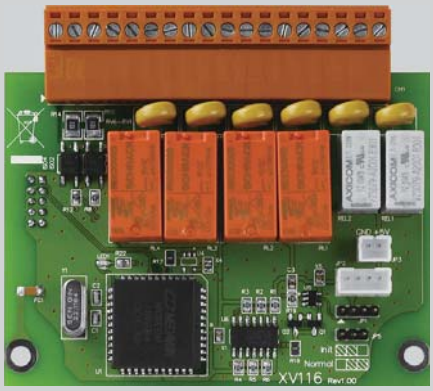


XV116

5-channel Isolated Digital Input and 6-channel Relay Output Module

Features

- 5 Digital Input channels and 6 Relay Output channels
- Sink- and Source-type Digital Input
- All Digital Input Channels can be used as 16-bit Counters
- 4 kV ESD Protection
- 3750 VDC Intra-module Isolation
- Configurable Power-on Value Settings
- Configurable Safe Value Settings
- Wide Operating Temperature Range: -25 ~ + 75°C

Introduction

The XV116 provides 5 channels for digital input, as well as 6 Form A relay output channels. In addition, either sink- or source-type digital input can be selected via wire connections. All input channels can be used as 16-bit counters. The XV116 also provides options for configuring power-on and safe digital output values. 4 kV ESD protection and 3750 VDC intra-module isolation are also provided to enhance noise immunity capabilities in industrial environments.

Applications

- Industrial Automation
- Building Automation
- Food and Beverage Systems
- Control Systems

System Specifications

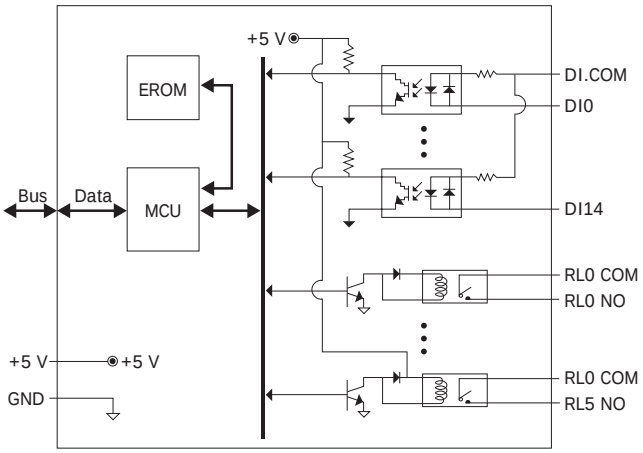
Communication	
Interface	RS-232/TTL
Format	N, 8, 1
Baud Rate	115200 bps
Protocol	Modbus/RTU
Dual Watchdog	Yes, Module (2.3 seconds), Communication (Programmable)
Isolation	
Intra-module Isolation, Field-to-Logic	3750 VDC
EMS Protection	
ESD (IEC 61000-4-2)	+/-4 kV Contact For each Terminal
	+/-8 kV Air For Random Terminal
Power	
Reverse Polarity Protection	-
Powered from Terminal Block	5 VDC
Consumption	1.2 W Max.
Mechanical	
Dimensions (W x L x H)	59 mm x 82 mm x 13 mm
Environment	
Operating Temperature	-25 ~ +75°C
Storage Temperature	-40 ~ +85°C
Humidity	10 ~ 95% RH, Non-condensing

I/O Specifications

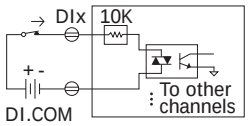
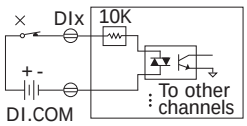
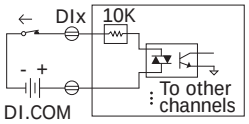
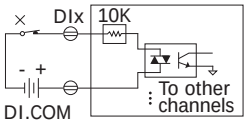
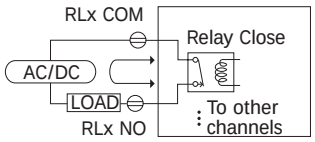
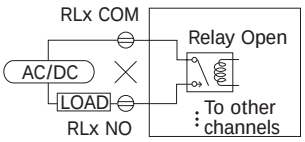
Digital Input/Counter			
Input Channels		5	
Type	Dry Contact	-	
	Wet Contact	Sink/Source	
On Voltage Level	Dry Contact	-	
	Wet Contact	+3.5 ~ +50 VDC	
Off Voltage Level	Dry Contact	-	
	Wet Contact	+1 VDC Max.	
Input Impedance		10 KΩ, 0.5 W	
Counters	Channels	5	
	Max. Count	16-bit (65535)	
	Max. Input Frequency	100 Hz	
	Min. Pulse Width	5 ms	
Overvoltage Protection		70 VDC	
Relay Output			
Channels		2 (Channel 0,1)	4 (Channel 2 ~ 5)
Type		Signal Relay	Power Relay
Form A Relay	Contact Rating	2 A @ 30 VDC 0.24 A @ 220 VDC 0.25 A @ 250 VAC	6 A @ 35 VDC 6 A @ 240 VAC
	Max. Contact Load	10 mA @ 20 mV	100 mA @ ≧ 12 V
	Contact Material	Silver Nickel, Gold-covered	Silver Cadmium Alloy
	Operate Time	3 ms (typical)	5 ms (typical)
	Release Time	4 ms (typical)	1 ms (typical)
	Mechanical Endurance	10^8 ops.	30 X 10^6 ops.
	Electrical Endurance	2 X 10^5 ops.	1 X 10^5 ops.
Power-on Value		Yes	
Safe Value		Yes	

Pin Assignments

Internal I/O Structure



Wire Connections

Digital Input/Counter	Readback as 1	Readback as 0
Wet Contant (Sink)	+3.5 ~ +50 VDC	+1 VDC Max.
		
Wet Contant (Source)	+3.5 ~ +50 VDC	+1 VDC Max.
		
Power Relay	**Readback as 1**	**Readback as 0**
Relay Output		

Ordering Information

XV116 CR	5-channel Isolated Digital Input and 6-channel Relay Output Module with 16-bit Counters (RoHS)