

## IR.T SERIES CURRENT CONTROL RELAY

UL listed CSA recognized

- Automatic or Manual Control
- Start-up Inhibit
- Adjustable Hysteresis
- Multiple Voltages
- LED Relay Status Indicator



### 1. AC Current Control Without Latching:

The output relay is energized when the current (peak current on AC) overshoots the level selected on the potentiometer. It de-energizes when the current falls below the normal current by 5 to 50% or when input power breaks. The hysteresis is controlled by a top mounted potentiometer and its selection does not change the chosen current level.

2. AC Current Control With Latching:

The output relay is energized when the current reaches the selected value and stays latched. The contact between terminal B1 and B2 (or 11 and 9) should be opened or input power to the device interrupted to reset. In this case, it is preferable to reduce the hysteresis 5%.

### SPECIFICATIONS:

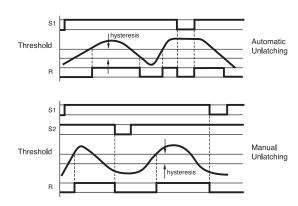
| Input | 24 VDC, 24, 48, 110, 220 VAC |
|-------|------------------------------|
|       | ±15%, 50/60 Hz               |

Power consumption ..... 3 VA maximum

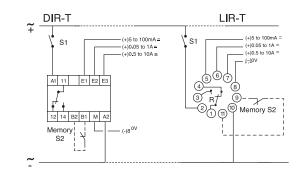
| 1 Ower consumption 5 vA maximum  |                  |            |                  |            |
|--|------------------|------------|------------------|------------|
| CONTR  | OL RANGE         |            | PERMITTED        | OVERLOAD   |
| DC   | AC               | INPUT      |                  | LESS THAN  |
| CURRENT  | CURRENT          | RESISTANCE | PERMANENTLY      | 1 sec Peak |
| 5 to 100 mA  | 3.5 to 70.7 mA   | 1 ohm      | 1.5 V            | 5 A        |
| 0.05 to 1 A  | 0.035 to 0.707 A | 0.1 ohm    | 5 A              | 17 A       |
| 0.5 to 10 A  | 0.35 to 7.07 A   | 0.01 ohm   | 15 A             | 55 A       |
| Hysteresis selection 5 to 50% of input current                         |                  |            |                  |            |
| Repeat accuracy ±2% at a constant ambient                              |                  |            |                  |            |
| Response time 100 ms On Make   |                  |            |                  |            |
|  |                  | 200 ms     | s On Break       |            |
| Output Relay SPDT Relay  |                  |            |                  |            |
| Contact material AgCdO   |                  |            |                  |            |
| Maximum loading  |                  |            |                  |            |
| Maximum switching voltage 250 VAC or DC                                |                  |            |                  |            |
| Relay maxim  | num power rating | 2500 V     | <b>/</b> A       | 30W        |
| Mechanical life of relay 30 x 10⁴ operations                           |                  |            |                  |            |
| Electrical life of relay 2 x 10 <sup>5</sup> at 2500 VA resistive load |                  |            |                  |            |
| Operating te   | mperature        | +14°F      | to + 140°F -10°C | to +60°C   |
| Weight   |                  | 7 oz. (2   | 200g)            |            |
|  |                  |            |                  |            |

**Option:** 24 VDC power - the voltage and the measured current must be from separate sources.

Note: It is recommended that the unit be adequately fused.



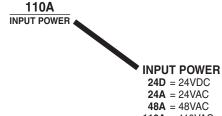
### WIRING DIAGRAM:



**Note:** Upon energization of the current control IR.T Series Relay, the time delay, which is adjustable from .1 to 10 seconds, inhibits the output relay during start-up periods. The delay time is adjustable via a potentiometer located on the side of the case. Applies to both versions, with and without latching.







**110A** = 110VAC **220A** = 220VAC

Products and specifications subject to change without notice.

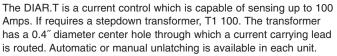




# AR.T SERIES

UL listed CSA recognized

- **Automatic or Manual Control**
- Start-up Inhibit
- Adjustable Hysteresis
- Multiple Voltages
- 5 to 100 Amp RMS



1. AC Current Control Without Latching:

The output relay is energized when the AC current overshoots the level selected on the potentiometer. It de-energizes when the current falls below the selected current by 5 to 50% or when input power breaks. The hysteresis is controlled by a top mounted potentiometer and its selection does not change the chosen current level.

2. AC Current Control With Latching:

The output relay is energized when the current reaches the selected value and stays latched. The contact between terminal B1 and B2 (or 11 and 9) should be opened or input power to the device interrupted to reset. In this case, it is preferable to reduce the hysteresis 5%.

## SPECIFICATIONS:

±15%, 50/60 Hz Power consumption . . . . . . . . . 3 VA maximum

Hysteresis selection . . . . . . . . 5 to 50% of input current

Repeat accuracy ..... ±2% at a constant ambient

±5% with temperature variation

VDE 0435

200 ms On Break

**Output Relay** SPDT Relay

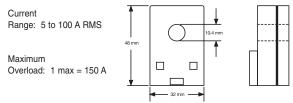
Contact material . . . . . . . . . . AgCdO Maximum loading ......

1 A DC inductive Maximum switching voltage ..... 250 VAC 30 VDC Relay maximum power rating ..... 2500 VA 30 W

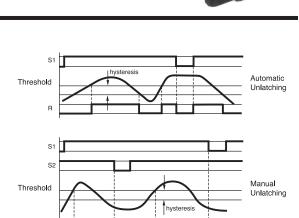
Operating temperature ......+14°F to +140°F -10°C to +60°C

Weight . . . . . . . . . . . . . . . . . 7 oz. (200g)

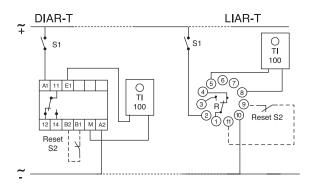
## TRANSFORMER: (Part Number 74 525 305)



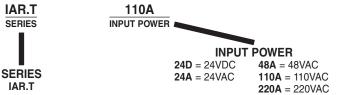




### WIRING DIAGRAM:



Note: Upon energization of the current control IAR.T Series Relay, the time delay, which is adjustable from .1 to 10 seconds, inhibits the output relay during start-up periods. The delay time is adjustable via a potentiometer located on the side of the case. For additional current transformer see "Accessories" section: L595 Series. Page 2/99



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