

Discrete Mixed I/O Modules



Discrete mixed modules provide maximum flexibility by combining inputs and outputs in a single, compact module. Discrete input modules receive signals from input devices such as sensors, pushbuttons, and switches that can have two states: on or off, open or closed. Discrete output modules send control signals to devices such as contactors, indicator lamps, and interposing relays that can also have two states. Discrete mixed modules provide maximum flexibility by combining inputs and outputs in a single, compact module. Modules require a carrier base (IC200CHSxxx).

| | IC200MDD840 | IC200MDD842 | IC200MDD843 |
|---|--|--|---|
| Product Name | VersaMax Discrete Mixed Modules, 24 VDC Pos Logic Input 20 points/ Output Relay 2.0 A, 12 points | VersaMax Discrete Mixed Modules 24 VDC Pos Logic Input 16/Output 24 VDC 0.5 A with ESCP | VersaMax Discrete Mixed Modules 24 VDC Positive Logic Input 10/Output Relay 6 |
| Lifecycle Status | Active | Active | Active |
| Input Voltage | 24 VDC | 24 VDC | 24 VDC |
| Output Voltage | 0-125 VDC, 5/24/125 VDC nominal; 0-265 VAC (47-63 Hz), 120/240 VAC nominal | 24 VDC | 0-125 VDC, 5/24/125 VDC nominal; 0-265 VAC (47-63 Hz), 120/240 VAC nominal |
| Number of Points | 20 in/12 out | 16 in/16 out | 10 in/6 out |
| Channel to Channel Isolation | No | No | No |
| Load Current per Point | 2.0 A for 5-265 VAC, 2.0 A for 5-30 VDC | 0.5 A for 30 VDC | 2.0 A for 5-265 VAC, 2.0 A for 5-30 VDC, 0.2 A for 31-125 VDC |
| Input and Output Response Time- On/Off(ms) | 0.5 and 10 | 0.5 and 0.5 | 0.5 and 10 |
| Protection | No internal fuses or snubbers | Short circuit protection, overcurrent protection, free-wheeling diodes | No internal fuses or snubbers |
| On State Current | 2.0-5.5 mA | 2.0-5.5 mA | 2.0-5.5 mA |
| Off State Current | 0-0.5 mA | 0-0.5 mA | 0-0.5 mA |
| External Power Supply | 0-125 VDC, 5/24/125 VDC nominal; 0-265 VAC (47-63 Hz), 120/240 VAC nominal | 18-30 VDC, 24 VDC nominal | 0-125 VDC, 5/24/125 VDC nominal, 0-265 VAC (47-63 Hz), 120/240 VAC nominal |
| Input Impedance | 10 kOhms maximum | 10 kOhms maximum | 10 kOhms maximum |
| Load Current | 2.0 A for 5-265 VAC or 5-30 VDC, 0.2 A for 31-125 VDC | 0.5 Amp at 30 VDC maximum (resistive); 2.0 Amps maximum for 100ms inrush | 10 mA per point minimum, 8.0 A maximum per module; 2.0 Amps for 5 to 265 VAC maximum (resistive); 2.0 Amps for 5 to 30 VDC maximum (resistive); 0.2 Amp for 31 to 125 VDC maximum (resistive) |
| 5V Backplane Current Consumption (mA) | 375 maximum | 100 maximum | 190 maximum |
| LED Indicators | One LED per point shows individual point on/off state (logic side); OK LED indicates backplane power is present | One LED per point shows individual point on/off state (logic side); OK LED indicates backplane power is present | One LED per point shows individual point on/off state (logic side); OK LED indicates backplane power is present |
| Dimensions (W x H x D) | 110 mm (4.3 in) x 66.8 mm (2.63 in) x 50 mm (1.956 in), not including the height of the carrier or the mating connectors | 110 mm (4.3 in) x 66.8 mm (2.63 in) x 50 mm (1.956 in), not including the height of the carrier or the mating connectors | 110 mm (4.3 in) x 66.8 mm (2.63 in) x 50 mm (1.956 in), not including the height of the carrier or the mating connectors |

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| | IC200MDD844 | IC200MDD845 | IC200MDD846 |
|---|--|---|---|
| Product Name | VersaMax Discrete Mixed Modules 24 VDC Positive Logic Input 16/Output 24 VDC 0.5 A 16 points | VersaMax Discrete Mixed Modules 24 VDC Positive Logic Input 16/Output Relay 2.0A Isolated 8 points | VersaMax Discrete Mixed Modules 120 VAC Input 8 points/Outputs Relay 2.0A Isolated 8 points |
| Lifecycle Status | Active | Active | Active |
| Input Voltage | 24 VDC | 24 VDC | 120 VAC |
| Output Voltage | 24 VDC | 0-125 VDC, 5/24/125 VDC nominal; 0-265 VAC (47-63 Hz), 120/240 VAC nominal | 0-125 VDC, 5/24/125 VDC nominal; 0-265 VAC (47-63 Hz), 120/240 VAC nominal |
| Number of Points | 16 in/16 out | 16 in/8 out | 8 in/8 out |
| Channel to Channel Isolation | No | Yes, outputs | Yes, outputs |
| Load Current per Point | 0.5 A for 30 VDC | 2.0 A for 5-265 VAC, 2.0 A for 5-30 VDC, 0.2 A for 31-125 VDC | 2.0 A for 5-265 VAC, 2.0 A for 5-30 VDC, 0.2 A for 31-125 VDC |
| Input and Output Response Time- On/Off(ms) | 0.5 and 0.2 ON / 1.0 OFF | 0.5 and 10 | 1 AC cycle minimum and 2 AC cycle (Hz dependent) maximum and 10.0 OFF |
| Protection | No internal fuses | No internal fuses or snubbers | No internal fuses or snubbers |
| On State Current | 2.0-5.5 mA | 2.0-5.5 mA | 5 mA minimum |
| Off State Current | 0-0.5 mA | 0-0.5 mA | 2.5 mA maximum |
| External Power Supply | 18-30 VDC, 24 VDC nominal | 0-125 VDC, 5/24/125 VDC nominal; 0-265 VAC (47-63 Hz), 120/240 VAC nominal | 0-125 VDC, 5/24/125 VDC nominal; 0-265 VAC (47-63 Hz), 120/240 VAC nominal |
| Input Impedance | 10 kOhms maximum | 10 kOhms maximum | 8.6 kOhms (reactive) at 60 Hz, typical; 10.32 kOhms (reactive) at 50 Hz, typical |
| Load Current | 0.5 Amp at 30 VDC maximum (resistive) 2.0 Amps maximum for 100ms inrush | 10 mA per point minimum 2.0 A for 5 to 265 VAC maximum (resistive) 2.0 A for 5 to 30 VDC maximum (resistive) 0.2 A for 31 to 125 VDC maximum (resistive) | 10 mA per point minimum 2.0 A for 5 to 265 VAC maximum (resistive) 2.0 A for 5 to 30 VDC maximum (resistive) 0.2 A for 31 to 125 VDC maximum (resistive) |
| 5V Backplane Current Consumption (mA) | 70 maximum | 270 maximum | 300 maximum |
| LED Indicators | One LED per point shows individual point on/off state (logic side); OK LED indicates backplane power is present | One LED per point shows individual point on/off state (logic side); OK LED indicates backplane power is present | One LED per point shows individual point on/off state (logic side); OK LED indicates backplane power is present |
| Dimensions (W x H x D) | 110 mm (4.3 in) x 66.8 mm (2.63 in) x 50 mm (1.956 in), not including the height of the carrier or the mating connectors | 110 mm (4.3 in) x 66.8 mm (2.63 in) x 50 mm (1.956 in), not including the height of the carrier or the mating connectors | 110 mm (4.3 in) x 66.8 mm (2.63 in) x 50 mm (1.956 in), not including the height of the carrier or the mating connectors |

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| | IC200MDD847 | IC200MDD848 | IC200MDD849 |
|---|---|---|---|
| Product Name | VersaMax Discrete Mixed Modules 240 VAC Input 8 points/Output Relay 2.0A Isolated 8 points | VersaMax Discrete Mixed Modules 120 VAC Input 8 points/Output 120 VAC 0.5A Isolated 8 points | VersaMax Discrete Mixed Modules 120 VAC Input Isolated 8 points/Output Relay 2.0 A Isolated 8 points |
| Lifecycle Status | Active | Active | Active |
| Input Voltage | 240 VAC | 120 VAC | 0-132 VAC (47 to 63 Hz), 120 VAC nominal |
| Output Voltage | 0-125 VDC, 5/24/125 VDC nominal; 0-265 VAC (47-63 Hz), 120/240 VAC nominal | 120 VAC | 0-125 VDC, 5/24/125 VDC nominal; 0-265 VAC (47-63 Hz), 120/240 VAC nominal |
| Number of Points | 8 in/8 out | 8 in/8 out | 8 in/8 out |
| Channel to Channel Isolation | Yes, outputs | Yes | Yes |
| Load Current per Point | 2.0 A for 5-265 VAC, 2.0 A for 5-30 VDC, 0.2 A for 31-125 VDC | 10 mA min, 0.5 A max., 5 A for 1 cycle (20 ms) max. inrush | 2.0 A |
| Input and Output Response Time- On/Off(ms) | 1 AC cycle minimum and 2 AC cycle (Hz dependent) maximum and 10.0 OFF | 1 cycle/2 cycle and <1/2 cycle/<1/2 cycle | 1 cycle/2 cycle and 10/10 |
| Protection | No internal fuses or snubbers | Snubber and MOVs (each output) | No internal fuses or snubbers |
| On State Current | 4 mA minimum | 5 mA minimum | 5 mA minimum |
| Off State Current | 1.5 mA maximum | 2.5 mA maximum | 2.5 mA maximum |
| External Power Supply | 0-125 VDC, 5/24/125 VDC nominal; 0-265 VAC (47-63 Hz), 120/240 VAC nominal | 0-125 VDC, 5/24/125 VDC nominal; 0-265 VAC (47-63 Hz), 120/240 VAC nominal | N/A |
| Input Impedance | 38.5 kOhms (reactive) at 60 Hz, typical; 46.3 kOhms (reactive) at 50 Hz, typical | 8.6 kOhms (reactive) at 60 Hz, typical; 10.32 kOhms (reactive) at 50 Hz, typical | 8.6 kOhms (reactive) at 60 Hz, typical; 10.32 kOhms (reactive) at 50 Hz, typical |
| Load Current | 10 mA per point minimum 2.0 Amps for 5 to 265 VAC maximum (resistive) 2.0 Amps for 5 to 30 VDC maximum (resistive) 0.2 Amp for 31 to 125 VDC maximum (resistive) | 10 mA minimum per point, 0.5 A maximum per point, 5.0 A for one cycle (20 ms) maximum inrush | 10 mA per point minimum; 2.0 A for 5-265 VAC maximum (resistive); 2.0 A for 5-30 VDC maximum (resistive); 0.2 A for 31-125 VDC maximum (resistive) |
| 5V Backplane Current Consumption (mA) | 300 maximum | 125 maximum | 300 maximum |
| LED Indicators | One LED per point shows individual point on/off state (logic side); OK LED indicates backplane power is present | One LED per point shows individual point on/off state (logic side); OK LED indicates backplane power is present | One LED per point shows individual point on/off state (logic side); OK LED indicates backplane power is present |
| Dimensions (W x H x D) | 110 mm (4.3 in) x 66.8 mm (2.63 in) x 50 mm (1.956 in), not including the height of the carrier or the mating connectors | 110 mm (4.3 in) x 66.8 mm (2.63 in) x 50 mm (1.956 in), not including the height of the carrier or the mating connectors | 110 mm (4.3 in) x 66.8 mm (2.63 in) x 50 mm (1.956 in), not including the height of the carrier or the mating connectors |

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Discrete mixed modules provide maximum flexibility by combining inputs and outputs in a single, compact module. Discrete input modules receive signals from input devices such as sensors, pushbuttons, and switches that can have two states: on or off, open or closed. Discrete output modules send control signals to devices such as contactors, indicator lamps, and interposing relays that can also have two states. Discrete mixed modules provide maximum flexibility by combining inputs and outputs in a single, compact module. Modules require a carrier base (IC200CHSxxx).

| | IC200MDD850 | IC200MDD851 |
|---|---|---|
| Product Name | VersaMax Discrete Mixed Modules 240 VAC Input Isolated 4 points/Output Relay 2.0 A Isolated 8 points | VersaMax Discrete Mixed Modules 5/12 VDC Input 16 points/Output 12/24 VDC 16 points |
| Lifecycle Status | Active | Active |
| Input Voltage | 0-264 VAC (47-63 Hz), 240 VAC nominal | 0 to 15 VDC, +5/12 VDC nominal |
| Output Voltage | 0-125 VDC, 5/24/125 VDC nominal; 0-265 VAC (47-63 Hz), 120/240 VAC nominal | +10.2 to +30 VDC, +12/24 VDC nominal |
| Number of Points | 8 out/4 in | 16 out/16 in |
| Channel to Channel Isolation | Yes | No |
| Load Current per Point | 2.0 A | 0.5 Amps at 30 VDC maximum (resistive) 2.0 Amps maximum for 100ms inrush |
| Input and Output Response Time- On/Off(ms) | 1 cycle/2 cycle and 10/10 | 0.25ms maximum/0.2ms ON and 1.0ms OFF maximum |
| Protection | No internal fuses or snubbers | No internal fuses or snubbers |
| On State Current | 4 mA minimum | 1.45 mA minimum |
| Off State Current | 1.5 mA maximum | 0 to 0.7 mA maximum |
| External Power Supply | N/A | +10.2 to +30 VDC, +12/24 VDC nominal |
| Input Impedance | 38.5 kOhms (reactive) at 60 Hz, typical; 46.3 kOhms (reactive) at 50 Hz, typical | 2.4kOhms typical @ 12 VDC |
| Load Current | 10 mA per point minimum; 2.0 A for 5-265 VAC maximum (resistive); 2.0 A for 5-30 VDC maximum (resistive); 0.2 A for 31-125 VDC maximum (resistive) | 0.5 Amps at 30 VDC maximum (resistive); 2.0 Amps maximum for 100ms inrush |
| 5V Backplane Current Consumption (mA) | 260 maximum | 115 maximum |
| LED Indicators | One LED per point shows individual point on/off state (logic side); OK LED indicates backplane power is present | One LED per point shows individual point on/off state (logic side); OK LED indicates backplane power is present |
| Dimensions (W x H x D) | 110 mm (4.3 in) x 66.8 mm (2.63 in) x 50 mm (1.956 in), not including the height of the carrier or the mating connectors | 110 mm (4.3 in) x 66.8 mm (2.63 in) x 50 mm (1.956 in), not including the height of the carrier or the mating connectors |

Discrete Input Modules

Discrete input modules receive signals from input devices such as sensors, pushbuttons, and switches that can have two states: on or off, open or closed. Modules require a carrier base (IC200CHSxxx).



| | IC200MDL140 | IC200MDL141 | IC200MDL143 |
|--|--|--|--|
| Product Name | VersaMax Discrete Input Module 120 VAC, 8 points | VersaMax Discrete Input Module 240 VAC, 8 points | VersaMax Discrete Input Module 120 VAC Isolated, 8 points |
| Lifecycle Status | Active | Active | Active |
| Input Voltage | 0-132 VAC | 0-264 VAC | 0-132 VAC |
| Number of Points | 8 | 8 | 8 |
| Channel to Channel Isolation | No | No | Yes |
| Input and Output Response Time- On/Off (ms) | 1 cycle/2 cycles | 1 cycle/2 cycles | 1 cycle/2 cycles |
| Points per Common | 1 group of 8 | 1 group of 8 | 8 groups of 1 |
| On State Current | 5 mA minimum | 7 mA minimum | 5 mA minimum |
| Off State Current | 2.5 mA maximum | 1.5 mA maximum | 2.5 mA maximum |
| Input Impedance | 8.6 kOhms (reactive) at 60 Hz, typical; 10.32 kOhms (reactive) at 50 Hz, typical | 38.5 kOhms (reactive) at 60 Hz, typical; 46.3 kOhms (reactive) at 50 Hz, typical | 8.6 kOhms (reactive) at 60 Hz, typical; 10.32 kOhms (reactive) at 50 Hz, typical |
| 5V Backplane Current Consumption (mA) | 55 maximum | 55 maximum | 50 maximum |
| LED Indicators | One LED per point shows individual point ON/OFF status. OK LED indicates backplane power is present | One LED per point shows individual point ON/OFF status. OK LED indicates backplane power is present | One LED per point shows individual point ON/OFF status. OK LED indicates backplane power is present |
| Dimensions (W x H x D) | 110 mm (4.3 in) x 66.8 mm (2.63 in) x 50 mm (1.956 in), not including the height of the carrier or the mating connectors | 110 mm (4.3 in) x 66.8 mm (2.63 in) x 50 mm (1.956 in), not including the height of the carrier or the mating connectors | 110 mm (4.3 in) x 66.8 mm (2.63 in) x 50 mm (1.956 in), not including the height of the carrier or the mating connectors |

Discrete Input Modules



Discrete input modules receive signals from input devices such as sensors, pushbuttons, and switches that can have two states: on or off, open or closed. Modules require a carrier base (IC200CHSxxx).

| | IC200MDL144 | IC200MDL240 | IC200MDL241 |
|--|--|--|--|
| Product Name | VersaMax Discrete Input Module 240 VAC Isolated, 4 points | VersaMax Discrete Input Module, 120 VAC Positive Logic, 16 points | VersaMax Discrete Input Module, 240 VAC Positive Logic, 16 points |
| Lifecycle Status | Active | Active | Active |
| Input Voltage | 0-264 VAC | 0-132 VAC | 0-264 VAC |
| Number of Points | 4 | 16 | 16 |
| Channel to Channel Isolation | Yes | No | No |
| Input and Output Response Time- On/Off (ms) | 1 cycle/2 cycles | 1 cycle/2 cycles | 1 cycle/2 cycles |
| Points per Common | 4 groups of 1 | 2 groups of 8 | 2 groups of 8 |
| On State Current | 7 mA minimum | 5 mA minimum | 4 mA minimum |
| Off State Current | 3 mA maximum | 2.5 mA maximum | 1.5 mA maximum |
| Input Impedance | 38.5 kOhms (reactive) at 60 Hz, typical; 46.3 kOhms (reactive) at 50 Hz, typical | 8.6 kOhms (reactive) at 60 Hz, typical; 10.32 kOhms (reactive) at 50 Hz, typical | 38.5 kOhms (reactive) at 60 Hz, typical; 46.3 kOhms (reactive) at 50 Hz, typical |
| 5V Backplane Current Consumption (mA) | 30 maximum | 110 maximum | 110 maximum |
| LED Indicators | One LED per point shows individual point ON/OFF status. OK LED indicates backplane power is present | One LED per point shows individual point ON/OFF status. OK LED indicates backplane power is present | One LED per point shows individual point ON/OFF status. OK LED indicates backplane power is present |
| Dimensions (W x H x D) | 110 mm (4.3 in) x 66.8 mm (2.63 in) x 50 mm (1.956 in), not including the height of the carrier or the mating connectors | 110 mm (4.3 in) x 66.8 mm (2.63 in) x 50 mm (1.956 in), not including the height of the carrier or the mating connectors | 110 mm (4.3 in) x 66.8 mm (2.63 in) x 50 mm (1.956 in), not including the height of the carrier or the mating connectors |

Discrete Input Modules

Discrete input modules receive signals from input devices such as sensors, pushbuttons, and switches that can have two states: on or off, open or closed. Modules require a carrier base (IC200CHSxxx).



| | IC200MDL243 | IC200MDL244 | IC200MDL631 |
|--|--|--|--|
| Product Name | VersaMax Discrete Input Module, 120 VAC Isolated, 16 points | VersaMax Discrete Input Module, 240 VAC Isolated, 8 points | VersaMax Discrete Input Module 125 VDC, Pos/Neg Logic, Isolated, 8 points |
| Lifecycle Status | Active | Active | Active |
| Input Voltage | 0-132 VAC | 0-264 VAC | 0-150 VDC, 125 VDC nominal |
| Number of Points | 16 | 8 | 8 isolated inputs |
| Channel to Channel Isolation | Yes | Yes | Yes |
| Input and Output Response Time- On/Off (ms) | 1 cycle/2 cycles | 1 cycle/2 cycles | 0.5 maximum |
| Points per Common | 16 groups of 1 | 8 groups of 1 | 8 groups of 1 |
| On State Current | 5 mA minimum | 7 mA minimum | 1.0 mA minimum |
| Off State Current | 2.5 mA maximum | 3 mA maximum | 0 to 0.1 mA maximum |
| Input Impedance | 8.6 kOhms (reactive) at 60 Hz, typical; 10.32 kOhms (reactive) at 50 Hz, typical | 38.5 kOhms (reactive) at 60 Hz, typical; 46.3 kOhms (reactive) at 50 Hz, typical | 74 K Ohm typical at 125 VDC |
| 5V Backplane Current Consumption (mA) | 100 maximum | 60 maximum | 40 maximum |
| LED Indicators | One LED per point shows individual point ON/OFF status. OK LED indicates backplane power is present | One LED per point shows individual point ON/OFF status. OK LED indicates backplane power is present | One LED per point shows individual point ON/OFF status. OK LED indicates backplane power is present |
| Dimensions (W x H x D) | 110 mm (4.3 in) x 66.8 mm (2.63 in) x 50 mm (1.956 in), not including the height of the carrier or the mating connectors | 110 mm (4.3 in) x 66.8 mm (2.63 in) x 50 mm (1.956 in), not including the height of the carrier or the mating connectors | 110 mm (4.3 in) x 66.8 mm (2.63 in) x 50 mm (1.956 in), not including the height of the carrier or the mating connectors |

Discrete Input Modules



Discrete input modules receive signals from input devices such as sensors, pushbuttons, and switches that can have two states: on or off, open or closed. Modules require a carrier base (IC200CHSxxx).

| | IC200MDL632 | IC200MDL635 | IC200MDL636 |
|--|--|--|--|
| Product Name | VersaMax Discrete Input Module 125 VDC, Pos/Neg Logic, Isolated, 16 points | VersaMax Discrete Input Module 48 VDC, Pos/Neg Logic (2 Groups of 8), 16 points | VersaMax Discrete Input Module 48 VDC, Pos/Neg Logic (4 Groups of 8), 32 points |
| Lifecycle Status | Active | Active | Active |
| Input Voltage | 0-150 VDC, 125 VDC nominal | 0-60 VDC, 48 VDC nominal | 0-60 VDC, 48 VDC nominal |
| Number of Points | 16 isolated inputs | 16 inputs (2 groups of 8) | 32 (4 groups of 8) |
| Channel to Channel Isolation | Yes | No | No |
| Input and Output Response Time- On/Off (ms) | 0.5 maximum | 0.5 maximum | 0.5 maximum |
| Points per Common | 16 groups of 1 | 2 groups of 8 | 4 groups of 8 |
| On State Current | 1.0 mA minimum | 1.0 mA minimum | 1.0 mA minimum |
| Off State Current | 0 to 0.1 mA maximum | 0 to 0.4 mA maximum | 0 to 0.4 mA maximum |
| Input Impedance | 74 K Ohm typical at 125 VDC | 28 K Ohm typical | 28 K Ohm typical |
| 5V Backplane Current Consumption (mA) | 80 maximum | 70 maximum | 140 maximum |
| LED Indicators | One LED per point shows individual point ON/OFF status. OK LED indicates backplane power is present | One LED per point shows individual point ON/OFF status. OK LED indicates backplane power is present | One LED per point shows individual point ON/OFF status. OK LED indicates backplane power is present |
| Dimensions (W x H x D) | 110 mm (4.3 in) x 66.8 mm (2.63 in) x 50 mm (1.956 in), not including the height of the carrier or the mating connectors | 110 mm (4.3 in) x 66.8 mm (2.63 in) x 50 mm (1.956 in), not including the height of the carrier or the mating connectors | 110 mm (4.3 in) x 66.8 mm (2.63 in) x 50 mm (1.956 in), not including the height of the carrier or the mating connectors |

Discrete Input Modules



Discrete input modules receive signals from input devices such as sensors, pushbuttons, and switches that can have two states: on or off, open or closed. Modules require a carrier base (IC200CHSxxx).

| | IC200MDL640 | IC200MDL643 | IC200MDL644 | IC200MDL650 |
|--|--|--|--|--|
| Product Name | VersaMax Discrete Input Module, 24 VDC Pos/Neg Logic, 16 points | VersaMax Discrete Input Module, 5/12 VDC (TTL) Pos/Neg Logic, 16 points | VersaMax Discrete Input Module, 5/12 VDC (TTL) Pos/Neg Logic, 32 points | VersaMax Discrete Input Module, 24 VDC Positive Logic, 32 points |
| Lifecycle Status | Active | Active | Active | Active |
| Input Voltage | 0-30 VDC | 0-15 VDC | 0-15 VDC | 0-30 VDC |
| Number of Points | 16 | 16 | 32 | 32 |
| Channel to Channel Isolation | No | No | No | No |
| Input and Output Response Time- On/Off (ms) | 0.5 | 0.25 | 0.25 | 0.5 |
| Points per Common | 2 groups of 8 | 2 groups of 8 | 4 groups of 8 | 2 groups of 8 |
| On State Current | 2.0-5.5 mA | 1.45 mA minimum | 1.45 mA minimum | 2.0-5.5 mA |
| Off State Current | 0-0.5 mA | 0-0.7 mA maximum | 0-0.7 mA maximum | 0-0.5 mA |
| Input Impedance | 10 kOhms maximum | 2.4 kOhms at 12 VDC, typical | 2.4 kOhms at 12 VDC, typical | 10 kOhms maximum |
| 5V Backplane Current Consumption (mA) | 25 maximum | 70 maximum | 140 maximum | 50 maximum |
| LED Indicators | One LED per point shows individual point ON/OFF status. OK LED indicates backplane power is present | One LED per point shows individual point ON/OFF status. OK LED indicates backplane power is present | One LED per point shows individual point ON/OFF status. OK LED indicates backplane power is present | One LED per point shows individual point ON/OFF status. OK LED indicates backplane power is present |
| Dimensions (W x H x D) | 110 mm (4.3 in) x 66.8 mm (2.63 in) x 50 mm (1.956 in), not including the height of the carrier or the mating connectors | 110 mm (4.3 in) x 66.8 mm (2.63 in) x 50 mm (1.956 in), not including the height of the carrier or the mating connectors | 110 mm (4.3 in) x 66.8 mm (2.63 in) x 50 mm (1.956 in), not including the height of the carrier or the mating connectors | 110 mm (4.3 in) x 66.8 mm (2.63 in) x 50 mm (1.956 in), not including the height of the carrier or the mating connectors |

Discrete Output Modules



Discrete output modules send control signals to devices such as contactors, indicator lamps, and interposing relays that can also have two states. Modules require a carrier base (IC200CHSxxx).

| | IC200MDL329 | IC200MDL330 | IC200MDL331 |
|--|--|--|--|
| Product Name | VersaMax Discrete Output Module, 120 VAC, 0.5A per point Isolated, 8 points | VersaMax Discrete Output Module, 120 VAC 0.5A per point Isolated, 16 points | VersaMax Discrete Output Module, 120 VAC 2.0A per point Isolated, 8 points |
| Lifecycle Status | Active | Active | Active |
| Output Voltage | 85-132 VAC (47-63 Hz), 120 VAC nominal | 85-132 VAC (47-63 Hz), 120 VAC nominal | 85-132 VAC (47-63 Hz), 120 VAC nominal |
| Number of Points | 8 | 16 | 8 |
| Channel to Channel Isolation | Yes | Yes | Yes |
| Load Current per Point | 0.5 A per point | 0.5 A per point | 2.0 A per point |
| Input and Output Response Time- On/Off (ms) | <1/2 cycle/<1/2 cycle | <1/2 cycle/<1/2 cycle | <1/2 cycle/<1/2 cycle |
| Protection | Snubber and MOVs (each output) | Snubber and MOVs (each output) | Snubber and MOVs (each output) |
| Points per Common | 8 groups of 1 | Isolated points | Isolated points |
| External Power Supply | 85-132 VAC (47-63 Hz), 120 VAC nominal | 85-132 VAC (47-63 Hz), 120 VAC nominal | 85-132 VAC (47-63 Hz), 120 VAC nominal |
| Load Current | 10 mA minimum per point, 0.5 A maximum per point, 5.0 A for one cycle (20 ms) maximum inrush | 10 mA minimum per point, 0.5 A maximum per point, 5.0 A for one cycle (20 ms) maximum inrush | 10 mA minimum per point, 2.0 A maximum per point, 20 A for one cycle (20 ms) maximum inrush |
| 5V Backplane Current Consumption (mA) | 70 maximum | 140 maximum | 85 maximum |
| LED Indicators | One LED per point shows individual point ON/OFF status (logic side). OK LED indicates backplane power is present | One LED per point shows individual point ON/OFF status (logic side). OK LED indicates backplane power is present | One LED per point shows individual point ON/OFF status (logic side). OK LED indicates backplane power is present |
| Dimensions (W x H x D) | 110 mm (4.3 in) x 66.8 mm (2.63 in) x 50 mm (1.956 in), not including the height of the carrier or the mating connectors | 110 mm (4.3 in) x 66.8 mm (2.63 in) x 50 mm (1.956 in), not including the height of the carrier or the mating connectors | 110 mm (4.3 in) x 66.8 mm (2.63 in) x 50 mm (1.956 in), not including the height of the carrier or the mating connectors |

Discrete Output Modules

Discrete output modules send control signals to devices such as contactors, indicator lamps, and interposing relays that can also have two states. Modules require a carrier base (IC200CHSxxx).



| | IC200MDL730 | IC200MDL740 | IC200MDL741 |
|--|--|--|--|
| Product Name | VersaMax Discrete Output Module, 24 VDC Positive Logic 2.0A per point w/ESCP, 8 points | VersaMax Discrete Output Module, 24 VDC Positive Logic, 0.5A per point, 16 points | VersaMax Discrete Output Module, 24 VDC Positive Logic, 0.5A per point w/ESCP, 16 points |
| Lifecycle Status | Active | Active | Active |
| Output Voltage | 17.5-30 VDC, 24 VDC nominal | 10.2-30 VDC, 12/24 VDC nominal | 18-30 VDC, 24 VDC nominal |
| Number of Points | 8 | 16 | 16 |
| Channel to Channel Isolation | No | No | No |
| Load Current per Point | 2.0 A per point | 0.5 A per point | 0.5 A per point |
| Input and Output Response Time- On/Off (ms) | 0.5 | 0.2/1.0 | 0.5/0.5 |
| Protection | Short circuit protection, overcurrent protection (each output) | No internal fuses (each output) | Short circuit protection, overcurrent protection, free-wheeling diodes (each output) |
| Points per Common | 1 group of 8 | 1 group of 16 | 1 group of 16 |
| External Power Supply | 18-30 VDC, 24 VDC nominal | 10.2-30 VDC, 12/24 VDC nominal | 18-30 VDC, 24 VDC nominal |
| Load Current | 2.0 A at 30 VDC maximum (resistive) per point, 8.0 A max. per module | 0.5 A at 30 VDC maximum (resistive); 2.0 A inrush maximum for 100 ms | 0.5 A at 30 VDC maximum (resistive); 2.0 A inrush maximum for 100 ms |
| 5V Backplane Current Consumption (mA) | 50 maximum | 45 maximum | 75 maximum |
| LED Indicators | One LED per point shows individual point ON/OFF state (logic side). FLD PWR LED indicates field power is present. OK LED indicates backplane power is present. | One LED per point shows individual point ON/OFF state (logic side). FLD PWR LED indicates field power is present. OK LED indicates backplane power is present. | One LED per point shows individual point ON/OFF state (logic side). FLD PWR LED indicates field power is present. OK LED indicates backplane power is present. |
| Dimensions (W x H x D) | 110 mm (4.3 in) x 66.8 mm (2.63 in) x 50 mm (1.956 in), not including the height of the carrier or the mating connectors | 110 mm (4.3 in) x 66.8 mm (2.63 in) x 50 mm (1.956 in), not including the height of the carrier or the mating connectors | 110 mm (4.3 in) x 66.8 mm (2.63 in) x 50 mm (1.956 in), not including the height of the carrier or the mating connectors |

Discrete Output Modules



Discrete output modules send control signals to devices such as contactors, indicator lamps, and interposing relays that can also have two states. Modules require a carrier base (IC200CHSxxx).

| | IC200MDL742 | IC200MDL743 | IC200MDL744 |
|--|--|--|--|
| Product Name | VersaMax Discrete Output Module, 24 VDC Positive Logic 0.5A with ESCP, 32 points | VersaMax Discrete Output Module, 5/12/24 VDC Negative Logic, 0.5 A per point (1 group of 16) 16 points | VersaMax Discrete Output Module, 5/12/24 VDC Negative Logic, 0.5 A per point (2 groups of 16) 32 points |
| Lifecycle Status | Active | Active | Active |
| Output Voltage | 18-30 VDC, 24 VDC nominal | 5/12/24 VDC | 5/12/24 VDC |
| Number of Points | 32 | 16 (1 group of 16) | 32 (2 groups of 16) |
| Channel to Channel Isolation | No | No | No |
| Load Current per Point | 0.5 A per point | 0.5 A per point | 0.5 A per point |
| Input and Output Response Time- On/Off (ms) | 0.5/0.5 | 0.2/1.0 | 0.2/1.0 |
| Protection | Short circuit protection, overcurrent protection, free-wheeling diodes (each output) | No internal fuse | No internal fuse |
| Points per Common | 2 groups of 16 | 1 group of 16 | 2 groups of 16 |
| External Power Supply | 18-30 VDC, 24 VDC nominal | 4.75 to 5.25 VDC, 5 VDC nominal for 5 VDC-TTL mode; 10.2 to 30 VDC, 12/24 VDC nominal for 12/24 VDC mode | 4.75 to 5.25 VDC, 5 VDC nominal for 5 VDC-TTL mode; 10.2 to 30 VDC, 12/24 VDC nominal for 12/24 VDC mode |
| Load Current | 0.5 A at 30 VDC maximum (resistive); 2.0 A inrush maximum for 100 ms | 25 mA maximum for 5 VDC-TTL mode, 0.5 A at 30 VDC maximum, 2.0 A inrush maximum for 100 ms for 12/24 VDC mode | 25 mA maximum for 5 VDC-TTL mode, 0.5 A at 30 VDC maximum, 2.0 A inrush maximum for 100 ms for 12/24 VDC mode |
| 5V Backplane Current Consumption (mA) | 150 maximum | 70 maximum | 140 maximum |
| LED Indicators | One LED per point shows individual point ON/OFF state (logic side). FLD PWR LED indicates field power is present. OK LED indicates backplane power is present. | One LED per point shows individual point ON/OFF state (logic side). FLD PWR LED indicates field power is present. OK LED indicates backplane power is present. | One LED per point shows individual point ON/OFF state (logic side). FLD PWR LED indicates field power is present. OK LED indicates backplane power is present. |
| Dimensions (W x H x D) | 110 mm (4.3 in) x 66.8 mm (2.63 in) x 50 mm (1.956 in), not including the height of the carrier or the mating connectors | 110 mm (4.3 in) x 66.8 mm (2.63 in) x 50 mm (1.956 in), not including the height of the carrier or the mating connectors | 110 mm (4.3 in) x 66.8 mm (2.63 in) x 50 mm (1.956 in), not including the height of the carrier or the mating connectors |

Discrete Output Modules

Discrete output modules send control signals to devices such as contactors, indicator lamps, and interposing relays that can also have two states. Modules require a carrier base (IC200CHSxxx).



| | IC200MDL750 | IC200MDL930 | IC200MDL940 |
|--|--|--|--|
| Product Name | VersaMax Discrete Output Module, 24 VDC Positive Logic, 0.5A per point, 32 points | VersaMax Discrete Output Module, Relay 2.0 A per point Isolated Form A, 8 points | VersaMax Discrete Output Module, Relay 2.0 A per point Isolated Form A, 16 points |
| Lifecycle Status | Active | Active | Active |
| Output Voltage | 10.2-30 VDC, 12/24 VDC nominal | 0-125 VDC, 5/24/125 VDC nominal; 0-265 VAC (47-63 Hz), 120/240 VAC nominal | 0-125 VDC, 5/24/125 VDC nominal; 0-265 VAC (47-63 Hz), 120/240 VAC nominal |
| Number of Points | 32 | 8 | 16 |
| Channel to Channel Isolation | No | Yes | Yes |
| Load Current per Point | 0.5 A per point | 2.0 A for 5-265 VAC, 2.0 A for 5-30 VDC, 0.2 A for 31-125 VDC | 2.0 A for 5-265 VAC, 2.0 A for 5-30 VDC, 0.2 A for 31-125 VDC |
| Input and Output Response Time- On/Off (ms) | 0.2/1.0 | 10.0/10.0 | 10.0/10.0 |
| Protection | No internal fuses | No internal fuses or snubbers | No internal fuses or snubbers |
| Points per Common | 2 groups of 16 | Isolated points | Isolated points |
| External Power Supply | 10.2-30 VDC, 12/24 VDC nominal | 0-125 VDC, 5/24/125 VDC nominal; 0-265 VAC (47-63 Hz), 120/240 VAC nominal | 0-125 VDC, 5/24/125 VDC nominal; 0-265 VAC (47-63 Hz), 120/240 VAC nominal |
| Load Current | 0.5 A at 30 VDC maximum (resistive); 2.0 A inrush maximum for 100 ms | 10 mA per point minimum; 2.0 A for 5-265 VAC maximum (resistive); 2.0 A for 5-30 VDC maximum (resistive); 0.2 A for 31-125 VDC maximum (resistive) | 10 mA per point minimum; 2.0 A for 5-265 VAC maximum (resistive); 2.0 A for 5-30 VDC maximum (resistive); 0.2 A for 31-125 VDC maximum (resistive) |
| 5V Backplane Current Consumption (mA) | 90 maximum | 245 maximum | 490 maximum |
| LED Indicators | One LED per point shows individual point ON/OFF state (logic side). FLD PWR LED indicates field power is present. OK LED indicates backplane power is present. | One LED per point shows individual point ON/OFF state (logic side). FLD PWR LED indicates field power is present. OK LED indicates backplane power is present. | One LED per point shows individual point ON/OFF state (logic side). FLD PWR LED indicates field power is present. OK LED indicates backplane power is present. |
| Dimensions (W x H x D) | 110 mm (4.3 in) x 66.8 mm (2.63 in) x 50 mm (1.956 in), not including the height of the carrier or the mating connectors | 110 mm (4.3 in) x 66.8 mm (2.63 in) x 50 mm (1.956 in), not including the height of the carrier or the mating connectors | 110 mm (4.3 in) x 66.8 mm (2.63 in) x 50 mm (1.956 in), not including the height of the carrier or the mating connectors |

Analog Input Modules



Analog input modules receive signals from current and voltage input devices. Modules require a carrier base (IC200CHSxxx).

| | IC200ALG230 | IC200ALG240 | IC200ALG260 | IC200ALG261 |
|--|--|--|--|--|
| Product Name | VersaMax Analog Input Module, 12 Bit Voltage/Current, 4 Channels | VersaMax Analog Input Module, 16 Bit Voltage/Current Isolated, 8 Channel | VersaMax Analog Input Module, 12 Bit Voltage/Current, 8 Channel | VersaMax Analog Input Module, 15 Bit Differential Voltage, 8 Channel |
| Lifecycle Status | Active | Active | Active | Active |
| Input Range | ±10 VDC or 0-10 VDC | ±10 VDC, 4-20 mA | 4-20 mA, ±10 VDC or 0-10 VDC | ±10 VDC |
| Number of Channels | 4 | 8 Channel to channel isolated | 8 | 8 |
| External Power Supply | None | Range: 19.5-30 VDC including ripple; Current consumption: 100 mA maximum plus load currents | None | None |
| Resolution | Bipolar mode: 2.5 mV = 8 counts, Unipolar mode: 2.5 mV = 8 counts | Current mode: 381 nA nominal Voltage mode: 381 µV nominal | Current mode: 4 µA = 8 counts, Bipolar mode: 2.5 mV = 8 counts, Unipolar mode: 2.5 mV = 8 counts | Bipolar mode: 0.3125 mV = 1 counts |
| Update Rate | 0.4 ms | Approximately 20 mS max. @ 50 Hz filter frequency Approximately 16.7 mS max. @ 60 Hz filter frequency | 0.4 ms | 7.5 ms |
| Accuracy at 25°C | ±0.3% typical of full scale, ±0.5% maximum of full scale | ±0.1% maximum of full scale | ±0.3% typical of full scale, ±0.5% maximum of full scale | ±0.3% typical of full scale, ±0.5% maximum of full scale |
| Input Impedance | Voltage mode: 126 kOhms maximum, Current mode: 200 Ohms maximum | N/A | Voltage mode: 126 kOhms maximum, Current mode: 200 Ohms maximum | Voltage mode: 100 kOhms maximum |
| Input Filter Response | 5.0 ms | N/A | 5.0 ms | N/A |
| 5V Backplane Current Consumption (mA) | 125 maximum | 15 maximum | 130 maximum | 200 maximum |
| 3.3V Backplane Current Consumption (mA) | N/A | 120 maximum | N/A | N/A |
| LED Indicators | INT PWR LED indicates internally-generated field power is present. OK LED indicates backplane power is present. | FLD PWR LED indicates the presence of both logic power and user power. OK LED indicates module status. | INT PWR LED indicates internally-generated field power is present. OK LED indicates backplane power is present. | INT PWR LED indicates internally-generated field power is present. OK LED indicates backplane power is present. |
| Dimensions (W x H x D) | 110 mm (4.3 in) x 66.8 mm (2.63 in) x 50 mm (1.956 in), not including the height of the carrier or the mating connectors | 110 mm (4.3 in) x 66.8 mm (2.63 in) x 50 mm (1.956 in), not including the height of the carrier or the mating connectors | 110 mm (4.3 in) x 66.8 mm (2.63 in) x 50 mm (1.956 in), not including the height of the carrier or the mating connectors | 110 mm (4.3 in) x 66.8 mm (2.63 in) x 50 mm (1.956 in), not including the height of the carrier or the mating connectors |

Analog Input Modules

Analog input modules receive signals from current and voltage input devices. Modules require a carrier base (IC200CHSxxx).



| | IC200ALG262 | IC200ALG263 | IC200ALG264 |
|--|---|---|---|
| Product Name | VersaMax Analog Input Module, 15 Bit Differential Current, 8 Channel | VersaMax Analog Input Module, 15 Bit Voltage, 15 Channel | VersaMax Analog Input Module, 15 Bit Current, 15 Channel |
| Lifecycle Status | Active | Active | Active |
| Input Range | 0 to 20 mA or 4 to 20 mA | ±10 VDC | 0 to 20 mA or 4 to 20 mA |
| Number of Channels | 8 | 15 | 15 |
| External Power Supply | None | None | None |
| Resolution | 4 to 20 mA: 0.5micro Amp = 1 count; 0 to 20 mA: 0.625micro Amp = 1 count | Bipolar mode: 0.3125 mV = 1 count | 4 to 20 mA: 0.5micro Amp = 1 count; 0 to 20 mA: 0.625micro Amp = 1 count |
| Update Rate | 7.5 ms | 7.5 ms | 7.5 ms |
| Accuracy at 25°C | ±0.3% typical of full scale, ±0.5% maximum of full scale | ±0.3% typical of full scale, ±0.5% maximum of full scale | ±0.3% typical of full scale, ±0.5% maximum of full scale |
| Input Impedance | Current mode: 100 kOhms maximum | Voltage mode: 100 kOhms maximum | Voltage mode: 100 kOhms maximum, Current mode: 200 Ohms maximum |
| Input Filter Response | N/A | N/A | 24 Hz ±20% |
| 5V Backplane Current Consumption (mA) | 200 maximum | 150 maximum | 100 maximum |
| 3.3V Backplane Current Consumption (mA) | N/A | N/A | N/A |
| LED Indicators | INT PWR LED indicates internally-generated field power is present. OK LED indicates backplane power is present. | INT PWR LED indicates internally-generated field power is present. OK LED indicates backplane power is present. | INT PWR LED indicates internally-generated field power is present. OK LED indicates backplane power is present. |
| Dimensions (W x H x D) | 110 mm (4.3 in) x 66.8 mm (2.63 in) x 50 mm (1.956 in) , not including the height of the carrier or the mating connectors | 110 mm (4.3 in) x 66.8 mm (2.63 in) x 50 mm (1.956 in) , not including the height of the carrier or the mating connectors | 110 mm (4.3 in) x 66.8 mm (2.63 in) x 50 mm (1.956 in) , not including the height of the carrier or the mating connectors |

Analog Output Modules

Analog output modules provide voltage or current signals to analog output devices. Modules require a carrier base (IC200CHSxxx).



| | IC200ALG320 | IC200ALG321 | IC200ALG322 |
|--|---|---|---|
| Product Name | VersaMax Analog Output Module, 12 Bit Current, 4 Channel | VersaMax Analog Output Module, 12 Bit 0-10V Voltage, 4 Channel | VersaMax Analog Output Module, 12 Bit $\pm 10V$ Voltage, 4 Channel |
| Lifecycle Status | Active | Active | Active |
| Output Range | 4-20 mA | 0-10 VDC | ± 10 VDC |
| Number of Channels | 4 | 4 | 4 |
| External Power Supply | Range: 18-30 VDC including ripple; Current consumption: 160 mA maximum including load current | Range: 18-30 VDC including ripple; Current consumption: 125 mA maximum | Range: 18-30 VDC including ripple; Current consumption: 125 mA maximum |
| Resolution | 4 μ A = 8 counts | 2.5 mV = 8 counts | 5 mV = 16 counts |
| Update Rate | 0.3 ms maximum | 0.3 ms maximum | 0.3 ms maximum |
| Accuracy at 25°C | $\pm 0.3\%$ typical of full scale, $\pm 0.5\%$ maximum of full scale | $\pm 0.3\%$ typical of full scale, $\pm 0.5\%$ maximum of full scale | $\pm 0.3\%$ typical of full scale, $\pm 0.5\%$ maximum of full scale |
| 5V Backplane Current Consumption (mA) | 50 maximum | 50 maximum | 50 maximum |
| 3.3V Backplane Current Consumption (mA) | N/A | N/A | N/A |
| LED Indicators | FLD PWR LED indicates field power is present. OK LED indicates backplane power is present. | FLD PWR LED indicates field power is present. OK LED indicates backplane power is present. | FLD PWR LED indicates field power is present. OK LED indicates backplane power is present. |
| Dimensions (W x H x D) | 110 mm (4.3 in) x 66.8 mm (2.63 in) x 50 mm (1.956 in), not including the height of the carrier or the mating connectors | 110 mm (4.3 in) x 66.8 mm (2.63 in) x 50 mm (1.956 in), not including the height of the carrier or the mating connectors | 110 mm (4.3 in) x 66.8 mm (2.63 in) x 50 mm (1.956 in), not including the height of the carrier or the mating connectors |

Analog Output Modules

Analog output modules provide voltage or current signals to analog output devices. Modules require a carrier base (IC200CHSxxx).



| | IC200ALG325 | IC200ALG326 | IC200ALG327 | IC200ALG328 | IC200ALG331 |
|--|--|---|--|---|--|
| Product Name | VersaMax Analog Output Module, 13 Bit ± 10 VDC or 0 to 10 VDC Voltage, 8 Channel | VersaMax Analog Output Module, 13 Bit Current, 8 Channel | VersaMax Analog Output Module, 13 Bit ± 10 VDC or 0 to 10 VDC Voltage, 12 Channel | VersaMax Analog Output Module, 13 Bit, 0 - 20 mA, 4-20 mA Current, 12 Channel | VersaMax Analog Output Module, 14 Bit Voltage/Current 1500 VAC Isolation, 4 Channel |
| Lifecycle Status | Active | Active | Active | Active | Active |
| Output Range | ± 10 VDC or 0 to 10 VDC | 4 to 20 mA (default) 0 to 20 mA (configured with jumper) | ± 10 VDC or 0 to 10 VDC | 4 to 20 mA (default) 0 to 20 mA (configured with jumper) | ± 10 VDC, 4-20 mA |
| Number of Channels | 8 | 8 | 12 | 12 single ended, one group | 4 |
| External Power Supply | Range: 18-30 VDC including ripple; Current consumption: 102 mA maximum | Range: 18-30 VDC including ripple; 2A inrush maximum, 100 mA maximum (no load), 185 mA maximum (all 8 outputs at full scale) | Range: 18-30 VDC including ripple; Current consumption: 112 mA maximum | Range: 18-30 VDC including ripple; Current consumption: 2A inrush maximum 100 mA maximum (no load) 270 mA maximum (all 12 outputs at full scale) | Range: 19.5-30 VDC including ripple; Current consumption: 100 mA maximum plus load currents |
| Resolution | 1.25 mV = 4 counts | 4-20 mA: 5 counts = 2.5 μ A (~12.7 bits) 0-20 mA: 4 counts = 2.5 μ A (13 bits) | 1.25 mV = 4 counts | 4-20 mA: 5 counts = 2.5 μ A (~12.7 bits) 0-20 mA: 4 counts = 2.5 μ A (13 bits) | Current mode: 381 nA nominal Voltage mode: 381 μ V nominal |
| Update Rate | 15.0 ms maximum | 15.0 ms maximum | 10.0 ms maximum | 15 ms maximum | 7 ms maximum |
| Accuracy at 25°C | $\pm 0.3\%$ typical of full scale, $\pm 0.5\%$ maximum of full scale | $\pm 0.3\%$ of full scale (typical), $\pm 0.5\%$ of full scale (max.) $\pm 1\%$ of full scale (max.) | $\pm 0.3\%$ typical of full scale, $\pm 0.5\%$ maximum of full scale | +/- 0.3% of full scale (typical), +/- 0.5% of full scale (max.) +/- 1% of full scale (max.) | $\pm 0.1\%$ maximum of full scale |
| 5V Backplane Current Consumption (mA) | 50 maximum | 50 maximum | 50 maximum | 50 maximum | 10 maximum |
| 3.3V Backplane Current Consumption (mA) | N/A | N/A | N/A | N/A | 115 maximum |
| LED Indicators | FLD PWR LED indicates field power is present. OK LED indicates backplane power is present. | FLD PWR LED indicates field power is present. OK LED indicates backplane power is present. | FLD PWR LED indicates field power is present. OK LED indicates backplane power is present. | FLD PWR LED indicates field power is present. OK LED indicates backplane power is present. | FLD PWR LED indicates the presence of both logic power and user power. OK LED indicates module status. |
| Dimensions (W x H x D) | 110 mm (4.3 in) x 66.8 mm (2.63 in) x 50 mm (1.956 in), not including the height of the carrier or the mating connectors | 110 mm (4.3 in) x 66.8 mm (2.63 in) x 50 mm (1.956 in), not including the height of the carrier or the mating connectors | 110 mm (4.3 in) x 66.8 mm (2.63 in) x 50 mm (1.956 in), not including the height of the carrier or the mating connectors | 110 mm (4.3 in) x 66.8 mm (2.63 in) x 50 mm (1.956 in), not including the height of the carrier or the mating connectors | 110 mm (4.3 in) x 66.8 mm (2.63 in) x 50 mm (1.956 in), not including the height of the carrier or the mating connectors |

Analog Mixed Modules

Analog mixed modules provide maximum flexibility by combining inputs and outputs in a single, compact module. Modules require a carrier base (IC200CHSxxx).



| | IC200ALG430 | IC200ALG431 | IC200ALG432 |
|-------------------------------|---|---|---|
| Product Name | VersaMax Analog Mixed Module, 12 Bit Input Current 4 Channel/Output Current 2 Channel | VersaMax Analog Mixed Module, 12 Bit 0-10V Input 4 Channel/Output 0-10V 2 Channel | VersaMax Analog Mixed Module, 12 Bit $\pm 10V$ Input 4 Channel/Output $\pm 10V$ 2 Channel |
| Lifecycle Status | Active | Active | Active |
| Input Range | 4-20 mA | 0-10 VDC | -10 to +10 VDC |
| Output Range | 4-20 mA | 0-10 VDC | -10 to +10 VDC |
| External Power Supply | Range: 18-30 VDC including ripple; Current consumption: 125 mA maximum | Range: 18-30 VDC including ripple; Current consumption: 125 mA maximum | Range: 18-30 VDC including ripple; Current consumption: 125 mA maximum |
| Resolution | 4 μA = 8 counts | 2.5 mV = 8 counts | Input: 2.5 mV = 8 counts, Output: 5 mV = 16 counts |
| Update Rate | 0.3 ms maximum | 0.3 ms maximum | 0.3 ms maximum |
| Accuracy at 25°C | $\pm 0.3\%$ typical of full scale, $\pm 0.5\%$ maximum of full scale | $\pm 0.3\%$ typical of full scale, $\pm 0.5\%$ maximum of full scale | $\pm 0.3\%$ typical of full scale, $\pm 0.5\%$ maximum of full scale |
| Input Impedance | 200 Ohms maximum | 120 kOhms minimum | 125 kOhms minimum |
| Input Filter Response | 5.0 ms | 5.0 ms | 5.0 ms |
| LED Indicators | FLD PWR LED indicates field power is present. OK LED indicates backplane power is present. | FLD PWR LED indicates field power is present. OK LED indicates backplane power is present. | FLD PWR LED indicates field power is present. OK LED indicates backplane power is present. |
| Dimensions (W x H x D) | 110 mm (4.3 in) x 66.8 mm (2.63 in) x 50 mm (1.956 in), not including the height of the carrier or the mating connectors | 110 mm (4.3 in) x 66.8 mm (2.63 in) x 50 mm (1.956 in), not including the height of the carrier or the mating connectors | 110 mm (4.3 in) x 66.8 mm (2.63 in) x 50 mm (1.956 in), not including the height of the carrier or the mating connectors |

RTD and Thermocouple Modules

Specialty modules are available for RTD and Thermocouple inputs. Modules require a carrier base (IC200CHSxxx).



| | IC200ALG620 | IC200ALG630 |
|---|--|--|
| Product Name | VersaMax Analog Input Module, 16 Bit RTD, 4 Channel | VersaMax Analog Input Module, 16 Bit Thermocouple, 7 Channel |
| Lifecycle Status | Active | Active |
| Input Range | RTD types: 25, 100, and 1000 ohm platinum 10, 50, and 100 ohm copper 100 and 120 ohm nickel 604 ohms nickel/iron | Thermocouple types: J, K, T, S, R, none (used for mV inputs) |
| Number of Channels | 4 | 7 |
| Resolution | 15 bits plus sign | 15 bits plus sign |
| Update Rate | 60 Hz: approximately 210 milliseconds per channel 50 Hz: approximately 230 milliseconds per channel | 60 Hz: approximately 60 milliseconds per channel 50 Hz: approximately 70 milliseconds per channel |
| Accuracy at 25°C | on voltage measurement: ±0.15% on resistance measurement on temperature measurement: ±0.15% on RTD (temperature) measurement | on voltage measurement: ±0.2% on temperature measurement: ±0.15% |
| 5 V Backplane Current Consumption (mA) | 125 maximum | 125 maximum |
| 3.3 V Backplane Current Consumption (mA) | 125 maximum | 125 maximum |
| LED Indicators | OK LED: green indicates backplane power is present. Amber indicates module fault. | OK LED: green indicates backplane power is present. Amber indicates module fault. |
| Dimensions (W x H x D) | 110 mm (4.3 in) x 66.8 mm (2.63 in) x 50 mm (1.956 in), not including the height of the carrier or the mating connectors | 110 mm (4.3 in) x 66.8 mm (2.63 in) x 50 mm (1.956 in), not including the height of the carrier or the mating connectors |