



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

product brand name	SIRIUS
product designation	timing relay
design of the product	slow-operating
product type designation	7PV15
<b>General technical data</b>	
product component semi-conductor output	No
product extension required remote control	No
product extension optional remote control	No
insulation voltage for overvoltage category III according to IEC 60664 with degree of pollution 3 rated value	300 V
test voltage for isolation test	2.2 kV
degree of pollution	2
surge voltage resistance rated value	4 000 V
test voltage for surge voltage test	4 800 V
protection class IP	IP20
shock resistance according to IEC 60068-2-27	11g / 15 ms
mechanical service life (operating cycles) typical	10 000 000
electrical endurance (operating cycles) at AC-15 at 230 V typical	100 000
adjustable time	0.05 s ... 100 h
relative setting accuracy relating to full-scale value	5 %; +/-
minimum ON period	35 ms
recovery time	500 ms
reference code according to IEC 81346-2	K
relative repeat accuracy	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
Substance Prohibitance (Date)	05/01/2012
SVHC substance name	Lead - 7439-92-1 Lead monoxide (lead oxide) - 1317-36-8
<b>Control circuit/ Control</b>	
type of voltage of the control supply voltage	AC/DC
control supply voltage 1 at AC	
• at 50 Hz	12 ... 240 V
• at 60 Hz	12 ... 240 V
control supply voltage frequency 1	50 ... 60 Hz
control supply voltage 1 at DC	
•	12 ... 240 V
operating range factor control supply voltage rated value at DC	
• 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

### Switching Function

<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

### Short-circuit protection

design of the fuse link for short-circuit protection of the auxiliary switch required	fuse gL/gG: 4 A
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### Auxiliary circuit

<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> </ul>	0
<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> </ul>	1

<ul style="list-style-type: none"> <li>instantaneous contact</li> </ul>	0
<b>operational current of auxiliary contacts at AC-15</b>	
<ul style="list-style-type: none"> <li>maximum</li> </ul>	3 A
<ul style="list-style-type: none"> <li>at 24 V</li> </ul>	3 A
<ul style="list-style-type: none"> <li>at 250 V</li> </ul>	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> </ul>	3 A
<ul style="list-style-type: none"> <li>at 250 V</li> </ul>	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> </ul>	3 A
<ul style="list-style-type: none"> <li>at 250 V</li> </ul>	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> </ul>	1 A
<ul style="list-style-type: none"> <li>at 125 V</li> </ul>	0.22 A
<ul style="list-style-type: none"> <li>at 250 V</li> </ul>	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> </ul>	No
<ul style="list-style-type: none"> <li>non-volatile</li> </ul>	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> </ul>	2 kV network connection / 1 kV control connection
<ul style="list-style-type: none"> <li>due to conductor-earth surge according to IEC 61000-4-5</li> </ul>	2 kV
<ul style="list-style-type: none"> <li>due to conductor-conductor surge according to IEC 61000-4-5</li> </ul>	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>	
category according to EN 954-1	none
<b>Electrical Safety</b>	
<b>type of insulation</b>	Basic insulation
<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> </ul>	1x (0.2 ... 2.5 mm <sup>2</sup> )
<ul style="list-style-type: none"> <li>finely stranded with core end processing</li> </ul>	1x (0.25 ... 1.5 mm <sup>2</sup> )
<ul style="list-style-type: none"> <li>finely stranded without core end processing</li> </ul>	1x (0.2 ... 1.5 mm <sup>2</sup> )
<ul style="list-style-type: none"> <li>for AWG cables solid</li> </ul>	1x (24 ... 14)
<ul style="list-style-type: none"> <li>for AWG cables stranded</li> </ul>	1x (24 ... 14)
<b>connectable conductor cross-section</b>	
<ul style="list-style-type: none"> <li>solid</li> </ul>	0.2 ... 2.5 m <sup>2</sup>
<ul style="list-style-type: none"> <li>finely stranded with core end processing</li> </ul>	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 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
<ul style="list-style-type: none"> <li>stranded</li> </ul>	24 ... 14
<b>Installation/ mounting/ dimensions</b>	
<b>mounting position</b>	any
<b>fastening method</b>	snap-on fastening on 35 mm DIN 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 %

**Environmental footprint**

Environmental Product Declaration (EPD)	Yes
Global Warming Potential [CO2 eq] total	22.4 kg
Global Warming Potential [CO2 eq] during manufacturing	1.34 kg
Global Warming Potential [CO2 eq] during operation	21.2 kg
Global Warming Potential [CO2 eq] after end of life	-0.156 kg

**Approvals Certificates**

**General Product Approval**



[Confirmation](#)



<b>EMV</b>	<b>Test Certificates</b>	<b>other</b>	<b>Environment</b>
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[KC](#)

[Type Test Certificates/Test Report](#)

[Confirmation](#)



**Further information**

Information on the packaging

<https://support.industry.siemens.com/cs/ww/en/view/109813875>

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>

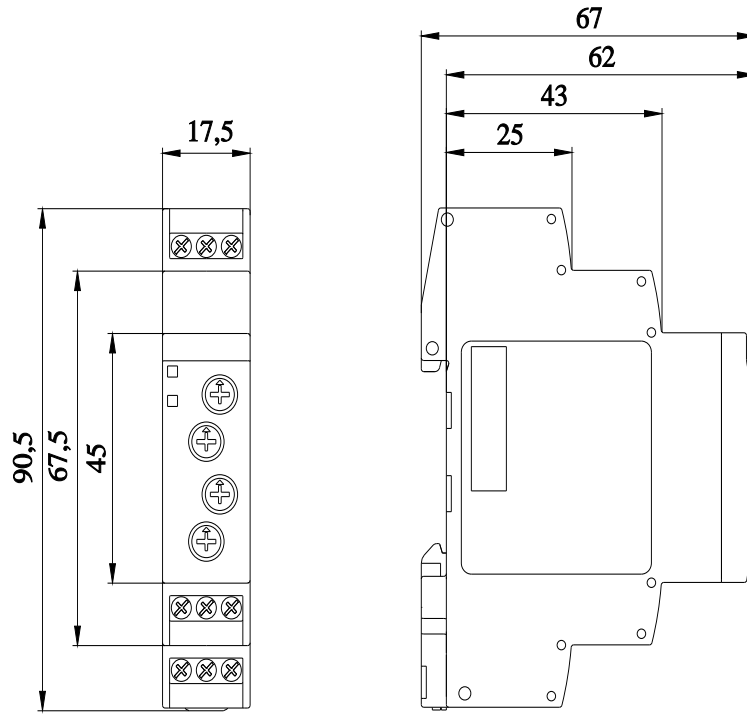
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

<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



Alle Bemessungswerte sind in Millimeter (mm) angegeben  
All dimensions are in millimeters (mm)

