



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

product brand name	SIRIUS
product designation	timing relay
design of the product	Star-delta (wye-delta) function
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
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 (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
Weight	0.081 kg
<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

• full-scale value	1.1
<b>operating range factor control supply voltage rated 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
• instantaneous contact	0
<b>number of CO contacts</b>	
• delayed switching	0

• instantaneous contact	0
<b>operational current of auxiliary contacts at AC-15</b>	
• maximum	3 A
• at 24 V	3 A
• at 250 V	3 A
<b>operational current of auxiliary contacts as NC contact at AC-15</b>	
• at 24 V	3 A
• at 250 V	3 A
<b>operational current of auxiliary contacts as NO contact at AC-15</b>	
• at 24 V	3 A
• at 250 V	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>	
• at 24 V	1 A
• at 125 V	0.22 A
• at 250 V	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>	
• at the relay outputs switchover delayed/without delay	No
• non-volatile	No
<b>Electromagnetic compatibility</b>	
EMC immunity according to IEC 61812-1	EN 61000-6-2
<b>conducted interference</b>	
• due to burst according to IEC 61000-4-4	2 kV network connection / 1 kV control connection
• due to conductor-earth surge according to IEC 61000-4-5	2 kV
• due to conductor-conductor surge according to IEC 61000-4-5	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>protection class IP on the front according to IEC 60529</b>	IP20
<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>	
• solid	1x (0.2 ... 2.5 mm <sup>2</sup> )
• finely stranded with core end processing	1x (0.25 ... 1.5 mm <sup>2</sup> )
• finely stranded without core end processing	1x (0.2 ... 1.5 mm <sup>2</sup> )
• for AWG cables solid	1x (24 ... 14)
• for AWG cables stranded	1x (24 ... 14)
<b>connectable conductor cross-section</b>	
• solid	0.2 ... 2.5 m <sup>2</sup>
• finely stranded with core end processing	0.25 ... 1.5 m <sup>2</sup>
• finely stranded without core end processing	0.2 ... 1.5 m <sup>2</sup>
<b>AWG number as coded connectable conductor cross section</b>	
• solid	24 ... 14
• stranded	24 ... 14
<b>Installation/ mounting/ dimensions</b>	
<b>mounting position</b>	any
<b>fastening method</b>	snap-on fastening on 35 mm DIN rail

height	90 mm
width	17.5 mm
depth	66.7 mm
<b>required spacing</b>	
• with side-by-side mounting	
— forwards	0 mm
— backwards	0 mm
— upwards	0 mm
— downwards	0 mm
— at the side	0 mm
• for grounded parts	
— forwards	0 mm
— backwards	0 mm
— upwards	0 mm
— at the side	0 mm
— downwards	0 mm
• for live parts	
— forwards	0 mm
— backwards	0 mm
— upwards	0 mm
— downwards	0 mm
— at the side	0 mm

<b>Ambient conditions</b>	
installation altitude at height above sea level maximum	2 000 m
<b>ambient temperature</b>	
• during operation	-25 ... +55 °C
• during storage	-40 ... +70 °C
• during transport	-40 ... +70 °C
relative humidity during operation	15 ... 85 %

<b>Environmental footprint</b>	
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

<b>Approvals Certificates</b>	
General Product Approval	EMV



EMV	Test Certificates	other	Environment
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[KC](#)

[Type Test Certificates/Test Report](#)

[Confirmation](#)



[Environmental Confirmations](#)

#### 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=7PV1578-1BW30>

Cax online generator

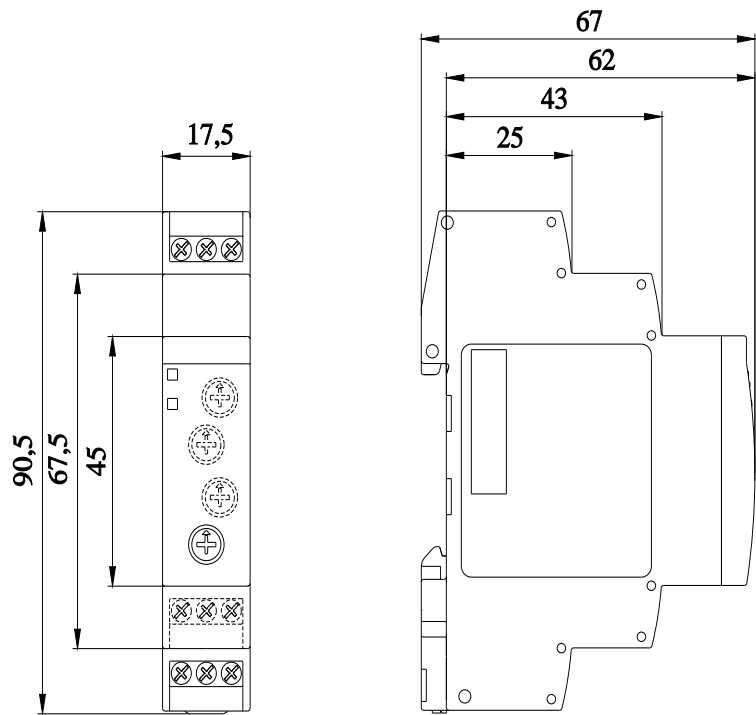
<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=7PV1578-1BW30>

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)



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

