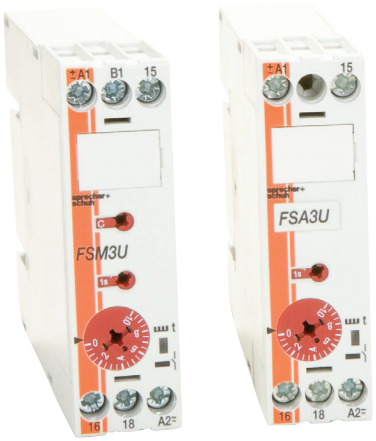
RZ7-FS Electronic Timing Relays

Precision DIN-rail mounted timing relays for any industrial application

DISCONTINUED

Sprecher + Schuh's RZ7-FS precision electronic timing relays offer 19 different output functions applicable to all types of industrial control. In addition to standard ON-Delay and OFF-Delay relays, the series also includes many specials such as an OFF-Delay that operates without supply voltage. Various timing ranges from 0.05 seconds to 60 hours are available, with many relays offering multi-time setting capability in the same device.



Solid state accuracy and reliability

Except for their hard silver contacts, all RZ7-FS timing relays are built with solid state electronics and controlled by a microprocessor. They are accurate to within 0.2 percent. Their ruggedness and high level of accuracy is due to the thorough testing of function, timing characteristics and surge voltage strength performed on each device prior to shipment.

In addition, RZ7-FS relays function reliably from 15% under rated operating voltage to 10% over rated voltage (AC). Voltage tolerance is even greater in DC applications.

Eliminates additional relays

The standard RZ7-FS is supplied with one single pole double throw (SPDT) contact within a compact case only 22.5mm wide. If more contacts are required, several relays are available that provide two separate, electrically isolated SPDT contacts within the same narrow footprint. Output two is selectable as an instantaneous contact, which can eliminate the need for auxiliary relays in complex installations. These two pole relays can also be used with an external potentiometer for remote time setting.

Multiple functions and timing ranges in one relay

The RZ7-FSM combines *eight* separate timing functions (plus ON and OFF functions) into one device. In addition, ten timing ranges are individually selectable from 0.05 seconds to 60 hours. These special relays reduce inventories and are ideal for maintaining remote installations where stocking several different timing relays would not be practical.

Many safety and convenience features

- Every RZ7 accepts a broad range of AC and DC supply voltages without special ordering.
- Each relay is equipped with an LED that indicates four output status conditions.
- Finger and back of hand protection to IP40.
- Terminals are captive and supplied in the open position.
- All RZ7's can be surface mounted, rail mounted, or mounted directly on our family of CA7/CS7 or CA8/CS8 devices.
- RZ7 relays can be mounted in any plane.
- Terminals, setting knob and LED's are all accessible from the front of the unit.
- RZ7 Timing Relays are very compact, measuring approximately 1" x 3" x 4".
- Hazardous location timing relays also available.

The multifunction RZ7-FSM Electronic Timing Relay provides eight different timing functions and ten different timing ranges.

Quick Selection Guide

Single Function Timing Relays

RZ7-FS	A	3	A	U23
Type	**Function**	**Contacts**	**Time Ranges**	**Supply Voltages**
	A On-Delay **B** Off-Delay **C** On and Off-Delay **D** One Shot / Watchdog **E** Fleeting Off-Delay **F** Symmetric flasher starting with a pulse **G** Symmetric flasher starting with a pause **I** On-Delay pulse generator **J** On-Delay (pulse controlled) **K** One Shot / Watch Dog (pulse controlled) **L** Impulse Converter	*All functions:* **3** One single pole double throw contact *Functions A & B only:* **4** Two single pole double throw contacts ❷ *(Available with Time Range "U" only. Not available with "U18" supply voltage)*	**A** 0.05…1 second **B** 0.15… 3 seconds **C** 0.5…10 seconds **D** 1.5…30 seconds **E** 0.05…1 minute **F** 0.15…3 minutes **G** 0.5…10 minutes **H** 1.5…30 minutes **I** 0.05…1 hour **J** 0.15…3 hours **K** 0.5…10 hours **L** 3.0…60 hours **U** 0.05s…60 hours ❶	*Standard:* **U23** 24…48VDC 24…240V 50/60Hz *Special Order:* **U18*** 24…240VAC or DC **A40** 346…440V 50/60Hz ❸ **Z12** 12VDC ** Not available with Time Range "U"*
RZ7-FS	**Q**	**3**	**Q**	**U18**
Type	**Function**	**Contacts**	**Time Ranges**	**Supply Voltages**
	Q Off-Delay Without Supply Voltage	**3** One single pole double throw contact **4** Two single pole double throw contacts ❷	**Q** 0.15s…10 minutes ❶	**U18** 24…240VAC or DC

Multi-Function Timing Relay

RZ7-FS	M	3	U	U23
Type	**Function**	**Contacts**	**Time Ranges**	**Supply Voltages**
	M Multi-Function *Eight single functions plus ON & OFF function (for installation/maintenance)* - On-Delay - Off-Delay - On and Off-Delay - One Shot / Watchdog - Fleeting Off-Delay - Symmetric flasher starting with a pulse	**3** One single pole double throw contact **4** Two single pole double throw contacts ❷	**U** 0.05…60 hours ❶	*Standard:* **U23** 24…48VDC 24…240V 50/60Hz *Special Order:* **U18** 24…240VAC or DC **A40** 346…440V 50/60Hz ❸ **Z12** 12VDC

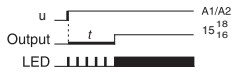
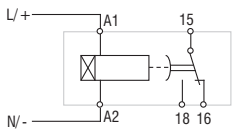
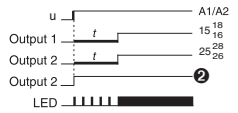
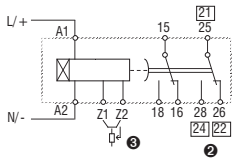
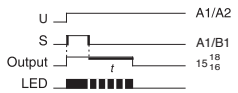
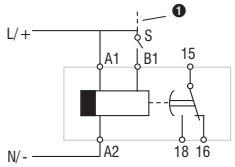
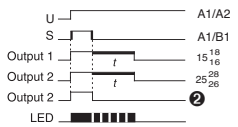
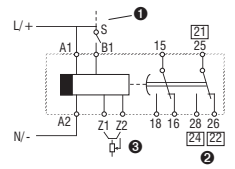
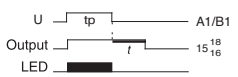
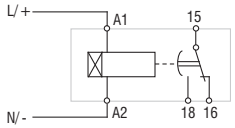
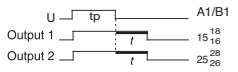
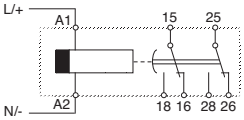
Special Function Timing Relays

RZ7-FS	H	3	U	U23
Type	**Function**	**Contacts**	**Time Ranges**	**Supply Voltages**
	H Repeat Cycle Timer (Flasher) *Includes four separate functions* - Supply voltage controlled, output starts with a pause - Supply voltage controlled, output starts with a pulse - Pulse controlled, output starts with a pause - Pulse controlled, output starts with a pulse	*All functions:* **3** One single pole double throw contact	*For equal timing of pulse and pause* **U** 0.05s…60 hours ❶ *For separate timing of pulse and pause* **V** 2 x 0.05s…60 hours ❶	*Standard:* **U23** 24…48VDC 24…240V 50/60Hz *Special Order:* **A40** 346…440V 50/60Hz ❸ **Z12** 12VDC
RZ7-FS	**Y**	**2**	**C**	**U23**
Type	**Function**	**Contacts**	**Time Ranges**	**Supply Voltages**
	Y Wye Delta Timing Relay	**2** Two normally open contacts	**C** 0.5…10 seconds **D** 1.5…30 seconds **E** 0.05…1 minute **F** 0.15…3 minutes **G** 0.5…10 minutes	*Standard:* **U23** 24…48VDC 24…240V 50/60Hz *Special Order:* **A40** 346…440V 50/60Hz ❸

Illustration for reference only. See selection tables for specific catalog numbers.

❶ Multi-time setting range. See Technical Section for specific time settings.
❷ Second output selectable as timed or instantaneous.
❸ Timers with supply voltage code A40 (346...440VAC) are not UL listed. RZ7-FSx4 models are not available with supply voltage code A40.

RZ7-FS Timing Relays – Single Function, One and Two Pole

Functional Description	Functional Diagram	Terminal Arrangement	Type	Catalog Number
ON-Delay Timing Relay (A) When supply voltage is applied, output contact(s) change state after time delay *t*.			• One SPDT contact • Single timing range	**RZ7-FSA3✱U23**
			• One SPDT contact • Multi-timing range (from 0.05s to 60h) ❹	**RZ7-FSA3UU23**
			• Two SPDT contacts ❷ • Multi-timing range (from 0.05s to 60h) ❹	**RZ7-FSA4UU23**
OFF-Delay Timing Relay (B) When control contact "S" closes, output contact(s) change state immediately. When control contact S opens, output contact(s) change state after time delay *t*. Constant supply voltage required on terminals A1/A2. ***Note:*** *Control pulse duration minimum 50ms (AC) - 30ms (DC).*			• One SPDT contact • Single timing range	**RZ7-FSB3✱U23**
			• One SPDT contact • Multi-timing range (from 0.05s to 60h) ❹	**RZ7-FSB3UU23**
			• Two SPDT contacts ❷ • Multi-timing range (from 0.05s to 60h) ❹	**RZ7-FSB4UU23**
Off-Delay Without Supply Voltage (Q) ❻ When supply voltage is applied, output contact(s) change state immediately. When supply voltage is removed, output contact(s) change state after time delay *t*.			• One SPDT contact • Multi-timing range (from 0.15s to 10min) ❺	**RZ7-FSQ3QU18**
			• Two SPDT contacts • Multi-timing range (from 0.15s to 10min) ❺	**RZ7-FSQ4QU18**

Supply Voltage

Single Function RZ7-FS...U23 timers (except RZ7-FSQ) accept supply voltages of 24…48VDC and 24…240VAC (RZ7-FSQ accepts 24…240VAC or DC). Other voltages are available by special order. See Quick Selection Guide on page G24 for details or contact your Sprecher + Schuh representative for information.

❶ For timing control, a voltage other than the supply voltage can also be used.
❷ Output two is selectable as an instantaneous contact by sliding a switch on the faceplate.
❸ Bridge or potentiometer 10kΩ, min. 0.25W (low voltage) for external time setting.
❹ Timing range is screwdriver selectable from the faceplate. Timing range selections include those found in the Timing Range Code chart.
❺ Timing range is screwdriver selectable from the faceplate. Exact timing ranges can be found in the Technical Section.
❻ Due to shock during shipment, the state of the contacts should be verified before initial use.

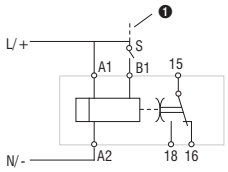
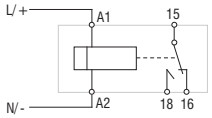
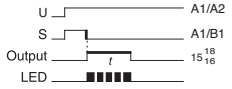
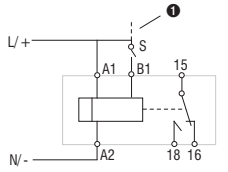
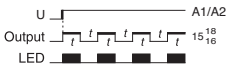
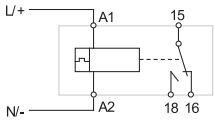
Timing Range Codes

Replace (✱) with Timing Range Code

Timing Range	Code
0.05…1 sec	A
0.15…3 sec	B
0.5…10 sec	C
1.5…30 sec	D
0.05…1 min	E
0.15…3 min	F
0.5…10 min	G
1.5…30 min	H
0.05…1 hour	I
0.15…3 hour	J
0.5…10 hour	K
3.0…60 hour	L

RZ7-FS two pole timing relay

RZ7-FS Timing Relays – Single Function, One Pole

Functional Description	Functional Diagram	Terminal Arrangement	Type	Catalog Number
ON and OFF-Delay Timing Relay (C) When control contact "S" closes, output contact changes state after time delay *t*. When control contact S opens, output contact changes state again after time delay *t*. Constant supply voltage required on terminals A1/A2. ***Note:*** *Closure duration of S must be greater than t.*			• One SPDT contact • Single timing range	**RZ7-FSC3✱U23**
One Shot / Watchdog Relay (D) When supply voltage is applied, the output contact changes state for time period *t*.			• One SPDT contact • Single timing range	**RZ7-FSD3✱U23**
Fleeting OFF-Delay Timing Relay (E) When control contact "S" is pulsed, output contact changes state for time period *t*. ***Note:*** *Control pulse duration minimum 50ms (AC) - 30ms (DC).*			• One SPDT contact • Single timing range	**RZ7-FSE3✱U23**
Symmetric Flasher Starting With A Pulse (F) When supply voltage is applied, output contact changes state immediately and then repeatedly changes after every time period *t*, continuing until supply voltage is removed.			• One SPDT contact • Single timing range	**RZ7-FSF3✱U23**

Supply Voltage

Single Function RZ7-FS...U23 timers accept supply voltages of 24…48VDC and 24…240VAC. Other voltages are available by special order. See Quick Selection Guide on page G24 for details or contact your Sprecher + Schuh representative for information.

Timing Range Codes

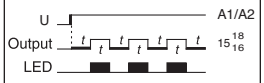
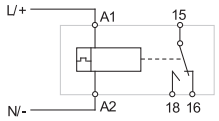
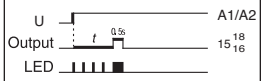
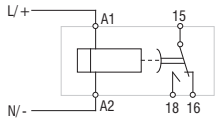
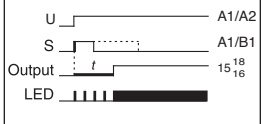
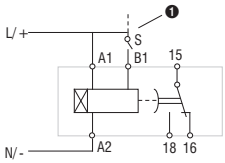
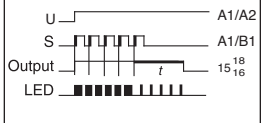
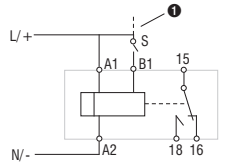
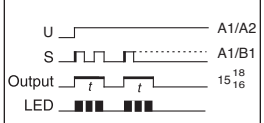
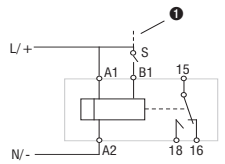
Replace (✱) with Timing Range Code

Timing Range	Code
0.05…1 sec	**A**
0.15…3 sec	**B**
0.5…10 sec	**C**
1.5…30 sec	**D**
0.05…1 min	**E**
0.15…3 min	**F**
0.5…10 min	**G**
1.5…30 min	**H**
0.05…1 hour	**I**
0.15…3 hour	**J**
0.5…10 hour	**K**
3.0…60 hour	**L**

RZ7-FS one pole timing relay

❶ For timing control, a voltage other than the supply voltage can also be used.

RZ7-FS Timing Relays – Single Function, One Pole

Functional Description	Functional Diagram	Terminal Arrangement	Type	Catalog Number
Symmetric Flasher Starting With A Pause (G) When supply voltage is applied, output contact changes state after time period *t* and then repeatedly changes again after every period *t*, continuing until supply voltage is removed.			• One SPDT contact • Single timing range	**RZ7-FSG3∗U23**
On-Delay Pulse Generator (I) When supply voltage is applied, output contact changes state after time period *t*. Output contact changes state again after 0.5 seconds.			• One SPDT contact • Single timing range	**RZ7-FSI3∗U23**
On-Delay (pulse controlled) (J) When control contact "S" is pulsed, the output contact changes state after time period *t*.			• One SPDT contact • Single timing range	**RZ7-FSJ3∗U23**
One Shot / Watchdog (pulse controlled) (K) When control contact "S" closes, the output contact changes state immediately. After the last pulse of contact S, the output contact changes state after time delay *t*.			• One SPDT contact • Single timing range	**RZ7-FSK3∗U23**
Impulse Converter (L) When a pulse is applied to control contact "S", the output contact changes state immediately for time period *t*. Pulses received during timing period *t* have no further effect. ***Note:*** *The period t is not dependent on the length of the control pulse. Control pulse duration minimum 50ms (AC) - 30ms (DC).*			• One SPDT contact • Single timing range	**RZ7-FSL3∗U23**

Supply Voltage

Single Function RZ7-FS..U23 timers accept supply voltages of 24…48VDC and 24…240VAC. Other voltages are available by special order. See Quick Selection Guide on page G24 for details or contact your Sprecher + Schuh representative for information.

Timing Range Codes

Replace (∗) with Timing Range Code

Timing Range	Code
0.05…1 sec	**A**
0.15…3 sec	**B**
0.5…10 sec	**C**
1.5…30 sec	**D**
0.05…1 min	**E**
0.15…3 min	**F**
0.5…10 min	**G**
1.5…30 min	**H**
0.05…1 hour	**I**
0.15…3 hour	**J**
0.5…10 hour	**K**
3.0…60 hour	**L**

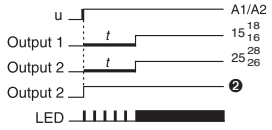
RZ7-FS one pole timing relay

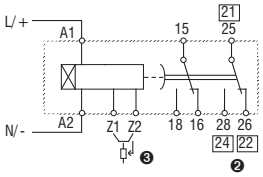
❶ For timing control, a voltage other than the supply voltage can also be used.

RZ7-FS Timing Relays – Multi-Function, One and Two Pole

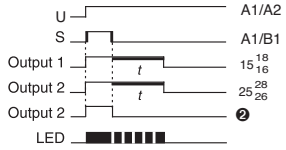
RZ7-FSM Multi-Function Relay	Functional Description	Type	Catalog Number
	**Multi-Function Relay (M)** The RZ7-FSM multifunction relay combines *eight* timing functions plus ON and OFF functions (for installation and maintenance). Each timing function and timing range is selectable from the face of the relay with a screwdriver actuated knob. The RZ7-FSM offers the following timing functions: On-Delay On and Off-Delay Fleeting Off-Delay On-Delay Pulse Generator ON Function (see below) OFF Function (see below) Off-Delay One Shot / Watchdog Impulse Converter Symmetric Flasher Starting With a Pulse The two pole RZ7-FSM4 offers two separate, electrically isolated single pole double throw (SPDT) contacts which allow applications in complex installations without additional auxiliary relays. This series may also be operated remotely via an external potentiometer.	• One SPDT contact • Multifunction, multi-timing range relay (from 0.05s to 60h) ❹	**RZ7-FSM3UU23**
		• Two SPDT contacts ❷ • Multifunction, multi-timing range relay (from 0.05s to 60h) ❹	**RZ7-FSM4UU23**

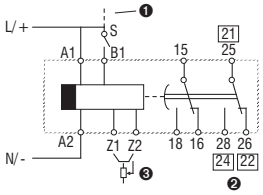
On-Delay (A)



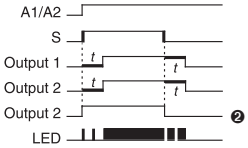


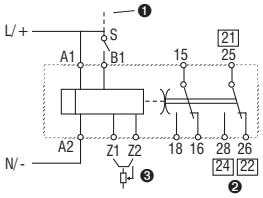
Off-Delay (B)



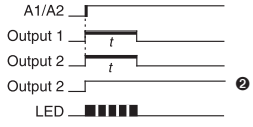


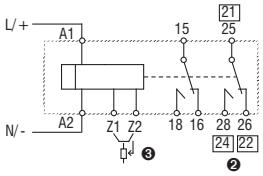
On and Off-Delay (C)



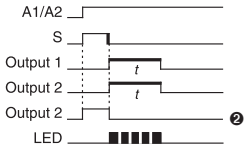


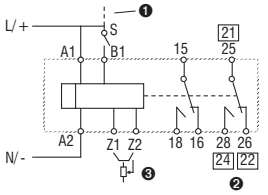
One Shot / Watchdog (D)



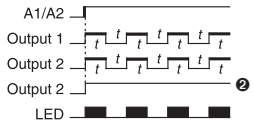


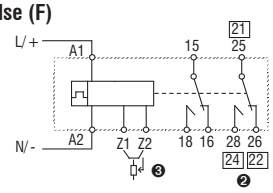
Fleeting Off-Delay (E)



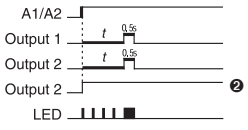


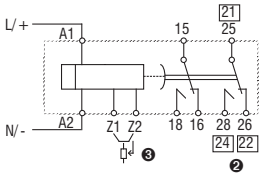
Symmetric Flasher Starting With a Pulse (F)



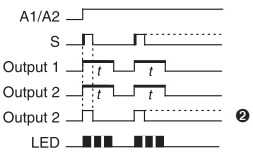


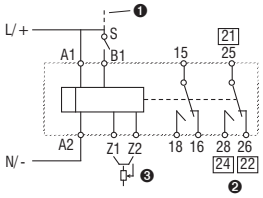
On-Delay Pulse Generator (I)



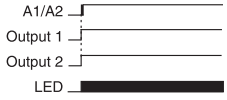


Impulse Converter (L)

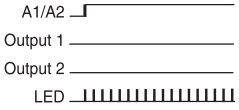




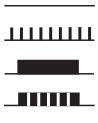
ON-Function



OFF-Function



Function display LED (Green)



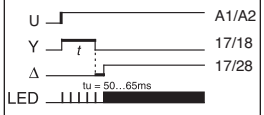
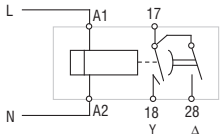
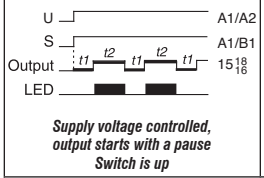
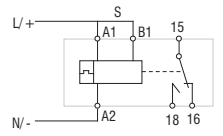
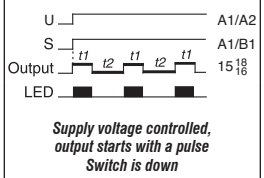
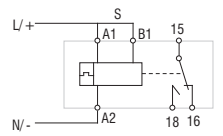
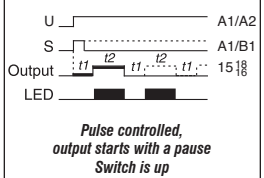
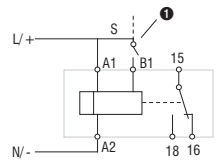
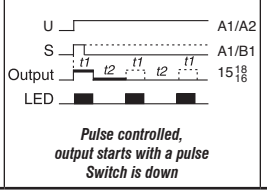
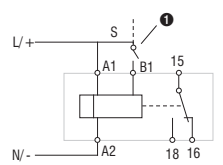
Output in rest position, no timing
Output in rest position, time running
Output in operation position, no timing
Output in operation position, time running

Supply Voltage

The RZ7-FSM timer accepts supply voltages of 24…48VDC and 24…240VAC. Other supply voltages are available by special order. See Quick Selection Guide on page G24 for details or contact your Sprecher + Schuh representative for information.

❶ For timing control, a voltage other than the supply voltage can also be used.
❷ Output two is selectable as an instantaneous contact by sliding a switch on the faceplate.
❸ Bridge or potentiometer 10kΩ, min. 0.25W (low voltage) for external time setting.
❹ Function selection and timing range is screwdriver selectable from the faceplate. Exact timing range selections can be found in Technical Information.

RZ7-FS Timing Relays – Special Function, One Pole

Functional Description	Functional Diagram	Terminal Arrangement	Type	Catalog Number
Wye-Delta Timing Relay (Y) When supply voltage is applied, output contact Y closes for time period *t*. After time period *t*, plus a fixed time period t_u, (50-65ms) output contact Δ closes.			• Two single pole N.O. contacts • Single timing range	**RZ7-FSY2✱U23**
Repeat Cycle Timer (H) - (Flasher) The Repeat Cycle Timer offers four different operating characteristics within the same relay. Depending on how the unit is wired, cycles are initiated either by supply voltage being applied or by a pulse from control contact "S". Regardless of the activation method, each cycle may begin with a pause or a pulse. The RZ7-FSH3**U** relay sets the pulse and pause durations within one timing range setting. The RZ7-FSH3**V** allows individual time settings of pulse and pause within two timing range settings. Both relays offer multiple time settings between 0.05s and 60h, selectable in ten increments.	 ***Supply voltage controlled, output starts with a pause Switch is up***		• One SPDT contact • Multi-timing range (from 0.05s to 60h) ❷ Provides (1) range setting for t_1 and t_2 Provides (2) range settings for t_1 and t_2	**RZ7-FSH3UU23** **RZ7-FSH3VU23**
	 ***Supply voltage controlled, output starts with a pulse Switch is down***			
	 ***Pulse controlled, output starts with a pause Switch is up***			
	 ***Pulse controlled, output starts with a pulse Switch is down***			

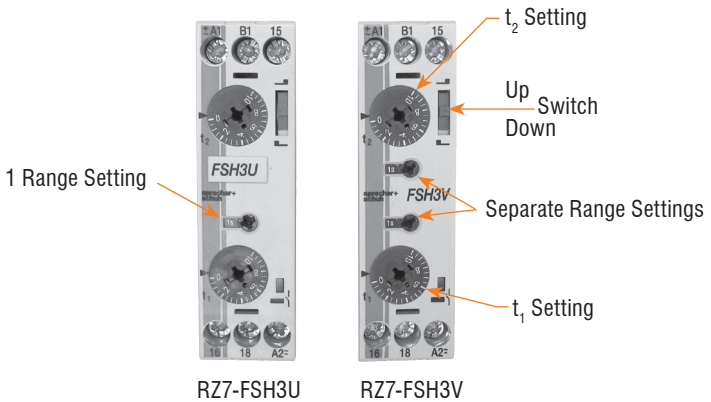
Supply Voltage

These timers accept supply voltages of 24…48VDC and 24…240VAC. A supply voltage of 346…440VAC is also available by special order. See Quick Selection Guide on page G24 for details or contact your Sprecher + Schuh representative for information.

Timing Range Codes

Replace (✱) with Timing Range Code

Timing Range	Code
0.5…10 sec	**C**
1.5…30 sec	**D**
0.05…1 min	**E**
0.15…3 min	**F**
0.5…10 min	**G**



RZ7-FSH3U RZ7-FSH3V

❶ For timing control, a voltage other than the supply voltage can also be used.
❷ Timing range is screwdriver selectable from the faceplate. Exact timing range selections can be found in Technical Information.

RZ7 Hazardous Location Electronic Timing Relays

Sprecher+Schuh's RZ7 hazardous location relay timers have been designed to meet the stringent requirements of hazardous location applications while maintaining the functionality of the existing RZ7-FS family of timing relays. The RZ7-FSM4...-EX is a multi-function timing relay with 8 single-functions, SPDT or DPDT contact output, and adjustable timing ranges. The -EX models are ideal for control panels installed in hazardous location areas such as in the oil, gas and petrochem industries.

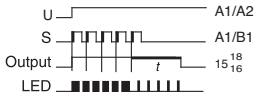
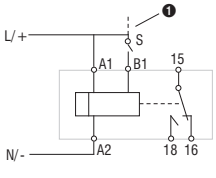
RZ7-FSK3CU23-EX

RZ7-FSM4UU23-EX

Multiple Approvals

- • cULus Industrial Control Equipment for Hazardous Location Listed 87SL
- • UL Class 1, Div. 2, Groups A,B,C,D
  UL Class 1, Zn 2, Group IIC
- • Temperature Code T4A,
- 2A 32VDC max.

RZ7-FS Hazardous Location Timing Relay – Single Function, One Pole ❷

Functional Description	Functional Diagram	Terminal Arrangement	Type	Catalog Number
One Shot / Watchdog (pulse controlled) (K) When control contact "S" closes, the output contact changes state immediately. After the last pulse of contact S, the output contact changes state after time delay *t*.			• One SPDT contact • Single timing range 0.05...1 second 0.5...10 second	**RZ7-FSK3AU23-EX** **RZ7-FSK3CU23-EX**

Supply Voltage

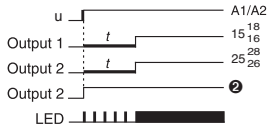
Single Function RZ7-FSK3...-EX timers accept supply voltages of 24…48VDC and 24…240VAC.

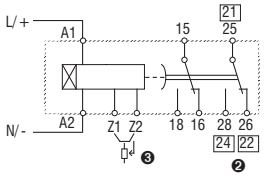
❶ For timing control, a voltage other than the supply voltage can also be used.
❷ Technical data and dimensional information for the RZ7-FS...-EX models are the same as the standard RZ7-FS models.

RZ7-FS Hazardous Location Timing Relays – Multi-Function, One and Two Pole ❺

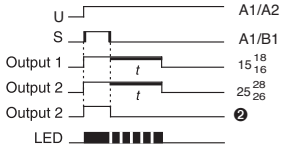
RZ7-FSM Multi-Function Relay	Functional Description	Type	Catalog Number
	**Multi-Function Relay (M)** The RZ7-FSM multifunction relay combines *eight* timing functions plus ON and OFF functions (for installation and maintenance). Each timing function and timing range is selectable from the face of the relay with a screwdriver actuated knob. The RZ7-FSM offers the following timing functions: On-Delay On and Off-Delay Fleeting Off-Delay On-Delay Pulse Generator ON Function (see below) OFF Function (see below) Off-Delay One Shot / Watchdog Impulse Converter Symmetric Flasher Starting With a Pulse The two pole RZ7-FSM4 offers two separate, electrically isolated single pole double throw (SPDT) contacts which allow applications in complex installations without additional auxiliary relays. This series may also be operated remotely via an external potentiometer.	• One SPDT contact • Multifunction, multi-timing range relay (from 0.05s to 60h) ❹	**RZ7-FSM3UU23-EX**
		• Two SPDT contacts ❷ • Multifunction, multi-timing range relay (from 0.05s to 60h) ❹	**RZ7-FSM4UU23-EX**

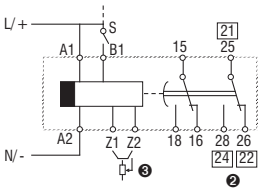
On-Delay (A)



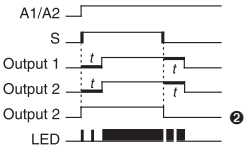


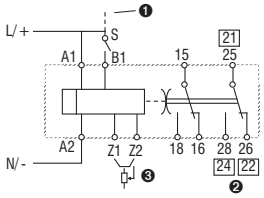
Off-Delay (B)



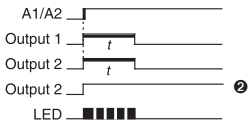


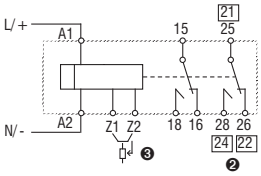
On and Off-Delay (C)



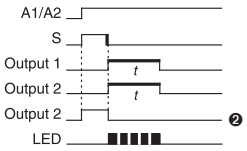


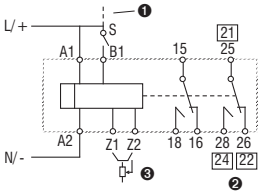
One Shot / Watchdog (D)



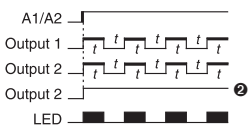


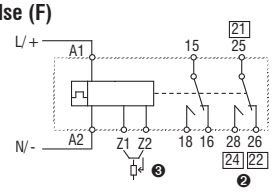
Fleeting Off-Delay (E)



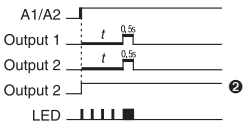


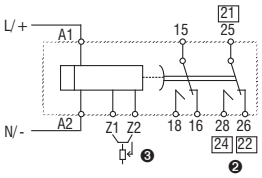
Symmetric Flasher Starting With a Pulse (F)



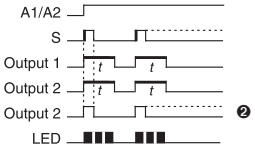


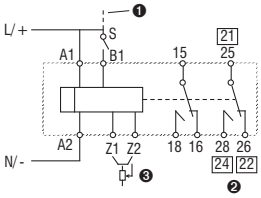
On-Delay Pulse Generator (I)





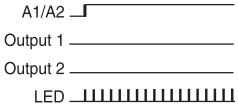
Impulse Converter (L)



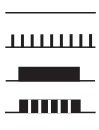


ON-Function

OFF-Function



Function display LED (Green)



Output in rest position, no timing
Output in rest position, time running
Output in operation position, no timing
Output in operation position, time running

Supply Voltage

The RZ7-FSM timer accepts supply voltages of 24…48VDC and 24…240VAC.

❶ For timing control, a voltage other than the supply voltage can also be used.
❷ Output two is selectable as an instantaneous contact by sliding a switch on the faceplate for RZ7-FSM4 model.
❸ Bridge or potentiometer 10kΩ, min. 0.25W (low voltage) for external time setting for RZ7-FSM4 model.
❹ Function selection and timing range is screwdriver selectable from the faceplate. Exact timing range selections can be found in Technical Information.
❺ Technical data and dimensional information for the RZ7-FS...-EX models are the same as the standard RZ7-FS models.

RZ7-FE Electronic Timing Relays

The economical choice for most industrial timing applications

DISCONTINUED

Sprecher+Schuh's RZ7-FE electronic timing relays offer seven popular output functions in an economical package. This series is especially designed for applications where a high quality, yet basic timing relay is required. Timing formats include ON-delay, OFF-delay, Wye-Delta and four other choices. All models are multi-time relays, meaning that various time ranges (from 0.05 seconds to 10 hours) can be selected from the face of the relay.

Solid state accuracy and reliability

Except for their hard silver contacts, all RZ7-FE timing relays are built with solid state surface mounted electronics and are accurate to within one percent. Their ruggedness and accuracy is due to the thorough testing of function, timing characteristics and surge voltage strength performed on *each device* prior to shipment.

In addition, RZ7-FE relays function reliably from 15% under rated operating voltage to 10% over rated operating voltage (AC). Voltage tolerance is even greater in DC applications.

Universal voltage capability

All RZ7-FE timing relays operate with multiple supply voltages ranging from 24VAC or DC to 240VAC. Universal voltage capability means smaller inventories and more flexibility.

Choose from two different output contacts

The RZ7-FE series has a choice between one normally open (NO) contact or one single pole double throw (SPDT) contact. The SPDT version can be used either normally open or normally closed. This version has several technical advantages such as shorter impulse duration requirements and a faster recovery time.

Multiple functions in one relay

The RZ7-FEM relay combines four of the most popular timing functions into one device. Six timing ranges are included that are individually selectable from 0.05 seconds to 10 hours. This multifunction relay reduces inventories and is ideal for maintaining remote installations where stocking several different timing relays would not be practical.

Many safety and convenience features

- Each relay is equipped with an LED that indicates output status conditions.
- Finger and back of hand protection to IP40.
- Terminals are captive and supplied in the open position.
- All RZ7's can be surface mounted, rail mounted, or mounted directly on our family of CA7/CS7 devices.
- RZ7 relays can be mounted in any plane.
- Terminals, setting knob and LED's are all accessible from the front of the unit.
- RZ7-FE Timing Relays are very compact, measuring approximately 1" x 3" x 3".

The RZ7-FEM multifunction timing relay combines all functions in one device.

Quick Selection Guide

Single Function Timing Relays				
RZ7-FE	**A**	**1**	**T**	**U22**
Type	**Function**	**Contacts**	**Time Ranges**	**Supply Voltages**
	A On-Delay **B** Off-Delay **D** One Shot / Watchdog **E** Fleeting Off-Delay ❷ **F** Symmetric flasher starting with a pulse **L** Impulse Converter ❷	*Functions A, B, D & F* **1** One normally open contact	**T** 0.05s…10 hours ❶	**U22** 24VAC or DC A1/A2 110…240V 50/60Hz
		All Functions: **3** One single pole double contact	**T** 0.05s…10 hours ❶	**U23** 24…48VDC A1/A2 24…240V 50/60Hz

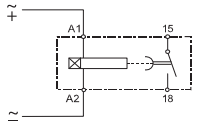
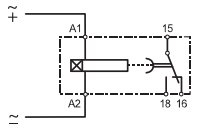
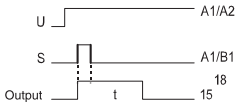
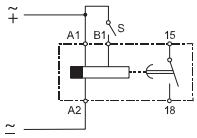
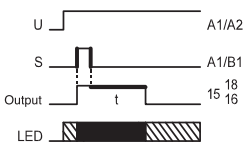
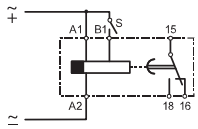
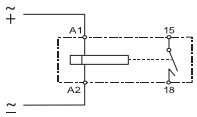
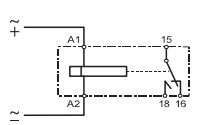
Multi-Function Timing Relays				
RZ7-FE	**M**	**1**	**T**	**U22**
Type	**Function**	**Contacts**	**Time Ranges**	**Supply Voltages**
	M Multi-function *Four single functions* *- On-delay* *- Off-delay* *- One shot* *- Symmetric flasher starting with a pulse*	**1** One normally open contact	**T** 0.05s…10 hours ❶	**U22** 24VAC or DC A1/A2 110…240V 50/60Hz
		3 One single pole double contact	**T** 0.05s…10 hours ❶	**U23** 24…48VDC A1/A2 24…240V 50/60Hz

Special Function Timing Relays				
RZ7-FE	**Y**	**2**	**Q**	**U23**
Type	**Function**	**Contacts**	**Time Ranges**	**Supply Voltages**
	Y Wye-Delta Timing Relay	**2** Two normally open contacts (one side common)	**Q** 0.15s…10 minutes ❶	**U23** 24…48VDC A1/A2 24…240V 50/60Hz A1/A2

Illustration for reference only. See selection tables for specific catalog numbers.

❶ Multi-time setting range. See appropriate catalog page for specific time settings.
❷ Not available in RZ7-FEx1 model.

RZ7-FE Timing Relays – Single Function, One Pole

Functional Description	Functional Diagram	Terminal Arrangement	Type	Catalog Number
ON-Delay Timing Relay (A) When supply voltage is applied, output contact(s) change state after time delay *t*.			• One NO contact • Multi-timing range (from 0.05s to 10h) ❷ • Supply voltage selected via wiring terminals A1, A2 • Bicolored LED indicator	**RZ7-FEA1TU22**
			• One SPDT contact • Multi-timing range (from 0.05s to 10h) ❷ • "Universal" terminals accept all appropriate supply voltages • Bicolored LED indicator	**RZ7-FEA3TU23**
OFF-Delay Timing Relay (B) When control contact B1 closes, the output contact changes state immediately. When control contact B1 opens, the output contact changes state after time delay *t*. Constant supply voltage required on terminals A1/A2 or A3/A2. ***Note:*** *Control pulse duration minimum 250ms for RZ7-FEB1SU22; 50ms (AC) and 30ms (DC) for RZ7-FEB3TU23.*			• One NO contact • Multi-timing range (from 0.05s to 10h) ❷ • Supply voltage selected via wiring terminals A1, A2 • Bicolored LED indicator	**RZ7-FEB1TU22**
			• One SPDT contact • Multi-timing range (from 0.05s to 10h) ❷ • "Universal" terminals accept all appropriate supply voltages • Bicolored LED indicator	**RZ7-FEB3TU23**
One Shot Relay / Watchdog (D) When supply voltage is applied, the output contact changes state for time period *t*.			• One NO contact • Multi-timing range (from 0.05s to 10h) ❷ • Supply voltage selected via wiring terminals A1, A2 • Bicolored LED indicator	**RZ7-FED1TU22**
			• One SPDT contact • Multi-timing range (from 0.05s to 10h) ❷ • "Universal" terminals accept all appropriate supply voltages • Bicolored LED indicator	**RZ7-FED3TU23**

Supply Voltage

The last three digits in the catalog number represent the supply voltage range the relay will accept:

U22	24V AC or DC	(A1/A2)
	110…240V 50/60Hz	(A1/A2)
U23	24…48VDC and 24…240V 50/60Hz	(A1/A2)

Timing Range Codes

RZ7-FE
0.05…1 sec
0.5…10 sec
0.05…1 min
0.5…10 min
0.05…1 hour
0.5…10 hour

Bicolored LED

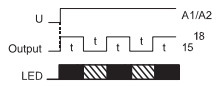
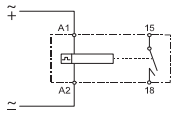
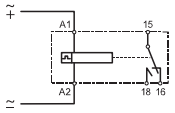
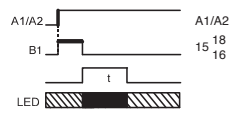
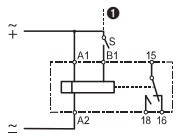
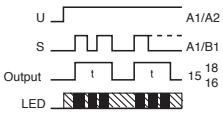
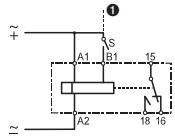
1 SPDT or 1 N.O. Contact Timers

- LED U = Green: Supply voltage available
- LED Relay = Red: Output is energized
- OFF: No color

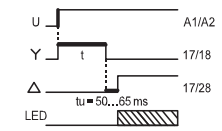
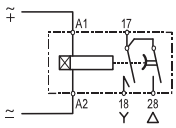
RZ7-FE timing relay

❶ For timing control, a voltage other than the supply voltage can also be used.
❷ Timing range is screwdriver selectable from the faceplate.

RZ7-FE Timing Relays – Single Function, One Pole

Functional Description	Functional Diagram	Terminal Arrangement	Type	Catalog Number
Symmetric Flasher Starting With A Pulse (F) When supply voltage is applied, the output contact changes state immediately and then repeatedly changes after every time period *t*, continuing until supply voltage is removed.			• One NO contact • Multi-timing range (from 0.05s to 10h) ❷ • Supply voltage selected via wiring terminals A1, A2 • Bicolored LED indicator	**RZ7-FEF1TU22**
			• One SPDT contact • Multi-timing range (from 0.05s to 10h) ❷ • "Universal" terminals accept all appropriate supply voltages • Bicolored LED indicator	**RZ7-FEF3TU23**
Fleeting OFF-Delay Timing Relay (E) When control contact B1 is pulsed, the output contact changes state for time period *t*. ***Note:*** *Control pulse duration minimum 50ms (AC) - 30ms (DC).*			• One SPDT contact • Multi-timing range (from 0.05s to 10h) ❷ • "Universal" terminals accept all appropriate supply voltages • Bicolored LED indicator	**RZ7-FEE3TU23**
Impulse Converter (L) When a pulse is applied to control contact B1, the output contact changes state immediately for time period *t*. Pulses received during timing period *t* have no further effect. ***Note:*** *The period t is not dependent on the length of the control pulse. Control pulse duration minimum 50ms (AC) - 30ms (DC).*			• One SPDT contact • Multi-timing range (from 0.05s to 10h) ❷ • "Universal" terminals accept all appropriate supply voltages • Bicolored LED indicator	**RZ7-FEL3TU23**

RZ7-FE Timing Relays – Special Function, One Pole

Functional Description	Functional Diagram	Terminal Arrangement	Type	Catalog Number
Wye-Delta Timing Relay (Y) When supply voltage is applied, output contact Y closes for time period *t*. After time period *t*, plus a fixed time period t_u, (50-65ms) output contact Δ closes.			• Two single pole N.O. contacts (one side common) • Multi-timing range (from 0.15s to 10m) ❷ • "Universal" terminals accept all appropriate supply voltages • LED indicator	**RZ7-FEY2QU23**

Supply Voltage

The last three digits in the catalog number represent the supply voltage range the relay will accept:

U22	24V AC or DC	(A1/A2)
	110…240V 50/60Hz	(A1/A2)
U23	24…48VDC and 24…240V 50/60Hz	(A1/A2)

Timing Range Codes

RZ7-FE with NO or SPDT contact	RZ7-FEY with two NO contacts
0.05…1 sec	0.15…3 sec
0.5…10 sec	0.5…10 sec
0.05…1 min	0.05…1 min
0.5…10 min	0.5…10 min
0.05…1 hour	
0.5…10 hour	

Bicolored LED

1 SPDT or 1 N.O. Contact Timers

- LED U = Green: Supply voltage available
- LED Relay = Red: Output is energized
- OFF: No color

Single Color LED

2 N.O. with Common

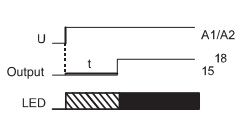
- ON = Green: Output is energized
- OFF = No Color

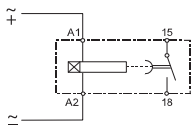
❶ For timing control, a voltage other than the supply voltage can also be used.
❷ Timing range is screwdriver selectable from the faceplate.

RZ7-FE Timing Relays – Multi-Function, One Pole

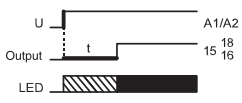
RZ7-FEM Multi-function Relay	Functional Description	Type	Catalog Number
	**Multi-Function Relay (M)** The RZ7-FEM multifunction relay combines *four* timing functions in one device. Each timing function and timing range is selectable from the face of the relay with a screwdriver actuated knob. The RZ7-FEM offers the following timing functions: On-Delay Off-Delay One Shot/Watchdog Symmetric Flasher Starting With a Pulse The RZ7-FEM3 offers one single pole double throw contact that can be used as either a normally open or normally closed contact.	• One NO contact • Multi-timing range (from 0.05s to 10h) ❷ • Supply voltage selected via wiring terminals A1, A2 • Bicolored LED indicator	**RZ7-FEM1TU22**
		• One SPDT contact • Multi-timing range (from 0.05s to 10h) ❷ • "Universal" terminals accept all appropriate supply voltages • Bicolored LED indicator	**RZ7-FEM3TU23**

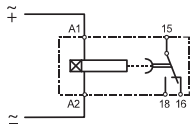
(A) On-Delay





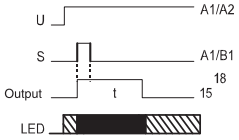
1 N.O. (SPST)

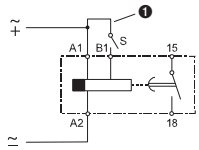




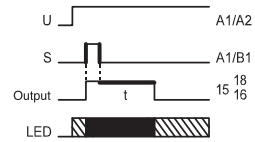
1 C/O (SPDT)

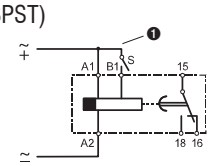
(B) Off-Delay





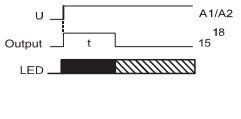
1 N.O. (SPST)

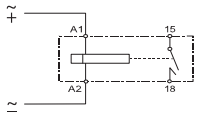




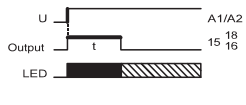
1 C/O (SPDT)

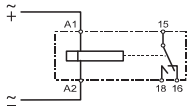
(D) One Shot





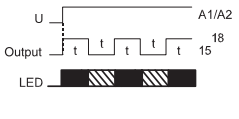
1 N.O. (SPST)

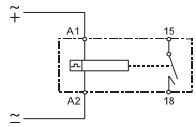




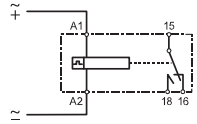
1 C/O (SPDT)

(F) Flasher (Repeat Cycle Starting with Pulse)





1 N.O. (SPST)



1 C/O (SPDT)

Supply Voltage

The last three digits in the catalog number represent the supply voltage range the relay will accept:

U22	24V AC or DC	(A1/A2)
	110…240V 50/60Hz	(A1/A2)
U23	24…48VDC and 24V…240V 50/60Hz	(A1/A2)

Bicolored LED

1 SPDT or 1 N.O. Contact Timers

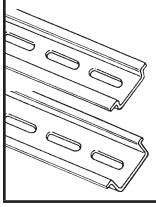
- LED U = Green: Supply voltage available
- LED Relay = Red: Output is energized
- OFF: No color

Timing Range Codes

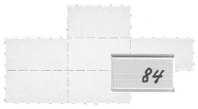
RZ7-FEM with one NO or SPDT contact
0.05…1 sec
0.5…10 sec
0.05…1 min
0.5…10 min
0.05…1 hour
0.5…10 hour

❶ For timing control, a voltage other than the supply voltage can also be used.
❷ Timing range is screwdriver selectable from the faceplate.

Accessories

Accessory	Description	Catalog Number
	**Setting Knob With Scale -** For time setting without tools.	**RZ7-FSK**
	**Panel Mounting Adaptor -** For surface mounting RZ7-FS/FE timing relays.	**RZ7-FSA** ❷
	**DIN-rail** - 2 meter lengths (≈6' 6") Top Hat, low profile (price per rail) Top Hat, high profile (price per rail)	**3F** **3AF**

Marking Systems

Component	Description	Pkg. Qty.	Catalog Number
	**Label Sheet** – 1 sheet with 105 self-adhesive paper labels each, 6 x 17mm	1	**CA7-FMS**
	**Marking Tag Sheet -** 1 sheet with 160 perforated paper labels each, 6 x 17mm. To be used with transparent cover.	1	**CA7-FMP**
	Transparent Cover - To be used with Marking Tag Sheets.	100 ❶	**CA7-FMC**
	Tag Carrier - For marking with Series V7 Clip-on Tags.	100 ❶	**CA7-FMA2**

❶ Minimum order quantity is one package of 100.
❷ The RZ7 timing relay can be panel or DIN rail mounted. For best long-term performance, allow at least 5mm (0.2 in.) of space on each side of the relay for proper ventilation.

Technical Data

Timing Characteristics (according to VDE 0435, Part 2021)		
Timing ranges for		
RZ7-FSM-A, B, C, D, E, F, I, & L	(1s)	0.05…1 sec
RZ7-FSH	(3s)	0.15…3 sec
	(10s)	0.5…10 sec
	(1mn)	0.05…1 min
	(3mn)	0.15…3 min
	(10mn)	0.5…10 min
	(1h)	0.05…1 hour
	(3h)	0.15…3 hours
	(10h)	0.5…10 hours
	(60h)	3…60 hours
RZ7-FSQ	(2.5s)	0.15…2.5 sec
	(10s)	0.5…10 sec
	(80s)	4…80 sec
	(10mn)	0.5…10 min
Setting accuracy	±5% of full scale value	
Repeatability	±0.2% of the setting values	
Tolerance	Voltage: ±0.001%/%ΔU	
	Temperature: ±0.025%/°C	
Power Supply		
Supply voltages	24…48VDC and 24…240VAC, 50/60Hz (multi voltage)	
	12VDC	
	24…240V AC or DC (universal voltage)	
	346…440VAC, 50/60Hz	
Voltage tolerance	AC: -15%... +10%	
	DC: -20%... +20%	
Power consumption	AC: 5VA at 240V	
	DC: 0.5W at 24V	
Time energized	100%	
Reset time	50ms	
Voltage interruption	≤20ms without reset (supply voltage)	
Input Impedance	Relay On: 3k-13k ohms	
	Relay Off: 0.7k-4k ohms	
Cable length (supply voltage control)	250 meters (800 ft.) max.	
Pulse Control (B1)		
Impulse duration	≥50ms (AC), ≥30ms (DC)	
Input voltage	Supply voltage range	
Input current	1 mA	
Max. Leakage Current	400 micro Amps	
Cable length	max. 250 m (800 ft.) without parallel load between B1 & A2	
	max. 50 m (160 ft.) with load (<3kΩ) between B1 & A2	
Outputs		
Type of outputs	Relay contacts: hard silver	
Maximum admissible operating voltage	Alternating current: 440VAC	
Dielectric Coil to contact Withstand Voltage	5,000 V	
Switching capacity		
Current I_{th}: (AC1)	8A (5A for RZ7-FSQ)	
Power:	2000VA	
	according to IEC947-5-1:	
	3A/440VAC (inductive load, AC14)	
	3A/250VAC (inductive load, AC15)	
	1A/24VDC (inductive load, DC13)	
	according to UL 508:	
	1.5A/250VAC (B300)	
	3A/120VAC (B300)	

Short circuit resistance	10 A gL (fast blow fuse)
Life expectancy (electrical)	4 million ops. at 1A/250VAC, cosφ = 1
	0.2 million ops. at 6A/250VAC, cosφ = 1
	1.5 million ops. at 1A/250VAC, cosφ = 0.3
	0.3 million ops. at 3A/250VAC, cosφ = 0.3
	0.5 million ops. at 6A/24VDC, resistive
	2 million ops. at 4A/24VDC, resistive
	2 million ops. at 0.2A/230VDC, resistive
	1 million ops. at 0.4A/24VDC, L/R = 20ms
	1 million ops. at 0.2A/110VDC, L/R = 20ms
	1 million ops. at 0.1A/230VDC, L/R = 20ms
Life expectancy (mechanical)	30 million operations
General Data Insulation Characteristics	2 kVAC/50 Hz test voltage according to VDE 0435 and 6 kV 1.2/50 µs surge voltage according to IEC 947-1 between all inputs and outputs
EMC/Interference Immunity	Performance of following requirements: - Surge capacity of the supply voltage according to IEC1000-4-5: 4 kV 1.2/50 µs - Burst according to IEC 1000-4-4: 6 kV/ 6/50ns - ESD discharge according to IEC 1000-4-2: - Contact 8 kV, air 8 kV - Electromagnetic HF field according to IEC 801-3 and conducted electromagnetic HF signal according to IEC 801-6: Level 3
EMC/Emission	Electromagnetic fields according to EN 55 022: Class B
Safe isolation	According to VDE 106, part 101
Climatic withstand	56 cycles (24h) at 25…40°C and 95% relative humidity according to IEC 68-2-30 and IEC 68-2-3.
Vibration resistance	4 g in 3 axis at 10…500 Hz, test FC according to IEC 68-2-6
Shock resistance	50 g according to IEC 68-2-27
Protection class	Enclosure: IP40 IP30 (single function) Terminal: IP20 according to IEC 947-1
Weight	100g
Approvals/Standards	UL File E14840, C-UL up to 240VAC, CE
Ambient temperature	Open: –25°C…+60°C Enclosed: –25°C…+45°C Storage –40°C…+85°C
Connections Screw terminal -	M3.5 for Pozidrive No.2, Phillips and slotted screws No.2 suitable for power screwdriver.
Rated tightening torque - Wire Size -	0.8 Nm (max. 1.2 Nm) - [8.8 lb-in] Dual-chamber system for terminal cross-sections of 1 x 0.5mm² (solid) or 2 x 2.5mm² (flexible with sleeve), AWG 20…14.
Finger Protection -	According to VDE 0106
Mounting	Can be panel or DIN rail mounted. For best performance allow at least 5mm (0.2in.) of space on each side for proper ventilation. – Snap-on mounting (35mm DIN-rail) – Side mounting on CA7contactors and CS7 with dovetail joint [surface mounting in any position] – Screw fixing by Panel Mount Adapter and two screws (M4) [surface mounting in any position]
Disposal	Synthetic material without dioxin according to EC/EFTA notification No. 93/0141/D. Electrical contacts contain cadmium.
Standards	EN 60947-1, EN 60947-5-1, EN 50081-1, IEC 947, UL 508. CSA 22.2 No. 14

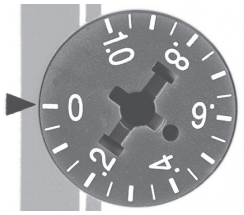
RZ7 Relative Scale Setting Knob

Series RZ7 Timing Relays have a "relative scale" setting knob numbered 0 to 1.0. Think about this as 0 to 100% of the relay's built-in time range. Example: To set an RZ7-FS timing relay (with a 0.05 to 1 minute range) to activate after 25 seconds:

1) Divide the desired activation time (25 seconds) by the maximum time limit of the relay (60 seconds).

   25 ÷ 60 = .416

2) Rotate the setting knob to just past the .4 mark.



Technical Data

		RZ7-FE With NO Contact	RZ7-FE With SPDT Contact
Setting Accuracy		±5% of the time range final value ($t_{max.}$)	±5% of the time range final value ($t_{max.}$)
Repeatability		±1% of the time range final value ($t_{max.}$)	±1% of the time range final value ($t_{max.}$)
Tolerance		by voltage: ±0.01%/%ΔU by temperature: ±0.25%/°C	by voltage: ±0.001%/%ΔU by temperature: ±0.025%/°C
Supply			
Supply Voltage		24 AC or DC and 110…240VAC, 50/60Hz	24…48VDC and 24…240VAC, 50/60 Hz
Voltage Tolerance		-15%/+20% (DC), -15%/+10% (AC)	-15%/+20% (DC), -15%/+10% (AC)
Power Consumption		0.5W at 24VDC, 5VA at 240VAC	0.5W at 24VDC, 5VA at 240VAC
Timer Energized		100%	100%
Recovery Time		100ms	100ms
Voltage Isolation		–	≤30ms without reset (supply voltage)
Cable length (supply voltage control)		max. 250 meters (750 ft.)	max. 250 meters (750 ft.)
Pulse Control (B1)			
Impulse Duration		≥250ms	≥50ms (AC), ≥30ms (DC)
Input Voltage		supply voltage range	supply voltage range
Input Current		1mA	1mA
Cable Length		max. 250 meters without parallel load between B1 and A2 max. 50 meters with load (<3 kΩ) between B1 and A2	max. 250 meters without parallel load between B1 and A2 max. 50 meters with load (<3 kΩ) between B1 and A2
Outputs			
Contact Type		1N.O. contact	1 Form C-SPDT contact
Switching Capacity	Voltage:	250VAC	250VAC
	Current:	5A (Resistive, AC1)	5A (Resistive, AC1)
	Power:	1250VA	1250VA
	according to IEC 947-5-1:	1A/250VAC (inductive load, AC14) 1A/24VDC (inductive load, DC13)	1A/250VAC (inductive load, AC14) 1A/24VDC (inductive load, DC13)
	according to UL508:	1A/300VAC (D300)	1A/300VAC (D300)
Short Circuit Resistance		6A gL (fast blow fuse)	6A gL (fast blow fuse)
Dielectric Withstand Voltage (contact to coil)		4000V	4000V
Life	mechanical:	20 million operations	
	electrical operations:	0.4 Mil. at 1A/250VAC, cosφ = 1 0.4 Mil. at 0.5A/250VAC, cosφ = 0.4 0.4 Mil. at 1A/24VDC, resistive	
State Indicator		1 bicolored LED (Supply = green; Relay = red)	
General Characteristics			
Insulation Characteristics		2 kVAC/50Hz test voltage according to VDE 0435 and 4kV 1.2/50μs surge voltage according to IEC 947-1 between all inputs and outputs	
EMC Interference Immunity		The following requirements are fulfilled: Surge capacity of the supply voltage according to IEC 1000-4-5: Level 3. Burst according to IEC 1000-4-4: Level 3. ESD discharge according to IEC 1000-4-2: Level 3.	
EMC/Emission		electromagnetic fields according to EN 55 022: Class B	
Safe Isolation		according to VDE 106, Part 101	
Climatic Withstand		56 cycles (24h) at 25…40°C and 95% relative humidity according to IEC 68-2-30 and IEC 68-2-3	
Vibration Resistance		4g in 3 axis at 10…500Hz, test FC according to IEC 68-2-6	
Shock Resistance		50g according to IEC 68-2-27	
Protection Class		Enclosure: IP40 Terminal: IP20	
Weight		60g	
Approvals/Standards		UL File E14840, C-UL, CE	
Ambient Temperature		Open: -25°C…+60°C Enclosed: -25°C…+45°C Storage: -40°C…+85°C	
Standard		EN 60947-1, EN 60947-5-1, EN 50081-1, IEC 947, UL 508, CSA 22.2	

Technical Data *(continued)*

		RZ7-FE With NO Contact	RZ7-FE With SPDT Contact
General Characteristics (continued)			
Connections	Screw terminals:	M3 for Pozidrive No: 1, Phillips and slotted screws No: 2, suitable for power screwdriver	
	Rated tightening torque:	0.8Nm (max. 1.0Nm) [8.8 lb-in]	
	Wire size:	Cross-sections of 1 x 0.5mm²...2 x 1.5mm² (solid) or 2 x 1.5mm² (stranded with sleeve)	
	Finger protection:	AWG 20...14	
Mounting		Can be panel or DIN rail mounted. For best performance allow at least 5mm (0.2in.) of space on each side for proper ventilation. - according to VDE 0106 - Snap-on mounting on 35mm DIN-rail - Side mounting on CA7contactors and CS7 with dovetail joint [surface mounting in any position] - Screw fixing by Panel Mount and two screws (M4) - [surface mounting in any position]	
Disposal		Synthetic materials without dioxin according to EC/EFTA-Notification No: 93/0141/D Electrical contacts contain cadmium	

RZ7 Relative Scale Setting Knob

Series RZ7 Timing Relays have a "relative scale" setting knob numbered 0 to 1.0. Think about this as 0 to 100% of the relay's built-in time range.

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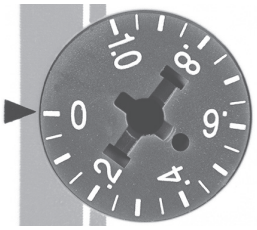


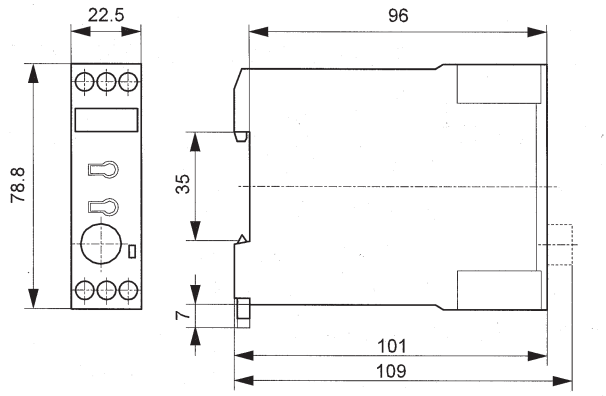
1) Divide the desired activation time (25 seconds) by the maximum time limit of the relay (60 seconds).

   25 ÷ 60 = .416

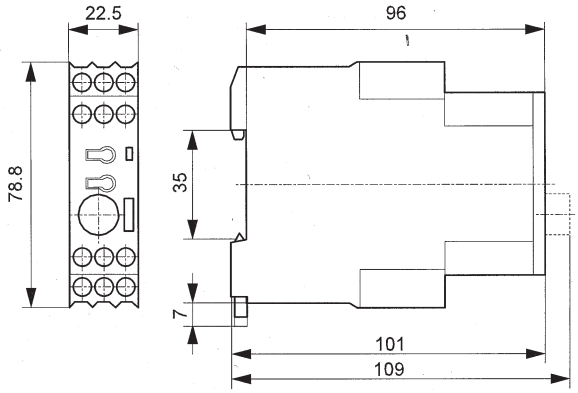
2) Rotate the setting knob to just past the .4 mark

Series RZ7-FS Timing Relays *(one and two pole)*

Dimensions are in millimeters (inches). Dimensions not intended for manufacturing purposes.

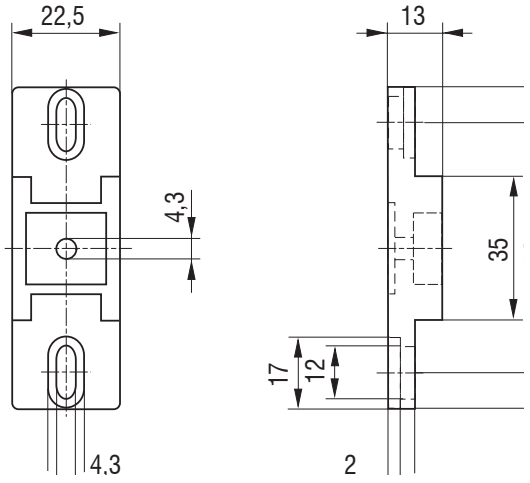


RZ7-FS (1 SPDT contact)



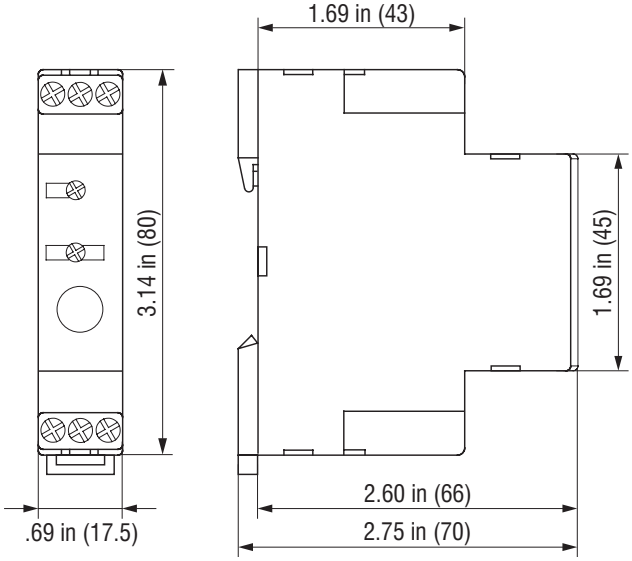
RZ7-FS (2 SPDT contacts)

Panel Mount Adaptor (RZ7-FSA)



Series RZ7-FE Timing Relays *(one and two pole)*

Dimensions are in inches (millimeters). Dimensions not intended for manufacturing purposes.



Panel Mount Adaptor (26.506.221-01)