



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 acc. to IEC 60068-2-27	11g / 15 ms
vibration resistance acc. 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 acc. to IEC 81346-2</b>	K
<b>relative repeat accuracy</b>	2 %
<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
• control supply voltage 1 at DC	12 ... 240 V
<b>operating range factor control supply voltage rated value at DC</b>	
• initial value	0.85
• full-scale value	1.1
<b>operating range factor control supply voltage rated</b>	

<b>value at AC at 50 Hz</b>	
• initial value	0.85
• full-scale value	1.1
<b>operating range factor control supply voltage rated value at AC at 60 Hz</b>	
• initial value	0.85
• full-scale value	1.1
<b>Switching Function</b>	
<b>switching function</b>	
• ON-delay	No
• ON-delay/instantaneous contact	No
• passing make contact	No
• passing make contact/instantaneous contact	No
• OFF delay	No
<b>switching function</b>	
• flashing symmetrically with interval start/instantaneous	No
• flashing symmetrically with interval start	No
• flashing symmetrically with pulse start/instantaneous	No
• flashing symmetrically with pulse start	No
• flashing asymmetrically with interval start	No
• flashing asymmetrically with pulse start	No
<b>switching function</b>	
• star-delta circuit with delay time	No
• star-delta circuit	Yes
<b>switching function with control signal</b>	
• additive ON-delay	No
• passing break contact	No
• passing break contact/instantaneous	No
• OFF delay	No
• OFF delay/instantaneous	No
• pulse delayed	No
• pulse delayed/instantaneous	No
• pulse-shaping	No
• pulse-shaping/instantaneous	No
• additive ON-delay/instantaneous	No
• ON-delay/OFF-delay	No
• ON-delay/OFF-delay/instantaneous	No
• passing make contact	No
• passing make contact/instantaneous contact	No
<b>switching function of interval relay with control signal</b>	
• retrotriggerable with deactivated control signal/instantaneous contact	No
• retrotriggerable with switched-on control signal	No
• retrotriggerable with switched-on control signal/instantaneous contact	No
• retriggerable with deactivated control signal	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>	
• delayed switching	0
• instantaneous contact	0
<b>number of NO contacts</b>	
• delayed switching	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>influence of the surrounding temperature</b>	2% in complete temperature range for the set duration
<b>power supply influence</b>	2% in complete voltage range for the set duration
<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 acc. to IEC 61812-1	EN 61000-6-2
<b>conducted interference</b>	
<ul style="list-style-type: none"> <li>due to burst acc. to IEC 61000-4-4</li> <li>due to conductor-earth surge acc. to IEC 61000-4-5</li> <li>due to conductor-conductor surge acc. to IEC 61000-4-5</li> </ul>	2 kV network connection / 1 kV control connection 2 kV 1 kV
<b>field-based interference acc. to IEC 61000-4-3</b>	10 V/m
<b>electrostatic discharge acc. to IEC 61000-4-2</b>	4 kV contact discharge / 8 kV air discharge
<b>Safety related data</b>	
<b>touch protection against electrical shock</b>	finger-safe
<b>type of insulation</b>	Basic insulation
<b>category acc. to EN 954-1</b>	none
<b>Connections/ Terminals</b>	
product function removable terminal for auxiliary and control circuit	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)
<ul style="list-style-type: none"> <li>connectable conductor cross-section solid</li> <li>connectable conductor cross-section finely stranded with core end processing</li> </ul>	0.2 ... 2.5 m <sup>2</sup> 0.25 ... 1.5 m <sup>2</sup>

<ul style="list-style-type: none"> <li>connectable conductor cross-section finely stranded without core end processing</li> </ul>	0.2 ... 1.5 m <sup>2</sup>
<ul style="list-style-type: none"> <li>AWG number as coded connectable conductor cross section solid</li> </ul>	24 ... 14
<ul style="list-style-type: none"> <li>AWG number as coded connectable conductor cross section stranded</li> </ul>	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</li> <li>backwards</li> <li>upwards</li> <li>downwards</li> <li>at the side</li> </ul> </li> <li>for grounded parts <ul style="list-style-type: none"> <li>forwards</li> <li>backwards</li> <li>upwards</li> <li>at the side</li> <li>downwards</li> </ul> </li> <li>for live parts <ul style="list-style-type: none"> <li>forwards</li> <li>backwards</li> <li>upwards</li> <li>downwards</li> <li>at the side</li> </ul> </li> </ul>	0 mm 0 mm 0 mm 0 mm 0 mm  0 mm 0 mm 0 mm 0 mm 0 mm  0 mm 0 mm 0 mm 0 mm 0 mm

#### Ambient conditions

installation altitude at height above sea level maximum	2 000 m
<ul style="list-style-type: none"> <li>ambient temperature during operation</li> <li>ambient temperature during storage</li> <li>ambient temperature during transport</li> </ul>	-25 ... +55 °C -40 ... +70 °C -40 ... +70 °C
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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[Miscellaneous](#)



<b>Test Certificates</b>	<b>other</b>
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[Type Test  
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#### 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,...)

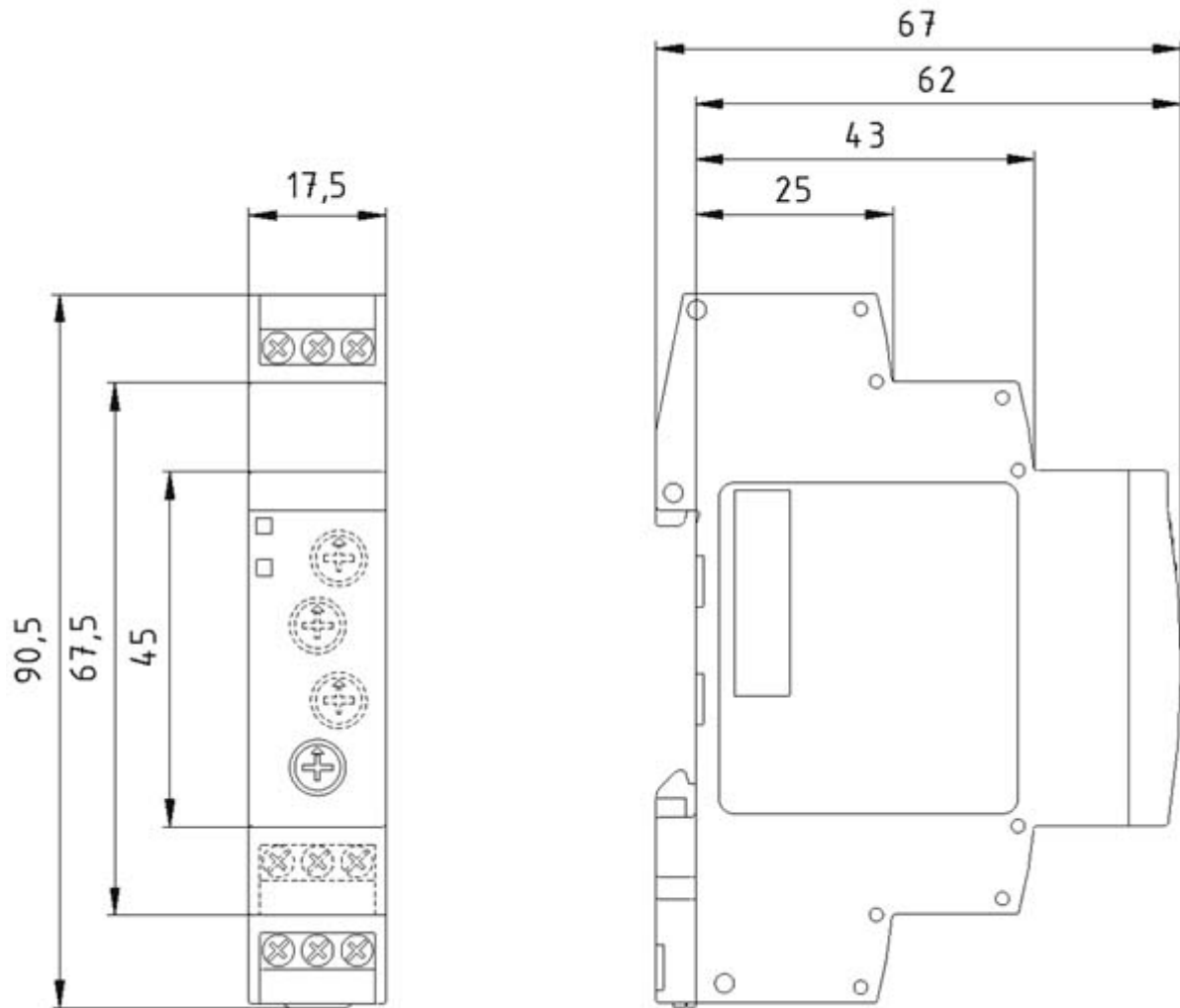
<https://support.industry.siemens.com/cs/ww/en/ps/7PV1578-1BW30>

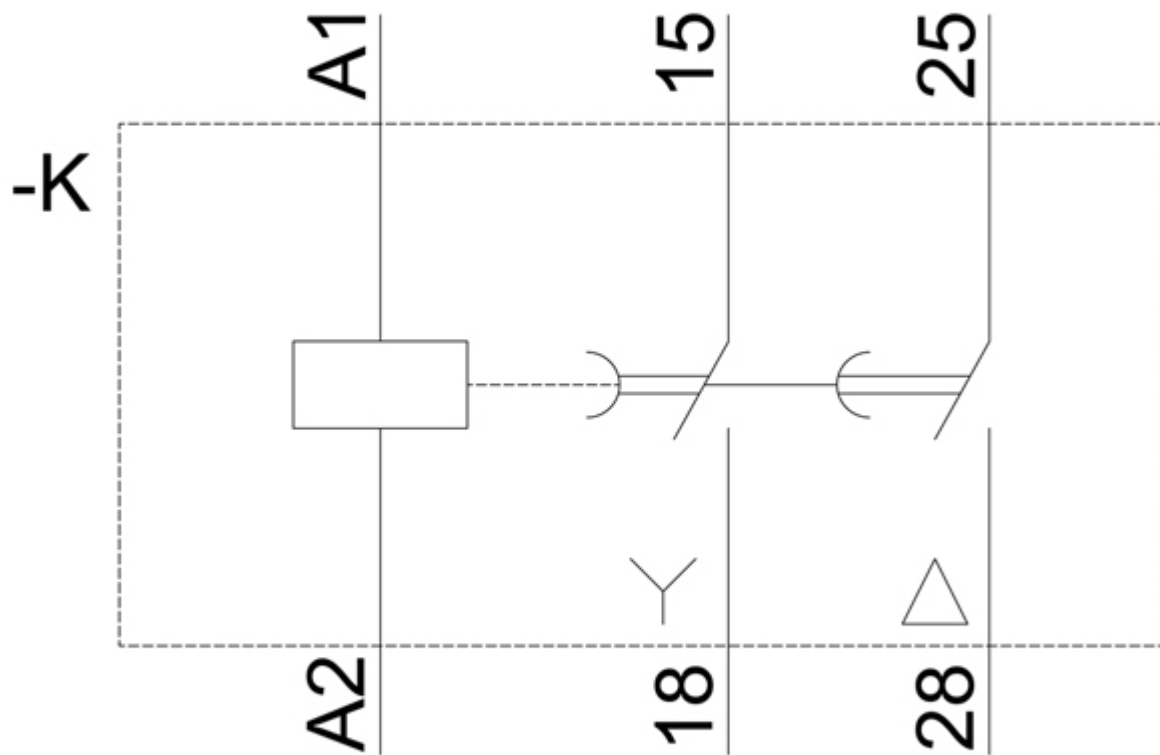
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)

[http://www.automation.siemens.com/bilddb/cax\\_de.aspx?mlfb=7PV1578-1BW30&lang=en](http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=7PV1578-1BW30&lang=en)

Characteristic: Derating

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





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