

TIME RELAY, MULTI-FUNCTION, 1 CO CONT., 13 FUNCTIONS, 7 TIME SET. RANGES, (1, 3, 10, 30, 100), (S/MIN/HR) 24V AC/DC AT 50/60HZ, LED, SPRING-LOADED TERM. (PUSH-IN)



Figure similar

General technical data:		
product brand name		SIRIUS
Product designation		3RP25 timing relays 17.5 mm and 22.5 mm
Design of the product		13 functions
Mounting position		any
Product function at the relay outputs Switchover delayed/without delay		No
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>	No
<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>	No
<ul style="list-style-type: none"> <li>• OFF delay</li> </ul>	Yes

• flashing asymmetrically starting with interval	No
• flashing asymmetrically starting with pulse	No
• flashing symmetrically starting with pulse	Yes
• flashing symmetrically starting with pulse/instantaneous	No
• flashing symmetrically starting with interval	Yes
• flashing symmetrically starting with interval/instantaneous	No
• 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	No
• ON-delay/OFF-delay/instantaneous	No
• passing break contact/instantaneous	No
• additive ON delay/instantaneous	No
• ON-delay/OFF-delay	Yes
• passing make contact	Yes
• passing make contact/instantaneous contact	No
• pulse delayed	Yes
• pulse delayed/instantaneous	No
• pulse-shaping/instantaneous	No
<b>Switching function of interval relay with control signal</b>	
• retrotriggerable with deactivated control signal/instantaneous contact	No
• retrotriggerable with activated control signal	Yes
• retrotriggerable with activated control signal/instantaneous contact	No
• 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>		
<ul style="list-style-type: none"> <li>• at 24 V</li> </ul>	A	2
<b>Duration of inrush current peak</b>		
<ul style="list-style-type: none"> <li>• at 24 V</li> </ul>	ms	1
<b>Power loss [W] at AC maximum</b>	W	0.44
<b>Power loss [V·A] at AC maximum</b>	V·A	0.44

#### 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>		1 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	17.5
<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>		PUSH-IN connection (spring-loaded connection)
<b>Product function removable terminal for auxiliary and control circuit</b>		Yes
<b>Type of connectable conductor cross-sections</b>		
• solid		0.5 ... 4 mm <sup>2</sup>
• finely stranded		
— without core end processing		0.5 ... 4 mm <sup>2</sup>
— with core end processing		0.5 ... 2.5 mm <sup>2</sup>
• at AWG conductors		
— stranded		20 ... 12
— solid		20 ... 12
<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="#">Typprüfbescheinigung/Werkszeugnis</a>

Shipping Approval	other
-------------------	-------



LRS

[Umweltbestätigung](#)

[Bestätigungen](#)

#### 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=3RP2505-2AB30>

**Cax online generator**

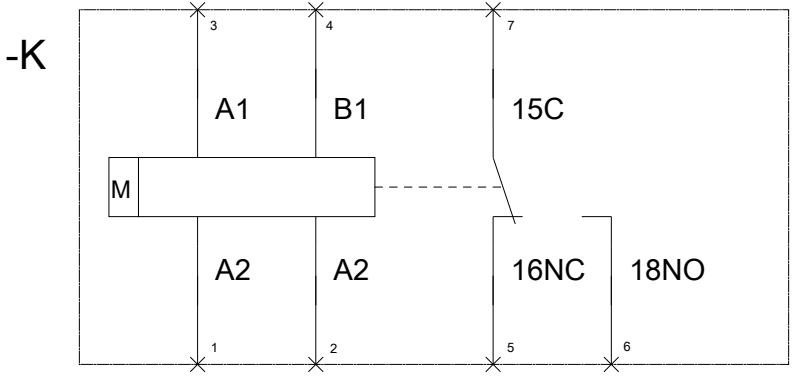
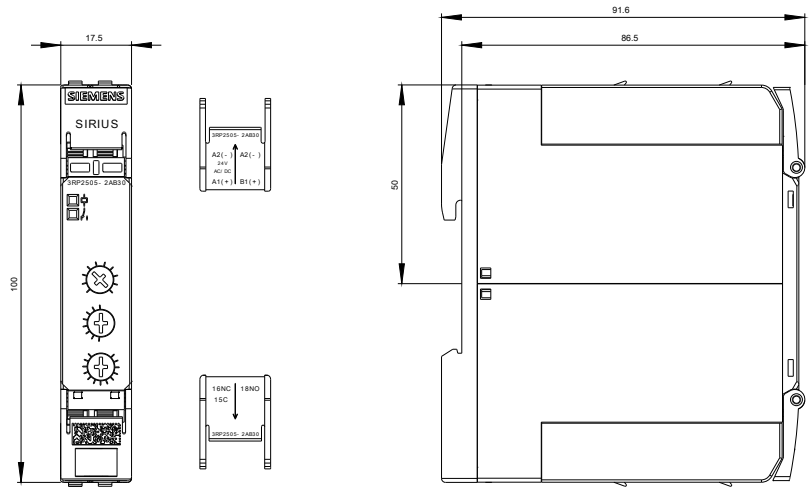
<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RP2505-2AB30>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RP2505-2AB30>

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

[http://www.automation.siemens.com/bilddb/cax\\_de.aspx?mlfb=3RP2505-2AB30&lang=en](http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RP2505-2AB30&lang=en)



last modified:

10/23/2016