

NMFT2 - Motor Controllers, Mechanically Operated and Solid-state – Component
NMFT8 - Motor Controllers, Mechanically Operated and Solid-state Certified for Canada
- Component

WATLOW ELECTRIC MANUFACTURING CO

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Investigated to ANSI/UL 508

Motor controllers for use in industrial control equipments Model(s) 0003-0195-0000, 0003-0195-6005, 0003-0195-6006, 0003-0195-6013, 18-6001, 18-6002, 18-6003, 18-6004, 18-6005, 18-6006, 18-6011, 18-6013, 18-6014, 18-6016, 18-6017, 18-6018, 18-6019, 18-6020, 18-6021, 18-6023, 18-6025, 18-6038, 18-6039, 18-6040, 18-6041

Solid State relays Model(s) 0003-0221-0001, 0003-0221-0002, 0003-0221-0003, 0003-0221-0004

Devices are Solid State Power switches for General Duty Loads.

Ratings to be marked on product.

Command Signal input voltage,
Load circuit output voltage,
Load current amperage.

load current contingent upon use of proper heatsink being provided.

ENGINEERING CONSIDERATIONS (NOT FOR FIELD REPRESENTATIVE'S USE):

Use - For use only in (or with) complete equipment where the acceptability of the combination is determined by Underwriters Laboratories Inc.

These components have been judged on the basis of the required spacings in the Standard for Industrial Control Equipment (UL 508), Paragraph 180, which would cover the components themselves if submitted for unrestricted Listing. These models have also been evaluated to Canadian Standard C22.2 No. 14.

Conditions of Acceptability -

1. These devices should be used within Recognized ratings as specified above.

2. These devices should be mounted in the intended manner in enclosures having adequate strength and thickness and with acceptable spacings being provided.
3. The ratings specified depend on temperatures in the end-use not exceeding those indicated on the rating curves, if provided. If not provided, 10 to 40°C is to be used.
4. Devices with ratings of 40 A and 75 A were tested with a Heat Sink pictured in Fig. 5. Consideration for a temperature test should be made if another Heat Sink is used in the end-use product.
5. These devices are suitable for factory wiring only and the suitability of these connections should be judged in the final installation. Particular attention should be paid to temperatures on terminals and leads.
6. Since these devices are rated greater than 1 hp, short circuit tests shall be considered in the end-product evaluation. No short circuit tests were conducted in these units.
7. The following temperatures were measured in a 25°C ambient at rated current; use of higher temperatures will require conducting a Temperature Test in the end-use product.

Model	Location	Temp °C
18-6041	On Attached Heat Sink	57
18-6003, 18-6006	On Attached Heat Sink	53
18-6023	On Attached Heat Sink	82
18-6018, 18-6013, 18-6020, 18-6019, 18-6016, 18-6021	On Attached Heat Sink	40

The terminals are to be factory wired only and the suitability of the connection (including spacings between factory connectors) shall be determined.

The spacings from the exposed live-metal parts to the enclosure walls shall be in accordance with the requirements of the overall equipment.

These devices have several termination methods. Some of which are supplied by the user. Consideration should be given to the termination means and if necessary, specified in the end-use equipment Report.

8. The optical isolators used in these products are suitable for minimum 4000 V ac rms isolation.
9. Models 18-6011, 18-6016 and 18-6021 were tested for 100,000 cycle endurance, general use ratings on a HE150 heatsink, measuring 7-1/16 by 4-5/16 by 5-15/16 in. overall. Use with a smaller heatsink will need to be determined.

DERATING CURVE 0003-0195-xxxx MODELS

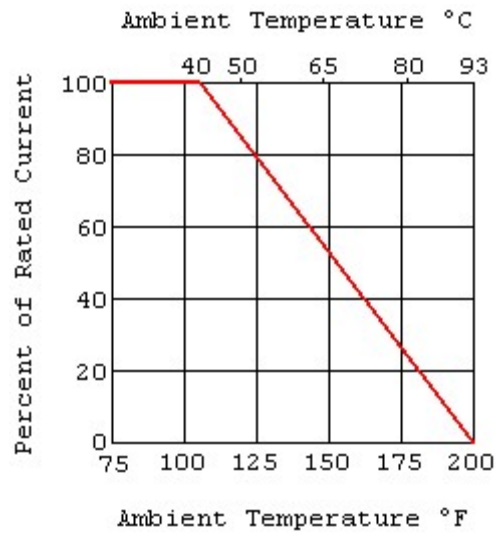


Figure 5