![Mastervolt – THE POWER TO BE INDEPENDENT]

DIGITAL AC 1x6A

AC RELAY FOR DIGITAL SWITCHING

USER AND INSTALLATION MANUAL
10000017912/01

1. GENERAL INFORMATION

1.1 Use of this manual

This manual serves as a guideline for the safe and effective operation of the Digital AC 1x6A. Read the entire manual before using the Digital AC 1x6A. Keep this manual in a secure place!

1.2 Liability

Mastervolt can accept no liability for:
- Consequential damage resulting from the use of the Digital AC 1x6A.
- Possible errors in the included manual and the consequences of these.
- Use that is inconsistent with the purpose of the product.

1.3 Warranty

The Mastervolt product warranty covers the Digital AC 1x6A for the first two years after the purchase date, on the condition that the product is installed and used according to the instructions in this manual.

Installation or use that do not comply with these instructions may result in under performance, damage or failure of the product and may void this warranty. The warranty is limited to the cost of repair and/or replacement of the product. Costs of labor or shipping are not covered by this warranty.

⚠ **CAUTION!**
Never remove the identification label. This will void the warranty.

1.4 Disclaimer

Our products are subject to continual development and improvement. Therefore, additions or modifications to the products may cause changes to the technical data and functional specifications. No rights can be derived from this document. Please consult our most current Terms & Conditions of Sale.

1.5 Correct disposal of this product

This product is designed and manufactured with high quality materials and components, which can be recycled and reused. Please be informed about the local separate collection system for electrical and electronic products. Please act according to your local rules and do not dispose of your old products with your normal household waste. The correct disposal of your old product will help prevent potential negative consequences to the environment and human health.

2. OPERATION

The Digital AC 1x6A operation is entirely MasterBus based. For information about MasterBus and the MasterBus event structure, see www.mastervolt.com. The following table shows the relay functions.

Monitoring	Description	Factory settings	Range
State	Relay can be switched On (activate) or Standby	Standby	Standby/ Activate
Control	Change the state of the relay	Standby	Activate/ Standby
Configuration General			
Language	Set the MasterBus Digital AC menu language	English	See specifications
Device name	Any name you wish with 12 characters max	AC Relay	1-12 characters
Events locked	Check box for installers to lock event configuration. Only operable by installers.	Unchecked	Unchecked/ Checked
Shock resistance (Installer menu)	For applications that experience large shocks and/or vibration on a regular basis (heavy duty/racing/etc). Turn on* will make the relay more 'sticky' and thus more resilient against shocks/vibrations.	Off	On/Off
Configuration Timing			
Min. runtime	Check box to enable the function *Minimum runtime* for switching the relay.	Unchecked	Unchecked/ Checked
Min. runtime	Minimum runtime setting	15 minutes	1-65535 minutes
Max. runtime	Check box to enable the function *Maximum runtime* for relay switching the relay.	Unchecked	Unchecked/ Checked
Max. runtime	Maximum runtime setting	480 minutes	1-65535 minutes

* This mode will increase the energy usage of the interface (by about 8mA continuously) as it will keep some power applied to the relay. This will keep the coil of the relay a little bit magnetized, which in turn will make it more 'sticky' to its current state.

Events

A MasterBus based device can initiate an action at another connected device. This is done by configuring Events. A device can act as *event source* and as *event target*.

Other devices can control the relay of the Digital AC 1x6A by setting up an event at the source device with the Digital AC 1x6A as target. The following example shows how a Digital Switch Input uses Switch 1 to control the relay with a toggle action.

Event source	Event target	Event command	Event action
Switch 1	Digital AC	Activate	Toggle

Likewise, the Digital AC 1x6A can control other devices. The following example shows how event source "State" of the Digital AC 1x6A, is used to control the feedback LED of a Digital Switch Input.

Event source	Event target	Event command	Event action
State	Switch input	Feed back 1	Copy

3. INSTALLATION

3.1 Overview

Insert the MasterBus cables, then connect the relay cables to the screw terminal input and outputs as shown below.
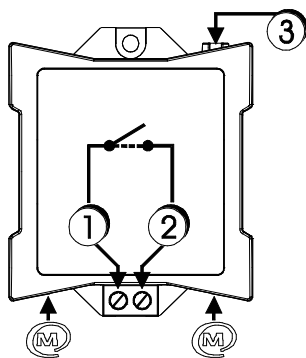
1. Input
2. Output normally open
3. Communication LED, illuminating when the state is "activate"

(M) MasterBus connector

Function:
Stand by: Relay is open,
Activate: 1 is connected to 2,
Maximum relay current: 6A.

Overview and functional scheme of the Digital AC 1x6A

3.2 Installation schemes

The Digital AC 1x6A is suitable for switching currents up to 6A. For currents above 6A you need an external relay which is controlled by the Digital AC 1x6A. You also need to add a fuse like shown for load protection.
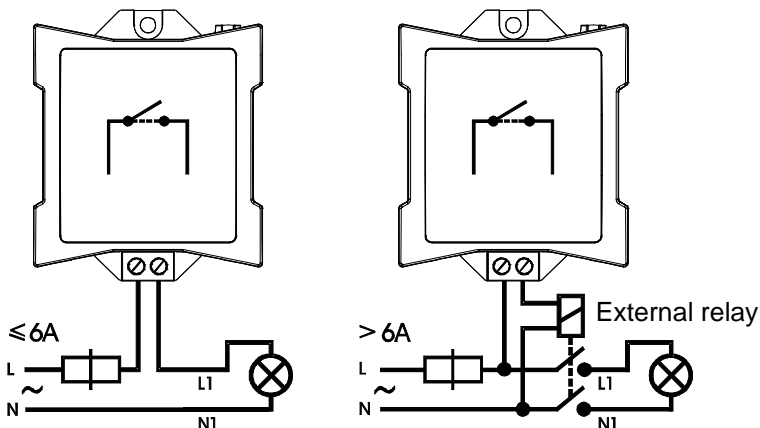
Installation schemes for currents up to 6A and above

4. EC DECLARATION OF CONFORMITY

This product is in conformity with the provision of the EC EMC directive 89/336/EEC and amendments 92/31/EEC, 93/68/EEC. Standards applied:
Generic emission standard: EN 50081-1:1992,
Generic Immunity standard: EN 50082-1:1997,
Safety directive 2006/95/EC, with the following standard,
Low voltage standard: EN 60950: 2000.

CE

5. SPECIFICATIONS

Model:	Digital AC 1x6A
Product code :	77031500
Delivery also includes:	Screw terminal, MasterBus cable, MasterBus Terminator, User manual
Function of instrument:	MasterBus controlled AC relay
Potential free contact:	1:C, 2:NO – 6A / 230 V AC
Languages available:	English, Nederlands, Deutsch, Français, Castellano, Italiano, Norsk, Svenska, Suomi, Dansk
Power consumption:	144 mW
MasterBus Powering:	No
Din rail mounting:	Yes, Din rail 30 mm [1.2 inch]
Protection degree:	IP 21
Dimensions:	66 x 78 x 32 mm [2.6 x 3.1 x 1.3 inch]; see drawing below
Weight:	Approx. 80 gr [0.18 lb]

Screw terminal

M = MasterBus connector
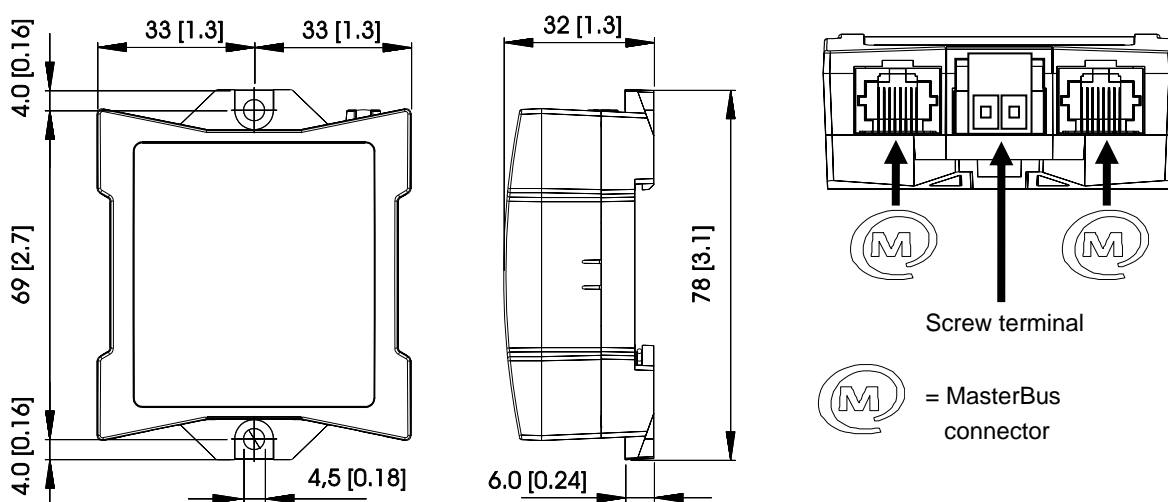
Dimensions in mm (inch) and connections

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