

**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
<b>Product Name</b>	<b>VersaMax Discrete Mixed Modules, 24 VDC Pos Logic Input 20 points/ Output Relay 2.0 A, 12 points</b>	<b>VersaMax Discrete Mixed Modules 24 VDC Pos Logic Input 16/Output 24 VDC 0.5 A with ESCP</b>	<b>VersaMax Discrete Mixed Modules 24 VDC Positive Logic Input 10/Output Relay 6</b>
<b>Lifecycle Status</b>	Active	Active	Active
<b>Input Voltage</b>	24 VDC	24 VDC	24 VDC
<b>Output Voltage</b>	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
<b>Number of Points</b>	20 in/12 out	16 in/16 out	10 in/6 out
<b>Channel to Channel Isolation</b>	No	No	No
<b>Load Current per Point</b>	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
<b>Input and Output Response Time- On/Off(ms)</b>	0.5 and 10	0.5 and 0.5	0.5 and 10
<b>Protection</b>	No internal fuses or snubbers	Short circuit protection, overcurrent protection, free-wheeling diodes	No internal fuses or snubbers
<b>On State Current</b>	2.0-5.5 mA	2.0-5.5 mA	2.0-5.5 mA
<b>Off State Current</b>	0-0.5 mA	0-0.5 mA	0-0.5 mA
<b>External Power Supply</b>	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
<b>Input Impedance</b>	10 kOhms maximum	10 kOhms maximum	10 kOhms maximum
<b>Load Current</b>	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)
<b>5V Backplane Current Consumption (mA)</b>	375 maximum	100 maximum	190 maximum
<b>LED Indicators</b>	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
<b>Dimensions (W x H x D)</b>	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
<b>Product Name</b>	<b>VersaMax Discrete Mixed Modules 24 VDC Positive Logic Input 16/Output 24 VDC 0.5 A 16 points</b>	<b>VersaMax Discrete Mixed Modules 24 VDC Positive Logic Input 16/Output Relay 2.0A Isolated 8 points</b>	<b>VersaMax Discrete Mixed Modules 120 VAC Input 8 points/Outputs Relay 2.0A Isolated 8 points</b>
<b>Lifecycle Status</b>	Active	Active	Active
<b>Input Voltage</b>	24 VDC	24 VDC	120 VAC
<b>Output Voltage</b>	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
<b>Number of Points</b>	16 in/16 out	16 in/8 out	8 in/8 out
<b>Channel to Channel Isolation</b>	No	Yes, outputs	Yes, outputs
<b>Load Current per Point</b>	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
<b>Input and Output Response Time- On/Off(ms)</b>	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
<b>Protection</b>	No internal fuses	No internal fuses or snubbers	No internal fuses or snubbers
<b>On State Current</b>	2.0-5.5 mA	2.0-5.5 mA	5 mA minimum
<b>Off State Current</b>	0-0.5 mA	0-0.5 mA	2.5 mA maximum
<b>External Power Supply</b>	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
<b>Input Impedance</b>	10 kOhms maximum	10 kOhms maximum	8.6 kOhms (reactive) at 60 Hz, typical; 10.32 kOhms (reactive) at 50 Hz, typical
<b>Load Current</b>	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)
<b>5V Backplane Current Consumption (mA)</b>	70 maximum	270 maximum	300 maximum
<b>LED Indicators</b>	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
<b>Dimensions (W x H x D)</b>	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).

	IC200MDD847	IC200MDD848	IC200MDD849
<b>Product Name</b>	<b>VersaMax Discrete Mixed Modules 240 VAC Input 8 points/Output Relay 2.0A Isolated 8 points</b>	<b>VersaMax Discrete Mixed Modules 120 VAC Input 8 points/Output 120 VAC 0.5A Isolated 8 points</b>	<b>VersaMax Discrete Mixed Modules 120 VAC Input Isolated 8 points/Output Relay 2.0 A Isolated 8 points</b>
<b>Lifecycle Status</b>	Active	Active	Active
<b>Input Voltage</b>	240 VAC	120 VAC	0-132 VAC (47 to 63 Hz), 120 VAC nominal
<b>Output Voltage</b>	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
<b>Number of Points</b>	8 in/8 out	8 in/8 out	8 in/8 out
<b>Channel to Channel Isolation</b>	Yes, outputs	Yes	Yes
<b>Load Current per Point</b>	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
<b>Input and Output Response Time- On/Off(ms)</b>	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
<b>Protection</b>	No internal fuses or snubbers	Snubber and MOVs (each output)	No internal fuses or snubbers
<b>On State Current</b>	4 mA minimum	5 mA minimum	5 mA minimum
<b>Off State Current</b>	1.5 mA maximum	2.5 mA maximum	2.5 mA maximum
<b>External Power Supply</b>	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
<b>Input Impedance</b>	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
<b>Load Current</b>	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)
<b>5V Backplane Current Consumption (mA)</b>	300 maximum	125 maximum	300 maximum
<b>LED Indicators</b>	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
<b>Dimensions (W x H x D)</b>	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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### 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
<b>Product Name</b>	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
<b>Lifecycle Status</b>	Active	Active	Active
<b>Input Voltage</b>	0-132 VAC	0-264 VAC	0-132 VAC
<b>Number of Points</b>	8	8	8
<b>Channel to Channel Isolation</b>	No	No	Yes
<b>Input and Output Response Time- On/Off (ms)</b>	1 cycle/2 cycles	1 cycle/2 cycles	1 cycle/2 cycles
<b>Points per Common</b>	1 group of 8	1 group of 8	8 groups of 1
<b>On State Current</b>	5 mA minimum	7 mA minimum	5 mA minimum
<b>Off State Current</b>	2.5 mA maximum	1.5 mA maximum	2.5 mA maximum
<b>Input Impedance</b>	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
<b>5V Backplane Current Consumption (mA)</b>	55 maximum	55 maximum	50 maximum
<b>LED Indicators</b>	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
<b>Dimensions (W x H x D)</b>	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
<b>Product Name</b>	<b>VersaMax Discrete Input Module 240 VAC Isolated, 4 points</b>	<b>VersaMax Discrete Input Module, 120 VAC Positive Logic, 16 points</b>	<b>VersaMax Discrete Input Module, 240 VAC Positive Logic, 16 points</b>
<b>Lifecycle Status</b>	Active	Active	Active
<b>Input Voltage</b>	0-264 VAC	0-132 VAC	0-264 VAC
<b>Number of Points</b>	4	16	16
<b>Channel to Channel Isolation</b>	Yes	No	No
<b>Input and Output Response Time- On/Off (ms)</b>	1 cycle/2 cycles	1 cycle/2 cycles	1 cycle/2 cycles
<b>Points per Common</b>	4 groups of 1	2 groups of 8	2 groups of 8
<b>On State Current</b>	7 mA minimum	5 mA minimum	4 mA minimum
<b>Off State Current</b>	3 mA maximum	2.5 mA maximum	1.5 mA maximum
<b>Input Impedance</b>	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
<b>5V Backplane Current Consumption (mA)</b>	30 maximum	110 maximum	110 maximum
<b>LED Indicators</b>	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
<b>Dimensions (W x H x D)</b>	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
<b>Product Name</b>	<b>VersaMax Discrete Input Module, 120 VAC Isolated, 16 points</b>	<b>VersaMax Discrete Input Module, 240 VAC Isolated, 8 points</b>	<b>VersaMax Discrete Input Module 125 VDC, Pos/Neg Logic, Isolated, 8 points</b>
<b>Lifecycle Status</b>	Active	Active	Active
<b>Input Voltage</b>	0-132 VAC	0-264 VAC	0-150 VDC, 125 VDC nominal
<b>Number of Points</b>	16	8	8 isolated inputs
<b>Channel to Channel Isolation</b>	Yes	Yes	Yes
<b>Input and Output Response Time- On/Off (ms)</b>	1 cycle/2 cycles	1 cycle/2 cycles	0.5 maximum
<b>Points per Common</b>	16 groups of 1	8 groups of 1	8 groups of 1
<b>On State Current</b>	5 mA minimum	7 mA minimum	1.0 mA minimum
<b>Off State Current</b>	2.5 mA maximum	3 mA maximum	0 to 0.1 mA maximum
<b>Input Impedance</b>	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
<b>5V Backplane Current Consumption (mA)</b>	100 maximum	60 maximum	40 maximum
<b>LED Indicators</b>	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
<b>Dimensions (W x H x D)</b>	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
<b>Product Name</b>	<b>VersaMax Discrete Input Module 125 VDC, Pos/Neg Logic, Isolated, 16 points</b>	<b>VersaMax Discrete Input Module 48 VDC, Pos/Neg Logic (2 Groups of 8), 16 points</b>	<b>VersaMax Discrete Input Module 48 VDC, Pos/Neg Logic (4 Groups of 8), 32 points</b>
<b>Lifecycle Status</b>	Active	Active	Active
<b>Input Voltage</b>	0-150 VDC, 125 VDC nominal	0-60 VDC, 48 VDC nominal	0-60 VDC, 48 VDC nominal
<b>Number of Points</b>	16 isolated inputs	16 inputs (2 groups of 8)	32 (4 groups of 8)
<b>Channel to Channel Isolation</b>	Yes	No	No
<b>Input and Output Response Time- On/Off (ms)</b>	0.5 maximum	0.5 maximum	0.5 maximum
<b>Points per Common</b>	16 groups of 1	2 groups of 8	4 groups of 8
<b>On State Current</b>	1.0 mA minimum	1.0 mA minimum	1.0 mA minimum
<b>Off State Current</b>	0 to 0.1 mA maximum	0 to 0.4 mA maximum	0 to 0.4 mA maximum
<b>Input Impedance</b>	74 K Ohm typical at 125 VDC	28 K Ohm typical	28 K Ohm typical
<b>5V Backplane Current Consumption (mA)</b>	80 maximum	70 maximum	140 maximum
<b>LED Indicators</b>	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
<b>Dimensions (W x H x D)</b>	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
<b>Product Name</b>	<b>VersaMax Discrete Input Module, 24 VDC Pos/Neg Logic, 16 points</b>	<b>VersaMax Discrete Input Module, 5/12 VDC (TTL) Pos/Neg Logic, 16 points</b>	<b>VersaMax Discrete Input Module, 5/12 VDC (TTL) Pos/Neg Logic, 32 points</b>	<b>VersaMax Discrete Input Module, 24 VDC Positive Logic, 32 points</b>
<b>Lifecycle Status</b>	Active	Active	Active	Active
<b>Input Voltage</b>	0-30 VDC	0-15 VDC	0-15 VDC	0-30 VDC
<b>Number of Points</b>	16	16	32	32
<b>Channel to Channel Isolation</b>	No	No	No	No
<b>Input and Output Response Time- On/Off (ms)</b>	0.5	0.25	0.25	0.5
<b>Points per Common</b>	2 groups of 8	2 groups of 8	4 groups of 8	2 groups of 8
<b>On State Current</b>	2.0-5.5 mA	1.45 mA minimum	1.45 mA minimum	2.0-5.5 mA
<b>Off State Current</b>	0-0.5 mA	0-0.7 mA maximum	0-0.7 mA maximum	0-0.5 mA
<b>Input Impedance</b>	10 kOhms maximum	2.4 kOhms at 12 VDC, typical	2.4 kOhms at 12 VDC, typical	10 kOhms maximum
<b>5V Backplane Current Consumption (mA)</b>	25 maximum	70 maximum	140 maximum	50 maximum
<b>LED Indicators</b>	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
<b>Dimensions (W x H x D)</b>	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
<b>Product Name</b>	<b>VersaMax Discrete Output Module, 120 VAC, 0.5A per point Isolated, 8 points</b>	<b>VersaMax Discrete Output Module, 120 VAC 0.5A per point Isolated, 16 points</b>	<b>VersaMax Discrete Output Module, 120 VAC 2.0A per point Isolated, 8 points</b>
<b>Lifecycle Status</b>	Active	Active	Active
<b>Output Voltage</b>	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
<b>Number of Points</b>	8	16	8
<b>Channel to Channel Isolation</b>	Yes	Yes	Yes
<b>Load Current per Point</b>	0.5 A per point	0.5 A per point	2.0 A per point
<b>Input and Output Response Time- On/Off (ms)</b>	<1/2 cycle/<1/2 cycle	<1/2 cycle/<1/2 cycle	<1/2 cycle/<1/2 cycle
<b>Protection</b>	Snubber and MOVs (each output)	Snubber and MOVs (each output)	Snubber and MOVs (each output)
<b>Points per Common</b>	8 groups of 1	Isolated points	Isolated points
<b>External Power Supply</b>	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
<b>Load Current</b>	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
<b>5V Backplane Current Consumption (mA)</b>	70 maximum	140 maximum	85 maximum
<b>LED Indicators</b>	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
<b>Dimensions (W x H x D)</b>	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
<b>Product Name</b>	<b>VersaMax Discrete Output Module, 24 VDC Positive Logic 2.0A per point w/ESCP, 8 points</b>	<b>VersaMax Discrete Output Module, 24 VDC Positive Logic, 0.5A per point, 16 points</b>	<b>VersaMax Discrete Output Module, 24 VDC Positive Logic, 0.5A per point w/ESCP, 16 points</b>
<b>Lifecycle Status</b>	Active	Active	Active
<b>Output Voltage</b>	17.5-30 VDC, 24 VDC nominal	10.2-30 VDC, 12/24 VDC nominal	18-30 VDC, 24 VDC nominal
<b>Number of Points</b>	8	16	16
<b>Channel to Channel Isolation</b>	No	No	No
<b>Load Current per Point</b>	2.0 A per point	0.5 A per point	0.5 A per point
<b>Input and Output Response Time- On/Off (ms)</b>	0.5	0.2/1.0	0.5/0.5
<b>Protection</b>	Short circuit protection, overcurrent protection (each output)	No internal fuses (each output)	Short circuit protection, overcurrent protection, free-wheeling diodes (each output)
<b>Points per Common</b>	1 group of 8	1 group of 16	1 group of 16
<b>External Power Supply</b>	18-30 VDC, 24 VDC nominal	10.2-30 VDC, 12/24 VDC nominal	18-30 VDC, 24 VDC nominal
<b>Load Current</b>	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
<b>5V Backplane Current Consumption (mA)</b>	50 maximum	45 maximum	75 maximum
<b>LED Indicators</b>	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.
<b>Dimensions (W x H x D)</b>	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
<b>Product Name</b>	<b>VersaMax Discrete Output Module, 24 VDC Positive Logic 0.5A with ESCP, 32 points</b>	<b>VersaMax Discrete Output Module, 5/12/24 VDC Negative Logic, 0.5 A per point (1 group of 16) 16 points</b>	<b>VersaMax Discrete Output Module, 5/12/24 VDC Negative Logic, 0.5 A per point (2 groups of 16) 32 points</b>
<b>Lifecycle Status</b>	Active	Active	Active
<b>Output Voltage</b>	18-30 VDC, 24 VDC nominal	5/12/24 VDC	5/12/24 VDC
<b>Number of Points</b>	32	16 (1 group of 16)	32 (2 groups of 16)
<b>Channel to Channel Isolation</b>	No	No	No
<b>Load Current per Point</b>	0.5 A per point	0.5 A per point	0.5 A per point
<b>Input and Output Response Time- On/Off (ms)</b>	0.5/0.5	0.2/1.0	0.2/1.0
<b>Protection</b>	Short circuit protection, overcurrent protection, free-wheeling diodes (each output)	No internal fuse	No internal fuse
<b>Points per Common</b>	2 groups of 16	1 group of 16	2 groups of 16
<b>External Power Supply</b>	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
<b>Load Current</b>	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
<b>5V Backplane Current Consumption (mA)</b>	150 maximum	70 maximum	140 maximum
<b>LED Indicators</b>	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.
<b>Dimensions (W x H x D)</b>	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
<b>Product Name</b>	<b>VersaMax Discrete Output Module, 24 VDC Positive Logic, 0.5A per point, 32 points</b>	<b>VersaMax Discrete Output Module, Relay 2.0 A per point Isolated Form A, 8 points</b>	<b>VersaMax Discrete Output Module, Relay 2.0 A per point Isolated Form A, 16 points</b>
<b>Lifecycle Status</b>	Active	Active	Active
<b>Output Voltage</b>	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
<b>Number of Points</b>	32	8	16
<b>Channel to Channel Isolation</b>	No	Yes	Yes
<b>Load Current per Point</b>	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
<b>Input and Output Response Time- On/Off (ms)</b>	0.2/1.0	10.0/10.0	10.0/10.0
<b>Protection</b>	No internal fuses	No internal fuses or snubbers	No internal fuses or snubbers
<b>Points per Common</b>	2 groups of 16	Isolated points	Isolated points
<b>External Power Supply</b>	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
<b>Load Current</b>	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)
<b>5V Backplane Current Consumption (mA)</b>	90 maximum	245 maximum	490 maximum
<b>LED Indicators</b>	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.
<b>Dimensions (W x H x D)</b>	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
<b>Product Name</b>	<b>VersaMax Analog Input Module, 12 Bit Voltage/Current, 4 Channels</b>	<b>VersaMax Analog Input Module, 16 Bit Voltage/Current Isolated, 8 Channel</b>	<b>VersaMax Analog Input Module, 12 Bit Voltage/Current, 8 Channel</b>	<b>VersaMax Analog Input Module, 15 Bit Differential Voltage, 8 Channel</b>
<b>Lifecycle Status</b>	Active	Active	Active	Active
<b>Input Range</b>	±10 VDC or 0-10 VDC	±10 VDC, 4-20 mA	4-20 mA, ±10 VDC or 0-10 VDC	±10 VDC
<b>Number of Channels</b>	4	8 Channel to channel isolated	8	8
<b>External Power Supply</b>	None	Range: 19.5-30 VDC including ripple; Current consumption: 100 mA maximum plus load currents	None	None
<b>Resolution</b>	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
<b>Update Rate</b>	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
<b>Accuracy at 25°C</b>	±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
<b>Input Impedance</b>	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
<b>Input Filter Response</b>	5.0 ms	N/A	5.0 ms	N/A
<b>5V Backplane Current Consumption (mA)</b>	125 maximum	15 maximum	130 maximum	200 maximum
<b>3.3V Backplane Current Consumption (mA)</b>	N/A	120 maximum	N/A	N/A
<b>LED Indicators</b>	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.
<b>Dimensions (W x H x D)</b>	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
<b>Product Name</b>	<b>VersaMax Analog Input Module, 15 Bit Differential Current, 8 Channel</b>	<b>VersaMax Analog Input Module, 15 Bit Voltage, 15 Channel</b>	<b>VersaMax Analog Input Module, 15 Bit Current, 15 Channel</b>
<b>Lifecycle Status</b>	Active	Active	Active
<b>Input Range</b>	0 to 20 mA or 4 to 20 mA	±10 VDC	0 to 20 mA or 4 to 20 mA
<b>Number of Channels</b>	8	15	15
<b>External Power Supply</b>	None	None	None
<b>Resolution</b>	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
<b>Update Rate</b>	7.5 ms	7.5 ms	7.5 ms
<b>Accuracy at 25°C</b>	±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
<b>Input Impedance</b>	Current mode: 100 kOhms maximum	Voltage mode: 100 kOhms maximum	Voltage mode: 100 kOhms maximum, Current mode: 200 Ohms maximum
<b>Input Filter Response</b>	N/A	N/A	24 Hz ±20%
<b>5V Backplane Current Consumption (mA)</b>	200 maximum	150 maximum	100 maximum
<b>3.3V Backplane Current Consumption (mA)</b>	N/A	N/A	N/A
<b>LED Indicators</b>	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.
<b>Dimensions (W x H x D)</b>	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
<b>Product Name</b>	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
<b>Lifecycle Status</b>	Active	Active	Active
<b>Output Range</b>	4-20 mA	0-10 VDC	$\pm 10$ VDC
<b>Number of Channels</b>	4	4	4
<b>External Power Supply</b>	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
<b>Resolution</b>	4 $\mu$ A = 8 counts	2.5 mV = 8 counts	5 mV = 16 counts
<b>Update Rate</b>	0.3 ms maximum	0.3 ms maximum	0.3 ms maximum
<b>Accuracy at 25°C</b>	$\pm 0.3\%$ 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
<b>5V Backplane Current Consumption (mA)</b>	50 maximum	50 maximum	50 maximum
<b>3.3V Backplane Current Consumption (mA)</b>	N/A	N/A	N/A
<b>LED Indicators</b>	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.
<b>Dimensions (W x H x D)</b>	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
<b>Product Name</b>	VersaMax Analog Output Module, 13 Bit $\pm 10$ VDC or 0 to 10 VDC Voltage, 8 Channel	VersaMax Analog Output Module, 13 Bit Current, 8 Channel	VersaMax Analog Output Module, 13 Bit $\pm 10$ 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
<b>Lifecycle Status</b>	Active	Active	Active	Active	Active
<b>Output Range</b>	$\pm 10$ VDC or 0 to 10 VDC	4 to 20 mA (default) 0 to 20 mA (configured with jumper)	$\pm 10$ VDC or 0 to 10 VDC	4 to 20 mA (default) 0 to 20 mA (configured with jumper)	$\pm 10$ VDC, 4-20 mA
<b>Number of Channels</b>	8	8	12	12 single ended, one group	4
<b>External Power Supply</b>	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
<b>Resolution</b>	1.25 mV = 4 counts	4-20 mA: 5 counts = 2.5 $\mu$ A (~12.7 bits) 0-20 mA: 4 counts = 2.5 $\mu$ A (13 bits)	1.25 mV = 4 counts	4-20 mA: 5 counts = 2.5 $\mu$ A (~12.7 bits) 0-20 mA: 4 counts = 2.5 $\mu$ A (13 bits)	Current mode: 381 nA nominal Voltage mode: 381 $\mu$ V nominal
<b>Update Rate</b>	15.0 ms maximum	15.0 ms maximum	10.0 ms maximum	15 ms maximum	7 ms maximum
<b>Accuracy at 25°C</b>	$\pm 0.3\%$ 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
<b>5V Backplane Current Consumption (mA)</b>	50 maximum	50 maximum	50 maximum	50 maximum	10 maximum
<b>3.3V Backplane Current Consumption (mA)</b>	N/A	N/A	N/A	N/A	115 maximum
<b>LED Indicators</b>	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.
<b>Dimensions (W x H x D)</b>	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
<b>Product Name</b>	<b>VersaMax Analog Mixed Module, 12 Bit Input Current 4 Channel/Output Current 2 Channel</b>	<b>VersaMax Analog Mixed Module, 12 Bit 0-10V Input 4 Channel/Output 0-10V 2 Channel</b>	<b>VersaMax Analog Mixed Module, 12 Bit ±10V Input 4 Channel/Output ±10V 2 Channel</b>
<b>Lifecycle Status</b>	Active	Active	Active
<b>Input Range</b>	4-20 mA	0-10 VDC	-10 to +10 VDC
<b>Output Range</b>	4-20 mA	0-10 VDC	-10 to +10 VDC
<b>External Power Supply</b>	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
<b>Resolution</b>	4 $\mu$ A = 8 counts	2.5 mV = 8 counts	Input: 2.5 mV = 8 counts, Output: 5 mV = 16 counts
<b>Update Rate</b>	0.3 ms maximum	0.3 ms maximum	0.3 ms maximum
<b>Accuracy at 25°C</b>	±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
<b>Input Impedance</b>	200 Ohms maximum	120 kOhms minimum	125 kOhms minimum
<b>Input Filter Response</b>	5.0 ms	5.0 ms	5.0 ms
<b>LED Indicators</b>	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.
<b>Dimensions (W x H x D)</b>	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).



	<b>IC200ALG620</b>	<b>IC200ALG630</b>
<b>Product Name</b>	<b>VersaMax Analog Input Module, 16 Bit RTD, 4 Channel</b>	<b>VersaMax Analog Input Module, 16 Bit Thermocouple, 7 Channel</b>
<b>Lifecycle Status</b>	Active	Active
<b>Input Range</b>	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)
<b>Number of Channels</b>	4	7
<b>Resolution</b>	15 bits plus sign	15 bits plus sign
<b>Update Rate</b>	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
<b>Accuracy at 25°C</b>	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%
<b>5 V Backplane Current Consumption (mA)</b>	125 maximum	125 maximum
<b>3.3 V Backplane Current Consumption (mA)</b>	125 maximum	125 maximum
<b>LED Indicators</b>	OK LED: green indicates backplane power is present. Amber indicates module fault.	OK LED: green indicates backplane power is present. Amber indicates module fault.
<b>Dimensions (W x H x D)</b>	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