



Timing relay, electronic with star-delta (wye-delta) function 2 NO 7 time ranges 0.05 s...100 h 12-240 V AC/DC Screw terminal

<b>product brand name</b>	SIRIUS
<b>product designation</b>	timing relay
<b>design of the product</b>	Star-delta (wye-delta) function
<b>product type designation</b>	7PV15
<b>General technical data</b>	
product component semi-conductor output	No
<b>product extension required remote control</b>	No
<b>product extension optional remote control</b>	No
insulation voltage for overvoltage category III according to IEC 60664 with degree of pollution 3 rated value	300 V
<b>test voltage for isolation test</b>	2.2 kV
<b>degree of pollution</b>	2
<b>surge voltage resistance rated value</b>	4 000 V
<b>test voltage for surge voltage test</b>	4 800 V
<b>protection class IP</b>	IP20
shock resistance according to IEC 60068-2-27	11g / 15 ms
vibration resistance according to IEC 60068-2-6	10 ... 55 Hz: 0.35 mm
mechanical service life (switching cycles) typical	10 000 000
electrical endurance (switching cycles) at AC-15 at 230 V typical	100 000
<b>adjustable time</b>	0.05 s ... 100 h
<b>relative setting accuracy relating to full-scale value</b>	5 %; +/-
<b>minimum ON period</b>	35 ms
<b>recovery time</b>	500 ms
<b>reference code according to IEC 81346-2</b>	K
<b>relative repeat accuracy</b>	2 %; +/-
influence of the surrounding temperature	2% in complete temperature range for the set duration
power supply influence	2% in complete voltage range for the set duration
<b>Substance Prohibittance (Date)</b>	05/01/2012
<b>Control circuit/ Control</b>	
<b>type of voltage of the control supply voltage</b>	AC/DC
<b>control supply voltage 1 at AC</b>	
• at 50 Hz	12 ... 240 V
• at 60 Hz	12 ... 240 V
<b>control supply voltage frequency 1</b>	50 ... 60 Hz
<b>control supply voltage 1</b>	
• at DC	12 ... 240 V
<b>operating range factor control supply voltage rated value at DC</b>	
• initial value	0.85

<ul style="list-style-type: none"> <li>• full-scale value</li> </ul>	1.1
<b>operating range factor control supply voltage rated value at AC at 50 Hz</b> <ul style="list-style-type: none"> <li>• initial value</li> <li>• full-scale value</li> </ul>	0.85 1.1
<b>operating range factor control supply voltage rated value at AC at 60 Hz</b> <ul style="list-style-type: none"> <li>• initial value</li> <li>• full-scale value</li> </ul>	0.85 1.1
<b>Switching Function</b>	
<b>switching function</b> <ul style="list-style-type: none"> <li>• ON-delay</li> <li>• ON-delay/instantaneous contact</li> <li>• passing make contact</li> <li>• passing make contact/instantaneous contact</li> <li>• OFF delay</li> </ul>	No No No No No
<b>switching function</b> <ul style="list-style-type: none"> <li>• flashing symmetrically with interval start/instantaneous</li> <li>• flashing symmetrically with interval start</li> <li>• flashing symmetrically with pulse start/instantaneous</li> <li>• flashing symmetrically with pulse start</li> <li>• flashing asymmetrically with interval start</li> <li>• flashing asymmetrically with pulse start</li> </ul>	No No No No No No
<b>switching function</b> <ul style="list-style-type: none"> <li>• star-delta circuit with delay time</li> <li>• star-delta circuit</li> </ul>	No Yes
<b>switching function with control signal</b> <ul style="list-style-type: none"> <li>• additive ON-delay</li> <li>• passing break contact</li> <li>• passing break contact/instantaneous</li> <li>• OFF delay</li> <li>• OFF delay/instantaneous</li> <li>• pulse delayed</li> <li>• pulse delayed/instantaneous</li> <li>• pulse-shaping</li> <li>• pulse-shaping/instantaneous</li> <li>• additive ON-delay/instantaneous</li> <li>• ON-delay/OFF-delay</li> <li>• ON-delay/OFF-delay/instantaneous</li> <li>• passing make contact</li> <li>• passing make contact/instantaneous contact</li> </ul>	No No No No No No No No No No No No No No No
<b>switching function of interval relay with control signal</b> <ul style="list-style-type: none"> <li>• retrotriggerable with deactivated control signal/instantaneous contact</li> <li>• retrotriggerable with switched-on control signal</li> <li>• retrotriggerable with switched-on control signal/instantaneous contact</li> <li>• retriggerable with deactivated control signal</li> </ul>	No No No No
<b>design of the control terminal non-floating</b>	No
<b>Short-circuit protection</b>	
design of the fuse link for short-circuit protection of the auxiliary switch required	fuse gL/gG: 4 A
<b>Auxiliary circuit</b>	
<b>material of switching contacts</b>	AgSnO2
<b>number of NC contacts</b> <ul style="list-style-type: none"> <li>• delayed switching</li> <li>• instantaneous contact</li> </ul>	0 0
<b>number of NO contacts</b> <ul style="list-style-type: none"> <li>• delayed switching</li> </ul>	2

<ul style="list-style-type: none"> <li>instantaneous contact</li> </ul>	0
<b>number of CO contacts</b>	
<ul style="list-style-type: none"> <li>delayed switching</li> <li>instantaneous contact</li> </ul>	0 0
<b>operational current of auxiliary contacts at AC-15</b>	
<ul style="list-style-type: none"> <li>maximum</li> <li>at 24 V</li> <li>at 250 V</li> </ul>	3 A 3 A 3 A
<b>operational current of auxiliary contacts as NC contact at AC-15</b>	
<ul style="list-style-type: none"> <li>at 24 V</li> <li>at 250 V</li> </ul>	3 A 3 A
<b>operational current of auxiliary contacts as NO contact at AC-15</b>	
<ul style="list-style-type: none"> <li>at 24 V</li> <li>at 250 V</li> </ul>	3 A 3 A
<b>operational current of auxiliary contacts at DC-13</b>	1 ... 0.01
<b>operational current of auxiliary contacts at DC-13</b>	
<ul style="list-style-type: none"> <li>at 24 V</li> <li>at 125 V</li> <li>at 250 V</li> </ul>	1 A 0.22 A 0.1 A
<b>operating frequency with 3RT2 contactor maximum</b>	5 000 1/h
<b>contact reliability of auxiliary contacts</b>	one incorrect switching operation of 100 million switching operations (17 V, 5 mA)
<b>contact rating of auxiliary contacts according to UL</b>	R150 / B300
<b>switching capacity current with inductive load</b>	0.01 ... 3 A
<b>Inputs/ Outputs</b>	
<b>product function</b>	
<ul style="list-style-type: none"> <li>at the relay outputs switchover delayed/without delay</li> <li>non-volatile</li> </ul>	No No
<b>Electromagnetic compatibility</b>	
EMC immunity according to IEC 61812-1	EN 61000-6-2
<b>conducted interference</b>	
<ul style="list-style-type: none"> <li>due to burst according to IEC 61000-4-4</li> <li>due to conductor-earth surge according to IEC 61000-4-5</li> <li>due to conductor-conductor surge according to IEC 61000-4-5</li> </ul>	2 kV network connection / 1 kV control connection 2 kV 1 kV
<b>field-based interference according to IEC 61000-4-3</b>	10 V/m
<b>electrostatic discharge according to IEC 61000-4-2</b>	4 kV contact discharge / 8 kV air discharge
<b>Safety related data</b>	
<b>type of insulation</b>	Basic insulation
<b>category according to EN 954-1</b>	none
<b>Connections/ Terminals</b>	
<b>product component removable terminal for auxiliary and control circuit</b>	No
type of electrical connection for auxiliary and control circuit	screw-type terminals
<b>type of connectable conductor cross-sections</b>	
<ul style="list-style-type: none"> <li>solid</li> <li>finely stranded with core end processing</li> <li>finely stranded without core end processing</li> <li>at AWG cables solid</li> <li>at AWG cables stranded</li> </ul>	1x (0.2 ... 2.5 mm <sup>2</sup> ) 1x (0.25 ... 1.5 mm <sup>2</sup> ) 1x (0.2 ... 1.5 mm <sup>2</sup> ) 1x (24 ... 14) 1x (24 ... 14)
<b>connectable conductor cross-section</b>	
<ul style="list-style-type: none"> <li>solid</li> <li>finely stranded with core end processing</li> <li>finely stranded without core end processing</li> </ul>	0.2 ... 2.5 m <sup>2</sup> 0.25 ... 1.5 m <sup>2</sup> 0.2 ... 1.5 m <sup>2</sup>
<b>AWG number as coded connectable conductor cross section</b>	
<ul style="list-style-type: none"> <li>solid</li> </ul>	24 ... 14

- stranded

24 ... 14

### Installation/ mounting/ dimensions

<b>mounting position</b>	any
<b>fastening method</b>	snap-on fastening on 35 mm standard rail
<b>height</b>	90 mm
<b>width</b>	17.5 mm
<b>depth</b>	66.7 mm
<b>required spacing</b>	
<ul style="list-style-type: none"> <li>• with side-by-side mounting           <ul style="list-style-type: none"> <li>— forwards 0 mm</li> <li>— backwards 0 mm</li> <li>— upwards 0 mm</li> <li>— downwards 0 mm</li> <li>— at the side 0 mm</li> </ul> </li> <li>• for grounded parts           <ul style="list-style-type: none"> <li>— forwards 0 mm</li> <li>— backwards 0 mm</li> <li>— upwards 0 mm</li> <li>— at the side 0 mm</li> <li>— downwards 0 mm</li> </ul> </li> <li>• for live parts           <ul style="list-style-type: none"> <li>— forwards 0 mm</li> <li>— backwards 0 mm</li> <li>— upwards 0 mm</li> <li>— downwards 0 mm</li> <li>— at the side 0 mm</li> </ul> </li> </ul>	

### Ambient conditions

installation altitude at height above sea level maximum	2 000 m
<b>ambient temperature</b>	
<ul style="list-style-type: none"> <li>• during operation -25 ... +55 °C</li> <li>• during storage -40 ... +70 °C</li> <li>• during transport -40 ... +70 °C</li> </ul>	
relative humidity during operation	15 ... 85 %

### Certificates/ approvals

<b>General Product Approval</b>	<b>EMC</b>	<b>Declaration of Conformity</b>
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[Confirmation](#)



<b>Declaration of Conformity</b>	<b>Test Certificates</b>	<b>other</b>
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EG-Konf.

[Type Test Certificates/Test Report](#)

[Environmental Conformations](#)

[Confirmation](#)

### Further information

Information- and Downloadcenter (Catalogs, Brochures,...)

<https://www.siemens.com/ic10>

Industry Mall (Online ordering system)

<https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=7PV1578-1BW30>

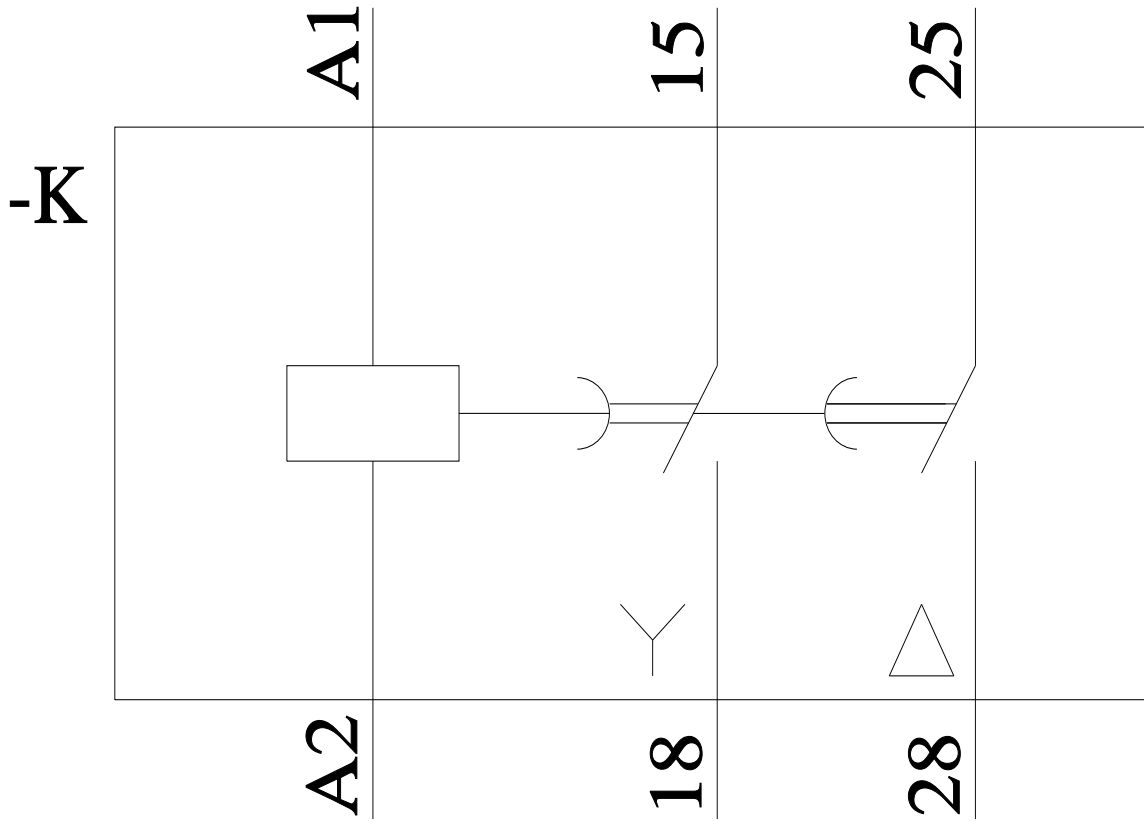
Cax online generator

<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=7PV1578-1BW30>

Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

<https://support.industry.siemens.com/cs/ww/en/ps/7PV1578-1BW30>

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)



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12/9/2021 