## **SIEMENS**

Data sheet 3RP1505-1AW30



Timing relay, Multifunction Phased-out product !!! For further information, please contact our sales department 1 change-over contact, 8 functions 15 time ranges (0.05 s-100 h) 24...240 V AC/DC at 50/60 Hz AC with LED, Screw terminal

product brand name	SIRIUS
product designation	timing relay
product type designation	3RP15
General technical data	
product component	
• relay output	Yes
semi-conductor output	No
product extension required remote control	No
product extension optional remote control	No
power loss [W] maximum	2 W
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 kV
degree of pollution	3
surge voltage resistance rated value	4 000 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 %
thermal current	5 A
minimum ON period	35 ms
recovery time	150 ms
reference code according to IEC 81346-2	K
relative repeat accuracy	1 %
influence of the surrounding temperature	±5 %
power supply influence	±1 %
Substance Prohibitance (Date)	05/28/2009
SVHC substance name	Lead monoxide (lead oxide) - 1317-36-8 Lead titanium zirconium oxide - 12626-81-2
Control circuit/ Control	
type of voltage of the control supply voltage	AC/DC
control supply voltage 1 at AC	
• at 50 Hz	24 240 V
• at 60 Hz	24 240 V
control supply voltage frequency 1	50 60 Hz
control supply voltage 1 at DC	
•	24 240 V
operating range factor control supply voltage rated value at	

DC	0.7
• initial value	0.7
• full-scale value	1.1
operating range factor control supply voltage rated value at AC at 50 Hz	
• initial value	0.8
full-scale value	1.1
operating range factor control supply voltage rated value at AC at 60 Hz	
initial value	0.8
full-scale value	1.1
Switching Function	
switching function	
<ul><li>ON-delay</li></ul>	Yes
<ul> <li>ON-delay/instantaneous contact</li> </ul>	No
<ul> <li>passing make contact</li> </ul>	Yes
<ul> <li>passing make contact/instantaneous contact</li> </ul>	No
OFF delay	No
switching function	
<ul> <li>flashing symmetrically with interval start/instantaneous</li> </ul>	No
<ul> <li>flashing symmetrically with interval start</li> </ul>	Yes
<ul> <li>flashing symmetrically with pulse start/instantaneous</li> </ul>	No
<ul> <li>flashing symmetrically with pulse start</li> </ul>	No
<ul> <li>flashing asymmetrically with interval start</li> </ul>	No
flashing asymmetrically with pulse start	No
switching function	
star-delta circuit with delay time	No 
star-delta circuit	No
switching function with control signal	
additive ON-delay	Yes
passing break contact	Yes
passing break contact/instantaneous	No
OFF delay	Yes
OFF delay/instantaneous	No
pulse delayed	No
pulse delayed/instantaneous	No
<ul><li>pulse-shaping</li><li>pulse-shaping/instantaneous</li></ul>	Yes No
	No
<ul><li>additive ON-delay/instantaneous</li><li>ON-delay/OFF-delay/instantaneous</li></ul>	No
passing make contact	No
passing make contact/instantaneous contact	No
switching function of interval relay with control signal	INO
retrotriggerable with deactivated control signal/instantaneous contact	No
retrotriggerable with switched-on control signal	No
retrotriggerable with switched-on control	No
signal/instantaneous contact	
retriggerable with deactivated control signal	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> <li>delayed switching</li> </ul>	0
instantaneous contact	0
number of NO contacts	
deleved evilleties	
<ul> <li>delayed switching</li> </ul>	0
instantaneous contact  number of CO contacts	0 0

delayed switching	1
instantaneous contact	0
operational current of auxiliary contacts at AC-15	
• at 24 V	3 A
• at 250 V	3 A
operational current of auxiliary contacts at DC-13	
• at 24 V	1 A
• at 125 V	0.2 A
● 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	R300 / B300
Inputs/ Outputs	
product function	
• non-volatile	No
Electromagnetic compatibility	
EMC emitted interference according to IEC 61812-1	EN 61000-6-4(3)
EMC immunity according to IEC 61812-1	EN 61000-6-2
conducted interference	
<ul> <li>due to burst according to IEC 61000-4-4</li> </ul>	2 kV network connection / 1 kV control connection
• due to conductor-earth surge according to IEC 61000-4-5	2 kV
<ul> <li>due to conductor-conductor surge according to IEC 61000-4-5</li> </ul>	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	
category according to EN 954-1	none
Electrical Safety	
protection class IP on the front according to IEC 60529	IP20
type of insulation	Basic insulation
Connections/ Terminals	
Connections/ Terminals  product component removable terminal for auxiliary and control circuit	Yes
product component removable terminal for auxiliary and	Yes screw-type terminals
product component removable terminal for auxiliary and control circuit	
product component removable terminal for auxiliary and control circuit  type of electrical connection for auxiliary and control circuit  type of connectable conductor cross-sections  • solid	screw-type terminals  1x (0.5 4.0 mm²), 2x (0.5 2.5 mm²)
product component removable terminal for auxiliary and control circuit  type of electrical connection for auxiliary and control circuit  type of connectable conductor cross-sections  • solid  • finely stranded with core end processing	screw-type terminals  1x (0.5 4.0 mm²), 2x (0.5 2.5 mm²)  1x (0.5 2.5 mm²), 2x (0.5 1.5 mm²)
product component removable terminal for auxiliary and control circuit  type of electrical connection for auxiliary and control circuit  type of connectable conductor cross-sections  • solid  • finely stranded with core end processing  • for AWG cables solid	screw-type terminals  1x (0.5 4.0 mm²), 2x (0.5 2.5 mm²)  1x (0.5 2.5 mm²), 2x (0.5 1.5 mm²)  2x (20 14)
product component removable terminal for auxiliary and control circuit  type of electrical connection for auxiliary and control circuit  type of connectable conductor cross-sections  • solid  • finely stranded with core end processing  • for AWG cables solid  • for AWG cables stranded	screw-type terminals  1x (0.5 4.0 mm²), 2x (0.5 2.5 mm²)  1x (0.5 2.5 mm²), 2x (0.5 1.5 mm²)
product component removable terminal for auxiliary and control circuit  type of electrical connection for auxiliary and control circuit  type of connectable conductor cross-sections	screw-type terminals  1x (0.5 4.0 mm²), 2x (0.5 2.5 mm²)  1x (0.5 2.5 mm²), 2x (0.5 1.5 mm²)  2x (20 14)  2x (20 14)
product component removable terminal for auxiliary and control circuit  type of electrical connection for auxiliary and control circuit  type of connectable conductor cross-sections	screw-type terminals  1x (0.5 4.0 mm²), 2x (0.5 2.5 mm²)  1x (0.5 2.5 mm²), 2x (0.5 1.5 mm²)  2x (20 14)  2x (20 14)  0.5 4 mm²
product component removable terminal for auxiliary and control circuit  type of electrical connection for auxiliary and control circuit  type of connectable conductor cross-sections	screw-type terminals  1x (0.5 4.0 mm²), 2x (0.5 2.5 mm²)  1x (0.5 2.5 mm²), 2x (0.5 1.5 mm²)  2x (20 14)  2x (20 14)
product component removable terminal for auxiliary and control circuit  type of electrical connection for auxiliary and control circuit  type of connectable conductor cross-sections	screw-type terminals  1x (0.5 4.0 mm²), 2x (0.5 2.5 mm²)  1x (0.5 2.5 mm²), 2x (0.5 1.5 mm²)  2x (20 14)  2x (20 14)  0.5 4 mm²
product component removable terminal for auxiliary and control circuit  type of electrical connection for auxiliary and control circuit  type of connectable conductor cross-sections	screw-type terminals  1x (0.5 4.0 mm²), 2x (0.5 2.5 mm²)  1x (0.5 2.5 mm²), 2x (0.5 1.5 mm²)  2x (20 14)  2x (20 14)  0.5 4 mm²
product component removable terminal for auxiliary and control circuit  type of electrical connection for auxiliary and control circuit  type of connectable conductor cross-sections	screw-type terminals  1x (0.5 4.0 mm²), 2x (0.5 2.5 mm²)  1x (0.5 2.5 mm²), 2x (0.5 1.5 mm²)  2x (20 14)  2x (20 14)  0.5 4 mm²  0.5 2.5 mm²
product component removable terminal for auxiliary and control circuit  type of electrical connection for auxiliary and control circuit  type of connectable conductor cross-sections	screw-type terminals  1x (0.5 4.0 mm²), 2x (0.5 2.5 mm²)  1x (0.5 2.5 mm²), 2x (0.5 1.5 mm²)  2x (20 14)  2x (20 14)  0.5 4 mm²  0.5 2.5 mm²
product component removable terminal for auxiliary and control circuit  type of electrical connection for auxiliary and control circuit  type of connectable conductor cross-sections	screw-type terminals  1x (0.5 4.0 mm²), 2x (0.5 2.5 mm²)  1x (0.5 2.5 mm²), 2x (0.5 1.5 mm²)  2x (20 14)  2x (20 14)  0.5 4 mm²  0.5 2.5 mm²
product component removable terminal for auxiliary and control circuit  type of electrical connection for auxiliary and control circuit  type of connectable conductor cross-sections	screw-type terminals  1x (0.5 4.0 mm²), 2x (0.5 2.5 mm²)  1x (0.5 2.5 mm²), 2x (0.5 1.5 mm²)  2x (20 14)  2x (20 14)  0.5 4 mm²  0.5 2.5 mm²  20 14  20 14  20 14
product component removable terminal for auxiliary and control circuit  type of electrical connection for auxiliary and control circuit  type of connectable conductor cross-sections	screw-type terminals  1x (0.5 4.0 mm²), 2x (0.5 2.5 mm²) 1x (0.5 2.5 mm²), 2x (0.5 1.5 mm²) 2x (20 14)  2x (20 14)  0.5 4 mm² 0.5 2.5 mm²  20 14 20 14 0.8 1.2 N·m M3
product component removable terminal for auxiliary and control circuit  type of electrical connection for auxiliary and control circuit  type of connectable conductor cross-sections	screw-type terminals  1x (0.5 4.0 mm²), 2x (0.5 2.5 mm²) 1x (0.5 2.5 mm²), 2x (0.5 1.5 mm²) 2x (20 14) 2x (20 14)  0.5 4 mm² 0.5 2.5 mm²  20 14 20 14 0.8 1.2 N·m M3  any screw and snap-on mounting onto 35 mm DIN rail
product component removable terminal for auxiliary and control circuit  type of electrical connection for auxiliary and control circuit  type of connectable conductor cross-sections	screw-type terminals  1x (0.5 4.0 mm²), 2x (0.5 2.5 mm²) 1x (0.5 2.5 mm²), 2x (0.5 1.5 mm²) 2x (20 14) 2x (20 14)  0.5 4 mm² 0.5 2.5 mm²  20 14 20 14 20 14 0.8 1.2 N·m M3  any screw and snap-on mounting onto 35 mm DIN rail 102 mm
product component removable terminal for auxiliary and control circuit  type of electrical connection for auxiliary and control circuit  type of connectable conductor cross-sections	screw-type terminals  1x (0.5 4.0 mm²), 2x (0.5 2.5 mm²) 1x (0.5 2.5 mm²), 2x (0.5 1.5 mm²) 2x (20 14) 2x (20 14)  0.5 4 mm² 0.5 2.5 mm²  20 14 20 14 20 14 0.8 1.2 N·m M3  any screw and snap-on mounting onto 35 mm DIN rail 102 mm 22.5 mm
product component removable terminal for auxiliary and control circuit  type of electrical connection for auxiliary and control circuit  type of connectable conductor cross-sections	screw-type terminals  1x (0.5 4.0 mm²), 2x (0.5 2.5 mm²) 1x (0.5 2.5 mm²), 2x (0.5 1.5 mm²) 2x (20 14) 2x (20 14)  0.5 4 mm² 0.5 2.5 mm²  20 14 20 14 20 14 0.8 1.2 N·m M3  any screw and snap-on mounting onto 35 mm DIN rail 102 mm
product component removable terminal for auxiliary and control circuit  type of electrical connection for auxiliary and control circuit  type of connectable conductor cross-sections	screw-type terminals  1x (0.5 4.0 mm²), 2x (0.5 2.5 mm²) 1x (0.5 2.5 mm²), 2x (0.5 1.5 mm²) 2x (20 14) 2x (20 14)  0.5 4 mm² 0.5 2.5 mm²  20 14 20 14 20 14 0.8 1.2 N·m M3  any screw and snap-on mounting onto 35 mm DIN rail 102 mm 22.5 mm
product component removable terminal for auxiliary and control circuit  type of electrical connection for auxiliary and control circuit  type of connectable conductor cross-sections	screw-type terminals  1x (0.5 4.0 mm²), 2x (0.5 2.5 mm²) 1x (0.5 2.5 mm²), 2x (0.5 1.5 mm²) 2x (20 14) 2x (20 14)  0.5 4 mm² 0.5 2.5 mm²  20 14 20 14 3 1.2 N·m M3  any screw and snap-on mounting onto 35 mm DIN rail 102 mm 22.5 mm 91 mm
product component removable terminal for auxiliary and control circuit  type of electrical connection for auxiliary and control circuit  type of connectable conductor cross-sections	screw-type terminals  1x (0.5 4.0 mm²), 2x (0.5 2.5 mm²)  1x (0.5 2.5 mm²), 2x (0.5 1.5 mm²)  2x (20 14)  2x (20 14)  0.5 4 mm²  0.5 2.5 mm²  20 14  20 14  0.8 1.2 N·m  M3  any  screw and snap-on mounting onto 35 mm DIN rail  102 mm  22.5 mm  91 mm
product component removable terminal for auxiliary and control circuit  type of electrical connection for auxiliary and control circuit  type of connectable conductor cross-sections	screw-type terminals  1x (0.5 4.0 mm²), 2x (0.5 2.5 mm²)  1x (0.5 2.5 mm²), 2x (0.5 1.5 mm²)  2x (20 14)  2x (20 14)  0.5 4 mm²  0.5 2.5 mm²  20 14  20 14  0.8 1.2 N·m  M3  any  screw and snap-on mounting onto 35 mm DIN rail  102 mm  22.5 mm  91 mm  0 mm  0 mm
product component removable terminal for auxiliary and control circuit  type of electrical connection for auxiliary and control circuit  type of connectable conductor cross-sections	screw-type terminals  1x (0.5 4.0 mm²), 2x (0.5 2.5 mm²) 1x (0.5 2.5 mm²), 2x (0.5 1.5 mm²) 2x (20 14) 2x (20 14)  0.5 4 mm² 0.5 2.5 mm²  20 14 20 14 20 14 0.8 1.2 N·m M3  any screw and snap-on mounting onto 35 mm DIN rail 102 mm 22.5 mm 91 mm  0 mm 0 mm 0 mm
product component removable terminal for auxiliary and control circuit  type of electrical connection for auxiliary and control circuit  type of connectable conductor cross-sections	screw-type terminals  1x (0.5 4.0 mm²), 2x (0.5 2.5 mm²)  1x (0.5 2.5 mm²), 2x (0.5 1.5 mm²)  2x (20 14)  2x (20 14)  0.5 4 mm²  0.5 2.5 mm²  20 14  20 14  0.8 1.2 N·m  M3  any  screw and snap-on mounting onto 35 mm DIN rail  102 mm  22.5 mm  91 mm  0 mm  0 mm

<ul> <li>for grounded parts</li> </ul>		
— forwards	0 mm	
— backwards	0 mm	
— upwards	0 mm	
— at the side	0 mm	
— downwards	0 mm	
<ul> <li>for live parts</li> </ul>		
— 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> <li>during operation</li> </ul>	-25 +60 °C	
<ul> <li>during storage</li> </ul>	-40 +85 °C	
during transport	-40 +85 °C	
relative humidity during operation	10 95 %	
Approvals Certificates		

## **General Product Approval**







Confirmation





EMV **Test Certificates** Marine / Shipping



<u>KC</u>

Type Test Certificates/Test Report

<u>ate</u>



**firmations** 





other Railway Environment **Miscellaneous** Confirmation **Special Test Certific-Environmental Con-**

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=3RP1505-1AW30

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RP1505-1AW30

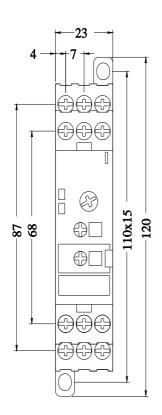
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

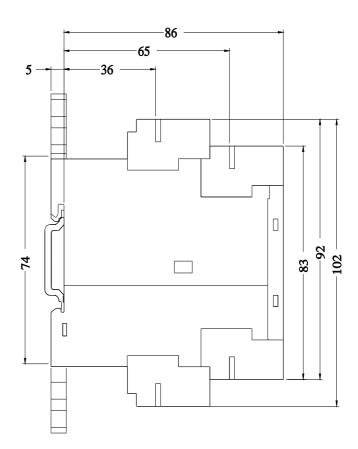
https://support.industry.siemens.com/cs/ww/en/ps/3RP1505-1AW30

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) <a href="http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RP1505-1AW30&lang=en">http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RP1505-1AW30&lang=en</a>

**Characteristic: Derating** 

https://support.industry.siemens.com/cs/ww/en/ps/3RP1505-1AW30/manual





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