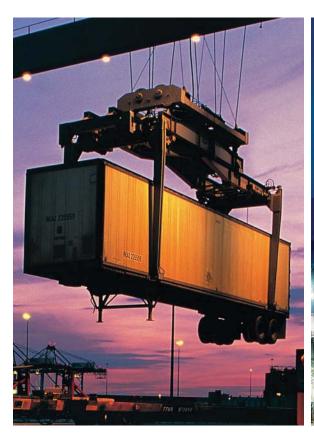
# Monitoring, Controlling and Switching with SIRIUS Relays

One range for every application



## **SIRIUS**

**SIEMENS** 





## The Wide Range of SIRIUS Relays

A relay for every application

Every engineer knows that he must be completely up to date when it comes to controls, load feeders and drives. However, with coupling, control and monitoring relays, the search among the various suppliers becomes time-consuming. This is now a thing of the past because we have all of these products combined in just one family: SIRIUS®. This makes it easy for you to select the optimum product and guarantees you a top price-performance ratio.

In our assortment of SIRIUS relays, you can find everything you need for motor feeders. Simple and easy. From a single source. Whether you need timing or reliable monitoring relays, narrow coupling relays, plug-in relays, low-noise power relays or interface converters – it would be difficult to find a more complete and extensive range of relays. We have a relay for simply every application.

All SIRIUS relays are especially easy to use – all across the product portfolio. Have a closer look at our products and see for yourself. You'll be quite impressed.

SIRIUS Relays – a complete portfolio to cover every application.

#### The highlights at a glance:

- An extensive range:
  A matching relay for every application
- User-friendly:
  Extremely simple to operate
- Multi-functional:Relays for versatile purposes
- In line with requirements from practice:
  Grading allows for optimal
  performance level
- Excellent price-performance ratio

## 3RP15/3RP20 Timing Relays

#### for rail mounting

Electronic 3RP1/3RP2 timing relays are used for all switching operations in starting, protection and open- and closed-loop control circuits that require time delay functions. Due to their well-proven concept and their space-saving, compact design they are the ideal timing devices for all industrial control cabinet, panel and control manufacturers.





#### **Application areas:**

#### ON delay:

- Interference pulse suppression (gating of interference pulses)
- Motors are started step by step to ensure that the supply system is not subject to excessive stress

#### **OFF** delay:

- Over-travel functions are generated after removal of the control supply voltage (fan over-travel)
- Gradually delayed disconnection of motors, fans, etc., for targeted system shutdown

#### Star/delta:

Star-delta changeover for motors with a fixed interval time of 50 ms in order to prevent phase leakage

#### **Multifunction:**

Maximum flexibility: one device for all application areas

#### Your advantages:

- Labels are used to document the function that has been set at multifunctional timing relays
- Transparent product range for every application: only seven basic devices
- Considerable logistical advantages thanks to versions with wide voltage and wide time setting range
- Optimum price-performance ratio
- Positively driven relay contacts
- Hard-gold-plated relay contacts for optimum interaction with electronic controls
- Sealable cover to secure parameters that have been set
- All versions with removable terminals
- All versions with screw terminals or with the innovative spring-loaded terminal system
- High setting accuracy
- Long service life
- Particularly suitable for industrial applications thanks to rugged design

#### Configuration information:

- For the "clock-pulse" function, pulse and interval can be separately set, for the flashing function it is pulse and interval 1:1
- "Time addition" function (volatile) for the multi-function relays: by activating the start contacts

Electronic	3RP15	timina	relays in	an indu	strial h	ousina :	22 5 mm

Function	Contact elements	Time range	Rated control supply voltage V <sub>s</sub>	Order No.
8 functions	1 CO (changeover contact)	0.05 s-100 h	12 V DC	3RP1505-□AA40
8 functions	1 CO	0.05 s-100 h	AC/DC 24/100-127 V AC	3RP1505-□AQ30
8 functions	1 CO	0.05 s-100 h	AC/DC 24/200-240 V AC	3RP1505-□AP30
8 functions	1 CO	0.05 s-100 h	24-240 V AC/DC	3RP1505-□AW30
8 functions	2 CO	0.05 s-100 h	24-240 V AC/DC	3RP1505-□RW30¹)
16 functions	2 CO	0.05 s-100 h	AC/DC 24/100-127 V AC	3RP1505-□BQ30
16 functions	2 CO	0.05 s-100 h	AC/DC 24/200-240 V AC	3RP1505-□BP30
16 functions	2 CO	0.05 s-100 h	24-240 V AC/DC	3RP1505-□BW30
16 functions	2 CO	0.05 s-100 h	400-440 V AC	3RP1505-1BT20 <sup>2)</sup>
ON delay	1 CO	0.5–10 s	AC/DC 24/100-127 V AC	3RP1511-□AQ30
ON delay	1 CO	0.5–10 s	AC/DC 24/200-240 V AC	3RP1511-□AP30
ON delay	1 CO	1.5–30 s	AC/DC 24/100-127 V AC	3RP1512-□AQ30
ON delay	1 CO	1.5–30 s	AC/DC 24/200-240 V AC	3RP1512-□AP30
ON delay	1 CO	5–100 s	AC/DC 24/100-127 V AC	3RP1513-□AQ30
ON delay	1 CO	5–100 s	AC/DC 24/200-240 V AC	3RP1513-□AP30
ON delay	1 CO	0.05 s-100 h	AC/DC 24/100-127 V AC	3RP1525-□AQ30
ON delay	1 CO	0.05 s-100 h	AC/DC 24/200-240 V AC	3RP1525-□AP30
ON delay	2 CO	0.05 s-100 h	42-48/60 V AC/DC	3RP1525-□BR30
ON delay	2 CO	0.05 s-100 h	AC/DC 24/100-127 V AC	3RP1525-□BQ30
ON delay	2 CO	0.05 s-100 h	AC/DC 24/200-240 V AC	3RP1525-□BP30
ON delay	2 CO	0.05 s-100 h	24-240 V AC/DC	3RP1525-□BW30
ON delay, 2-wire	1 NO contact, solid-state	0.05–240 s	24-66 V AC/DC	3RP1527-□EC30
ON delay, 2-wire	1 NO contact, solid-state	0.05-240 s	90-240 V AC/DC	3RP1527-□EM30
OFF delay with auxiliary voltage	1 CO	0.5–10 s	AC/DC 24/100-127 V AC	3RP1531-□AQ30
OFF delay with auxiliary voltage	1 CO	0.5–10 s	AC/DC 24/200-240 V AC	3RP1531-□AP30
OFF delay with auxiliary voltage	1 CO	1.5–30 s	AC/DC 24/100-127 V AC	3RP1532-□AQ30
OFF delay with auxiliary voltage	1 CO	1.5–30 s	AC/DC 24/200-240 V AC	3RP1532-□AP30
Off delay with auxiliary voltage	1 CO	5–100 s	AC/DC 24/100-127 V AC	3RP1533-□AQ30
OFF delay with auxiliary voltage	1 CO	5–100 s	AC/DC 24/200-240 V AC	3RP1533-□AP30
OFF delay without auxiliary voltage	1 CO	0.05–600 s	24 V AC/DC	3RP1540-□AB31
OFF delay without auxiliary voltage	1 CO	0.05-600 s	100-127 V AC/DC	3RP1540-□AJ31
OFF delay without auxiliary voltage	1 CO	0.05–600 s	200-240 V AC/DC	3RP1540-□AN31
OFF delay without auxiliary voltage	1 CO	0.05-600 s	24-240 V AC/DC	3RP1540-□AW31
OFF delay without auxiliary voltage	2 CO	0.05–600 s	24 V AC/DC	3RP1540-□BB31
OFF delay without auxiliary voltage	2 CO	0.05-600 s	100-127 V AC/DC	3RP1540-□BJ31
OFF delay without auxiliary voltage	2 CO	0.05-600 s	200-240 V AC/DC	3RP1540-□BN31
OFF delay without auxiliary voltage	2 CO	0.05-600 s	24-240 V AC/DC	3RP1540-□BW31
Clock-pulse relay	1 CO	0.05 s-100 h	42-48/60 V AC/DC	3RP1555-□AR30
Clock-pulse relay	1 CO	0.05 s-100 h	AC/DC 24/100-127 V AC	3RP1555-□AQ30
Clock-pulse relay	1 CO	0.05 s-100 h	AC/DC 24/200-240 V AC	3RP1555-□AP30
Star/delta with over-travel function	3 x 1 NO contact	1–20 s, 30–600 s (over-travel)	AC/DC 24/100-127 V AC	3RP1560-□SQ30
Star/delta with over-travel function	3 x 1 NO contact	1–20 s, 30–600 s (over-travel)	AC/DC 24/200-240 V AC	3RP1560-□SP30
Star/delta	1 NO contact + 1 NO contact	1–20 s	AC/DC 24/100-127 V AC	3RP1574-□NQ30
Star/delta	1 NO contact + 1 NO contact	1–20 s	AC/DC 24/200-240 V AC	3RP1574-□NP30
Star/delta	1 NO contact + 1 NO contact	3–60 s	AC/DC 24/100-127 V AC	3RP1576-□NQ30
Star/delta	1 NO contact + 1 NO contact	3–60 s	AC/DC 24/200-240 V AC	3RP1576-□NP30

8 functions	1 CO (changeover contact)	0.05 s-100 h	AC/DC 24/100-127 V AC	3RP2005-□AQ30
8 functions	1 CO	0.05 s-100 h	AC/DC 24/200-240 V AC	3RP2005-□AP30
ON delay	1 CO	0.05 s-100 h	AC/DC 24/100-127 V AC	3RP2025-□AQ30
ON delay	1 CO	0.05 s-100 h	AC/DC 24/200-240 V AC	3RP2025-□AP30
16 functions	2 CO	0.05 s-100 h	24-240 V AC/DC	3RP2005-□BW30

<sup>&</sup>lt;sup>1)</sup> Positively driven and hard-gold-plated relay contacts <sup>2)</sup> This device is only available with screw terminals

## **7PV15 Timing Relays**

#### for DIN rail mounting

7PV15 electronic timing relays are employed for all time-delayed switching processes in control, start-up, protection and regulation circuits. Thanks to their narrow design, they are particularly suitable for applications in heaters, fans, air conditioning systems and compressors





#### **Application areas:**

#### ON delay:

- Interference pulse suppression (gating of interference pulses)
- Successive motor starting to prevent supply system overloads

#### **OFF delay:**

- Generation of overtravel functions after disconnection of the control voltage (fan overtravel)
- Successively delayed disconnection of motors, fans, etc., for targeted system shutdown

#### Star/delta:

 Switchover of motors from star to delta with a switchover break of 50 msec to 1 sec (adjustable) to prevent phase leakage

#### Multifunction:

Maximum flexibility: one device for all application areas

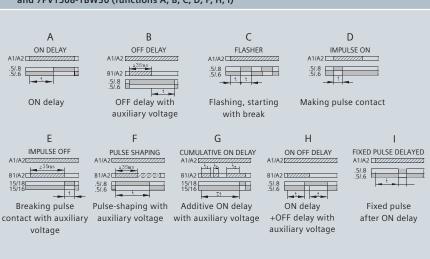
#### Your advantages:

- Transparent product range for all applications: only 5 basic devices
- Significant logistics advantages thanks to versions with wide voltage and wide time setting ranges
- DIN rail mounting and disassembly without tools
- Cadmium-free relay contacts
- Recyclable, halogen-free housing
- Optimum cost-performance ratio
- Logical separation of the wiring
- Minimum variety of types: one design both for power distribution boards and control cabinets
- Compliance with EMC requirements for buildings
- Environmentally compatible laser inscription instead of solvent-containing imprinting
- Switchover break adjustable from 50 msec to 1 sec, for optimum adjustability to your application

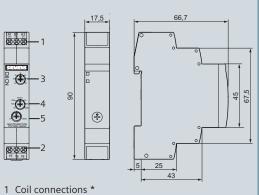
#### 7PV15 electronic timing relays in 17.5 mm housing for industry and infrastructure applications

Function	Time range	Rated control supply voltage V <sub>5</sub>	Contacts	Order No.
7 functions	0.05 s-100 h	12-240 V AC/DC	1 CO contact	7PV1508-1AW30
Multifunction	0.05 s-100 h	12-240 V AC/DC	2 CO contacts	7PV1508-1BW30
ON delay	0.5-10s	AC/DC 24 100-127 V AC	1 CO contact	7PV1512-1AQ30
ON delay	0.05-1 s	AC/DC 24 100-127 V AC	1 CO contact	7PV1511-1AP30
ON delay	0.5-10s	AC/DC 24 200-240 V AC	1 CO contact	7PV1512-1AP30
ON delay	5–100 s	AC/DC 24 100-127 V AC	1 CO contact	7PV1513-1AQ30
ON delay	5–100 s	AC/DC 24 200-240 V AC	1 CO contact	7PV1513-1AP30
ON delay	0.05 s-100 h	12-240 V AC/DC	1 CO contact	7PV1518-1AW30
ON delay	0.05 s-100 h	90-127 V AC/DC	1 CO contact	7PV1518-1AJ30
ON delay	0.05 s-100 h	180-240 V AC/DC	1 CO contact	7PV1518-1AN30
OFF delay with auxiliary voltage	0.05 s-100 h	12-240 V AC/DC	1 CO contact	7PV1538-1AW30
OFF delay without auxiliary voltage	0.05-100s	12-240 V AC/DC	1 CO contact	7PV1540-1AW30
Clock generator	0.05 s-100 h	12-240 V AC/DC	1 CO contact	7PV1558-1AW30
Star/delta	0.05 s-100 h	12-240 V AC/DC	2 CO contacts	7PV1578-1BW30

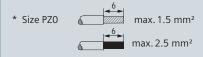
### Multifunction timing relays with 7 functions, 7PV1508-1AW30 (functions A, B, C, D, E, F, G) and 7PV1508-1BW30 (functions A, B, C, D, F, H, I)



OFF delay without auxiliary voltage	Clock generator	Star/delta
7PV1540-1AW30	7PV1588-1AW30	7PV1578-1BW30
OFF DELAY <u>\$250 ms</u> A1/A2	CLOCK PULSE	STAR/DELTA A1/A2 \(\frac{\frac{1}{2}}{2}\frac{1}{2}\fra
15/18	15/18 15/16 Pausenzeit Impulszeit Interval time Impulse time	15/18



- 2 Contact terminals \*
- 3 Function selection switch
- 4 Time selection switch
- 5 Time potentiometer



All 7PV15 timing relays in this housing design are suitable for snap-on mounting on TH 35 DIN rails in accordance with DIN EN 60715. The housing complies with DIN 43880.