SIEMENS

Data sheet 3RP1505-1AQ30



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 V, 100-127 V AC and 24 V 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	К
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 rated value	24 V
at 60 Hz rated value	24 V
control supply voltage 2 at AC	
• at 50 Hz	100 127 V
• at 60 Hz	100 127 V
control supply voltage frequency 1	50 60 Hz

control supply voltage 1 at DC	
• rated value	24 V
operating range factor control supply voltage rated value at DC	
• initial value	0.85
• full-scale value	1.1
operating range factor control supply voltage rated value at	
AC at 50 Hz	
• initial value	0.85
• full-scale value	1.1
operating range factor control supply voltage rated value at AC at 60 Hz	
• initial value	0.85
• full-scale value	1.1
Switching Function	
switching function	
ON-delay	Yes
 ON-delay/instantaneous contact 	No
passing make contact	Yes
 passing make contact/instantaneous contact 	No
OFF delay	No
switching function	
• flashing symmetrically with interval start/instantaneous	No
flashing symmetrically with interval start	Yes
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
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
• pulse-shaping	Yes
• pulse-shaping/instantaneous	No
additive ON-delay/instantaneous	No
ON-delay/OFF-delay/instantaneous	No
passing make contact	No
passing make contact/instantaneous contact	No
switching function of interval relay with control signal	
 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
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	/ igonoz
delayed switching	0
instantaneous contact	0
number of NO contacts	

 delayed switching 	0
instantaneous contact	0
number of CO contacts	
 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	
 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
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	
cotogon / cocording to EN 054 4	nono
category according to EN 954-1	none
Electrical Safety	none
	IP20
Electrical Safety	
Electrical Safety protection class IP on the front according to IEC 60529	IP20
Electrical Safety protection class IP on the front according to IEC 60529 type of insulation	IP20
Electrical Safety protection class IP on the front according to IEC 60529 type of insulation Connections/ Terminals product component removable terminal for auxiliary and	IP20 Basic insulation
Electrical Safety protection class IP on the front according to IEC 60529 type of insulation Connections/ Terminals product component removable terminal for auxiliary and control circuit	IP20 Basic insulation Yes
Electrical Safety protection class IP on the front according to IEC 60529 type of insulation Connections/ Terminals product component removable terminal for auxiliary and control circuit type of electrical connection for auxiliary and control circuit	IP20 Basic insulation Yes
Electrical Safety protection class IP on the front according to IEC 60529 type of insulation Connections/ Terminals product component removable terminal for auxiliary and control circuit type of electrical connection for auxiliary and control circuit type of connectable conductor cross-sections	IP20 Basic insulation Yes screw-type terminals
Electrical Safety protection class IP on the front according to IEC 60529 type of insulation Connections/ Terminals 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	IP20 Basic insulation Yes screw-type terminals 1x (0.5 4.0 mm²), 2x (0.5 2.5 mm²)
Electrical Safety protection class IP on the front according to IEC 60529 type of insulation Connections/ Terminals 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	IP20 Basic insulation Yes 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)
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Electrical Safety protection class IP on the front according to IEC 60529 type of insulation Connections/ Terminals product component removable terminal for auxiliary and control circuit type of electrical connection for auxiliary and control circuit type of connectable conductor cross-sections	IP20 Basic insulation Yes 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
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Electrical Safety protection class IP on the front according to IEC 60529 type of insulation Connections/ Terminals 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 connectable conductor cross-section • solid • finely stranded with core end processing AWG number as coded connectable conductor cross section • solid • stranded tightening torque design of the thread of the connection screw Installation/ mounting/ dimensions mounting position fastening method height	IP20 Basic insulation Yes 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
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— 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
Ambient conditions	
installation altitude at height above sea level maximum	2 000 m
ambient temperature	
 during operation 	-25 +60 °C
during storage	-40 +85 °C
during transport	-40 +85 °C
relative humidity during operation	10 95 %
Approvals Cartificates	

Approvals Certificates

General Product Approval





Confirmation







EMV Test Certificates Marine / Shipping



<u>KC</u>

Type Test Certificates/Test Report







other Railway

<u>Confirmation</u> <u>Miscellaneous</u> <u>Special Test Certificate</u>

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=3RP1505-1AQ30

Cax online generator

 $\underline{\text{http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en\&mlfb=3RP1505-1AQ30}$

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

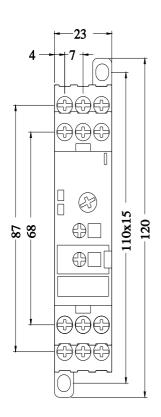
https://support.industry.siemens.com/cs/ww/en/ps/3RP1505-1AQ30

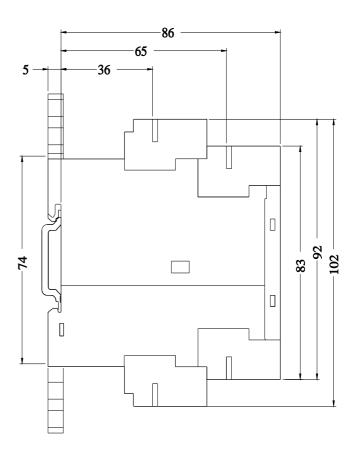
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)

http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RP1505-1AQ30&lang=en

Characteristic: Derating

https://support.industry.siemens.com/cs/ww/en/ps/3RP1505-1AQ30/manual





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