SIEMENS

Data sheet 3RP1505-1BW30



Timing relay, Multifunction Phased-out product !!! For further information, please contact our sales department 2 change-over contacts, 16 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
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	0.05 100 s
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
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	

• 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	
ON-delay	Yes
ON-delay/instantaneous contact	Yes
passing make contact	Yes
passing make contact/instantaneous contact	Yes
OFF delay	No
switching function	
flashing symmetrically with interval start/instantaneous	Yes
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	Yes
switching function with control signal	
additive ON-delay	Yes
passing break contact	Yes
passing break contact/instantaneous	Yes
OFF delay	Yes
OFF delay/instantaneous	Yes
• pulse delayed	No
• pulse delayed/instantaneous	No
• pulse-shaping	Yes
pulse-shaping/instantaneous	Yes
 additive ON-delay/instantaneous 	Yes
 ON-delay/OFF-delay/instantaneous 	Yes
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	
delayed switching	0
• instantaneous contact	0
number of NO contacts	
delayed switching	0
• instantaneous contact	0
number of CO contacts	
delayed switching	2

 instantaneous contact 	0
operational current of auxiliary contacts at AC-15	U
at 24 V	2 ^
**= : :	3 A
• at 250 V	3 A
operational current of auxiliary contacts at DC-13	
• at 24 V	1A
• 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	1 kV
61000-4-5	
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	
protection class IP on the front according to IEC 60529	IP20
type of insulation	Basic insulation
category according to EN 954-1	none
Connections/ Terminals	
product component removable terminal for auxiliary and control circuit	Yes
type of electrical connection for auxiliary and control circuit	screw-type terminals
type of connectable conductor cross-sections	
• solid	1x (0.5 4.0 mm²), 2x (0.5 2.5 mm²)
solidfinely stranded with core end processing	
	1x (0.5 2.5 mm²), 2x (0.5 1.5 mm²)
• finely stranded with core end processing	1x (0.5 2.5 mm²), 2x (0.5 1.5 mm²) 2x (20 14)
finely stranded with core end processingfor AWG cables solid	1x (0.5 2.5 mm²), 2x (0.5 1.5 mm²)
 finely stranded with core end processing for AWG cables solid for AWG cables stranded 	1x (0.5 2.5 mm²), 2x (0.5 1.5 mm²) 2x (20 14)
finely stranded with core end processing for AWG cables solid for AWG cables stranded connectable conductor cross-section solid	1x (0.5 2.5 mm²), 2x (0.5 1.5 mm²) 2x (20 14) 2x (20 14)
 finely stranded with core end processing for AWG cables solid for AWG cables stranded connectable conductor cross-section	1x (0.5 2.5 mm²), 2x (0.5 1.5 mm²) 2x (20 14) 2x (20 14) 0.5 4 mm²
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	1x (0.5 2.5 mm²), 2x (0.5 1.5 mm²) 2x (20 14) 2x (20 14) 0.5 4 mm²
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	1x (0.5 2.5 mm²), 2x (0.5 1.5 mm²) 2x (20 14) 2x (20 14) 0.5 4 mm²
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	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
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	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
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 solid stranded	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
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	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
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	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
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	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
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	1x (0.5 2.5 mm²), 2x (0.5 1.5 mm²) 2x (20 14) 0.5 4 mm² 0.5 2.5 mm² 20 14 20 14 0.8 1.2 N·m M3
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	1x (0.5 2.5 mm²), 2x (0.5 1.5 mm²) 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
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	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
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 width	1x (0.5 2.5 mm²), 2x (0.5 1.5 mm²) 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
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 width depth	1x (0.5 2.5 mm²), 2x (0.5 1.5 mm²) 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
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 width depth required spacing	1x (0.5 2.5 mm²), 2x (0.5 1.5 mm²) 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
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 istranded tightening torque design of the thread of the connection screw Installation/ mounting/ dimensions mounting position fastening method height width depth required spacing with side-by-side mounting	1x (0.5 2.5 mm²), 2x (0.5 1.5 mm²) 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
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 width depth required spacing with side-by-side mounting — forwards	1x (0.5 2.5 mm²), 2x (0.5 1.5 mm²) 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
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 width depth required spacing with side-by-side mounting — forwards — backwards	1x (0.5 2.5 mm²), 2x (0.5 1.5 mm²) 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
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 width depth required spacing with side-by-side mounting — forwards — backwards — upwards	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 0 mm
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 width depth required spacing with side-by-side mounting — forwards — backwards — upwards — downwards	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 0 mm 0 mm

— backwards	0 mm			
— upwards	0 mm			
— at the side	0 mm			
— downwards	0 mm			
for live parts	0.11111			
— forwards	0 mm			
— backwards	0 mm			
	0 mm			
— upwards				
— 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 %			
Certificates/ approvals				
General Product Approval		EMC		





Confirmation







Declaration of Conformity

Test Certificates

Marine / Shipping





Type Test Certificates/Test Report







Marine / Shipping

other

Railway





Miscellaneous

Confirmation

Special Test Certificate

Further information

Siemens has decided to exit the Russian market (see here).

 $\underline{\text{https://press.siemens.com/global/en/pressrelease/siemens-wind-down-russian-business}}$

Siemens is working on the renewal of the current EAC certificates.

Please contact your local Siemens office on the status of validity of the EAC certification if you intend to import or offer to supply these products to an EAC relevant market (other than the sanctioned EAEU member states Russia or Belarus).

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=3RP1505-1BW30

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RP1505-1BW30

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

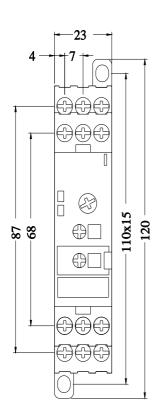
https://support.industry.siemens.com/cs/ww/en/ps/3RP1505-1BW30

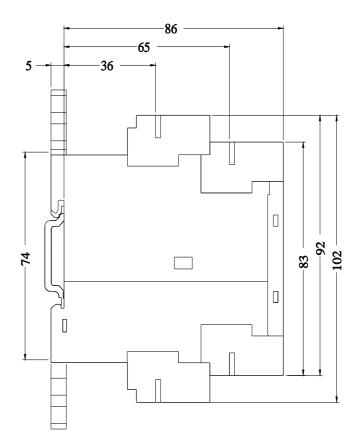
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)

http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RP1505-1BW30&lang=en

Characteristic: Derating

https://support.industry.siemens.com/cs/ww/en/ps/3RP1505-1BW30/manual





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