User Manual
GFK-1504Q
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PACSystems™ VersaMax

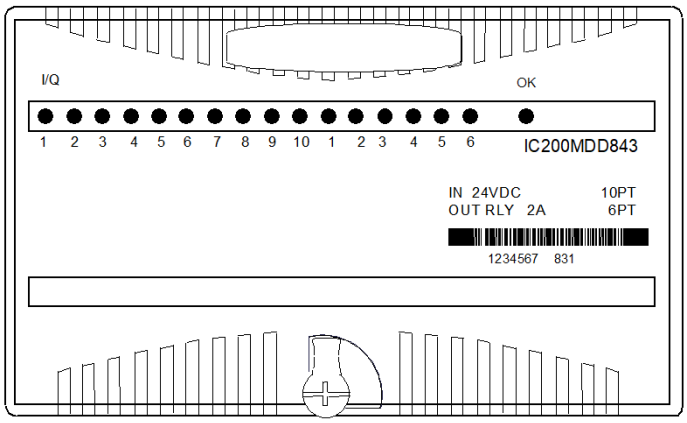
I/O MODULES, POWER SUPPLIES & CARRIERS
USER MANUAL

EMERSON

9.3 IC200MDD843 - Mixed Module, 24 V DC Positive Logic Input Grouped 10 Points / Output Relay 2.0 A per Point Grouped 6 Points

Discrete input/output module IC200MDD843 provides 10 discrete inputs and 6 relay outputs. The inputs form one group of 10 points. Inputs are positive logic or sourcing-type inputs; they receive current from input devices and return the current on the common. The relay outputs form one group of 6 points. The output group can drive a maximum of 8 A.

Figure 9-3



Power for module operation comes from the backplane. Loads must be powered by an external source.

Intelligent processing for the module is performed by the CPU or NIU. The module provides 10 bits of discrete input data and receives 6 bits of discrete output data.

9.3.1 LED Indicators

Individual green LEDs indicate the on/off state of the output points and input 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.

9.3.2 Configuration Parameters

The module's basic input on/off response time is 0.5ms. For some applications, it may be preferable to add additional filtering to compensate for conditions such as noise spikes or switch bounce. Input filter times of 0ms, 1.0ms, or 7.0ms are selectable through software configuration, for total response times of 0.5ms, 1.5ms, and 7.5ms respectively. The default is 1.0ms filter time total (response time is 1.5ms).

9.3.3 Module Specifications

Module Characteristics									
Points	10 Positive DC Inputs, one group, 6 Form A Relay Outputs, one group								
Module ID	FFFF8035								
Isolation: User input/output to logic (optical) and frame ground Group to group Point to point	 250 V AC continuous; 1500 V AC for 1 minute 250 V AC continuous; 1500 V AC for 1 minute None								
LED indicators	One LED per point shows individual point on/off state OK LED indicates backplane power is present								
Backplane current consumption	5V output: 190mA maximum								
External power supply	0 to 125 V DC, 5/24/125 V DC nominal 0 to 265 V AC (47 to 63Hz), 120/240 V AC nominal								
Thermal derating	None								
Configuration parameters	Input response time								
Compatibility	PME programming software	CPU 001	CPU 002	CPU 005	CPU E05	DBI 001	EBI 001	GBI 001	PBI 001
HW, FW vers. *FW release*	All	AA 1.0	AA 1.5	AA 2.1	AA 2.1	AA 1.1	AA 1.0	AA 1.0	AA 1.0

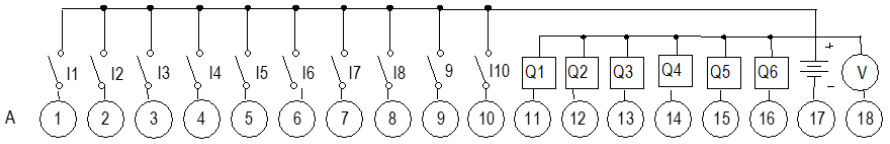
Input Characteristics	
Input voltage	0 to +30 V DC, +24 V DC nominal
On state voltage	+15.0 to +30.0 V DC
Off state voltage	0 to +5.0 V DC
On state Current	2.0 to 5.5mA
Off state Current	0 to 0.5mA
On, Off response time	0.5ms maximum
Configurable filter time	0ms, 1.0ms (default), or 7.0ms
Input impedance	10kΩ maximum

Output Characteristics	
Output voltage	0 to 125 V DC, 5/24/125 V DC nominal 0 to 265 V AC (47 to 63Hz), 120/240 V AC nominal
Output voltage drop	0.3V maximum
Load current	10mA per point minimum, 8.0A maximum per module 2.0 Amps for 5 to 265 V AC maximum (resistive) 2.0 Amps for 5 to 30 V DC maximum (resistive) 0.2 Amp for 31 to 125 V DC maximum (resistive)
Output leakage current	Not applicable (open contact)
On, Off response time	10ms maximum
Protection	No internal fuses or snubbers.
Switching frequency	20 cycles per minute (inductive load)
Relay type	Fixed coil, moving armature
Contact type	Silver alloy
Contact life	Refer to appendix B

9.3.4 Field Wiring

Terminal	Connection	Terminal	Connection
A1	Input 1	B1	No connection
A2	Input 2	B2	No connection
A3	Input 3	B3	No connection
A4	Input 4	B4	No connection
A5	Input 5	B5	No connection
A6	Input 6	B6	No connection
A7	Input 7	B7	No connection
A8	Input 8	B8	No connection
A9	Input 9	B9	No connection
A10	Input 10	B10	No connection
A11	Output 1	B11	No connection
A12	Output 2	B12	No connection
A13	Output 3	B13	No connection
A14	Output 4	B14	No connection
A15	Output 5	B15	No connection
A16	Output 6	B16	No connection
A17	Inputs 1-10 Common	B17	No connection
A18	Outputs 1-6 Common	B18	No connection

If additional bussed terminals are needed, the B terminals can be made available by using a shorting bar. The shorting bar has a maximum current-carrying capacity of 2 Amps per point. Refer to chapter 2 Installing Wiring for I/O Devices- Wiring to Inductive Loads for additional information about using the shorting bar. When wiring outputs to inductive loads, use of external suppression circuits is recommended. Refer to chapter 2.

Wiring Connections for Carriers with Two Rows of Terminals IC200CHS002, 005 IC200CHS012, 015	
Wiring Connections for Carriers with Three Rows of Terminals IC200CHS001, 022, 025 IC200CHS011	