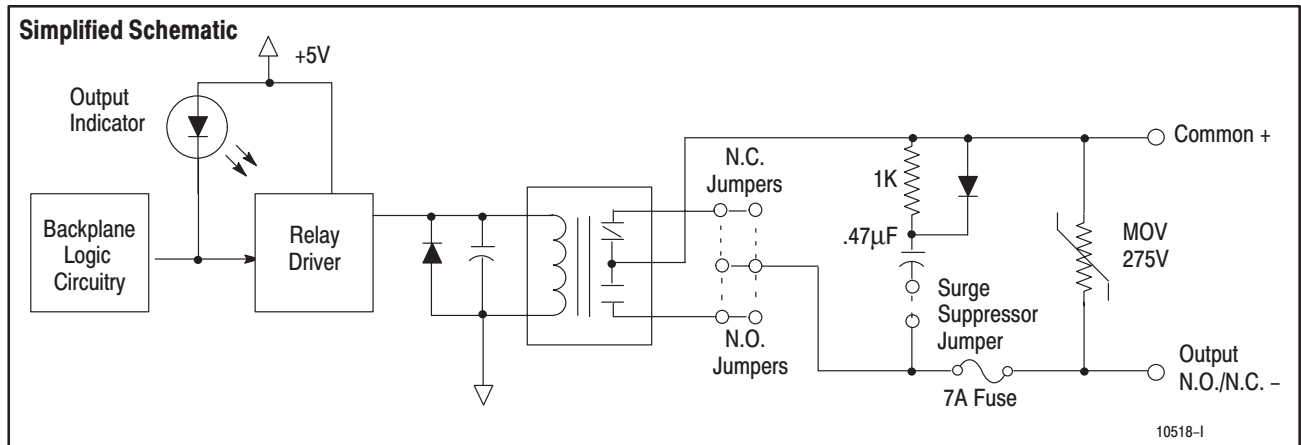


Power Relay Contact Output Module (Cat. No. 1771-OX)



Application Notes

Vibration. The 1771-OX module contains mercury-wetted relays. Handle the module carefully and avoid excessive vibration. This can cause damage to the glass bulb which houses the mercury and contacts. Failure to observe this caution may cause damage to the module's circuitry.

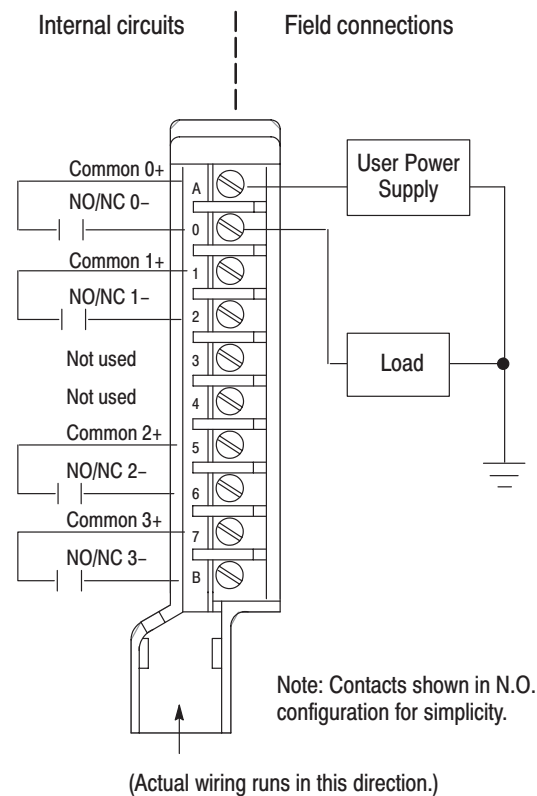
Mounting. The power contact output module **must** be mounted within 30° of vertical for the mercury-wetted relays to function. After installation, wait 3 minutes, or manually operate the relays 16 times, before powering up the module in an actual application.

Surge Suppression. The 1771-OX module includes a selectable RC network for switching dc voltages. When switching these voltages, include the on-board surge suppression. When switching inductive ac voltages, you must supply an external rc network as close as possible to the load terminals. These are listed below.

No Increase from Parallel Operation. Do not attempt to increase load current or wattage capability beyond the rating by connecting two or more outputs in parallel. The slightest variation in output relay switching time may cause one set of the contacts to switch the total load current.

Starter Size	Starter Voltage	Number of Poles	R(Ω)	C(µF)	Leakage Current	Electrocube PN
0	120V ac	2-5	68	0.1	8mA	RG 1782-4
	240V ac	2-5	270	0.027	4.5mA	
1	120V ac	2-5	68	0.1	8mA	RG 1782-4
	240V ac	2-5	270	0.027	4.5mA	
2	120V ac	2-3	68	0.1	8mA	RG 1782-4
	120V ac	4-5	47	0.1	8mA	RG 1782-3
	240V ac	2-3	270	0.027	4.5mA	
	240V ac	4-5	180	0.047	7.5mA	
3	120V ac	2-3	47	0.1	8mA	RG 1782-3
	240V ac	2-3	150	0.047	8mA	
	240V ac	4-5	100	0.1	16mA	RG 1782-6
4	240V ac	2-3	100	0.1	16mA	RG 1782-6

Connection Diagram



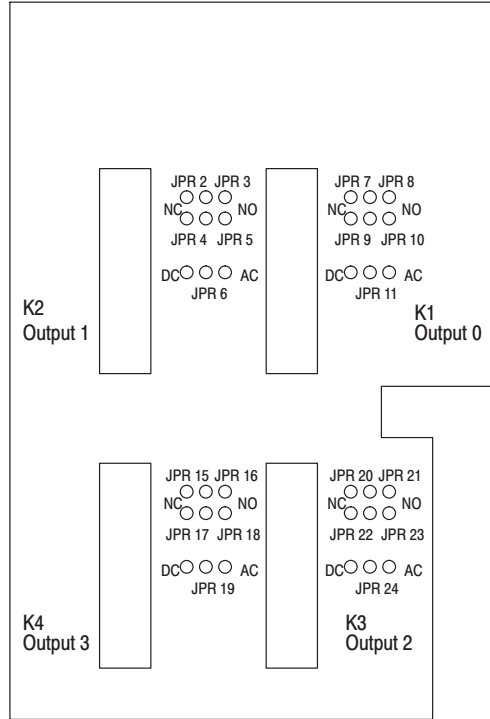
10519-I

Specifications (Cat. No. 1771-OX)	
Outputs per Module	4 N.O/N.C.
Module Location	1771 I/O chassis
Voltage Rating	0-250V ac rms; 0-175V dc
Current Rating	2A (maximum)
Surge Current (Repeatable every 10 seconds)	5.5A ac peak for 5 seconds 6A dc for 5 seconds 15A dc for 500ms
Power Rating	200VA
On-state Contact Resistance	0.25 ohms maximum
Operate/Release Time	10ms maximum
Power Dissipation	2.9 Watts (max.), 2.6 Watts (min.)
Thermal Dissipation	9.9 BTU/hr (max.), 8.9 BTU/hr (min.)
Backplane Current	550mA maximum
Isolation Voltage	2500V ac rms
Conductors	Wire Size 14 gauge (2mm ²) stranded maximum 3/64 inch (1.2mm) insulation maximum Category 1 ¹
Environmental Conditions	Operating Temperature 0 to 60°C (32 to 140°F) Storage Temperature -40 to 85°C (-40 to 185°F) Relative Humidity 5 to 95% (without condensation)
Keying	Between 6 and 8 Between 16 and 18
Fuse	7A, 250V Type 3AG Slo Blow (1 per circuit) Bussman MSL 7.0; Littelfuse 313007
Field Wiring Arm	1771-WC
Wiring Arm Screw Torque	7-9 inch-pounds
Agency Certification (when product or packaging is marked)	<ul style="list-style-type: none"> • CSA certified • CSA Class I, Division 2, Groups A, B, C, D certified • UL listed • CE marked for all applicable directives
Installation Data	1771-2.43

¹ You use this conductor category information for planning conductor routing as described in the system level installation manual.

Caution: The power contact output module **must** be mounted within 30° of vertical for the mercury-wetted relays to function. After installation, wait 3 minutes, or manually operate the relays 16 times, before powering up the module in an actual application.

Jumper Locations



10555-1

ac and dc Programming Plug Selections

Output	Jumper (JPR)
0	11
1	6
2	24
3	19

Normally-open and Normally-closed Programming Plug Locations

Module output	Normally-open	Normally-closed
0	JPR 8, 10	JPR 7, 9
1	JPR 3, 5	JPR 2, 4
2	JPR 21, 23	JPR 20, 22
3	JPR 16, 18	JPR 15, 17