

The logo for ENTRON, featuring the word "ENTRON" in a bold, black, sans-serif font. A thick red horizontal bar is positioned above the letters "E" and "N". A small "TM" trademark symbol is located to the right of the word.

Data Sheet

**TD160321-3**

Product Model

**MTR mkII**

February 4, 2022

## 1 Low-Cost Resistance Welding Control



### Cost effective – Simple to use – Flexible

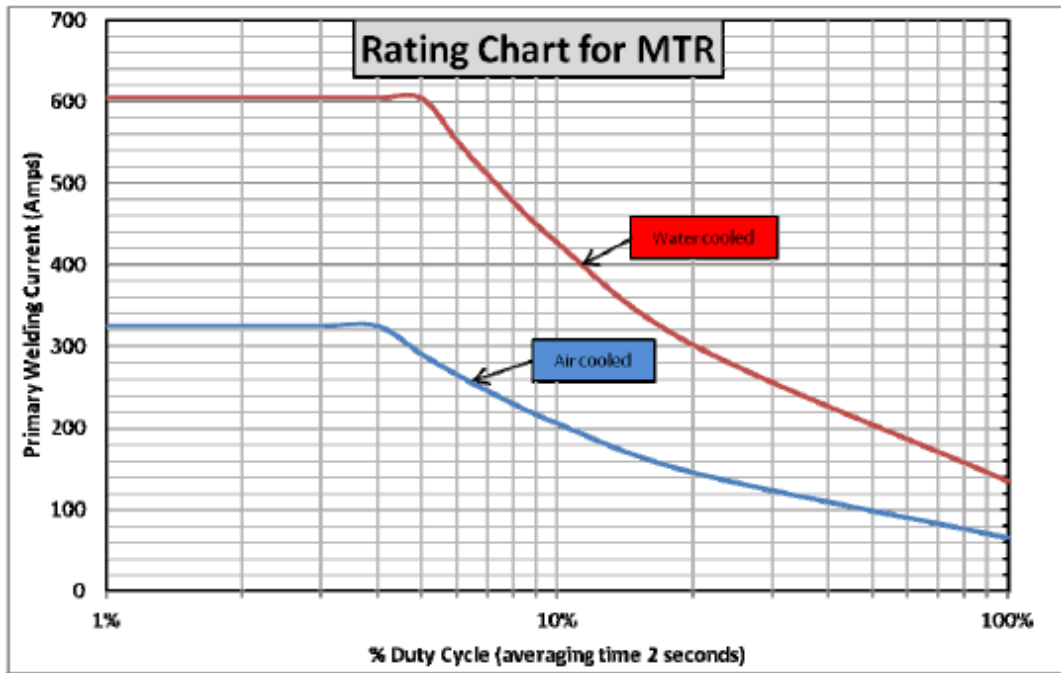
The MTR has been designed as a low cost welding control system intended for customers who are working on a tight budget but require a high degree of accuracy. A comprehensive and easy to use set of features are built into a very compact package. The inherent flexibility of the MTR allows it to be used in a wide range of applications including poke guns, spot welding, projection welding, seam welding and bench welding applications. The MTR has an integrated programmer and SCR rated for applications of up to 50kVA.

Programmable Parameters	Range of Values
Mode	Single or Repeat.
Heat 1	0-99% Percentage of available heat range.
Heat 2	0-99% Percentage of available heat range.
Presqueeze**	0-99 Time in cycles.
Squeeze	0-99 Time in cycles.
Weld 1	0-99 Time in cycles.
Cool 1	0-99 Time in cycles.
Weld 2	0-99 Time in cycles.
Cool 2	0-99 Time in cycles, period of time between pluses of Weld 2 when pulsation is used.
Pulses (Pulsation)	1-9 Number of repeat pulses of Weld 2 in the weld sequence
Hold	0-99 Time in cycles.
Off**	0-99 Time in cycles.

General Features	
Up to 8 programmes.	Low cost.
Repeat Operation.	Integrated programmer.
Single Operation.	24VDC inputs and outputs.
Seam Mode up to 10kVA maximum. (Available as a software option). Note the SCR must be water cooled.	Counter with optional sequence lock, can be used as an aid to electrode management.
Integrated SCR up to 50kVA at 20% duty cycle. (with water @5ltr/min)	Easy installation and use.
Integrated SCR up to 25kVA at 20% duty cycle (without water)	

Electrical Specifications	
Mains voltage	110,120,220,240,260 volts AC or 380,415,440,480,500 volts AC
Mains frequency	50 Hz or 60 Hz
Duty cycle	100% up to 10 kVA or 20% up to 50 kVA –see chart over
Load	50 kVA maximum
Number of digital inputs	2 rated at 24 V DC < 10 mA ( 1 dedicated to initiation)
Number of digital outputs	2 rated at 24 V DC < 500 mA ( 1 dedicated to WAV)
Max ambient air temperature where applicable (with air cooled SCR)	35°C (95°F)
Max inlet water temperature where applicable (with air cooled SCR)	35°C (95°F)

\*\*Note: these parameters will only appear if the mode is set to repeat.

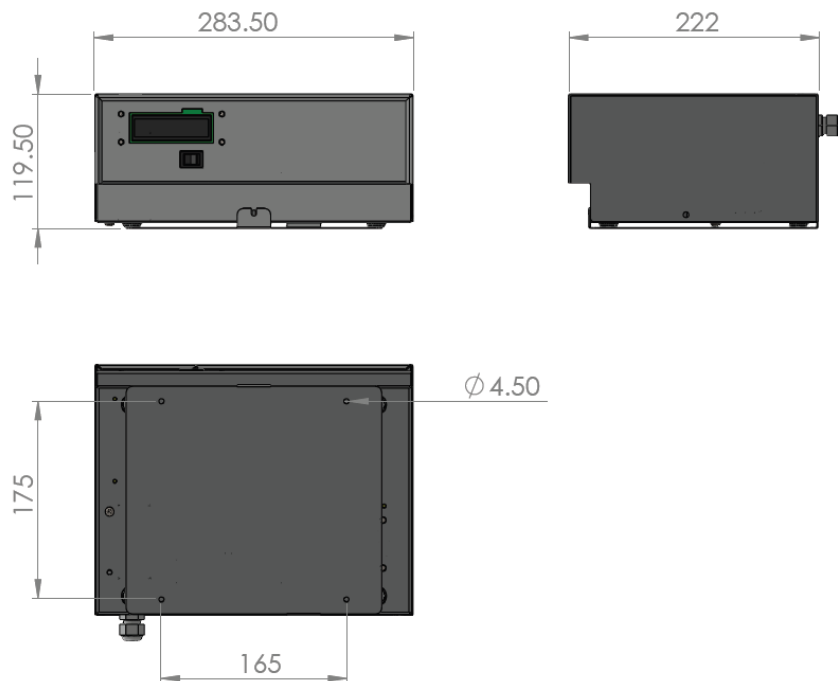


**Note: Duty cycle definition**

The % duty cycle is defined as the total number of milliseconds of current flow (weld time) during the worst case two second period.

$$\text{Duty cycle\%} = (\text{Total milliseconds of weld} / 2000) * 100$$

**Dimensions:**



## 2 Technical Support

### 2.1.1 Internet

The latest version of the documentation and other helpful resources in the ENTRON Document Library page found in the Resource section of the ENTRON website: <https://www.entroncontrols.com>

### 2.1.2 Documentation Request

Documentation, user instructions and technical information can be requested by emailing ENTRON Controls at [customerservice@entroncontrols.com](mailto:customerservice@entroncontrols.com) or [support@bfentron.co.uk](mailto:support@bfentron.co.uk)

Please include your name and email

### 2.1.3 Service and Technical Support

For service and technical support, we request that customers fill out the Technical Support Form found on our website at link below:

NOTICE



TECHNICAL SUPPORT FORM LINK

<https://www.entroncontrols.com/resources/technical-support.html>

After the web form has been completed, your case will be assigned to one of our technical specialists who will contact you directly.

and service sites is shown in the table below. Please contact the site for your specific region.

Manufacturing Site	Country	Phone	Email	Regions Supported
ENTRON UK	England	+44-1384-455401	support@bfentron.co.uk	Europe, Asia, Africa, Rest of World
ENTRON US	USA	+1-864-416-0190	tech.support@entroncontrols.com	USA, Canada
ENTRON MX	Mexico	+52-844-415-9081	soporte@entronmx.com	Mexico, Central America