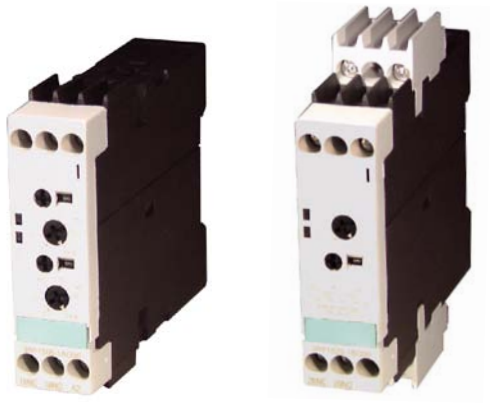
THIS DATA IS FOR REFERENCE PURPOSES ONLY
This Product's status is: OBSOLETE.
Tyco Electronics no longer offers the 3RP1 series.

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 2021 "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.

Contact Data @ 25°C

Arrangements: 1 Form C (SPDT).
2 Form C (DPDT)
Material: Silver tin oxide.
Rating: 3A @ 250VAC.
Switching Frequency: 2,500 ops./hour.
Electrical Life: 200,000 operations min. at rated load.
Mechanical Life: 30 x 10^6 operations.

Input Data @ 25°C

Voltage: Universal Input Type: 24 - 240V, 50/60 Hz. AC or DC.
Fixed Input Type: 24, 100-127, 200-240AC; 24VDC.
Operating Range: AC: 85 to 110%.
DC: 80 to 125%.
Power Requirement:
Universal Input Type: AC: 6VA.
DC: 2W.

Environmental Data

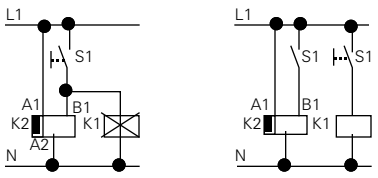
Temperature Range: Storage: -40°C to +80°C.
Operating: -25°C to +60°C.
Protection Category: IP 20 according to EN 60529.

Mechanical Data

Termination: Screw terminal.
Enclosure: Plastic DIN case.
Mounting: 35mm DIN track.
Weight: (3RP1505) 5.29 oz. (150g) approximately.
(3RP1525) 3.88 oz. (110g) approximately.

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).

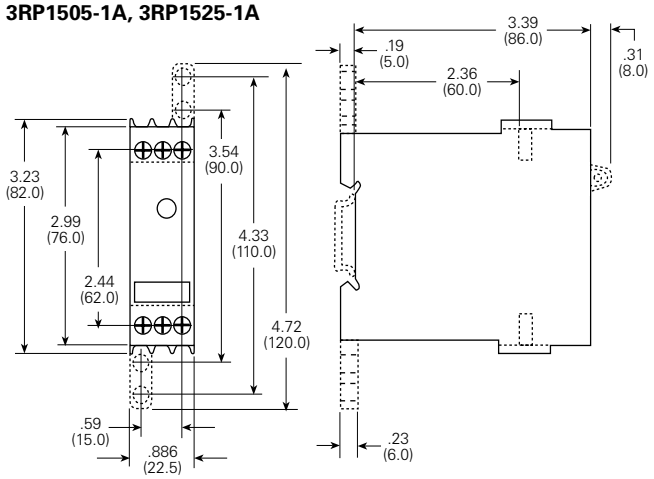


Ordering Information – Authorized distributors are more likely to stock boldface items listed below.

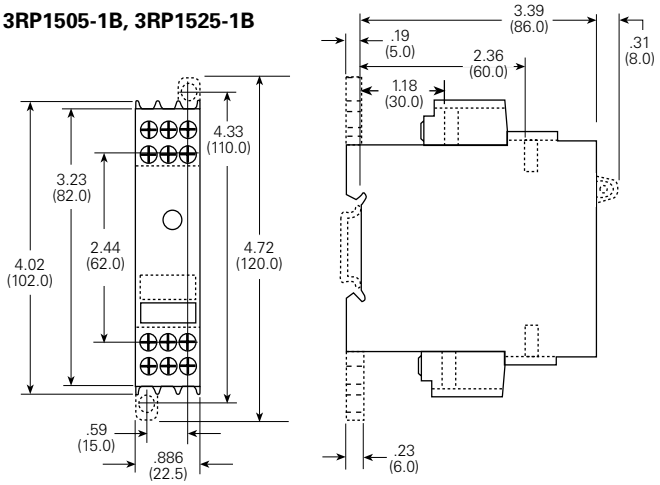
Input Voltage DC	Input Voltage AC	Input Type	Contact Arrang.	Wiring Diagram	Functions	Part Number
3RP1505 Multifunction						
24	24, 100-127	Fixed	SPDT	1 to 8	1 to 8	**3RP15 05-1AQ30**
24	24, 200-240	Fixed	SPDT	1 to 8	1 to 8	**3RP15 05-1AP30**
24	24, 100-127	Fixed	DPDT	9 to 24	9 to 24	**3RP15 05-1BQ30**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

Outline Dimensions

3RP1505-1A, 3RP1525-1A



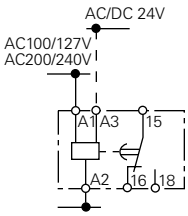
3RP1505-1B, 3RP1525-1B



Wiring Diagram

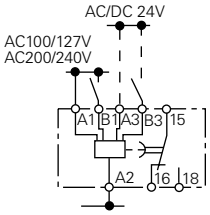
1. On-Delay

3RP1505-1A
3RP1525-1A



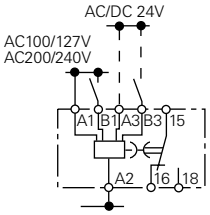
2. Off-Delay With Auxiliary Voltage

3RP1505-1A



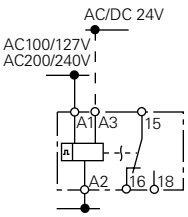
3. On and Off Delay With Auxiliary Voltage

3RP1505-1A



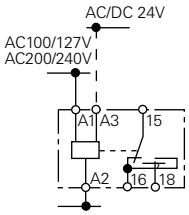
4. Flashing

3RP1505-1A



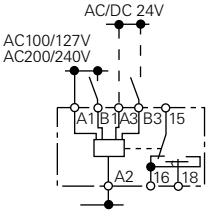
5. Making-Pulse Contact

3RP1505-1A
3RP1525-1A



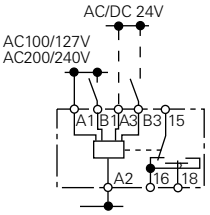
6. Breaking-Pulse Contact With Auxiliary Voltage

3RP1505-1A



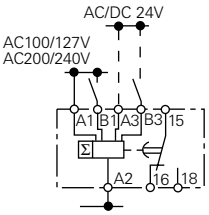
7. Pulse Forming With Auxiliary Voltage

3RP1505-1A



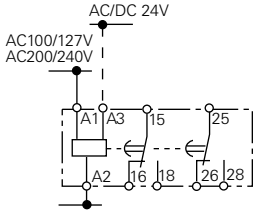
8. Additive On-Delay With Auxiliary Voltage and Instantaneous Contact

3RP1505-1A



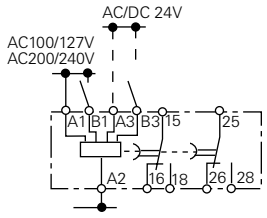
9. On-Delay

3RP1505-1B
3RP1525-1B



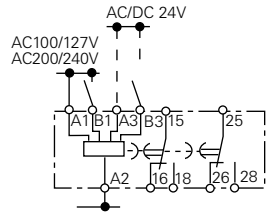
10. Off-Delay With Auxiliary Voltage

3RP1505-1B



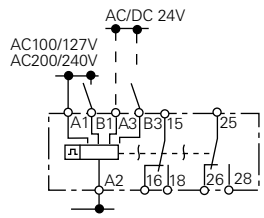
11. On-and Off-Delay With Auxiliary Voltage

3RP1505-1B



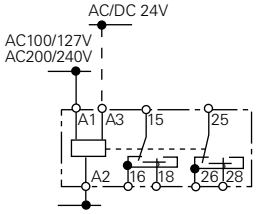
12. Flashing

3RP1505-1B



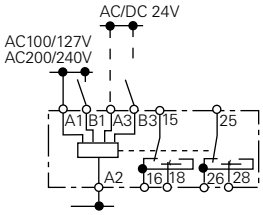
13. Making-Pulse Contact

3RP1505-1B



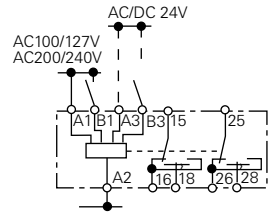
14. Breaking-Pulse Contact With Auxiliary Voltage

3RP1505-1B



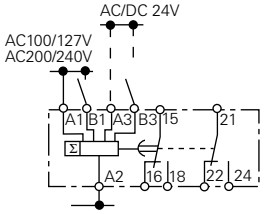
15. Pulse Forming With Auxiliary Voltage

3RP1505-1B



16. Additive On-Delay With Auxiliary Voltage and Instantaneous Contact

3RP1505-1B



Dimensions are shown for reference purposes only.

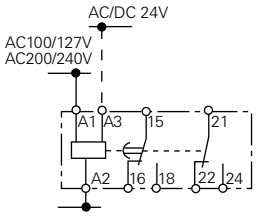
Dimensions are in inches over (millimeters) unless otherwise specified.

Specifications and availability subject to change.

Wiring Diagrams (continued)

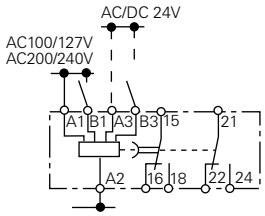
17. On-Delay and Instantaneous Contact

3RP1505-1B



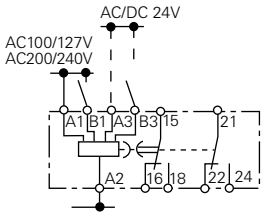
18. Off-Delay With Auxiliary Voltage and Instantaneous Contact

3RP1505-1B



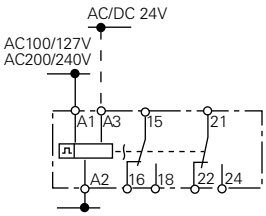
19. On and Off Delay With Auxiliary Voltage and Instantaneous Contact

3RP1505-1B



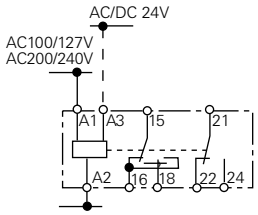
20. Flashing and Instantaneous Contact

3RP1505-1B



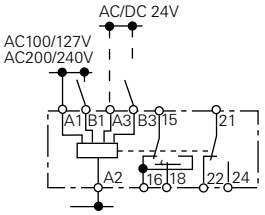
21. Making-Pulse Contact and Instantaneous Contact

3RP1505-1B



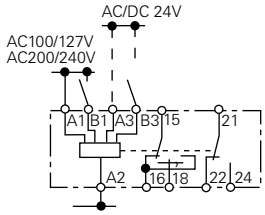
22. Breaking-Pulse Contact With Auxiliary Voltage and Instantaneous Contact

3RP1505-1B



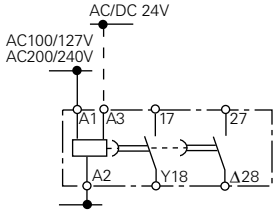
23. Pulse Forming With Auxiliary Voltage and Instantaneous Contact

3RP1505-1B



24. Star-Delta Function

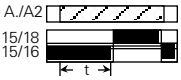
3RP1505-1B



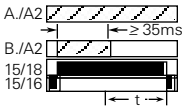
Timing Function Descriptions and Settings

3RP1505-1A

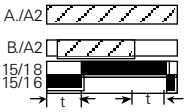
1. On Delay



2. Off Delay



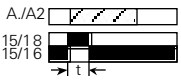
3. On/Off Delay



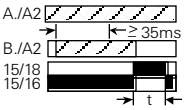
4. Flasher



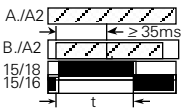
5. Impulse On



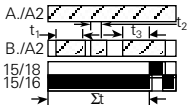
6. Impulse Off



7. Pulse Shaping

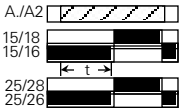


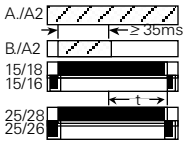
8. Cumulative On Delay

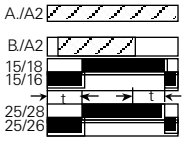


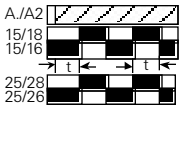
3RP1505-1B

9. On Delay

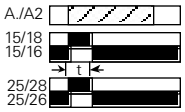


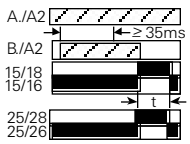


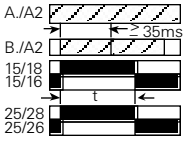


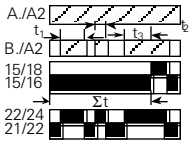


13. Impulse On

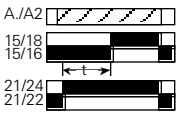


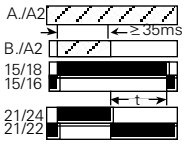


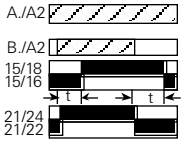


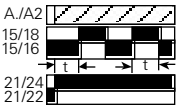


17. On Delay









21. Impulse On

