

## Digital I/O Modules

I/O Type	Cat. No.	Description	Pages
AC digital input	5069-IA16	79...264V AC 16-point, input module	4
DC digital input	5069-IB16	10...32V DC 16-point, sinking input module	9
	5069-IB16K	10...32V DC 16-point, conformal coated sinking input module	
	5069-IB16F	10...32V DC 16-point, sinking fast input module	
	5069-IB6F-3W	10...32V DC 6-point, 3-wire, sinking fast input module	14
AC digital output	5069-OA16	85...264V AC 16-point, output module	19
DC digital output	5069-OB8	10...32V DC 8-point, sourcing high-current output module	24
	069-OB16	10...32V DC 16-point, sourcing high-current output module	29
	5069-OB16K	10...32V DC 16-point, conformal coated sourcing output module	
	5069-OB16F	10...32V DC 16-point, sourcing fast output module	
Relay output	5069-OW4I	5...264V AC /125V DC 4-point, isolated normally open relay output module	35
	5069-OW16	5...264V AC/125V DC 16-point, normally open relay output module	40
	5069-OX4I	5...264V AC /125V DC 4-point, isolated normally open/normally closed relay output module	45

## 5069-IA16 Digital 16-point 120/240V AC Input Module

The following figure shows a wiring diagram for the 5069-IA16 module.

### 5069-IA16 Wiring Diagram

#### Channel Connections

The diagram shows devices that are connected to channels 0, 2, 4, 6, 8, and 10. You are not restricted to using only those channels.

You can connect devices to any channel or combination of channels as needed.

#### SA Power

Connections to an external power supply that provides SA Power via the SA Power RTB on one of the following:

- CompactLogix 5380 controller
- CompactLogix 5480 controller
- 5069-AENTR or 5069-AEN2TR EtherNet/IP™ adapter
- 5069-FPD field potential distributor

**IMPORTANT:** Remember the following:

- The 5069-IA16 module uses AC SA power. You must connect AC power to the component, that is, CompactLogix 5380 controller, adapter, or field potential distributor, that provides SA Power to the module.
- If you install a **5069-IA16 module as a local I/O module in a Compact GuardLogix 5380 controller system**, you must install a field potential distributor that has AC power that is connected to it and install the 5069-IA16 module next to the field potential distributor.

You cannot install modules that draw AC SA power next to a Compact GuardLogix 5380 controller. Compact GuardLogix 5380 controllers do not support AC power on their SA Power RTBs.

- The 5069-IA16 module inputs use a shared common. The inputs have a return through internal module circuitry to the SA (-) terminal on the SA Power RTB.
- If you install modules in a system that use AC SA power and DC SA power, you must install them on separate SA Power buses.
- You use a 5069-FPD field potential distributor to establish a new SA Power bus in a system. SA Power buses are isolated from each other. To keep the modules on separate SA Power buses, complete these steps.
  1. Install the modules that use one type of SA power, for example DC, to the right of the adapter or controller, that is, the first SA Power bus.
  2. Install the 5069-FPD field potential distributor to establish a second SA Power bus.
  3. Install the modules that use the other type of SA power, for example AC, on the second SA Power bus.

