

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 AC/DC and 200-240 V AC 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
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	
• acc. to IEC 60068-2-27	11g / 15 ms

Vibration resistance	
<ul style="list-style-type: none"> • acc. to IEC 60068-2-6 	10 ... 55 Hz / 0.35 mm
Mechanical service life (switching cycles)	
<ul style="list-style-type: none"> • typical 	10 000 000
Electrical endurance (switching cycles)	
<ul style="list-style-type: none"> • 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 acc. to DIN EN 81346-2	K
Relative repeat accuracy	1 %

Control circuit/ Control

Type of voltage of the control supply voltage	AC/DC
Control supply voltage 1 at AC	
<ul style="list-style-type: none"> • at 50 Hz rated value 	24 V
<ul style="list-style-type: none"> • at 60 Hz rated value 	24 V
Control supply voltage 2 at AC	
<ul style="list-style-type: none"> • at 50 Hz 	200 ... 240 V
<ul style="list-style-type: none"> • at 60 Hz 	200 ... 240 V
Control supply voltage frequency 1	50 ... 60 Hz
Control supply voltage 1	
<ul style="list-style-type: none"> • at DC rated value 	24 V
Operating range factor control supply voltage rated value at DC	
<ul style="list-style-type: none"> • 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 	0.85
<ul style="list-style-type: none"> • Full-scale value 	1.1
Operating range factor control supply voltage rated value at AC at 60 Hz	
<ul style="list-style-type: none"> • initial value 	0.85
<ul style="list-style-type: none"> • Full-scale value 	1.1

Switching Function

Switching function	
<ul style="list-style-type: none"> • ON-delay 	Yes
<ul style="list-style-type: none"> • ON-delay/instantaneous contact 	No
<ul style="list-style-type: none"> • passing make contact 	Yes
<ul style="list-style-type: none"> • passing make contact/instantaneous contact 	No

• OFF delay	No
Switching function	
• flashing symmetrically starting with interval/instantaneous	No
• flashing symmetrically starting with interval	Yes
• flashing symmetrically starting with pulse/instantaneous	No
• flashing symmetrically starting with pulse	No
• flashing asymmetrically starting with interval	No
• flashing asymmetrically starting with pulse	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 activated control signal	No
• retrotriggerable with activated 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	

<ul style="list-style-type: none"> • delayed switching 	0
Number of NO contacts	
<ul style="list-style-type: none"> • delayed switching 	0
Number of CO contacts	
<ul style="list-style-type: none"> • delayed switching 	1
Operating current of auxiliary contacts 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
Operating 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 	0.2 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	R300 / B300
Influence of the surrounding temperature	±5 %
Power supply influence	±1 %

Inputs/ Outputs

Product function	
<ul style="list-style-type: none"> • non-volatile 	No

Electromagnetic compatibility

EMI immunity	
<ul style="list-style-type: none"> • acc. to IEC 61812-1 	EN 61000-6-2
Conducted interference	
<ul style="list-style-type: none"> • due to burst acc. to IEC 61000-4-4 	2 kV network connection / 1 kV control connection
<ul style="list-style-type: none"> • due to conductor-earth surge acc. to IEC 61000-4-5 	2 kV
<ul style="list-style-type: none"> • due to conductor-conductor surge acc. to IEC 61000-4-5 	1 kV
Field-bound parasitic coupling acc. to IEC 61000-4-3	10 V/m
Electrostatic discharge acc. to IEC 61000-4-2	4 kV contact discharge / 8 kV air discharge

Safety related data

Protection against electrical shock	finger-safe
Type of insulation	Basic insulation
Category acc. to EN 954-1	none

Connections/ Terminals

Product function	
<ul style="list-style-type: none"> • removable terminal for auxiliary and control circuit 	Yes
Type of electrical connection	

• for auxiliary and control current circuit	screw-type terminals
Type of connectable conductor cross-sections	
• solid	1x (0.5 ... 4.0 mm ²), 2x (0.5 ... 2.5 mm ²)
• finely stranded with core end processing	1x (0.5 ... 2.5 mm ²), 2x (0.5 ... 1.5 mm ²)
• at AWG conductors solid	2x (20 ... 14)
• at AWG conductors stranded	2x (20 ... 14)
Connectable conductor cross-section	
• solid	0.5 ... 4 mm ²
• finely stranded with core end processing	0.5 ... 2.5 mm ²
AWG number as coded connectable conductor cross section	
• solid	20 ... 14
• stranded	20 ... 14
Tightening torque	0.8 ... 1.2 N·m
Design of the thread of the connection screw	M3

Installation/ mounting/ dimensions	
Mounting position	any
Mounting type	screw and snap-on mounting onto 35 mm standard mounting rail
Height	102 mm
Width	22.5 mm
Depth	91 mm
Required spacing	
• 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

Ambient conditions

Installation altitude at height above sea level	
<ul style="list-style-type: none"> • maximum 	2 000 m
Ambient temperature	
<ul style="list-style-type: none"> • during operation • during storage • during transport 	-25 ... +60 °C -40 ... +85 °C -40 ... +85 °C
Relative humidity	
<ul style="list-style-type: none"> • during operation 	10 ... 95 %

Certificates/ approvals

General Product Approval	EMC	Declaration of Conformity
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Declaration of Conformity	Test Certificates	Marine / Shipping
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[Miscellaneous](#)

[Type Test Certificates/Test Report](#)



Marine / Shipping	other	Railway
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[Confirmation](#)

[Miscellaneous](#)

[Special Test Certificate](#)

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=3RP1505-1AP30>

Cax online generator

<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RP1505-1AP30>

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

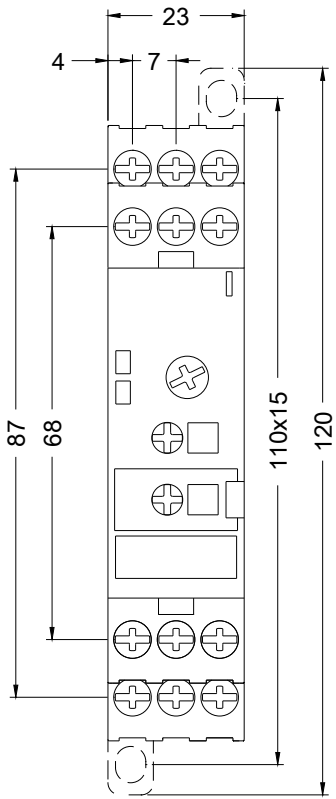
<https://support.industry.siemens.com/cs/ww/en/ps/3RP1505-1AP30>

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

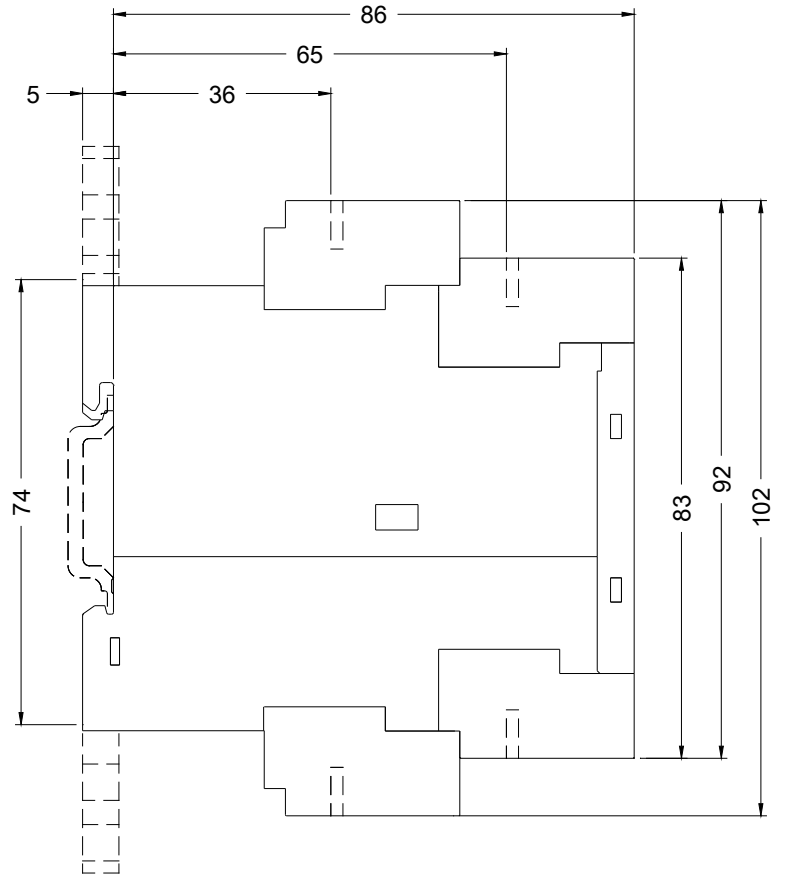
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RP1505-1AP30&lang=en

Characteristic: Derating

<https://support.industry.siemens.com/cs/ww/en/ps/3RP1505-1AP30/manual>



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