UNITED AUTOMATION	**DC MOTOR CONTROLLER** **MODULE**	**DCM** **X10335**

INTRODUCTION

This general purpose, modulated, pulse-width, low voltage dc controller, can be operated in any of the following modes:

Motor Control: High Frequency (RT/RT1 no link) speed control set by a 5kΩ potentiometer.

Lighting/Heating Control: Low frequency (RT/RT1 linked) output level set by a 5kΩ potentiometer as above.

Temperature Control: Thermistor connected across RT/RT1, with a temperature range of 5-130°C. Temperature set by a 5kΩ potentiometer.

APPLICATIONS

Include speed control of low voltage, high frequency, dc motors, low voltage lighting and medium frequency heaters.

FEATURES

RoHS Compliant

- Manual or signal control.
- Temperature control with optional sensor.
- 180 or 350Hz selectable frequency ranges.
- Short-circuit protection.
- 6 to 24V dc supply voltage range.

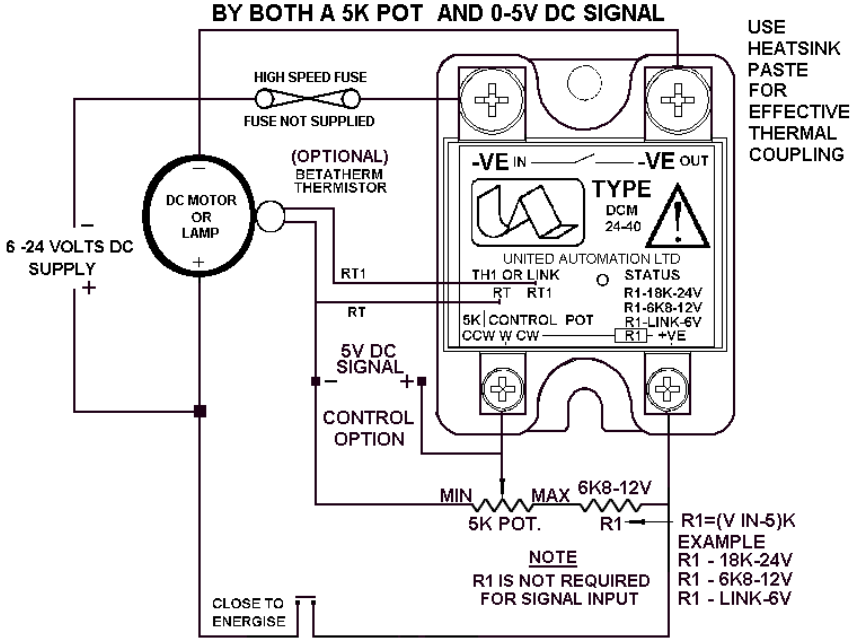
INSTALLATION

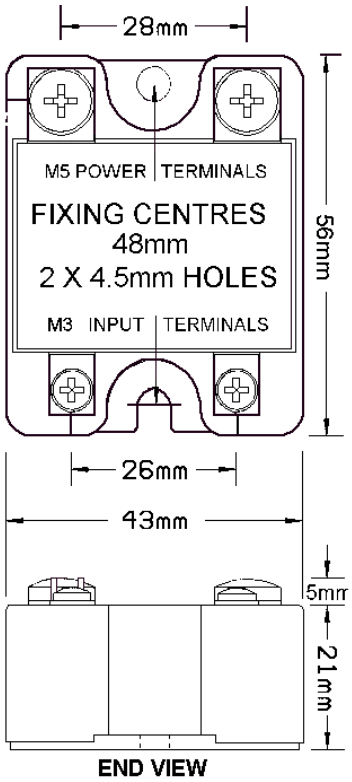
MOTOR CONTROL CONNECTIONS

WARNING

SWITCH OFF SUPPLY BEFORE COMMENCING ANY SERVICE WORK.

ALL SET POINTS CAN BE CONTROLLED BY BOTH A 5K POT AND 0-5V DC SIGNAL



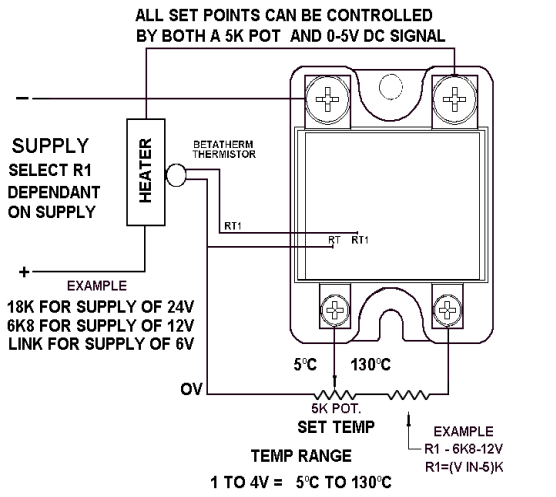


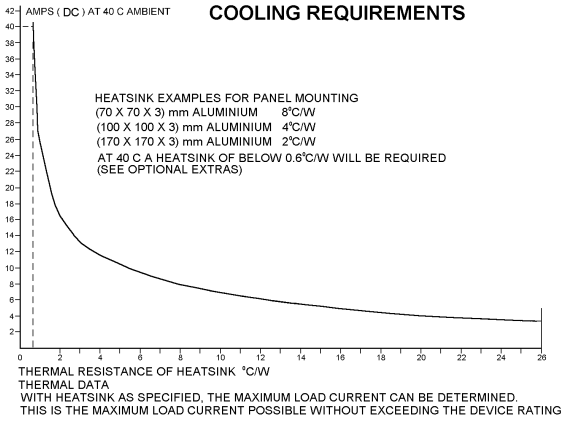
END VIEW

INSTALLATION

TEMPERATURE CONTROL CONNECTION FOR 12V SUPPLY

WARNING
SWITCH OFF SUPPLY BEFORE COMMENCING ANY SERVICE WORK





SPECIFICATIONS

Maximum dc system line voltage	24V dc
Unit limiting dc current	40A dc
Control input voltage range	0-5V dc
Control input current @ 5V typical	1mA dc
High frequency mode (no link across RT and RT1)	350Hz
Medium frequency mode (link RT and RT1)	180Hz
Optional for temperature control (terminals RT & RT1): Thermistor type- Betatherm - 10K3A1	5 - 130°C
Unit operating temperature range	0 to 65°C
Unit storage temperature range	0 to 85°C

FUSING

It is recommended that semiconductor, fast-acting type fuses or circuit breakers (semiconductor - MCB) be used for unit/device protection. On initial operation some loads may need an increased factor of safety for unit/device protection (see SRA datasheet for further information).

CE MARKING

This product family carries a CE marking. For information see recommendation section and contact our sales des. (see Declaration of Conformity).

RECOMMENDATION

Other documents are available on request, which may be appropriate for your applications.

CODE	IDENTITY	DESCRIPTION
X10229	RFI	Filter recommendation: 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, earth requirements and fusing recommendations.
P01.1	COS	UAL conditions of sale.

NOTE: It is recommended that installation and maintenance of this equipment should be done with reference to the current edition of the I.E.T. (formally I.E.E.) regulations (BS7671) by suitably qualified/trained personnel. The regulations contain important requirements regarding installation and safety of electrical equipment. Specific installers should refer to local and national regulations.

ORDER CODE:	State part number: DCM –24-40	
Optional extras include:-	Betatherm 10K3A1 bead sensor only –	Stock code D80005
	Betatherm 10K3A1 bead (type-X) sensor with 1m PTFE leads:	Stock code A26046
	Betatherm 10K3A1 enclosed (type-E) sensor with 1m PTFE leads	Stock code A26036
Further extras include:-	Heatsink assemblies for 40A capability; Heat sink paste; 5K potentiometer.	

CE

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