

## 1771sc Isolated-Circuit 74 to 276 Vac Triac Output Module

Catalog No. 1771sc-OMI16

### Product Profile



- Installs and operates exactly like an Allen-Bradley product
- Features 1 common per output and 1500 V output-to-output isolation to eliminate concerns with crossing phases
- Each channel is individually fuse protected and provides “fuse blown” indication to the processor, pin-pointing which fuse has opened
- Directly drives a Spectrum Controls 1771sc-IMI16 input module
- Can be used in applications requiring from 74 to 276 Vac triac output, ideal for motor starters and other inductive loads
- Completely solid-state, no relays to fail

The 1771sc-OMI16 provides 16 triac-controlled outputs, each with its own common. The module also provides a broad operating range (74 to 276 Vac) for increased versatility. It is designed for use with high inductive load output devices such as solenoids, relays, and motor starters (up to Allen-Bradley size 5).

### Increases Safety

The 1771sc-OMI16 provides a separate fuse for each output. This means a blown fuse in one output won't affect other outputs. The module will also indicate to the PLC's input image table which fuse has blown, so you can actively monitor each output and alert personnel to a fault. For visual diagnostics, the 1771sc-OMI16 provides an LED block to indicate if the module is active, which outputs are on, and if any fuse has blown.

### Reduces System Costs

The 1771sc-OMI16 can save you hundreds of dollars on system installation costs. The module allows direct control of 120 to 240 V circuits, eliminating the need for costly interposing relays and transformers. One 1771sc-OMI16 can also be used with devices of different voltages and phases (something you can only do with an isolated-circuit module) so you don't need to buy separate modules for each power source.

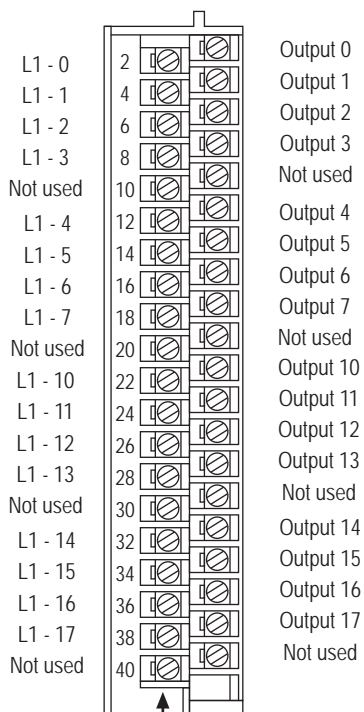
### Simplifies Installation

The 1771sc-OMI16 incorporates proprietary Allen-Bradley technology so it operates and performs like an Allen-Bradley product for easy installation.

module also allows you to control up to 16 devices without worrying about whether they're powered by different supplies. The 1771sc-OMI16 will directly drive terminals on an isolated-circuit AC/DC input module (Spectrum Controls catalog no. 1771sc-IMI16) without any snubber circuitry, for those who want to actively monitor each output.

## 1771sc-OMI16 Specifications

### 1771sc-OMI16 Wiring



(Actual wiring runs in this direction.)  
Always follow the applicable codes  
and laws in your area.

\* Input numbers are shown in octal.

Number of Outputs	16
Points per Common	1
Module Location	1771 I/O chassis
Nominal Output Voltage	120/220 VAC @ 50/60 Hz
Output Voltage Range	74 to 276 VAC @ 47 to 63 Hz
Output Current Rating	2 A per output—not to exceed 8 A per module
Surge Current (maximum)	25 A per output for 100 ms, repeatable every 1 sec 25 A per module for 100 ms, repeatable every 1 sec
Load Current (minimum)	5 mA per output
On-State Voltage Drop (maximum)	1.5 V @ 2 A
Off-State Leakage Current (max.)	2 mA @ 220 VAC
Signal Delay	Zero crossing: 8.3 ms @ 60 Hz; 10.0 ms @ 50 Hz On to Off: 8.3 ms @ 60 Hz; 10.0 ms @ 50 Hz
Power Dissipation	13.0 W maximum 0.1 W minimum
Thermal Dissipation	48.0 BTU/hr maximum 0.4 BTU/hr minimum
Backplane Current	330 mA maximum @ 5 VDC ±5%
Isolation Voltage	1500 VAC output-to-output 1500 VAC field wiring-to-backplane
Environmental Conditions	Operational Temperature: 0° to 60°C (32° to 140°F) Storage Temperature: -40° to +85°C (-40° to 185°F) Relative Humidity: 5 to 95% (non-condensing)
Certifications	CE
Conductors Wire Size	14 gage stranded maximum 3/64 inch insulation maximum
Category	1
Fuses	3 A, 250 V, 2 AG SLO-BLO fuses (1 per output) Littelfuse 229003
Field Wiring Arm	A-B Catalog No. 1771-WN (included)

The maximum value is measured when the module is dissipating 8 A (100% duty cycle); the minimum value is measured with no outputs turned on.

Use this conductor-category information for planning conductor routing as described in the system-level installation manual.



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