

VersaMax 120VAC 0.5Amp Isolated Output Modules

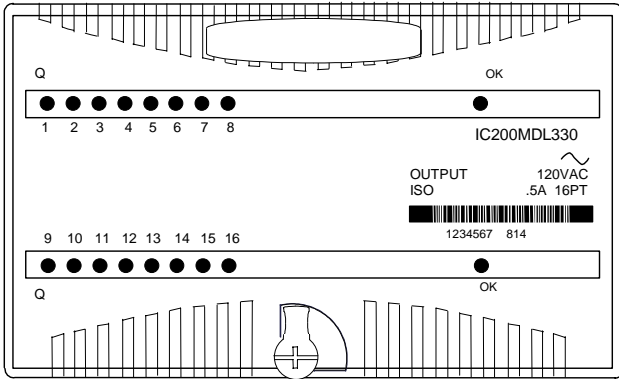
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Product Description

Discrete Output Modules IC200MDL329 and BXIOOA8120 provide 8 isolated discrete outputs.

Discrete output modules IC200MDL330 (shown below) and BXIOOA16120 provide 16 isolated outputs.



An external 120 VAC power supply must be provided to switch power to the loads.

Intelligent processing for the module is performed by the CPU or NIU.

LED Indicators

Individual green LEDs indicate the on/off state of the output points. The output LEDs are logic-driven and independent of the load conditions.

The green OK LED is on when backplane power is present to the module.

Preinstallation Check

Carefully inspect all shipping containers for damage. If any equipment is damaged, notify the delivery service immediately. Save the damaged shipping container for inspection by the delivery service. After unpacking the equipment, record all serial numbers. Save the shipping containers and packing material in case it is necessary to transport or ship any part of the system.

Installation in Hazardous Locations

- EQUIPMENT LABELED WITH REFERENCE TO CLASS I, GROUPS A, B, C & D, DIV. 2 HAZARDOUS LOCATIONS IS SUITABLE FOR USE IN CLASS I, DIVISION 2, GROUPS A, B, C, D OR NON-HAZARDOUS LOCATIONS ONLY
- WARNING - EXPLOSION HAZARD - SUBSTITUTION OF COMPONENTS MAY IMPAIR SUITABILITY FOR CLASS I, DIVISION 2;
- WARNING - EXPLOSION HAZARD - WHEN IN HAZARDOUS LOCATIONS, TURN OFF POWER BEFORE REPLACING OR WIRING MODULES; AND
- WARNING - EXPLOSION HAZARD - DO NOT DISCONNECT EQUIPMENT UNLESS POWER HAS BEEN SWITCHED OFF OR THE AREA IS KNOWN TO BE NONHAZARDOUS.

Module Characteristics

Points	IC200MDL329, BXIOOA8120: 8 isolated outputs IC200MDL330, BXIOOA16120: 16 isolated outputs
Module ID	IC200MDL329, BXIOOA8120: FFFF8840 IC200MDL330, BXIOOA16120: 88408840
Isolation:	User input to logic (optical) and frame ground: 250VAC continuous; 1500VAC for 1 minute IC200MDL329, BXIOOA8120, Group to group: not applicable IC200MDL330, BXIOOA16120, Group to group: 250VAC continuous; 1500VAC for 1 minute Point to point: 250VAC continuous; 1500VAC for 1 minute
LED indicators	One LED per point shows individual point ON/OFF state OK LED indicates backplane power is present
Backplane current consumption (5V output)	IC200MDL329, BXIOOA8120: 70mA maximum IC200MDL330, BXIOOA16120: 140mA maximum
External power supply	85 to 132VAC (47 to 63Hz), 120VAC nominal
Thermal derating	See diagrams
Output Characteristics	
Output voltage	85 to 132 VAC (47 to 63Hz), 120VAC nominal
Output voltage drop	2.0V maximum
Load current	10mA minimum per point 0.5A maximum per point 5.0A for one cycle (20ms) maximum inrush
Output leakage current	Less than 2mA at 132VAC
On response time	Less than ½ cycle, maximum
Off response time	Less than ½ cycle, maximum
Protection	Snubber and MOVs (each output)
Diagnostics	None

Product Revision History

Rev	Date	Description
IC200MDL329F BXIOOA8120F IC200MDL330G BXIOOA16120G	October 2008	Updated Power Supply OK signal circuitry.
IC200MDL329E BXIOOA8120E IC200MDL330F BXIOOA16120F	April 2005	Improvement to latching mechanism
IC200MDL329D IC200MDL330E	April 2004	Changed to V0 plastic for module housing.
BXIOOA8120D BXIOOA16120E	January 2004	Changed to V0 plastic for module housing. ATEX approval for Group 2 Category 3 applications.
IC200MDL329C IC200MDL330D	January 2004	ATEX approval for Group 2 Category 3 applications.
IC200MDL329B BXIOOA8120B IC200MDL330C BXIOOA16120C	February 2003	Hardware modification for improved response to shorted or near-shortd failures.
IC200MDL329A BXIOOA8120A	March 1999	Initial product release
IC200MDL330A BXIOOA16120A	September 1998	Initial product release

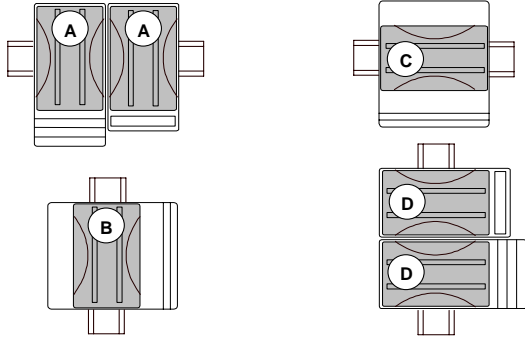
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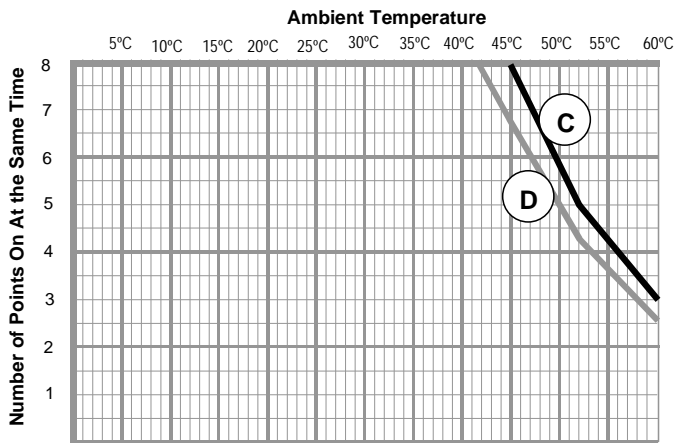
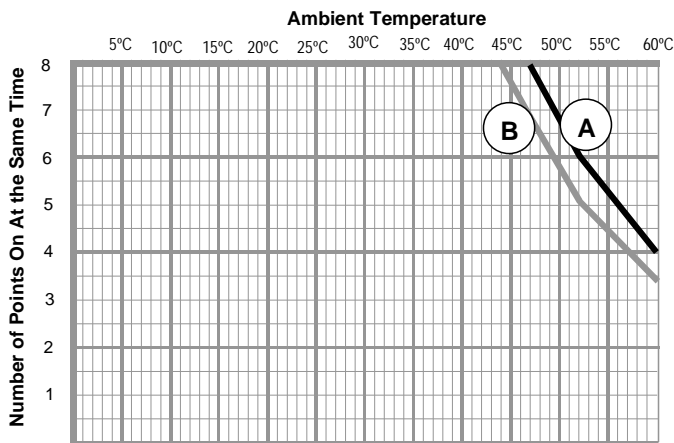
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Thermal Derating

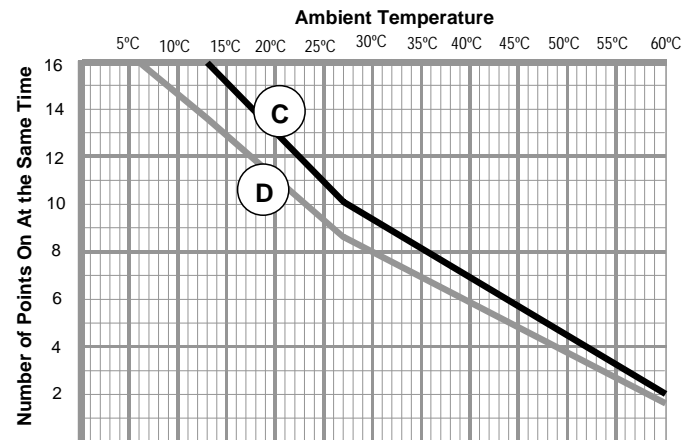
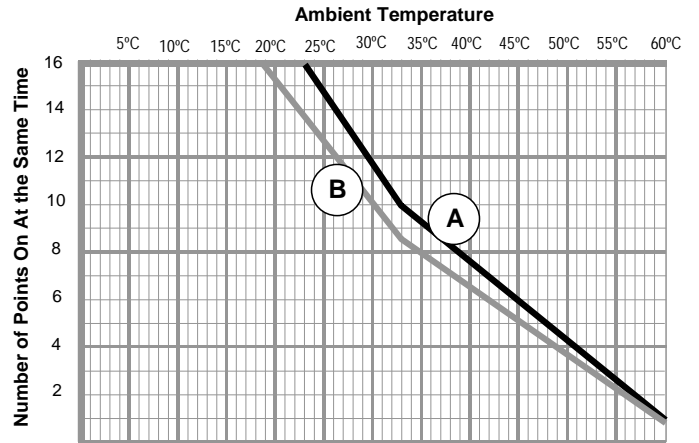
The number of points that can be on at the same time depends on the ambient temperature, the external voltage, and the orientation of the module and DIN rail. The charts below show thermal deratings for the module at 120VAC with the maximum output current per point.



IC200MDL329, BXIOOA8120



IC200MDL330, BXIOOA16120



Operating Note

If hot insertion of a module is done improperly, the operation of other modules on the same backplane may be disrupted. See *Installing a Module on a Carrier* in the *VersaMax Modules Manual*, GFK-1504.

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Field Wiring Terminals

Terminal	Connection	Terminal	Connection
A1	Output 1	B1	Output 9 *
A2	Output 1 Ret	B2	Output 9 Ret *
A3	Output 2	B3	Output 10 *
A4	Output 2 Ret	B4	Output 10 Ret *
A5	Output 3	B5	Output 11 *
A6	Output 3 Ret	B6	Output 11 Ret *
A7	Output 4	B7	Output 12 *
A8	Output 4 Ret	B8	Output 12 Ret *
A9	Output 5	B9	Output 13 *
A10	Output 5 Ret	B10	Output 13 Ret *
A11	Output 6	B11	Output 14 *
A12	Output 6 Ret	B12	Output 14 Ret *
A13	Output 7	B13	Output 15 *
A14	Output 7 Ret	B14	Output 15 Ret *
A15	Output 8	B15	Output 16 *
A16	Output 8 Ret	B16	Output 16 Ret *
A17	No connection	B17	No connection
A18	No connection	B18	No connection

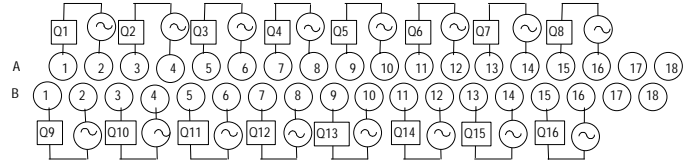
* Inputs available on 16-point modules only.

When wiring outputs to inductive loads, use of external suppression circuits is recommended. See chapter 2, "Installing Wiring for I/O Devices-Wiring to Inductive Loads" in the *VersaMax I/O System Manual*, GFK-1504, for more information.

If additional bussed terminals are needed for the 8-point modules, the B terminals can be made available by using a shorting bar. The shorting bar has a maximum current-carrying capacity of 2A per point. See chapter 2 for additional information about using the shorting bar.

Wiring Connections for Carriers with Two Rows of Terminals

Row B connections shown below are for 16-point modules only.



Wiring Connections for Carriers with Three Rows of Terminals

Side B connections shown below are for 16-point modules only.

