



Timing relay, electronic ON delay 1 change-over contact, 7 time ranges  
0.05 s...100 h 12-240 V AC/DC wide voltage range Screw terminal

<b>product brand name</b>	SIRIUS
<b>product designation</b>	timing relay
<b>design of the product</b>	slow-operating
<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>Substance Prohibitance (Date)</b>	01.05.2012 00:00:00
<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> </ul>	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 60 Hz</b>	
<ul style="list-style-type: none"> <li>• initial value</li> </ul>	0.85
<ul style="list-style-type: none"> <li>• full-scale value</li> </ul>	1.1
<b>Switching Function</b>	
<b>switching function</b>	
<ul style="list-style-type: none"> <li>• ON-delay</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• ON-delay/instantaneous contact</li> </ul>	No
<ul style="list-style-type: none"> <li>• passing make contact</li> </ul>	No
<ul style="list-style-type: none"> <li>• passing make contact/instantaneous contact</li> </ul>	No
<ul style="list-style-type: none"> <li>• OFF delay</li> </ul>	No
<b>switching function</b>	
<ul style="list-style-type: none"> <li>• flashing symmetrically with interval start/instantaneous</li> </ul>	No
<ul style="list-style-type: none"> <li>• flashing symmetrically with interval start</li> </ul>	No
<ul style="list-style-type: none"> <li>• flashing symmetrically with pulse start/instantaneous</li> </ul>	No
<ul style="list-style-type: none"> <li>• flashing symmetrically with pulse start</li> </ul>	No
<ul style="list-style-type: none"> <li>• flashing asymmetrically with interval start</li> </ul>	No
<ul style="list-style-type: none"> <li>• flashing asymmetrically with pulse start</li> </ul>	No
<b>switching function</b>	
<ul style="list-style-type: none"> <li>• star-delta circuit with delay time</li> </ul>	No
<ul style="list-style-type: none"> <li>• star-delta circuit</li> </ul>	No
<b>switching function with control signal</b>	
<ul style="list-style-type: none"> <li>• additive ON-delay</li> </ul>	No
<ul style="list-style-type: none"> <li>• passing break contact</li> </ul>	No
<ul style="list-style-type: none"> <li>• passing break contact/instantaneous</li> </ul>	No
<ul style="list-style-type: none"> <li>• OFF delay</li> </ul>	No
<ul style="list-style-type: none"> <li>• OFF delay/instantaneous</li> </ul>	No
<ul style="list-style-type: none"> <li>• pulse delayed</li> </ul>	No
<ul style="list-style-type: none"> <li>• pulse delayed/instantaneous</li> </ul>	No
<ul style="list-style-type: none"> <li>• pulse-shaping</li> </ul>	No
<ul style="list-style-type: none"> <li>• pulse-shaping/instantaneous</li> </ul>	No
<ul style="list-style-type: none"> <li>• additive ON-delay/instantaneous</li> </ul>	No
<ul style="list-style-type: none"> <li>• ON-delay/OFF-delay</li> </ul>	No
<ul style="list-style-type: none"> <li>• ON-delay/OFF-delay/instantaneous</li> </ul>	No
<ul style="list-style-type: none"> <li>• passing make contact</li> </ul>	No
<ul style="list-style-type: none"> <li>• passing make contact/instantaneous contact</li> </ul>	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> </ul>	No
<ul style="list-style-type: none"> <li>• retrotriggerable with switched-on control signal</li> </ul>	No
<ul style="list-style-type: none"> <li>• retrotriggerable with switched-on control signal/instantaneous contact</li> </ul>	No
<ul style="list-style-type: none"> <li>• retriggerable with deactivated control signal</li> </ul>	No
<b>design of the control terminal non-floating</b>	Yes
<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> </ul>	0
<ul style="list-style-type: none"> <li>• instantaneous contact</li> </ul>	0
<b>number of NO contacts</b>	

<ul style="list-style-type: none"> <li>• delayed switching</li> <li>• instantaneous contact</li> </ul>	0
<b>number of CO contacts</b>	0
<ul style="list-style-type: none"> <li>• delayed switching</li> <li>• instantaneous contact</li> </ul>	1
<b>operational current of auxiliary contacts at AC-15</b>	0
<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>type of insulation</b>	Basic insulation
<b>category acc. to EN 954-1</b>	none
<b>Connections/ Terminals</b>	
<b>product component removable terminal for auxiliary and control circuit</b>	No
<b>type of electrical connection for auxiliary and control circuit</b>	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> </ul>	0.2 ... 2.5 m <sup>2</sup>
	0.25 ... 1.5 m <sup>2</sup>

<ul style="list-style-type: none"><li>finely stranded without core end processing</li></ul>	0.2 ... 1.5 m²	
<b>AWG number as coded connectable conductor cross section</b>		
<ul style="list-style-type: none"><li>solid</li></ul>	24 ... 14	
<ul style="list-style-type: none"><li>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></ul>	0 mm 0 mm 0 mm 0 mm 0 mm	
<ul style="list-style-type: none"><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></ul>	0 mm 0 mm 0 mm 0 mm 0 mm	
<ul style="list-style-type: none"><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	
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</li></ul>	-25 ... +55 °C	
<ul style="list-style-type: none"><li>during storage</li></ul>	-40 ... +70 °C	
<ul style="list-style-type: none"><li>during transport</li></ul>	-40 ... +70 °C	
relative humidity during operation	15 ... 85 %	
Certificates/ approvals		
General Product Approval	EMC	Declaration of Conformity



[Miscellaneous](#)



**Test Certificates**      **other**

[Type Test Certificates/Test Report](#)

[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=7PV1518-1AW30>

Cax online generator

<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=7PV1518-1AW30>

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

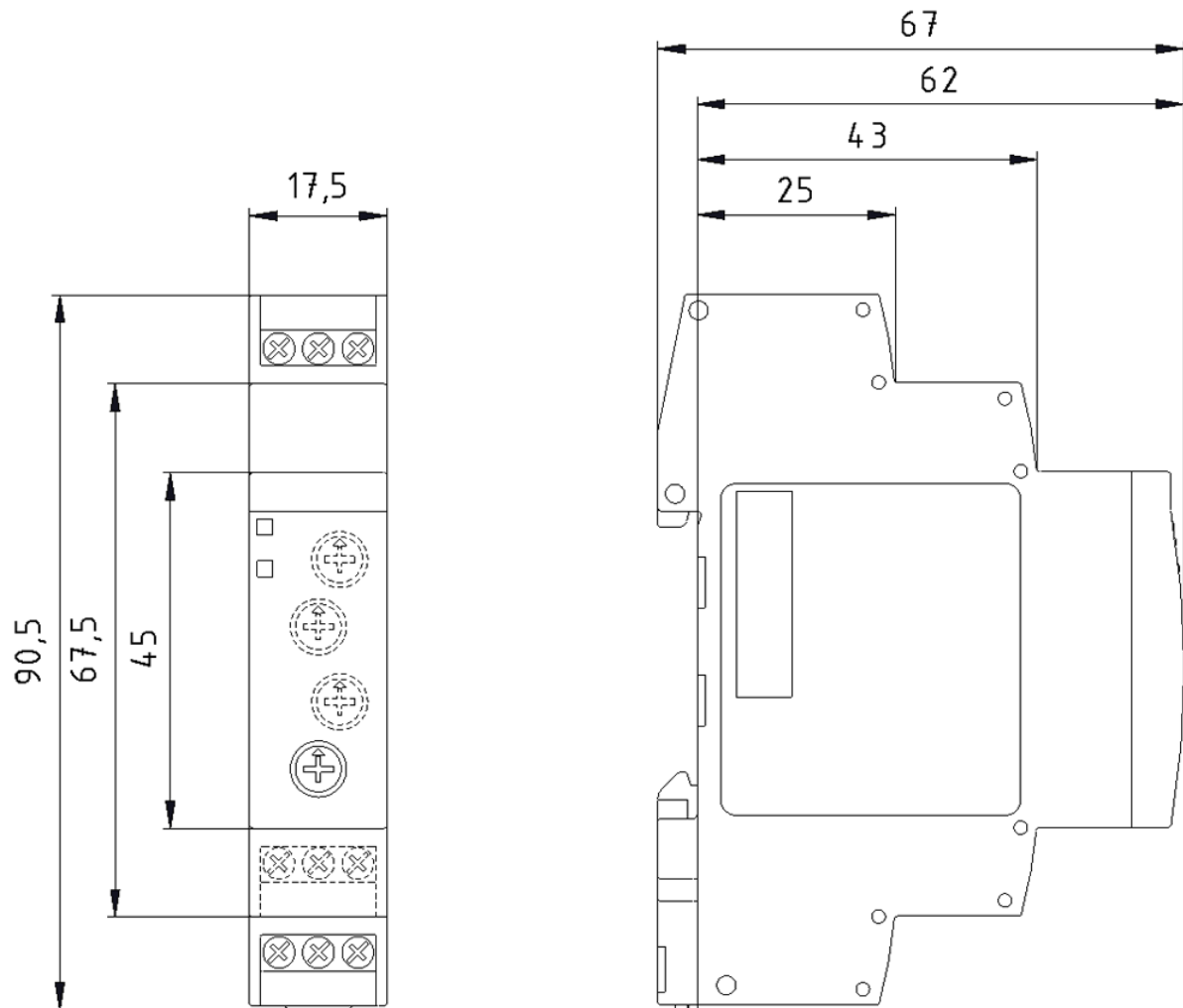
<https://support.industry.siemens.com/cs/ww/en/ps/7PV1518-1AW30>

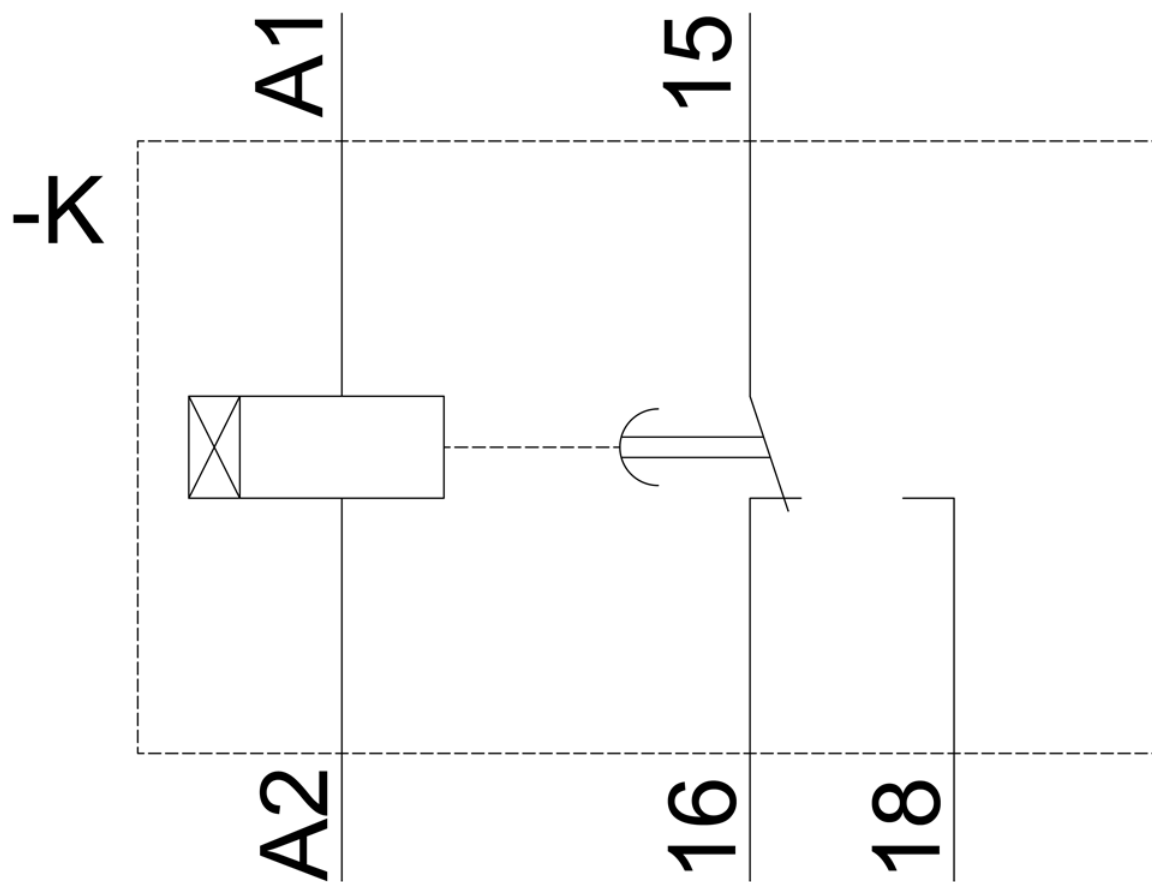
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)

[http://www.automation.siemens.com/bilddb/cax\\_de.aspx?mlfb=7PV1518-1AW30&lang=en](http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=7PV1518-1AW30&lang=en)

Characteristic: Derating

<https://support.industry.siemens.com/cs/ww/en/ps/7PV1518-1AW30/manual>





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