

# Electronic Time Relays

**CE** 7PV0  
IEC 61812-1  
IEC 60947-5-1



7PV0 712...

7PV0 723...

7PV0 732...

7PV0 742...

Please read and understand these instructions before installing, operating, or maintaining the equipment.



**DANGER**  
Hazardous voltage can cause death or serious injury. Disconnect power before working on equipment.

**CAUTION**  
Reliable functioning of the equipment is only ensured with certified components.

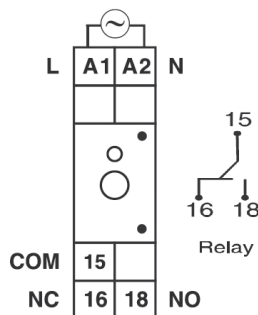
**NOTICE**  
This product has been designed for environment A. Use of this product in environment B may cause unwanted electromagnetic disturbances in which case the user may require to take adequate mitigation measures.

### Technical Data

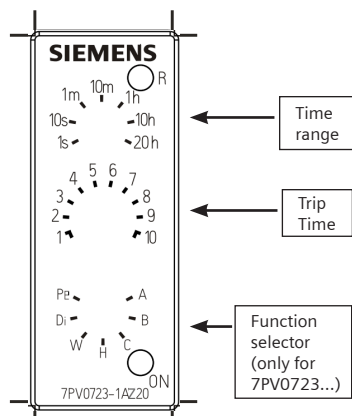
Designation	7PV0 712-1AD20	7PV0723-1AZ20	7PV0 732-1AV20	7PV0 742-1CB20	7PV0 742-1CD20
Type	ON delay	Multi-function (10 functions)	Multi-function (15 functions)	Star Delta	
Supply voltage Tolerance	-15% to +10%				
Operating temperature	0 to 50°C				
Time ranges	0.1 --- 1s 1 --- 10s 0.1 --- 1min 1 --- 10min 0.1 --- 1hrs 0.3 --- 3hrs	0.1 --- 1s 1 --- 10s 0.1 --- 1min 1 --- 10min 0.1 --- 1hrs 1 --- 10hrs 2 --- 20hrs	0.1 - 99.9 sec/min/hr 1 - 999 sec/min/hr 0.01 - 9:59 min:sec 0.01 - 9:59 hr:min	0.5-30s (For 30s range) 1-60s (For 60s range)	

### 7PV0 712-...

#### Terminal connections



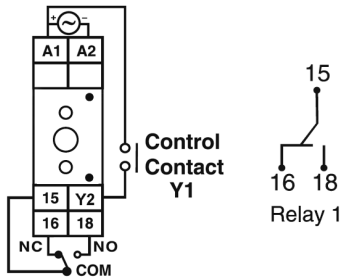
#### Front Panel description for 7PV0 712... and 7PV0723...



Trip Time range	1	2	3	4	5	6	7	8	9	10
1 s/min/hrs	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1
10 s/min/hrs	1	2	3	4	5	6	7	8	9	10
20 hrs	2	4	6	8	10	12	14	16	18	20
3 hrs	0.3	0.6	0.9	1.2	1.5	1.8	2.1	2.4	2.7	3

### 7PV0 723...

Terminal connections

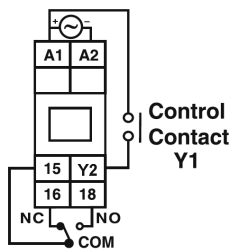


LED Indication Chart		
Condition	'ON' LED (Red)	'R' LED (Green)
Power ON	ON	OFF
Relay ON	ON	ON

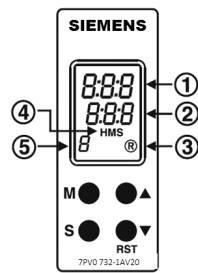
Function Selector
On delay (A)
Delay with totalise (At)
Single Shot (B)
Delay on Break (C)
Cyclic equal off first(with external contact) (D)
Cyclic equal on first(Di)
Interval(H)
Interval with Totalise(Ht)
Pulse output(Pe)
Interval after break(W)

### 7PV0 732...

Terminal connections



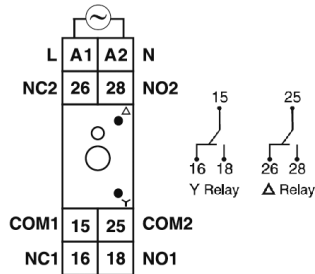
Front Panel description



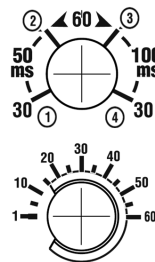
	On line	Config.	Front Reset
①	Process time	Parameter name	
②	Set time	Parameter Options	
③	Output Status (Lit when O/P is ON)		
④	Time Range (Blink in online Mode)		
⑤	Operating Mode		

### 7PV0 742...

Terminal connections



Time Range setting

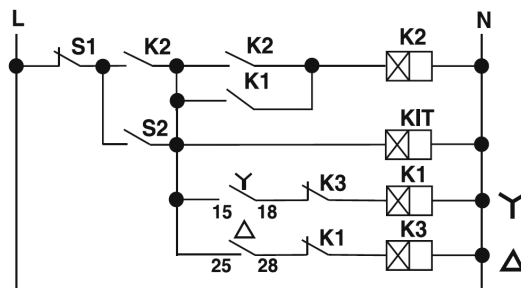


Run-up Time setting

	Run-up Time	Pause Time
①	30sec	50ms
②	60sec	50ms
③	60sec	100ms
④	30sec	100ms

Time range	Time range						
	1	10	20	30	40	50	60
30 sec	0.5	5	10	15	20	25	30
60 sec	1	10	20	30	40	50	60

Circuit diagram



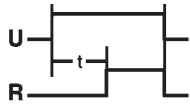
- S1 : STOP PB
- S2 : START PB
- K1 : Star Contactor
- K2 : Line Contactor
- K3 : Delta Contactor
- KIT : Timer

For 7PV0...	
	0.6 Nm
	1 x (0.75... 2.5) mm <sup>2</sup> 2 x 0.5 to 2 x 1.5 mm <sup>2</sup>
	1 x 0.5... 2.5 mm <sup>2</sup> 2 x 0.5... 1.5 mm <sup>2</sup>

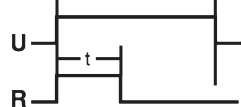
## Timing Diagram

### 7PV0732 (Digital 15 func) / 7PV0723 (10 func)

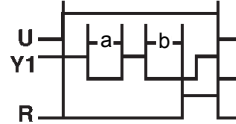
A. ON delay



B/H. Interval

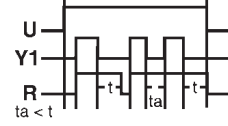


T. Delay on break with Totalise  
At. Delay with totalise

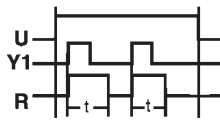


Set trip time =  $t = a + b$

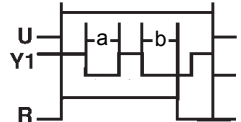
J/C. Delay on Break



P/B. Single Shot

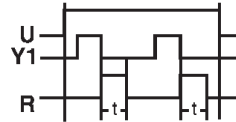


U/Ht. Interval with Totalise

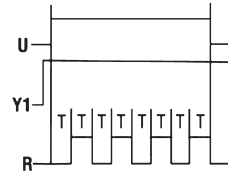


Set trip time =  $t = a + b$

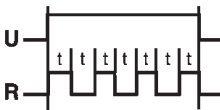
L/W. Interval after Break



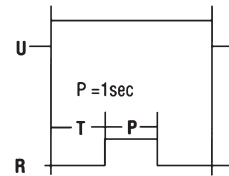
D. Cyclic equal off first #  
(with external contact)



F/Di. Cycle equal (ON 1st)

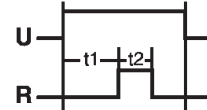


Pe. Pulse output #

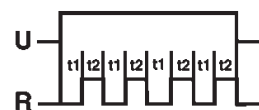


P = Pulse time

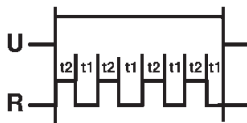
H. Pulse output\*



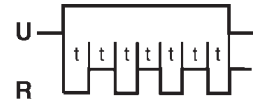
C. Asym. cyclic (OFF 1st)\*



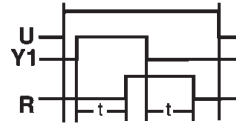
D. Asym. cyclic (ON 1st)\*



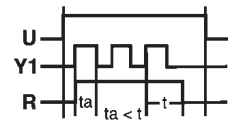
E. Cycle Equal (OFF 1st)\*



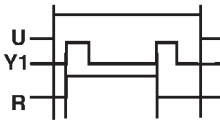
K. Delay on Make/Break\*



Q. Retriggerable Single shot\*



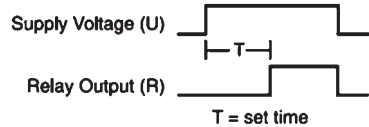
R. Latching Relay\*



t or T = set time delay, t1 = off time, t2 = on time, # only for 7PV0723, \* only for 7PV0732

### 7PV0 712-1AD20

ON delay

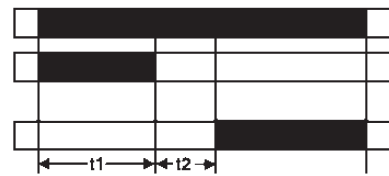


T = set time

### 7PV0 742-1C.20

Supply voltage

Star relay NO contact  
Delta relay NO contact

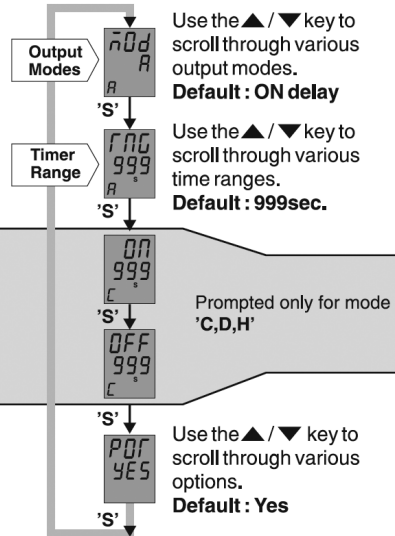


t1 = Run up time, t2 = Pause time

## Menu Guide 7PV0 732....

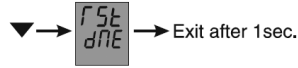
### Configuration Mode

1. Enter by pressing the key 'M' for 3 sec.
2. Scroll the parameters by pressing the key 'S'
3. Change the parameter value by pressing the ▲ / ▼ key.
4. Exit config. mode by pressing the key 'M' for 3 sec. [All parameters are saved in memory when unit exits from config. mode.]



### Front Reset

1. Enter by pressing the ▼ key for 5 sec.  
(\* The unit will auto exit reset mode after 1 sec.)

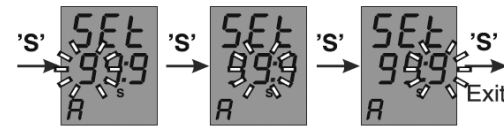


### Time Set Mode

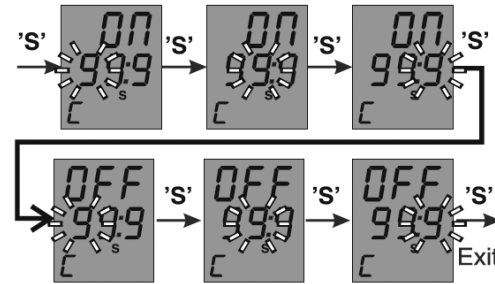
1. Enter by pressing the key 'S' for 5 sec.
2. Press the key 'S' to select next digit.
3. If 'S' key is pressed when cursor is at the right most position [and the parameter being set is not the last one] the next parameter is displayed. And if it is the last parameter then it exits the time set mode and all parameters are stored in memory.

### Time Set Mode

#### 1) If the mode is ON delay

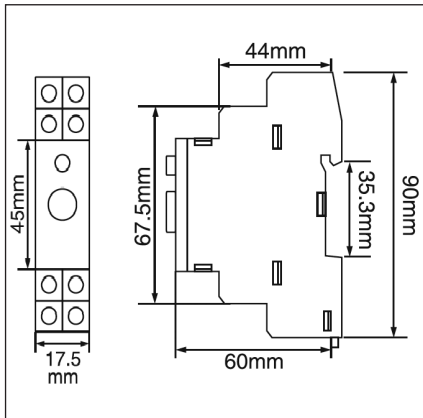


#### 2) If the mode is C,D,H

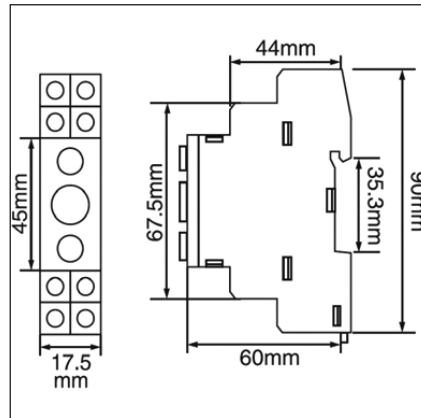


## Dimensional drawings

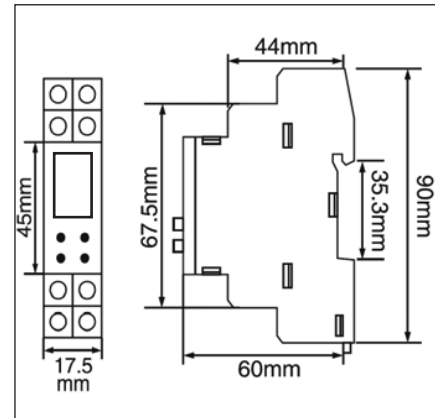
7PV0 712...  
7PV0 742...



7PV0 723...



7PV0 732...



## Disposal

Siemens products are environment friendly, which predominantly consist of recyclable materials. For disposals we recommend disassembling and separation into following materials:

**METALS:** Segregate into Ferrous & Non Ferrous types for recycling through authorised dealer.

**PLASTICS:** Segregate as per material type for recycling through authorised dealer. Because of the long lifetime of Siemens products the disposal guidelines may be replaced by other national regulations when taking the product out of service.

The local customer care service is available at any time to answer disposal-related questions