



Timing relay, electronic ON delay 1 change-over contact, 7 time ranges
0.05 s...100 h 110 V AC/DC, 0.7...1.15 x US Screw terminal

product brand name	SIRIUS
product designation	timing relay
design of the product	slow-operating
product type designation	7PV15
General technical data	
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
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
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 Prohibittance (Date)	05/01/2012
Control circuit/ Control	
type of voltage of the control supply voltage	AC/DC
control supply voltage 1 at AC	
• at 50 Hz	90 ... 127 V
• at 60 Hz	90 ... 127 V
control supply voltage frequency 1	50 ... 60 Hz
control supply voltage 1	
• at DC	90 ... 127 V
operating range factor control supply voltage rated value at DC	
• initial value	0.85

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

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

- stranded

24 ... 14

Installation/ mounting/ dimensions

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

Ambient conditions

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

Certificates/ approvals

General Product Approval	EMC	Declaration of Conformity
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[Confirmation](#)



Declaration of Conformity	other
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[Environmental Confirmations](#)

[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=7PV1518-1AJ30>

Cax online generator

<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=7PV1518-1AJ30>

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

<https://support.industry.siemens.com/cs/ww/en/ps/7PV1518-1AJ30>

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

http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=7PV1518-1AJ30&lang=en

Characteristic: Derating

<https://support.industry.siemens.com/cs/ww/en/ps/7PV1518-1AJ30/manual>

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