

# OVDC7-16/22

230V

Overvoltage Solenoid Controller

## CONTACT US:

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## KEY FEATURES:

- ✓ Simple wiring for easy installation
- ✓ Rugged and compact design
- ✓ Available in fixed and variable output models

## APPLICATIONS:

Ideal for a diverse range of applications, including:

- Linear and rotary magnetic coils
- Magnetic door locks
- Solenoid valves
- Actuators

The **OVDC7-16/22 Overvoltage Solenoid Controller** delivers high initial output voltage to generate a high torque at activation, followed by a lower hold voltage for efficient long-term operation. This reduces solenoid operating temperatures, improving performance and durability in demanding applications.

The OVDC7-16/22 ensures reliable solenoid performance, making it an excellent choice for various industrial and commercial applications.

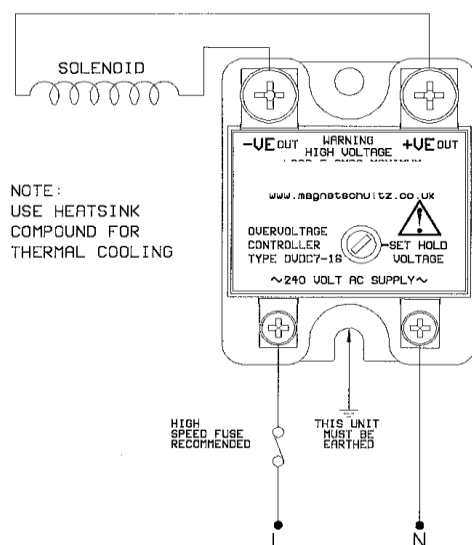
## TECHNICAL SPECIFICATIONS

| SKU                              | A84027 (Fixed)                               | A84021 (Variable) |
|----------------------------------|----------------------------------------------|-------------------|
| Supply Voltage AC                | 230V                                         | 230V              |
| Stroke Voltage DC                | 205V                                         | 205V              |
| Hold Voltage (Continuous DC)     | 79V-97V (with a Solenoid load – 90V nominal) | 60 to 150V        |
| Maximum Stroke DC Current        | 5A                                           | 5A                |
| Maximum Hold DC Current          | 2.2A                                         | 2.2A              |
| Maximum DC Load                  | 5A                                           | 5A                |
| PWM Frequency                    | 1.3kHz                                       | 1.3kHz            |
| Reset Time                       | 1.5 to 2 sec                                 | 1.5 to 2 sec      |
| Unit Operating Temperature Range | 0-65°C                                       | 0-65°C            |

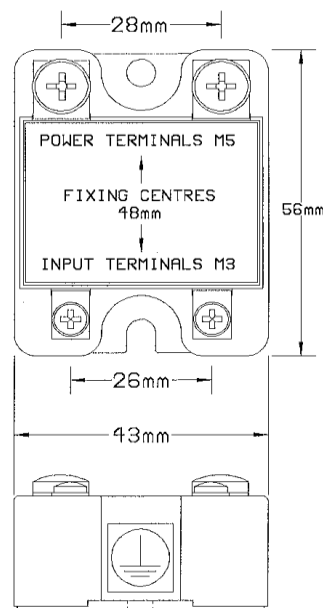
## INSTALLATION, DIMENSIONS & CONNECTIONS

### Solenoid Connection for 230V Supply

WARNING DISCONNECT FROM THE SUPPLY BEFORE COMMENCING ANY SERVICE WORK



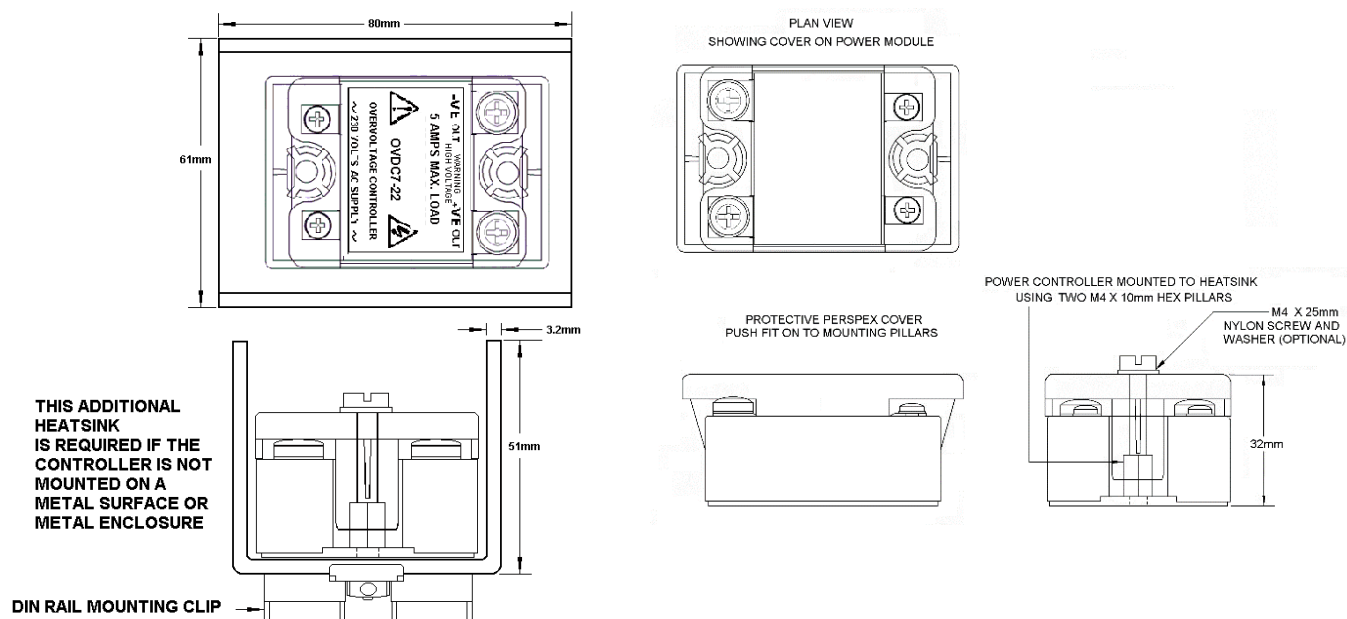
NOTE:  
USE HEATSINK COMPOUND FOR THERMAL COOLING



## YOU MUST READ THIS BEFORE INSTALLATION

| ELECTRICAL SAFETY                                                                                                                                                                                                                                                                                                                 | INSTALLATION REQUIREMENTS                                                                                                                                                                                                 | USER RESTRICTIONS                                                                                                                                                                                                                                                                                            | USAGE ENVIRONMENT                                                                                                 | HOT SURFACE WARNING                                                                                                                                                        |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>WARNING: RISK OF ELECTRIC SHOCK</b><br>Always consult the Installation & Maintenance Instructions before connecting this product to the power supply.<br><b>WARNING: Disconnect Power Before Servicing</b><br>Ensure the electrical supply is safely disconnected before connecting to any supply, load, or control terminals. | <b>WARNING: Installation by Qualified Personnel Only</b><br>This product must only be installed or fitted by a competent, qualified installer familiar with the relevant electrical standards and installation practices. | <b>WARNING: Not for Use by Vulnerable Individuals</b><br>This product is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they are supervised or instructed by a person responsible for their safety. | <b>WARNING: Industrial Use Only</b><br>This is an industrial-grade product and is not intended for household use. | <b>WARNING: Hot Surfaces</b><br>On certain models, surfaces marked with this symbol become hot during use. Avoid direct contact and follow all thermal safety precautions. |

## Cooling Requirements



## FUNCTION

AC supply to this controller is initially full-wave rectified for a fixed period of approximately 0.5 seconds. Thus, supplying full DC output voltage for the initial stroke of the solenoid. After this period, the output voltage to the solenoid is reduced to the continuous hold voltage for as long as the input AC supply is present

## RECOMMENDATIONS

### FUSING

It is recommended to use semiconductor (fast-acting) type fuses or circuit breakers (Semiconductor - MCB) for unit protection. On initial switch-on, some loads may need an increased Factor of Safety (F of S) for unit and/or device protection. See SRA datasheet for information.

### CE Marking

This product family carries a "CE marking". This controller needs a suitable remote filter. For information, see the recommendation section and contact our sales desk. (See Declaration of Conformity).

## DOCUMENTS

Other documents available on request, which may be appropriate for your application:

| Code   | Identity | Description                                                                                                                                                           |
|--------|----------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| X10229 | RFI      | Filter recommendations: Addressing the EMC Directive                                                                                                                  |
| X10213 | ITA      | Interaction: Uses for phase angle and for burst fire control                                                                                                          |
| X10255 | SRA      | Safety Requirements: Addressing the Low Voltage Directive (LVD) including, Thermal Data/Cooling, Live Parts Warning, Earthing Requirements and Fusing Recommendations |

It is recommended that installation and maintenance of this equipment should be done with reference to the current edition of the I.E.T. regulations (BS7671) by suitably qualified/trained personnel. The regulations contain important requirements regarding the safety of electrical equipment. For International standards refer STANDARDS on D of C.

## OPTIONAL EXTRAS

| Product Code | Product Description                                              |
|--------------|------------------------------------------------------------------|
| A15216       | KA100 Black Plate Mounted Heatsink                               |
| A15217       | KA100 DIN Rail Mounted Heatsink                                  |
| Z01062       | Heatsink Compound Syringe <b>(Must be applied while fitting)</b> |
| A80030       | SSR Cover Kit                                                    |
|              | EMI/RFI filter                                                   |

**\*Note:** When ordering a filter, the current at which the OVDC7 is to be used will be required

## PRODUCT CODE AND RELATED PRODUCT CODE

| Product Code | Product Description                           |
|--------------|-----------------------------------------------|
| A84027       | OVDC7-22 230V ac I/P; 97V fixed dc O/P        |
| A84021       | OVDC7-16 230V ac I/P; 60-150V variable dc O/P |