, they are well suited to drive lamp loads, solenoids, actuators or similar loads.

Series 20 General Purpose Reed Relays

This is a range of miniature dry reed relays. We would suggest that for new designs, you look also at our Series 80 upwards, except for where 3 or 4 changeover switches are required in a single package, when Series 20 relays remain an ideal choice.

Series 40 Mercury Wetted Reed Relays

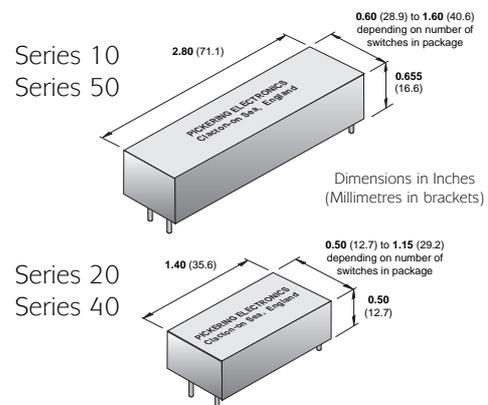
This is a range of miniature mercury wetted relays in identical packages to the Pickering Series 20. Mercury wetted switches must be mounted to within 30 degrees of vertical, they exhibit very low and constant contact resistance with life expectancy of over one thousand million operations. Multi-pole changeover versions of this range are available to special order only. We would suggest that you look also at our Series 88 upwards for new designs.

Series 50 High Power Reed Relays

The series 50 range is designed for long life switching of higher power levels that may be beyond the range of normal reed relays. They are pin compatible and mechanically identical to the series 10 range.

Mounting

Series 10, 20 and 50 dry relays may be mounted in any position. The mercury wetted Series 40 must be mounted within thirty degrees of vertical in the direction of the arrow printed on the package.



Series 10 Dry Switch Ratings

- Form A (energize to make), 15watts, 1.0amp, 400v
- Form C (change-over), 10watts, 0.5amps, 250v

Series 20 Dry Switch Ratings

- Form A (energize to make), 10watts, 0.5amps, 200v
- Form A (energize to make), 10watts, 0.5amps, 500v
- Form C (change-over), 3watts, 0.25amps, 200v

Series 40 Mercury Switch Ratings

- Form A (energize to make), 50watts, 2.0amps, 500v
- Form C (change-over), 30watts, 1.0amp, 350v

Series 50 Dry Switch Ratings

- Form A (energize to make), 100watts, 3.0amps, 250v
- Form A (energize to make), 100watts, 1.5amps, 400v
- Form C (change-over), 20watts, 1.5amps, 500v

Series 20 General purpose dry reed relays

Switch ratings

Switch Number	Contact form	Power rating	Maximum switching current	Maximum carry current	Maximum voltage
1	A	10 watts	0.50 amps	1.2 amps	200
5	A	10 watts	0.50 amps	1.2 amps	500
7	C	3 watts	0.25 amps	1.2 amps	200

Coil resistance data

Voltage	1 Switch	2 Switches	3 Switches	4 Switches
5	350 ohms	350 ohms	75 ohms	75 ohms
12	600 ohms	400 ohms	300 ohms	300 ohms
24	2200 ohms	1600 ohms	1200 ohms	1200 ohms

Series 40 Mercury wetted reed relays

Switch ratings

Switch Number	Contact form	Power rating	Maximum switching current	Maximum carry current	Maximum voltage
1	A	50 watts	2.0 amps	3.0 amps	500
2	C	30 watts	1.0 amps	2.0 amps	350

Coil resistance data - Form A switch

Voltage	1 Switch	2 Switches	3 Switches	4 Switches
5	150 ohms	100 ohms	75 ohms	50 ohms
12	600 ohms	400 ohms	300 ohms	200 ohms
24	2200 ohms	1600 ohms	1200 ohms	1200 ohms

Coil resistance data - Form C switch

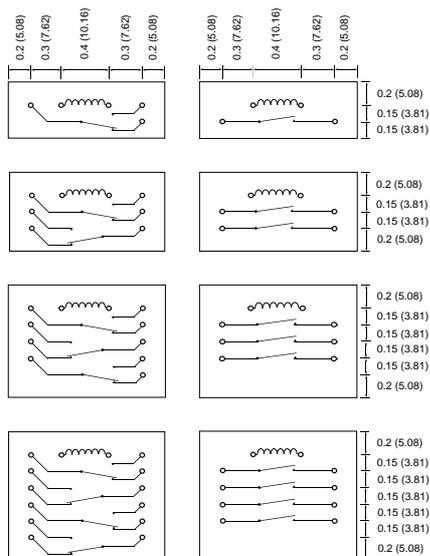
Voltage	1 Switch	2 Switches	3 Switches	4 Switches
5	75 ohms	Special order only	Not available	Not available
12	350 ohms	Consult factory		
24	1200 ohms			

Mounting position

Mercury wetted relays should be mounted vertically in the direction of the arrow printed on the package.

Series 20 and Series 40 Dimensional data

Schematics are shown from **UNDERSIDE** of relay
Dimensions in Inches (Millimetres in brackets).



Mercury Wetted Series 40 this way up →

Series 10 General purpose dry reed relays

Switch ratings

Switch Number	Contact form	Power rating	Maximum switching current	Maximum carry current	Maximum voltage
1	A	15 watts	1.0 amps	6.0 amps	400
5	C	10 watts	0.5 amps	3.0 amps	250

Coil resistance data

Voltage	1 Switch	2 Switches	3 Switches	4 Switches
5	150 ohms	100 ohms	75 ohms	50 ohms
12	600 ohms	400 ohms	300 ohms	300 ohms
24	2200 ohms	1600 ohms	1200 ohms	1200 ohms

Series 50 High power dry reed relays

Switch ratings

Switch Number	Contact form	Power rating	Maximum switching current	Maximum carry current	Maximum voltage
* 2	A	100 watts	3.0 amps	5.0 amps	250
4	C	20 watts	1.5 amps	2.0 amps	500
5	A	100 watts	3.0 amps	6.0 amps	400

* Switch number 2 is tungsten plated and is recommended for switching inductive loads.

Coil resistance data

Voltage	1 Switch	2 Switches	3 Switches	4 Switches
5	150 ohms	100 ohms	75 ohms	50 ohms
12	600 ohms	400 ohms	300 ohms	300 ohms
24	2200 ohms	1600 ohms	1200 ohms	1200 ohms

Order Code

10 - 1 - A - 5 / 1

Series (10, 20, 40 or 50)

Number of reeds

Switch form

Coil voltage

Switch number

Series 10 and Series 50 Dimensional data

Schematics are shown from **UNDERSIDE** of relay
Dimensions in Inches (Millimetres in brackets).

