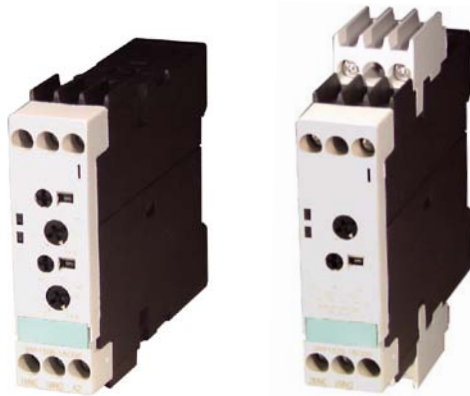


**THIS DATA IS FOR REFERENCE PURPOSES ONLY**  
**This Product's status is: OBSOLETE.**  
**Tyco Electronics no longer offers the 3RP1 series.**

# 3RP1 series

## Multifunction Solid State DIN Mount Time Delay Relay

- Available as SPDT or DPDT
- 15 time setting ranges
- .05s - 100hr programmable timing range
- Universal 24-240 VAC/VDC or fixed input types.
- 3A switching current rating
- Fits 35mm DIN track
- Single function, Delay-On available



Users should thoroughly review the technical data before selecting a product part number. It is recommended that user also seek out the pertinent approvals files of the agencies/laboratories and review them to ensure the product meets the requirements for a given application.

### Standards and Specifications

- IEC 721-3-3 "Ambient conditions"
- IEC 61812-1/DIN VDE 0435 Part 201 "Solid State Relays, Time Relays"
- IEC 1000 "electromagnetic compatibility"
- IEC 947-5-1: DIN VDE 0660 Part 200 "Low-voltage control circuit devices"

### Timing Specifications

**Timing Ranges:** 0.05 to 1 / 0.15 to 3 / 0.5 to 10 / 1.5 to 30 / 5 to 100 sec.;  
 0.05 to 1 / 0.15 to 3 / 0.5 to 10 / 1.5 to 30 / 5 to 100 min.;  
 0.05 to 1 / 0.15 to 3 / 0.5 to 10 / 1.5 to 30 / 5 to 100 hr.

**Timing Adjustment:** Potentiometer adjustable within selected range.

**Tolerance:** ±5% of full scale value.

**Reset Time:** 150 ms.

**Minimum On Period:** 35 msec.

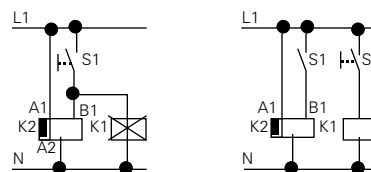
**Repeatability:** ± 1%.

### Timing Modes

See the following page for a description of timing modes.

### Configuring

- Changing the timer range and their functions will only be effective when they are carried out in a voltage-free state.
- Trigger input B1 or B3 must only be started when the supply voltage is applied.
- The same potential must be applied to A1 and B1, or A3 and B3. With the two-voltage design, only one voltage range must be connected.
- The triggering of the load paralleled to the start input is not permissible when using AC (see adjacent diagrams).

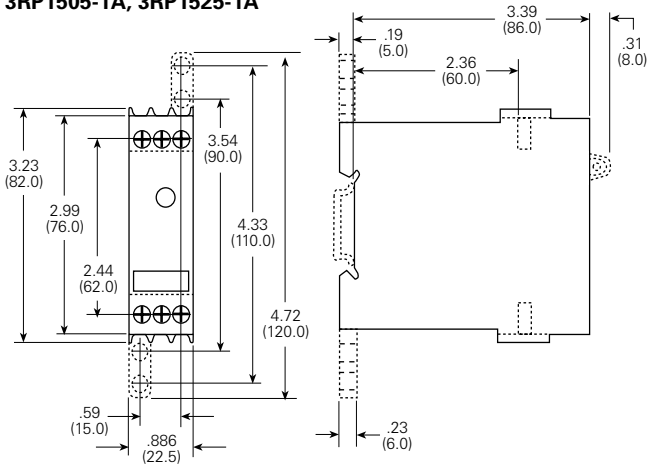


**Ordering Information – Authorized distributors are more likely to stock boldface items listed below.**

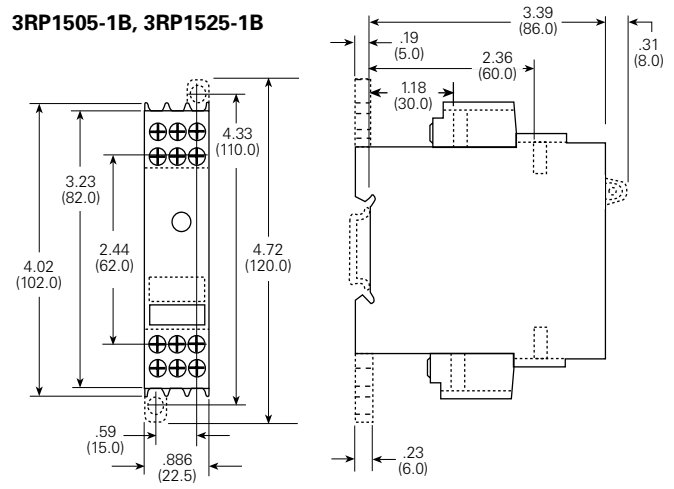
| Input Voltage                |             | Input Type | Contact Arrang. | Wiring Diagram | Functions | Part Number           |
|------------------------------|-------------|------------|-----------------|----------------|-----------|-----------------------|
| DC                           | AC          |            |                 |                |           |                       |
| <b>3RP1505 Multifunction</b> |             |            |                 |                |           |                       |
| 24                           | 24, 100-127 | Fixed      | SPDT            | 1 to 8         | 1 to 8    | <b>3RP15 05-1AQ30</b> |
| 24                           | 24, 200-240 | Fixed      | SPDT            | 1 to 8         | 1 to 8    | <b>3RP15 05-1AP30</b> |
| 24                           | 100-127     | Fixed      | DPDT            | 9 to 24        | 9 to 24   | <b>3RP15 05-1BQ30</b> |
| 24-240                       | 24-240      | Universal  | DPDT            | 9 to 24        | 9 to 24   | <b>3RP15 05-1BW30</b> |
| <b>3RP1525 Delay On</b>      |             |            |                 |                |           |                       |
| 24                           | 24, 100-127 | Fixed      | SPDT            | 1              | 1         | <b>3RP15 25-1AQ30</b> |
| 24                           | 24, 200-240 | Fixed      | SPDT            | 1              | 1         | <b>3RP15 25-1AP30</b> |
| 24                           | 24, 100-127 | Fixed      | DPDT            | 9              | 9         | <b>3RP15 25-1BQ30</b> |
| 24                           | 24, 200-240 | Fixed      | DPDT            | 9              | 9         | <b>3RP15 25-1BP30</b> |

**Outline Dimensions**

**3RP1505-1A, 3RP1525-1A**



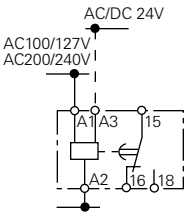
**3RP1505-1B, 3RP1525-1B**



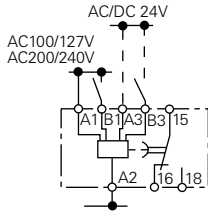
**Wiring Diagram**

**1. On-Delay**

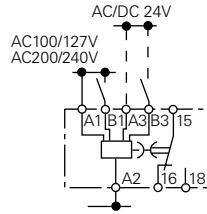
**3RP1505-1A  
3RP1525-1A**



**2. Off-Delay  
With Auxiliary Voltage  
3RP1505-1A**

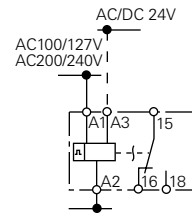


**3. On and Off Delay  
With Auxiliary Voltage  
3RP1505-1A**



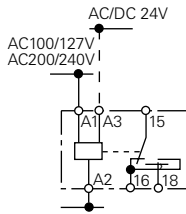
**4. Flashing**

**3RP1505-1A**

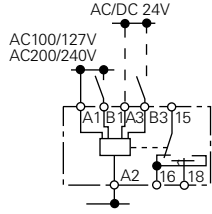


**5. Making-Pulse Contact**

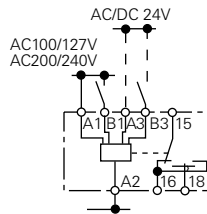
**3RP1505-1A  
3RP1525-1A**



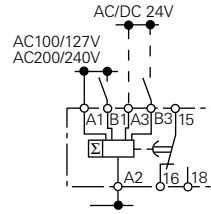
**6. Breaking-Pulse Contact  
With Auxiliary Voltage  
3RP1505-1A**



**7. Pulse Forming  
With Auxiliary Voltage  
3RP1505-1A**

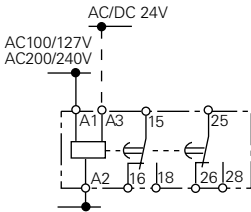


**8. Additive On-Delay With Auxiliary Voltage and Instantaneous Contact  
3RP1505-1A**

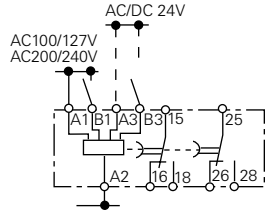


**9. On-Delay**

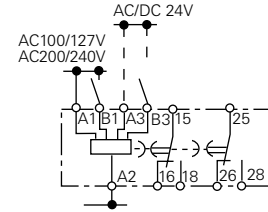
**3RP1505-1B  
3RP1525-1B**



**10. Off-Delay  
With Auxiliary Voltage  
3RP1505-1B**

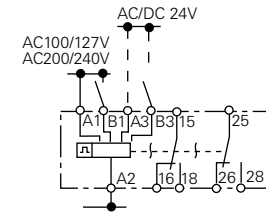


**11. On-and Off-Delay  
With Auxiliary Voltage  
3RP1505-1B**



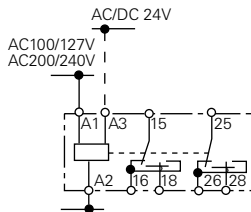
**12. Flashing**

**3RP1505-1B**

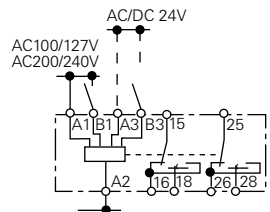


**13. Making-Pulse Contact**

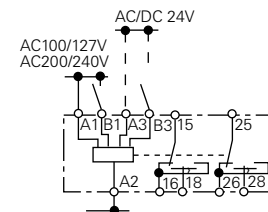
**3RP1505-1B**



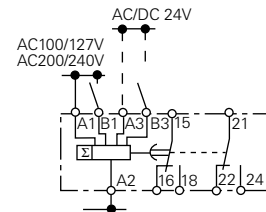
**14. Breaking-Pulse Contact  
With Auxiliary Voltage  
3RP1505-1B**



**15. Pulse Forming  
With Auxiliary Voltage  
3RP1505-1B**



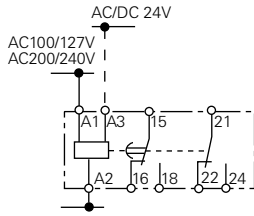
**16. Additive On-Delay With Auxiliary Voltage and Instantaneous Contact  
3RP1505-1B**



**Wiring Diagrams (continued)**

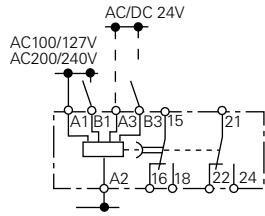
**17. On-Delay and Instantaneous Contact**

3RP1505-1B



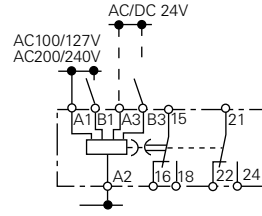
**18. Off-Delay With Auxiliary Voltage and Instantaneous Contact**

3RP1505-1B



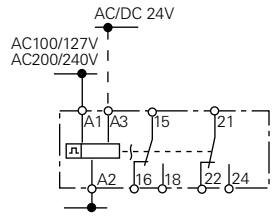
**19. On and Off Delay With Auxiliary Voltage and Instantaneous Contact**

3RP1505-1B



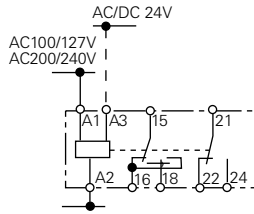
**20. Flashing and Instantaneous Contact**

3RP1505-1B



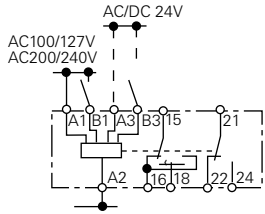
**21. Making-Pulse Contact and Instantaneous Contact**

3RP1505-1B



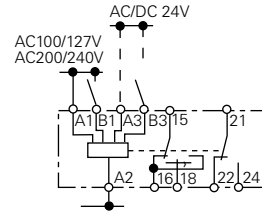
**22. Breaking-Pulse Contact With Auxiliary Voltage and Instantaneous Contact**

3RP1505-1B



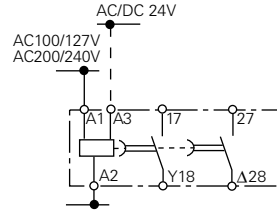
**23. Pulse Forming With Auxiliary Voltage and Instantaneous Contact**

3RP1505-1B



**24. Star-Delta Function**

3RP1505-1B

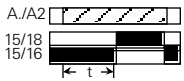


**Timing Function Descriptions and Settings**

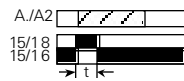
3RP1505-1A

3RP1505-1B

**1. On Delay**



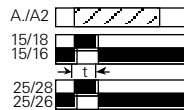
**5. Impulse On**



**9. On Delay**



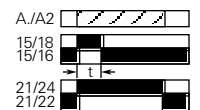
**13. Impulse On**



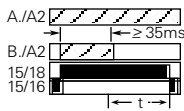
**17. On Delay**



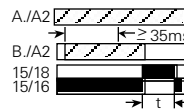
**21. Impulse On**



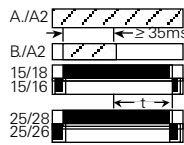
**2. Off Delay**



**6. Impulse Off**



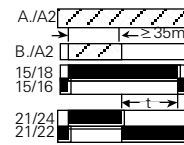
**9. On Delay**



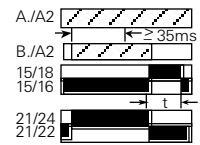
**13. Impulse On**



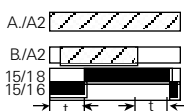
**17. On Delay**



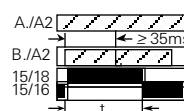
**21. Impulse On**



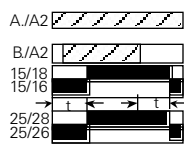
**3. On/Off Delay**



**7. Pulse Shaping**



**9. On Delay**



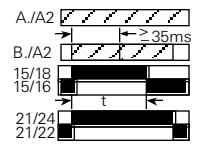
**13. Impulse On**



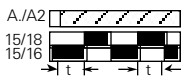
**17. On Delay**



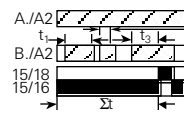
**21. Impulse On**



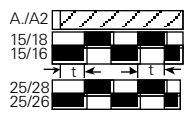
**4. Flasher**



**8. Cumulative On Delay**



**9. On Delay**



**13. Impulse On**



**17. On Delay**



**21. Impulse On**

