

TIME REL., MULTI-FUNCTION, 1 CO CONTACT, 13 FUNCTIONS, 7 TIME SET. RANGES, (1,10,100)s 10MIN; (1,10,100) HR 12...240V 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		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"> • acc. to DIN 40719 extended according to IEC 204-2 acc. to IEC 750 		K
<ul style="list-style-type: none"> • acc. to DIN EN 61346-2 		K
<ul style="list-style-type: none"> • acc. to DIN EN 81346-2 		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	250
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"> • 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
<ul style="list-style-type: none"> • OFF delay 		No

<ul style="list-style-type: none"> • flashing asymmetrically starting with interval 		No
<ul style="list-style-type: none"> • flashing asymmetrically starting with pulse 		No
<ul style="list-style-type: none"> • flashing symmetrically starting with pulse 		Yes
<ul style="list-style-type: none"> • flashing symmetrically starting with pulse/instantaneous 		No
<ul style="list-style-type: none"> • flashing symmetrically starting with interval 		Yes
<ul style="list-style-type: none"> • flashing symmetrically starting with interval/instantaneous 		No
<ul style="list-style-type: none"> • star-delta circuit 		No
<ul style="list-style-type: none"> • star-delta circuit with delay time 		No
Switching function with control signal		
<ul style="list-style-type: none"> • additive ON delay 		Yes
<ul style="list-style-type: none"> • passing break contact 		Yes
<ul style="list-style-type: none"> • OFF delay 		Yes
<ul style="list-style-type: none"> • pulse-shaping 		Yes
<ul style="list-style-type: none"> • OFF delay/instantaneous 		No
<ul style="list-style-type: none"> • ON-delay/OFF-delay/instantaneous 		No
<ul style="list-style-type: none"> • passing break contact/instantaneous 		No
<ul style="list-style-type: none"> • additive ON delay/instantaneous 		No
<ul style="list-style-type: none"> • ON-delay/OFF-delay 		Yes
<ul style="list-style-type: none"> • passing make contact 		Yes
<ul style="list-style-type: none"> • passing make contact/instantaneous contact 		No
<ul style="list-style-type: none"> • pulse delayed 		Yes
<ul style="list-style-type: none"> • pulse delayed/instantaneous 		No
<ul style="list-style-type: none"> • pulse-shaping/instantaneous 		No
Switching function of interval relay with control signal		
<ul style="list-style-type: none"> • retrotriggerable with deactivated control signal/instantaneous contact 		No
<ul style="list-style-type: none"> • retrotriggerable with activated control signal 		Yes
<ul style="list-style-type: none"> • retrotriggerable with activated control signal/instantaneous contact 		No
<ul style="list-style-type: none"> • retriggerable with deactivated control signal 		Yes
Design of the control terminal non-floating		Yes
Control circuit/ Control:		
Adjustable time	s	0.05 ... 360 000
Type of voltage of the control supply voltage		AC/DC
Control supply voltage frequency 1	Hz	50 ... 60
Control supply voltage 1		
<ul style="list-style-type: none"> • at AC at 50 Hz 	V	12 ... 240
<ul style="list-style-type: none"> • at AC at 60 Hz 	V	12 ... 240
<ul style="list-style-type: none"> • at DC 	V	12 ... 240

Operating range factor control supply voltage rated value		
<ul style="list-style-type: none"> • at AC <ul style="list-style-type: none"> — at 50 Hz — at 60 Hz • at DC 		0.85 ... 1.1 0.85 ... 1.1 0.85 ... 1.1
Inrush current peak		
<ul style="list-style-type: none"> • at 24 V • at 240 V 	A A	0.4 5
Duration of inrush current peak		
<ul style="list-style-type: none"> • at 24 V • at 240 V 	ms ms	0.3 0.5
Power loss [W] at AC maximum	W	1.09
Power loss [V·A] at AC maximum	V·A	2.95

Auxiliary circuit:

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

Contact rating of auxiliary contacts according to UL		R300 / B300
--	--	-------------

Installation/ mounting/ dimensions:





Mounting type		screw and snap-on mounting onto 35 mm standard mounting rail
Width	mm	17.5
Height	mm	100
Depth	mm	90
Required spacing with side-by-side mounting		
• upwards	mm	0
• forwards	mm	0
• at the side	mm	0
• Backwards	mm	0
• downwards	mm	0
Required spacing for grounded parts		
• Backwards	mm	0
• at the side	mm	0
• upwards	mm	0
• forwards	mm	0
• downwards	mm	0
Required spacing for live parts		
• downwards	mm	0
• Backwards	mm	0
• at the side	mm	0
• forwards	mm	0
• upwards	mm	0

Connections/ Terminals:

Type of electrical connection for auxiliary and control current circuit		screw-type terminals
Product function removable terminal for auxiliary and control circuit		Yes
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 ... 4 mm ²), 2x (0.5 ... 1.5 mm ²)
• at AWG conductors		
— stranded		1x (20 ... 12), 2x (20 ... 14)
— solid		1x (20 ... 12), 2x (20 ... 14)
Tightening torque	N·m	0.6 ... 0.8
Design of the thread of the connection screw		M3
Ampacity of the bridge terminals maximum	A	10

Certificates/approvals

General Product Approval				Declaration of Conformity	Test Certificates
 CCC	 CSA	 UL		 EG-Konf.	Type Test Certificates/Test Report

Shipping Approval				other	
 LRS	 PRS	 RINA	 RMRS	Environmental Confirmations	Confirmation

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=3RP2505-1AW30>

Cax online generator

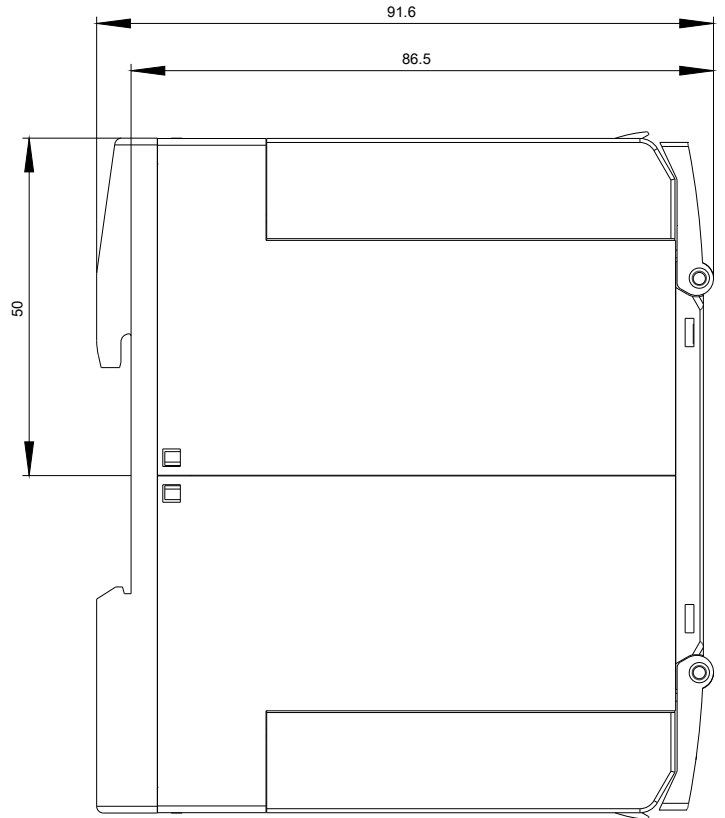
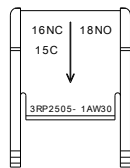
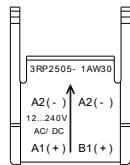
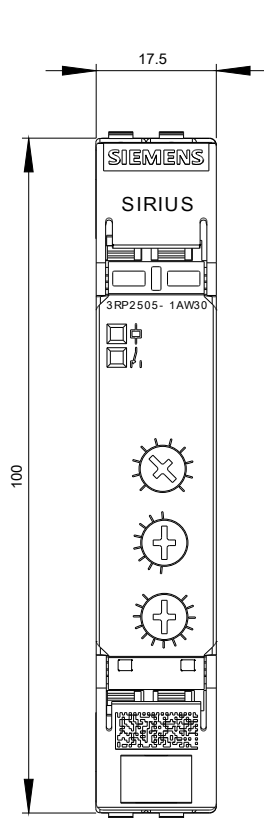
<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RP2505-1AW30>

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

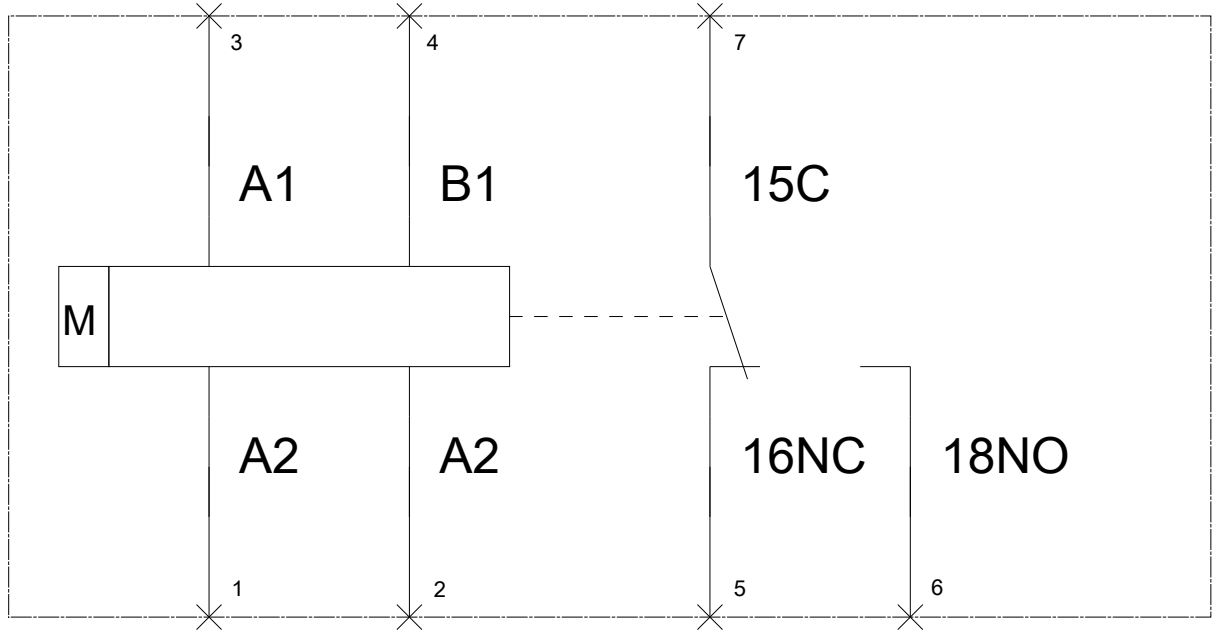
<https://support.industry.siemens.com/cs/ww/en/ps/3RP2505-1AW30>

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

http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RP2505-1AW30&lang=en



-K



last modified:

08/07/2017