

12V DC Voltage Regulator with Security Bell Interface

24DC12

Overview

The 24DC12 is a multi-function module used to convert 24 Vdc to 12 Vdc. This makes it possible to use 24 Vdc fire alarm power supplies to provide power for 12-volt security devices. The 24DC12 also provides electrical isolation for UL609/ULC-S303 Local Burglar alarm bell housings.

The module's 2-gang mounting makes it ideal for installation into cabinets and wallboxes on SIGA-MP Series mounting plates, thus eliminating the need for additional mounting boxes and hardware.

Standard Features

- Converts 18.5-26 Vdc to 12 Volts DC
- Permits the use of existing 24 Vdc fire alarm power supplies to power 12-volt security devices
- Mounts on SIGA-MP series plates.
- Includes isolation for Grade A and B Local Mercantile premises, Grade A Police Station connect with basic line security, Central Station Grade B.

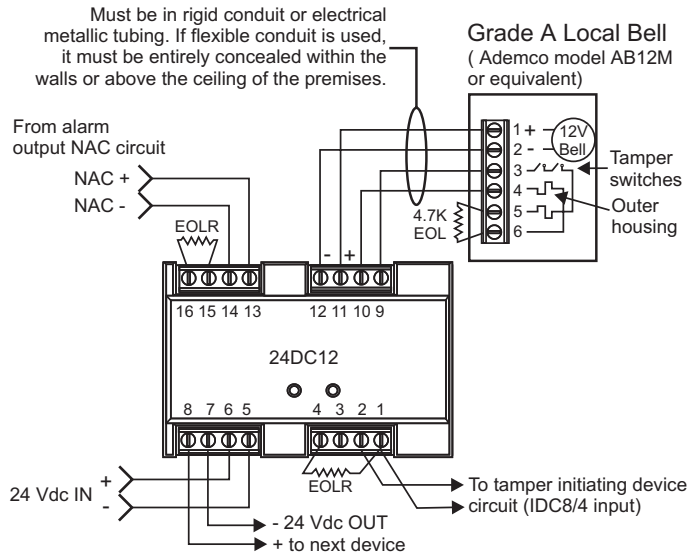
Application

The 24DC12 converts and regulates power of between 18.5 and 26 volts DC, (typically found in fire alarm panels) to 12 volts DC (used by many security devices). This makes it possible to use existing fire alarm power supplies to run 12-volt security devices.

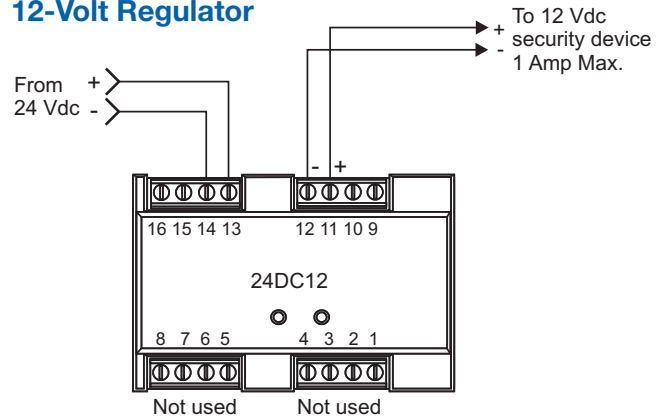
The 24DC12 also isolates devices from the control panel alarm initiating circuit. This is useful for meeting UL609/ULC-S303 Local Burglar alarm applications, which require ground isolation for externally-mounted security bells. The 24DC12 may also be used for other security devices that are not ground isolated.

Typical Wiring

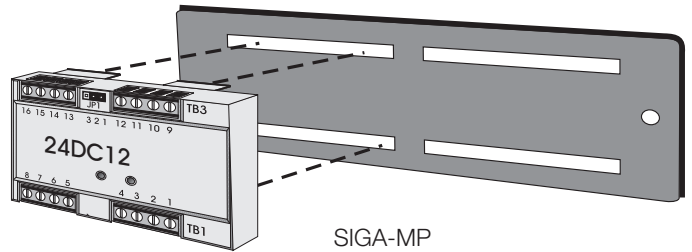
Grade A Local Bell



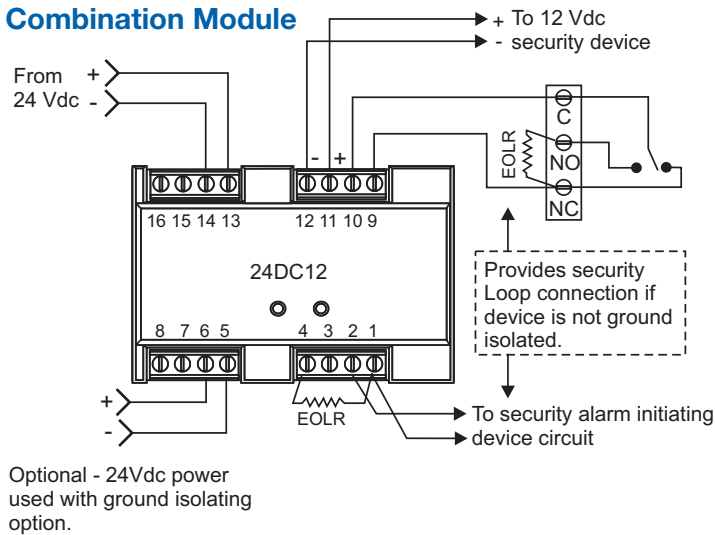
12-Volt Regulator



Mounting



Combination Module



Specifications

Agency Listings	UL, ULC (See Note 1)
Input/Output	Input 21 to 26 Vdc / output 12 Vdc
Max. Current output @12 Vdc	1 Amp Max.
Current draw as voltage regulator	700mA @24Vdc input with 1.0 Amp 12Vdc load; 350mA @24Vdc input with 500mA 12Vdc load
Current Draw Grade A Bell Wiring	20mA standby (fail safe - module energized) * Plus bell current
Mounting	SIGA-MP series mounting plates for installation in security cabinets.
Wiring Terminations	Suitable for #12 to #22 AWG (2.5 mm ² to 0.25mm ²)
Relative Humidity	10-85% non condensing
Temperature Rating	0°-49° C (32° - 120° F)

Note 1:

The EST3 is modularly listed under the following standards:

UL 864 categories: UOJZ, UOXX, UUKL and SYZV, UL 294 category ALVY, UL 609 category AOTX, UL 636 category ANET, UL 1076 category APOU, UL 365 category APAW, UL 1610 category AMCX, UL 1635 category AMCX ULC-S527, ULC-S301, ULC-S302, ULC-S303, ULC-S306, ULC/ORD-C1076, ULC/ORD-C693

Please refer to EST3 Installation and Service Manual for complete system requirements.

Ordering Information

Catalog Number	Description	Shipping Wt. lb (kg)
24DC12	12V DC Voltage Regulator with Security Bell Interface	1 (.45)