

Series 80, 85 switch ratings - The contact ratings for each switch type are shown below:

Switch No	Switch form	Power rating	Max. switch current	Max. carry current	Max. switching volts	Life expectancy ops typical (see Note ¹ below)	Special features
1	A or B	10 W	0.5 A	1.2 A	200	10E8	General purpose
5	A	10 W	0.5 A	1.2 A	500	10E8	1000V stand-off
7	C	3 W	0.25 A	1.2 A	200	10E7	Change over

Series 80, 85 Coil data and type numbers

Device type	Type Number Series 80	Type Number Series 85	Coil (V)	Coil resistance	Max. contact resistance (initial)
1 Form A (energize to make) General Purpose Switch No. 1	80-1-A-5/1D	85-1-A-5/1D	5	500 Ω	0.15 Ω
	80-1-A-12/1D	85-1-A-12/1D	12	1000 Ω	
	80-1-A-24/1D	85-1-A-24/1D	24	3000 Ω	
1 Form A (energize to make) HV Switch No. 5 Note: Special Pin Configuration	80-1-A-5/5D	Not Available	5	500 Ω	0.15 Ω
	80-1-A-12/5D		12	1000 Ω	
	80-1-A-24/5D		24	3000 Ω	
1 Form B (energize to make) General Purpose Switch No. 1	80-1-B-5/1D	85-1-B-5/1D	5	1000 Ω	0.15 Ω
	80-1-B-12/1D	85-1-B-12/1D	12	3000 Ω	
	80-1-B-24/1D	85-1-B-24/1D	24	3000 Ω	
1 Form C (change-over) Switch No. 7	80-1-C-5/7D	85-1-C-5/7D	5	500 Ω	0.20 Ω
	80-1-C-12/7D	85-1-C-12/7D	12	1000 Ω	
	80-1-C-24/7D	85-1-C-24/7D	24	3000 Ω	
2 Form A (energize to make) General Purpose Switch No. 1	80-2-A-5/1D	85-2-A-5/1D	5	500 Ω	0.15 Ω
	80-2-A-12/1D	85-2-A-12/1D	12	1000 Ω	
	80-2-A-24/1D	85-2-A-24/1D	24	3000 Ω	
2 Form C (change-over) Switch No. 7	80-2-C-5/7D	85-2-C-5/7D	5	375 Ω	0.20 Ω
	80-2-C-12/7D	85-2-C-12/7D	12	1000 Ω	
	80-2-C-24/7D	85-2-C-24/7D	24	3000 Ω	
3 Form A (energize to make) General Purpose Switch No. 1	80-3-A-5/1D	Not Available	5	375 Ω	0.15 Ω
	80-3-A-12/1D			1000 Ω	
	80-3-A-24/1D			3000 Ω	

When an internal diode is required, the suffix D is added to the part number as shown in the table.

Mercury Reed: Series 88, 89 switch ratings - The contact ratings for each switch type are shown below:

Switch No	Switch form	Power rating	Max. switch current	Max. carry current	Max. switching volts	Life expectancy ops typical (see Note ¹ below)	Special Features
1	A	50 W	2 A	3 A	500	10E8	Standard Mercury

Mercury Relay: Series 88, 89 Coil data and type numbers

Device type	Type Number Series 88	Type Number Series 89	Coil (V)	Coil resistance	Max. contact resistance (initial)
1 Form A (energize to make) Switch No. 1	88-1-A-5/1D	89-1-A-5/1D	5	140 Ω	0.07 Ω
	88-1-A-12/1D	89-1-A-12/1D	12	750 Ω	
	88-1-A-24/1D	89-1-A-24/1D	24	2000 Ω	
1 Form B (energize to break) Switch No. 1	88-1-B-5/1D	89-1-B-5/1D	5	90 Ω	0.07 Ω
	88-1-B-12/1D	89-1-B-12/1D	12	430 Ω	
	88-1-B-24/1D	89-1-B-24/1D	24	1750 Ω	
2 Form A (energize to make) Switch No. 1	88-2-A-5/1D	89-2-A-5/1D	5	90 Ω	0.05 Ω
	88-2-A-12/1D	89-2-A-12/1D	12	430 Ω	
	88-2-A-24/1D	89-2-A-24/1D	24	1750 Ω	

When an internal diode is required, the suffix D is added to the part number as shown in the table.

Note¹ Life expectancy

The life of a reed relay depends upon the switch load and end of life criteria. For example, for an 'end of life' contact resistance specification of 1 Ω, switching low loads (10 V at 10 mA resistive) or when 'cold' switching, typical life is approx 1 x 10⁸ ops. At the maximum load (resistive), typical life is 1 x 10⁷ ops. In the event of abusive conditions, e.g. high currents due to capacitive inrushes, this figure reduces considerably. Pickering will be pleased to perform life testing with any particular load condition.

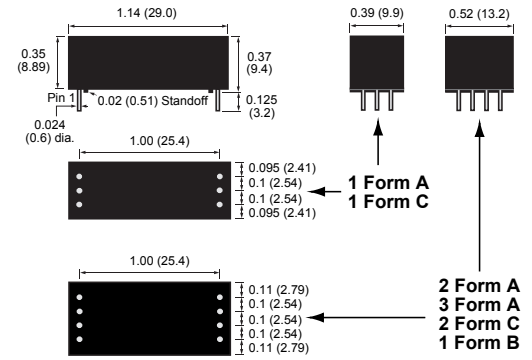
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ISO9001 Manufacture of
 Reed Relays FM 29036

Dimensional Data

Dimensions in Inches (Millimeters in brackets)



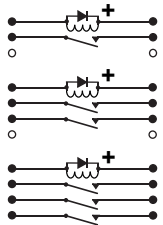
Pin Configurations

Schematics are shown from UNDERNEATH the relay.

Series 80 & 88

Orientation Bar printed on top face at this end

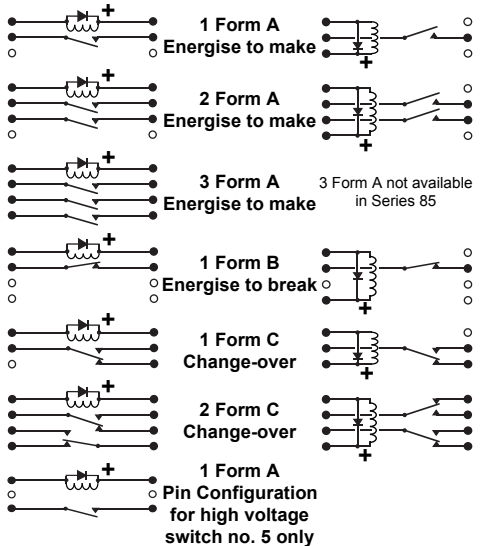
Mercury Series 88 this way up



Series 85 & 89

Orientation Bar printed on top face at this end

Mercury Series 89 this way up



Important: Where the optional internal diode is fitted or for all Form B types, the correct coil polarity must be observed, as shown by the + symbol on the schematics.

3D Models: Interactive models of the complete range of Pickering relay products can be downloaded from the web site.

Mercury Relays

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

Order Code

80 - 1 - A - 5 / 2 D

Series _____
 Number of reeds _____
 Switch form _____
 Coil voltage _____
 Switch number (See table adjacent) _____
 Diode if fitted (Omit if not required) _____

Help

If you need any technical advice or other help, for example, any special tests that you would like carried out, please do not hesitate to contact our Technical Sales Department. We will always be pleased to discuss Pickering relays with you. email: techsales@pickeringrelay.com

Please ask us for a FREE evaluation sample.



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