

TIME RELAY, MULTI-FUNCTION, 2 CO CONTACTS, 27 FUNCTIONS, 7 TIME SET. RANGES, (1, 10, 100)s 10MIN; (1,10,100) HR 24V AC/DC AT AC 50/60HZ, LED, SCREW TERMINAL



Figure similar

General technical data:		
product brandname		SIRIUS
Product designation		timing relay
Design of the product		27 functions
Mounting position		any
Product function at the relay outputs Switchover delayed/without delay		Yes
Product function non-volatile		No
Product component		
• Relay output		Yes
• semi-conductor output		No
Installation altitude at height above sea level maximum	m	2 000
Ambient temperature		
• during operation	°C	-25 ... +60
• during storage	°C	-40 ... +85
• during transport	°C	-40 ... +85
Relative humidity during operation	%	10 ... 95

EMC emitted interference acc. to IEC 61812-1		EN 61000-6-4(3)
EMI immunity acc. to IEC 61812-1		EN 61000-6-2
Conducted interference due to burst acc. to IEC 61000-4-4		2 kV network connection / 1 kV control connection
Conducted interference due to conductor-earth surge acc. to IEC 61000-4-5		2 kV
Conducted interference due to conductor-conductor surge acc. to IEC 61000-4-5		1 kV
Electrostatic discharge acc. to IEC 61000-4-2		4 kV contact discharge / 8 kV air discharge
Field-bound parasitic coupling acc. to IEC 61000-4-3		10 V/m
Surge voltage resistance rated value	V	4 000
Power loss [W] total typical	W	2
Equipment marking		
<ul style="list-style-type: none"> <li>• acc. to DIN 40719 extended according to IEC 204-2 acc. to IEC 750</li> </ul>		K
<ul style="list-style-type: none"> <li>• acc. to DIN EN 61346-2</li> </ul>		K
<ul style="list-style-type: none"> <li>• acc. to DIN EN 81346-2</li> </ul>		K
Category acc. to EN 954-1		none
Protection against electrical shock		finger-safe
Protection class IP		IP20
Type of insulation		Basic insulation
Mechanical service life (switching cycles) typical		10 000 000
Electrical endurance (switching cycles) at AC-15 at 230 V typical		100 000
Operating frequency with 3RT2 contactor maximum	1/h	5 000
Vibration resistance acc. to IEC 60068-2-6		10 ... 55 Hz / 0.35 mm
Shock resistance acc. to IEC 60068-2-27		11g / 15 ms
Relative repeat accuracy	%	1
Recovery time	ms	150
Minimum ON period	ms	35
Degree of pollution		3
Insulation voltage for overvoltage category III according to IEC 60664 with degree of pollution 3 rated value	V	300
Relative setting accuracy relating to full-scale value	%	5
Product extension required remote control		No
Product extension optional remote control		No

#### Switching Function:

##### Switching function

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

• flashing asymmetrically starting with interval		No
• flashing asymmetrically starting with pulse		No
• flashing symmetrically starting with pulse		Yes
• flashing symmetrically starting with pulse/instantaneous		Yes
• flashing symmetrically starting with interval		Yes
• flashing symmetrically starting with interval/instantaneous		Yes
• star-delta circuit		Yes
• star-delta circuit with delay time		No
<b>Switching function with control signal</b>		
• additive ON delay		Yes
• passing break contact		Yes
• OFF delay		Yes
• pulse-shaping		Yes
• OFF delay/instantaneous		Yes
• ON-delay/OFF-delay/instantaneous		Yes
• passing break contact/instantaneous		Yes
• additive ON delay/instantaneous		Yes
• ON-delay/OFF-delay		Yes
• passing make contact		Yes
• passing make contact/instantaneous contact		Yes
• pulse delayed		Yes
• pulse delayed/instantaneous		Yes
• pulse-shaping/instantaneous		Yes
<b>Switching function of interval relay with control signal</b>		
• retrotriggerable with deactivated control signal/instantaneous contact		Yes
• retrotriggerable with activated control signal		Yes
• retrotriggerable with activated control signal/instantaneous contact		Yes
• retriggerable with deactivated control signal		Yes
<b>Design of the control terminal non-floating</b>		Yes

#### Control circuit/ Control:

<b>Adjustable time</b>	s	0.05 ... 360 000
<b>Type of voltage of the control supply voltage</b>		AC/DC
<b>Control supply voltage frequency 1</b>	Hz	50 ... 60
<b>Control supply voltage 1</b>		
• at AC at 50 Hz rated value	V	24
• at AC at 60 Hz rated value	V	24
• at DC rated value	V	24

<b>Operating range factor control supply voltage rated value</b>		
<ul style="list-style-type: none"> <li>• at AC <ul style="list-style-type: none"> <li>— at 50 Hz</li> <li>— at 60 Hz</li> </ul> </li> <li>• at DC</li> </ul>		0.85 ... 1.1 0.85 ... 1.1 0.85 ... 1.1
<b>Inrush current peak</b>	A	2
<ul style="list-style-type: none"> <li>• at 24 V</li> </ul>		
<b>Duration of inrush current peak</b>	ms	1
<ul style="list-style-type: none"> <li>• at 24 V</li> </ul>		
<b>Power loss [W] at AC maximum</b>	W	0.73
<b>Power loss [V·A] at AC maximum</b>	V·A	0.73

#### Auxiliary circuit:

<b>Contact reliability of auxiliary contacts</b>		one incorrect switching operation of 100 million switching operations (17 V, 5 mA)
<b>Material of switching contacts</b>		AgSnO2
<b>Operating current of auxiliary contacts</b>		
<ul style="list-style-type: none"> <li>• at AC-15 <ul style="list-style-type: none"> <li>— at 24 V</li> <li>— at 250 V</li> </ul> </li> <li>• at DC-13 <ul style="list-style-type: none"> <li>— at 24 V</li> <li>— at 125 V</li> <li>— at 250 V</li> </ul> </li> </ul>	A A A A A	3 3 1 0.2 0.1
<b>Influence of the surrounding temperature</b>		1% in the whole temperature range to the set runtime
<b>Power supply influence</b>		1% in the whole voltage range to the set runtime
<b>Test voltage for isolation test</b>	kV	2.5
<b>Design of the fuse link for short-circuit protection of the auxiliary switch required</b>		fuse gL/gG: 4 A
<b>Thermal current</b>	A	5
<b>Switching capacity current with inductive load</b>	A	0.01 ... 3
<b>Number of NC contacts</b>		
<ul style="list-style-type: none"> <li>• delayed switching</li> <li>• instantaneous contact</li> </ul>		0 0
<b>Number of NO contacts</b>		
<ul style="list-style-type: none"> <li>• delayed switching</li> <li>• instantaneous contact</li> </ul>		0 0
<b>Number of CO contacts</b>		
<ul style="list-style-type: none"> <li>• delayed switching</li> <li>• instantaneous contact</li> </ul>		2 0
<b>Contact rating of auxiliary contacts according to UL</b>		R300 / B300

#### Installation/ mounting/ dimensions:





<b>Mounting type</b>		screw and snap-on mounting onto 35 mm standard mounting rail
<b>Width</b>	mm	22.5
<b>Height</b>	mm	100
<b>Depth</b>	mm	90
<b>Required spacing with side-by-side mounting</b>		
• upwards	mm	0
• forwards	mm	0
• at the side	mm	0
• Backwards	mm	0
• downwards	mm	0
<b>Required spacing for grounded parts</b>		
• Backwards	mm	0
• at the side	mm	0
• upwards	mm	0
• forwards	mm	0
• downwards	mm	0
<b>Required spacing for live parts</b>		
• downwards	mm	0
• Backwards	mm	0
• at the side	mm	0
• forwards	mm	0
• upwards	mm	0

**Connections/ Terminals:**

<b>Type of electrical connection for auxiliary and control current circuit</b>		screw-type terminals
<b>Product function removable terminal for auxiliary and control circuit</b>		Yes
<b>Type of connectable conductor cross-sections</b>		
• solid		1x (0.5 ... 4.0 mm <sup>2</sup> ), 2x (0.5 ... 2.5 mm <sup>2</sup> )
• finely stranded — with core end processing		1x (0.5 ... 4 mm <sup>2</sup> ), 2x (0.5 ... 1.5 mm <sup>2</sup> )
• at AWG conductors — stranded		1x (20 ... 12), 2x (20 ... 14)
— solid		1x (20 ... 12), 2x (20 ... 14)
<b>Tightening torque</b>	N·m	0.6 ... 0.8
<b>Design of the thread of the connection screw</b>		M3
<b>Ampacity of the bridge terminals maximum</b>	A	10

**Certificates/approvals**

General Product Approval				Declaration of Conformity	Test Certificates
 CCC	 CSA	 UL		 EG-Konf.	<a href="#">Type Test Certificates/Test Report</a>

Shipping Approval				other	
 LRS	 PRS	 RINA	 RMRS	<a href="#">Environmental Confirmations</a>	<a href="#">Confirmation</a>

### Further information

**Information- and Downloadcenter (Catalogs, Brochures,...)**

<http://www.siemens.com/industrial-controls/catalogs>

**Industry Mall (Online ordering system)**

<https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RP2505-1BB30>

**Cax online generator**

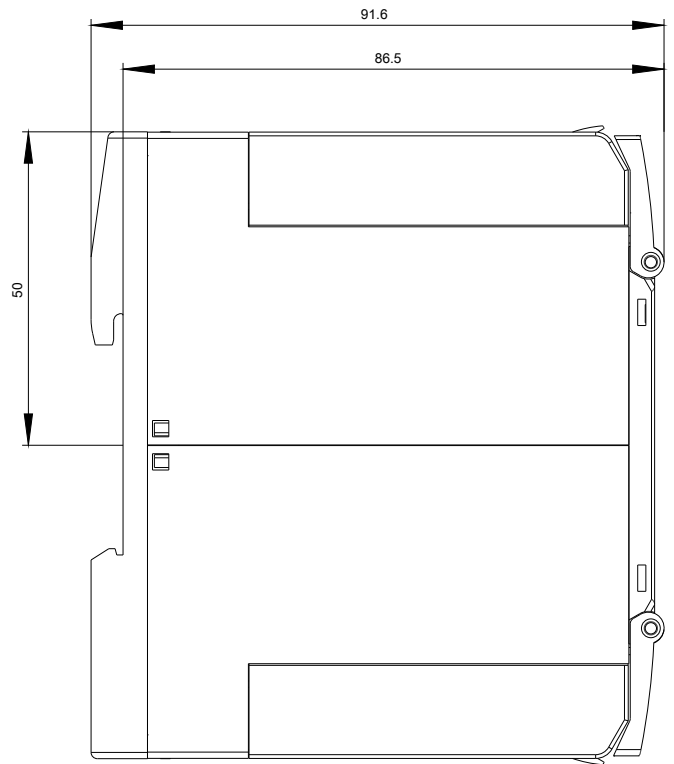
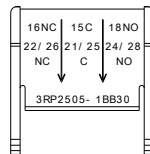
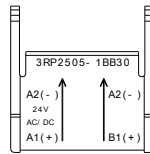
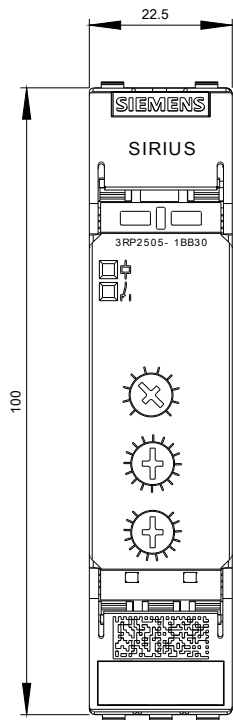
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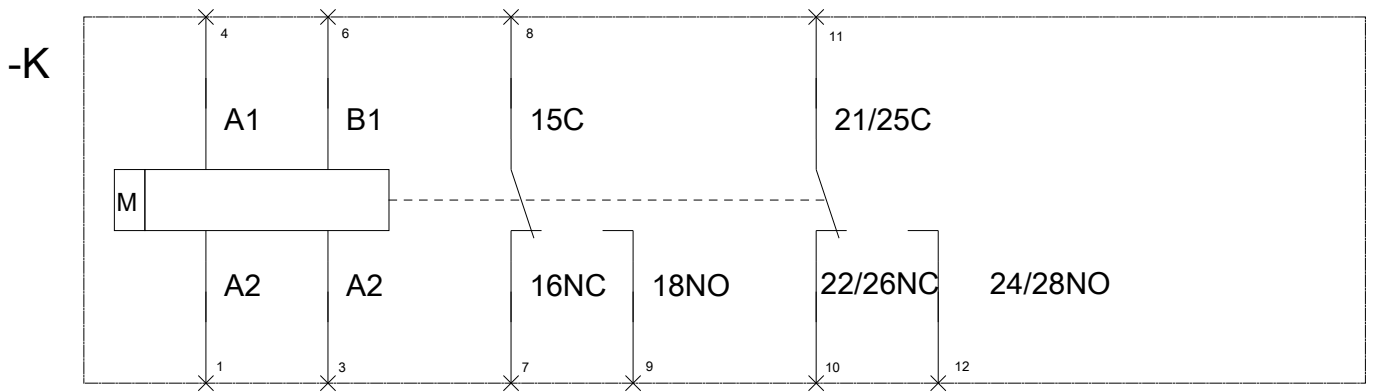
**Service&Support (Manuals, Certificates, Characteristics, FAQs,...)**

<https://support.industry.siemens.com/cs/ww/en/ps/3RP2505-1BB30>

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

[http://www.automation.siemens.com/bilddb/cax\\_de.aspx?mlfb=3RP2505-1BB30&lang=en](http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RP2505-1BB30&lang=en)





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