

# **Electronic timer**

Type 3RP

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Answers for industry.

### Introduction

Siemens offers 3RP15 electronic timers which meet the various control timing requirements of industry. These timers comply with IEC 60 947-5-1 IEC 61 000-6-2/EN 50 081-1 (EMC) Carry CE marking

### Range

ON delay:	<b>Control supply voltage options -</b> Discrete voltages Universal voltage of 24 to 240V ac/dc			
	<b>Time ranges</b> - 0.5 -10 sec, 5 - 100 sec Universal time range of 0.05 sec to 100Hr			
OFF delay:	Control supply voltage options - Discrete voltages			
	Time ranges - 0.5 - 10 sec, 5 - 100 sec			
Star Delta:	<b>Control supply voltage options -</b> Discrete voltages Universal voltages of 200 - 240V ac/dc, 380-440Vac/dc and 230 - 400V ac/dc			
	Time ranges - 1- 20 Sec, 3 - 60 Sec with 50 msec changeover delay			
Multifunction:	1 timer 8 functions (ON delay, OFF delay, ON+OFF delay, Cyclic, Make Contact, Break contact, Pulse shaping, Additive ON delay)			
	<b>Control supply voltage options -</b> Universal voltage of 24 - 240V ac/dc			
	<b>Time ranges -</b> Universal time range - 0.05 sec to			

**Time ranges -** Universal time range - 0.05 sec to 100Hrs

### Application

3RP15 electronic timers can be used for all delayed switching applications in control, starting and protection circuits. They are ideal for use in application like machine tools, material handling, process control and motor control.

With multifunction timer, you can configure the same timer as per your application need. Thus one timer is suited for many applications (refer timing diagram)

### **Benefits**

- **Reduction in inventory** cost (upto 80%) due to universal time and universal voltage ON delay timers.
- **High accuracy** (<±1% repeat accuracy & <±5% setting accuracy) and switching reliability.
- High mechanical endurance of 30x10<sup>6</sup> operations ensures trouble free operation
- Integral surge suppression No voltage surges during switching makes them ideal for use with electronic circuits
- Clear visual **status indication** through 2 separate LEDs both for actuation of control supply and the change over status.
- High level of Electromagnetic compatibility (EMC) i.e. maximum immunity to interferences.
- No more failures of contactors in Star Delta starting during changeover

• Sleek 22.5mm wide housing and compact design saves panel space.

Thus 3RP timers ensure unmatched reliability and offer excellent 'Value for Money'

#### Note

- Changing the time setting ranges and the functions will only be effective when carried out in de-energised (OFF) state.
- Start input B1 or B3 must only be triggered when the supply voltage is applied.
- OFF delay timers are with aux. voltage (refer wiring diagram fig.1). Same potential must be applied to A1 and B1, or A3 and B3.
- With the two-voltage version, only one voltage range must be connected.
- The activation of loads parallel to the start input is not permissible when using AC control voltage (see diagram below).

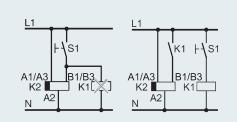
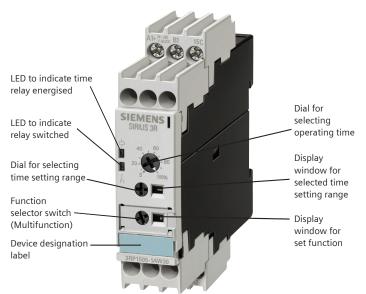


Fig.1

#### Mounting

3RP electronic timers are suitable for snap mounting onto 35 mm standard DIN rails. Accessory for mounting 3RP timers on base plate is available and can be ordered separately.

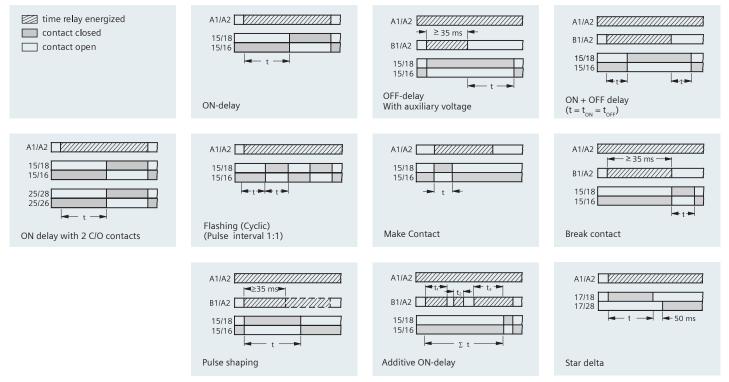
#### Layout



### **Technical data**

Туре			3RP15 05 3RP15 31 3RP15 33	3RP15 11 3RP15 13 3RP15 25	3RP15 74/76
<b>Rated insulation voltage</b> (Pollution degree 3) Overvoltage category III acc. to DIN VDE 0110			300		
Permissible ambient temperature	during operation during storage	°C °C	-25 to +60 -40 to +80		
Mechanical endurance		operating cycles	30 x 10 <sup>6</sup>		
Rated operational currents le AC-15 at 230 V AC, 50 Hz DC-13 at 24 V DC-13 at 24 V DC-13 at 24 V DC-13 at 24 V		A A A A	3 1 0.2 0.1		
Control voltage tolerance		V Hz	0.85 - 1.1 x U <sub>s</sub> for a 0.95 to 1.05 x rate	AC 50/60Hz; 0.8 - 1 d frequency	.25 x U <sub>s</sub> for 24VDC
<b>Operating frequency</b> at rated current le, 230 V AC		1/h	2500		
Setting accuracy referred to upper limit of scale Repeat accuracy			< ±5% < ±1%		
Recovery time Minimum ON period		ms ms	150 35	-	150 -
Degree of protection	cover terminals		IP 40 IP 20		
Rated power Power consumption at 230 V AC, 50 Hz		W VA	2 6		
Rated control fuse - Utilization category gL/gG	Rated control fuse - Utilization category gL/gG			4	
Permissible mounting position			any		
Conductor cross-sections – main / auxiliary conductors solid finely stranded with end sleeve solid or stranded AWG conductors terminal screw tightening torque		mm² mm² AWG Nm	1x(0.5-4), 2x(0.5-2.5) 1x(0.5-2.5), 2x(0.5-1.5) 2x(20-14) M3 0.8 to 1.2		

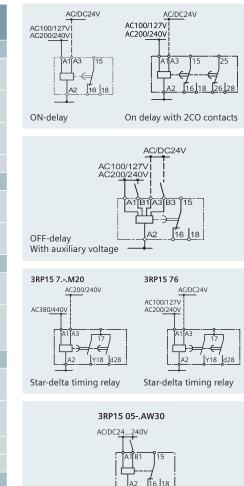
### **Timing Diagrams**



### Selection and ordering data

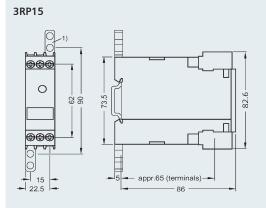
Time range	Control	Control Voltage		Туре			
	AC (50/60Hz)	DC	contacts				
ON Delay timers							
0.5 - 10 sec	24/100-127 24/200-240	24 24	1 C/O 1 C/O	3RP15 11-1AQ30 8K 3RP15 11-1AP30 8K			
5 - 100 sec	24/100-127 24/200-240	24 24	1 C/O 1 C/O	3RP15 13-1AQ30 8K 3RP15 13-1AP30 8K			
0.05sec to 100Hrs (15 time setting ranges)	24/100-127 24/200-240	24 24	1 C/O 1 C/O	3RP15 25-1AQ30 8K 3RP15 25-1AP30 8K			
	24 - 240	24 - 240	2C/O	3RP15 25-1BW30 8K			
OFF Dealy timers							
0.5 - 10 sec	24/100-127 24/200-240	24 24	1 C/O 1 C/O	3RP15 31-1AQ30 8K 3RP15 31-1AP30 8K			
5 - 100 sec	24/100-127 24/200-240	24 24	1 C/O 1 C/O	3RP15 33-1AQ30 8K 3RP15 33-1AP30 8K			
Multifunction timer <sup>1)</sup>							
0.05sec to 100Hrs (15 time setting ranges)	24 - 240	24 - 240	1 C/O	3RP15 05-1AW30 8K			
Label set - 8 functions	pulse make cor	elay, On+Off del ntact, pulse breal and additive ON o	contact,	3RP19 01-0A 8K			
Star Delta timers							
1 - 20 sec	200-240/380-4	40V AC	1NO inst. & 1NO delayed	3RP15 74-1NM20 8K			
3 - 60 sec	0 sec 24/100-127 24/200-240	24 24	1NO inst. & 1NO delayed	3RP15 76-1NQ30 8K 3RP15 76-1NP30 8K			
	200-240/380-4	40V AC		3RP15 76-1NM20 8K			
	230-400V AC			3RP15 76-1NP20 8K			
Accessory							
Push-in lug (for screw mounting on a base plate) for 3RP15 3RP19 03 8K							

### Wiring diagrams

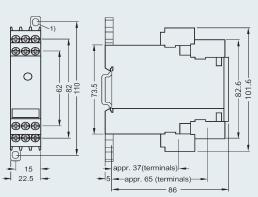


1) Please order label set alongwith multifunction timer (one per timer)

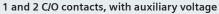
#### **Dimensions**



1 C/O contact without auxiliary voltage and star delta timer 1) Push-in lug (for screw mounting on a base plate) for 3RP15



Multifunction relay



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Order No.: 104846459 I-IA-CECP-005 (This replaces SGR-01-111-014)

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Product upgradation is a continuous process. Hence, data in this datasheet is subject to change without prior notice. For the latest information, please get in touch with our Sales Offices.

### Data sheet

### 3RP15 11-1AP30



TIME RELAY, SOLID-STATE, ON-DELAY, 1 CHANGEOVER CONTACT, 1 TIME RA 0.5S TO 10S, AC 24, 200 TO 240V AND DC 24V, WITH LED, SCREW TERMINAL

General technical data:		
product brand name		SIRIUS
Product designation	-	timing relay
mounting position		any
Product function non-volatile		No
Product component	-	
Relay output		Yes
<ul> <li>semi-conductor output</li> </ul>		No
Installation altitude at height above sea level	m	2 000
maximum		
Ambient temperature		
<ul> <li>during operation</li> </ul>	°C	-25 +60
<ul> <li>during storage</li> </ul>	°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		2 kV
acc. to IEC 61000-4-5		
Conducted interference due to conductor-conductor		1 kV
surge acc. to IEC 61000-4-5		
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
Active power loss total typical	W	2
Equipment marking acc. to DIN 40719 extended		κ
according to IEC 204-2 acc. to IEC 750		
Equipment marking acc. to DIN EN 81346-2	-	К
Category acc. to EN 954-1	-	none
Protection against electrical shock	-	finger-safe
Protection class IP	-	IP20
Mechanical service life (switching cycles) typical	-	10 000 000
Electrical endurance (switching cycles) at AC-15 at		100 000
230 V typical		
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
Degree of pollution		3
Insulation voltage for overvoltage category III	V	300
according to IEC 60664 with degree of pollution 3		
Rated value		
Relative setting accuracy relating to full-scale value	%	5

### Switching Function: Switching function

Switching function	
• ON-delay	Yes
<ul> <li>ON-delay/instantaneous contact</li> </ul>	No
<ul> <li>passing make contact</li> </ul>	No
<ul> <li>passing make contact/instantaneous contact</li> </ul>	No
• OFF delay	No
<ul> <li>flashing asymmetrically starting with interval</li> </ul>	No
<ul> <li>flashing asymmetrically starting with pulse</li> </ul>	No
<ul> <li>flashing symmetrically starting with pulse</li> </ul>	No
<ul> <li>flashing symmetrically starting with</li> </ul>	No
pulse/instantaneous	
<ul> <li>flashing symmetrically starting with interval</li> </ul>	No
<ul> <li>flashing symmetrically starting with</li> </ul>	No
interval/instantaneous	
• star-delta circuit	No

<ul> <li>star-delta circuit with delay time</li> </ul>		No
Switching function with control signal		
additive ON delay		No
<ul> <li>passing break contact</li> </ul>		No
• OFF delay		No
• pulse-shaping		No
<ul> <li>OFF delay/instantaneous</li> </ul>		No
<ul> <li>ON-delay/OFF-delay/instantaneous</li> </ul>		No
<ul> <li>passing break contact/instantaneous</li> </ul>		No
<ul> <li>additive ON delay/instantaneous</li> </ul>		No
ON-delay/OFF-delay		No
<ul> <li>passing make contact</li> </ul>		No
<ul> <li>passing make contact/instantaneous contact</li> </ul>		No
• pulse delayed		No
<ul> <li>pulse delayed/instantaneous</li> </ul>		No
<ul> <li>pulse-shaping/instantaneous</li> </ul>		No
Switching function of interval relay with control signal		
<ul> <li>retrotriggerable with deactivated control</li> </ul>		No
signal/instantaneous contact		
<ul> <li>retrotriggerable with activated control signal</li> </ul>		No
<ul> <li>retrotriggerable with activated control</li> </ul>		No
signal/instantaneous contact		
<ul> <li>retriggerable with deactivated control signal</li> </ul>		No
Control circuit/ Control:		
Adjustable time	S	0.5 10
Type of voltage of the control supply voltage		AC/DC
Control supply voltage frequency 1	Hz	50 60
Control supply voltage frequency 2	Hz	50 60
Control supply voltage 2 at AC		
• at 50 Hz	V	200 240
• at 60 Hz	V	200 240

Operating range factor control supply voltage rated value

• at AC 0.85 ... 1.1 — at 50 Hz 0.85 ... 1.1 — at 60 Hz 0.85 ... 1.1

• at DC

Auxiliary circuit:				
Contact reliability of the auxiliary contacts	one incorrect switching operation of 100 million			
	switching operations (17 V, 5 mA)			
Material of switching contacts	AgSnO2			
Operating current of the auxiliary contacts				

• at AC-15		
— at 24 V	А	3
— at 250 V	А	3
• at DC-13		
— at 24 V	А	1
— at 125 V	А	0.2
— at 250 V	А	0.1
Design of the fuse link for short-circuit protection of		fuse gL/gG: 4 A
the auxiliary switch required		
Thermal current	А	5
Number of NC contacts		
<ul> <li>delayed switching</li> </ul>		0
<ul> <li>instantaneous contact</li> </ul>		0
Number of NO contacts		
<ul> <li>delayed switching</li> </ul>		0
<ul> <li>instantaneous contact</li> </ul>		0
Number of CO contacts		
<ul> <li>delayed switching</li> </ul>		1
<ul> <li>instantaneous contact</li> </ul>		0

### Installation/ mounting/ dimensions:

Mounting type		screw and snap-on mounting onto 35 mm standard
		mounting rail
Width	mm	22.5
Height	mm	83
Depth	mm	91
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

<ul> <li>upwards</li> </ul>			mm	0		
onnections/ Termir	nals:					
ype of electrical cor	nection for auxiliar	y and control		screw-type	e terminals	
ype of connectable	conductor cross-se	ection				
• solid				1x (0.5 4	4.0 mm²), 2x (0.5 2.	5 mm²)
<ul> <li>finely stranded</li> </ul>						
	end processing			1x (0.5 2.5 mm²), 2x (0.5 1.5 mm²)		
<ul> <li>for AWG condu</li> </ul>	ictors					
— stranded				2x (20 1		
— solid				2x (20 1	4)	
ightening torque			N∙m	0.8 1.2		
ertificates/ approva	als:					
General Product					Declaration of	Test
	••					
					Conformity	Certificates
$\widehat{(\!\!( n ) \!\!)}$		103	ú	س	Conformity	spezielle
	(SP)	EAC		D	CE	spezielle
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Shipping Approv	DNV DNV	GL			EG-Konf.	spezielle Prüfbescheinigunge <u>n</u>

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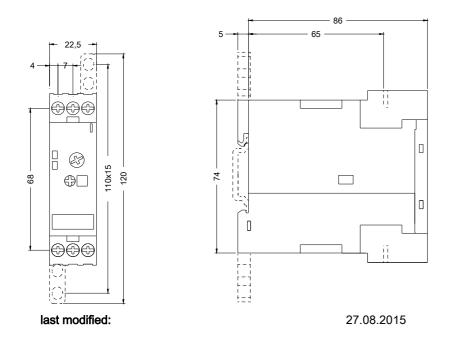
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Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RP15111AP30

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Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RP15111AP30&lang=en



### Data sheet

### 3RP15 25-1AP30



TIME RELAY, ON-DELAY, 1C, 15 RANGES (1,3,10,30,100) (S,MIN,H) AC 24,200...240 V AND DC 24 V, WITH LED

General technical data:		
product brand name		SIRIUS
Product designation	-	timing relay
mounting position	_	any
Product function non-volatile		No
Product component		
● Relay output		Yes
<ul> <li>semi-conductor output</li> </ul>		No
Installation altitude at height above sea level	m	2 000
maximum		
Ambient temperature		
<ul> <li>during operation</li> </ul>	°C	-25 +60
<ul> <li>during storage</li> </ul>	°C	-40 +85
<ul> <li>during transport</li> </ul>	°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		2 kV
acc. to IEC 61000-4-5		
Conducted interference due to conductor-conductor		1 kV
surge acc. to IEC 61000-4-5		
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
Active power loss total typical	W	2
Equipment marking acc. to DIN 40719 extended		κ
according to IEC 204-2 acc. to IEC 750		
Equipment marking acc. to DIN EN 81346-2	-	К
Category acc. to EN 954-1	-	none
Protection against electrical shock	-	finger-safe
Protection class IP	-	IP20
Mechanical service life (switching cycles) typical	-	10 000 000
Electrical endurance (switching cycles) at AC-15 at		100 000
230 V typical		
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
Degree of pollution		3
Insulation voltage for overvoltage category III	V	300
according to IEC 60664 with degree of pollution 3		
Rated value		
Relative setting accuracy relating to full-scale value	%	5

### Switching Function: Switching function

Switching function	
• ON-delay	Yes
<ul> <li>ON-delay/instantaneous contact</li> </ul>	No
<ul> <li>passing make contact</li> </ul>	No
<ul> <li>passing make contact/instantaneous contact</li> </ul>	No
• OFF delay	No
<ul> <li>flashing asymmetrically starting with interval</li> </ul>	No
<ul> <li>flashing asymmetrically starting with pulse</li> </ul>	No
<ul> <li>flashing symmetrically starting with pulse</li> </ul>	No
<ul> <li>flashing symmetrically starting with</li> </ul>	No
pulse/instantaneous	
<ul> <li>flashing symmetrically starting with interval</li> </ul>	No
<ul> <li>flashing symmetrically starting with</li> </ul>	No
interval/instantaneous	
• star-delta circuit	No

<ul> <li>star-delta circuit with delay time</li> </ul>	No
Switching function with control signal	
additive ON delay	No
<ul> <li>passing break contact</li> </ul>	No
• OFF delay	No
• pulse-shaping	No
<ul> <li>OFF delay/instantaneous</li> </ul>	No
<ul> <li>ON-delay/OFF-delay/instantaneous</li> </ul>	No
<ul> <li>passing break contact/instantaneous</li> </ul>	No
<ul> <li>additive ON delay/instantaneous</li> </ul>	No
<ul> <li>ON-delay/OFF-delay</li> </ul>	No
<ul> <li>passing make contact</li> </ul>	No
<ul> <li>passing make contact/instantaneous contact</li> </ul>	No
<ul> <li>pulse delayed</li> </ul>	No
<ul> <li>pulse delayed/instantaneous</li> </ul>	No
<ul> <li>pulse-shaping/instantaneous</li> </ul>	No
Switching function of interval relay with control signal	
<ul> <li>retrotriggerable with deactivated control signal/instantaneous contact</li> </ul>	No
<ul> <li>retrotriggerable with activated control signal</li> </ul>	No
<ul> <li>retrotriggerable with activated control signal/instantaneous contact</li> </ul>	No
<ul> <li>retriggerable with deactivated control signal</li> </ul>	No

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 frequency 2	Hz	50 60
Control supply voltage 2 at AC	_	
• at 50 Hz	V	200 240
• at 60 Hz	V	200 240
Operating range factor control supply voltage rated value	_	
• at AC		
— at 50 Hz		0.85 1.1
— at 60 Hz		0.85 1.1
• at DC		0.85 1.1

Auxiliary circuit.	
Contact reliability of the auxiliary contacts	one incorrect switching operation of 100 million
	switching operations (17 V, 5 mA)
Material of switching contacts	AgSnO2
Operating current of the auxiliary contacts	

• at AC-15		
— at 24 V	А	3
— at 250 V	А	3
• at DC-13		
— at 24 V	А	1
— at 125 V	А	0.2
— at 250 V	А	0.1
Design of the fuse link for short-circuit protection of		fuse gL/gG: 4 A
the auxiliary switch required		
Thermal current	А	5
Number of NC contacts		
<ul> <li>delayed switching</li> </ul>		0
<ul> <li>instantaneous contact</li> </ul>		0
Number of NO contacts		
<ul> <li>delayed switching</li> </ul>		0
<ul> <li>instantaneous contact</li> </ul>		0
Number of CO contacts		
<ul> <li>delayed switching</li> </ul>		1
<ul> <li>instantaneous contact</li> </ul>		0

### Installation/ mounting/ dimensions:

Mounting type		screw and snap-on mounting onto 35 mm standard
		mounting rail
Width	mm	22.5
Height	mm	83
Depth	mm	91
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

<ul> <li>upwards</li> </ul>			mm	0		
	·					
onnections/ Term	inals: pnnection for auxiliary	and control		screw-type t	orminals	
current circuit				sciew-type t	erriniais	
	e conductor cross-sec	tion				
• solid				1x (0.5 4.0	0 mm²), 2x (0.5 2.	5 mm²)
<ul> <li>finely stranded</li> </ul>	t					
— with core	end processing			1x (0.5 2.	5 mm²), 2x (0.5 1.	5 mm²)
<ul> <li>for AWG cond</li> </ul>	uctors					
— stranded				2x (20 14)	)	
— solid				2x (20 14)	)	
Tightening torque			N∙m	0.8 1.2		
			_			
ertificates/ approv						
General Produc	t Approval				Declaration of	Test
					Conformity	Certificates
						1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.
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	SP	FAL			CE	<u>spezielle</u> Prüfbescheinigunge <u>n</u>
	(SA)	EHC			EG-Konf.	Prüfbescheinigunge
	CSA	EHC			EG-Konf.	Prüfbescheinigunge
	CSA	EHC		D	EG-Konf.	Prüfbescheinigunge
ccc Shipping Approv	Val	EHC			EG-Konf.	Prüfbescheinigunge
	val			Du Nydis	EG-Konf.	Prüfbescheinigunge
Shipping Approv	val	EHC GL©		Notis Tester	EG-Konf.	Prüfbescheinigunge
	val	GL GL		yd's rster	EG-Konf.	Prüfbescheinigunge
Shipping Approv	<u>ĴÅ</u> dinv	GL GL		yds ster rs		Prüfbescheinigunge <u>n</u>
Shipping Approv	ĴÅ DNV DNV	GL GL		Polo Andrewski Rs		Prüfbescheinigunge <u>n</u>
Shipping Approv	<u>ĴÅ</u> dinv	GL GL		yd's rster rs		Prüfbescheinigunge <u>n</u>

 Further information

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

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

 Industry Mall (Online ordering system)

 http://www.siemens.com/industrymall

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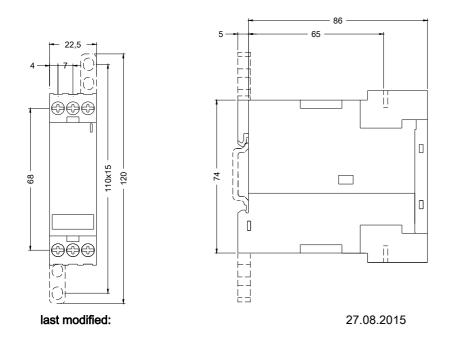
 http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RP15251AP30

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

 https://support.industry.siemens.com/cs/ww/en/ps/3RP15251AP30

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

 http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RP15251AP30&lang=en



### Data sheet

### 3RP15 76-1NP30



TIME RELAY, STAR-DELTA SINGLE TIME RANGE 60 S AC 24 V DC 200...240 V 0.7...1.25 US

#### Figure similar

General technical data:		
product brand name		SIRIUS
Product designation	_	timing relay
mounting position	_	any
Product function non-volatile		No
Product component		
<ul> <li>Relay output</li> </ul>		Yes
<ul> <li>semi-conductor output</li> </ul>		No
Installation altitude at height above sea level	m	2 000
maximum		
Ambient temperature		
<ul> <li>during operation</li> </ul>	°C	-25 +60
<ul> <li>during storage</li> </ul>	°C	-40 +85
<ul> <li>during transport</li> </ul>	°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		2 kV
acc. to IEC 61000-4-5		
Conducted interference due to conductor-conductor		1 kV
surge acc. to IEC 61000-4-5		
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
Active power loss total typical	W	2
Equipment marking acc. to DIN 40719 extended		К
according to IEC 204-2 acc. to IEC 750		
Equipment marking acc. to DIN EN 81346-2		К
Category acc. to EN 954-1		none
Protection against electrical shock		finger-safe
Protection class IP		IP20
Mechanical service life (switching cycles) typical		10 000 000
Electrical endurance (switching cycles) at AC-15 at		100 000
230 V typical		
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
Degree of pollution		3
Insulation voltage for overvoltage category III	V	300
according to IEC 60664 with degree of pollution 3		
Rated value		
Relative setting accuracy relating to full-scale value	%	5

### Switching Function: Switching function

witching function	
• ON-delay	No
<ul> <li>ON-delay/instantaneous contact</li> </ul>	No
<ul> <li>passing make contact</li> </ul>	No
<ul> <li>passing make contact/instantaneous contact</li> </ul>	No
• OFF delay	No
<ul> <li>flashing asymmetrically starting with interval</li> </ul>	No
<ul> <li>flashing asymmetrically starting with pulse</li> </ul>	No
<ul> <li>flashing symmetrically starting with pulse</li> </ul>	No
<ul> <li>flashing symmetrically starting with</li> </ul>	No
pulse/instantaneous	
<ul> <li>flashing symmetrically starting with interval</li> </ul>	No
<ul> <li>flashing symmetrically starting with</li> </ul>	No
interval/instantaneous	
• star-delta circuit	Yes

<ul> <li>star-delta circuit with delay time</li> </ul>		No
Switching function with control signal		
<ul> <li>additive ON delay</li> </ul>		No
<ul> <li>passing break contact</li> </ul>		No
• OFF delay		No
• pulse-shaping		No
<ul> <li>OFF delay/instantaneous</li> </ul>		No
<ul> <li>ON-delay/OFF-delay/instantaneous</li> </ul>		No
<ul> <li>passing break contact/instantaneous</li> </ul>		No
<ul> <li>additive ON delay/instantaneous</li> </ul>		No
<ul> <li>ON-delay/OFF-delay</li> </ul>		No
<ul> <li>passing make contact</li> </ul>		No
<ul> <li>passing make contact/instantaneous contact</li> </ul>		No
• pulse delayed		No
<ul> <li>pulse delayed/instantaneous</li> </ul>		No
<ul> <li>pulse-shaping/instantaneous</li> </ul>		No
Switching function of interval relay with control signal		
retrotriggerable with deactivated control		No
signal/instantaneous contact		
<ul> <li>retrotriggerable with activated control signal</li> </ul>		No
retrotriggerable with activated control		No
signal/instantaneous contact		
<ul> <li>retriggerable with deactivated control signal</li> </ul>		No
Control circuit/ Control:		
Adjustable time	S	3 60
Type of voltage of the control supply voltage		AC/DC
Control supply voltage frequency 1	Hz	50 60
Control supply voltage frequency 2	Hz	50 60
Control supply voltage 2 at AC		
• at 50 Hz	V	200 240

• at 60 Hz Operating range factor control supply voltage rated value

• at AC 0.85 ... 1.1 — at 50 Hz 0.85 ... 1.1 — at 60 Hz 0.85 ... 1.1

• at DC

Auxiliary circuit:	
Contact reliability of the auxiliary contacts	one incorrect switching operation of 100 million
	switching operations (17 V, 5 mA)
Material of switching contacts	AgSnO2
Operating current of the auxiliary contacts	

V

200 ... 240

• at AC-15		
— at 24 V	А	3
— at 250 V	А	3
• at DC-13		
— at 24 V	А	1
— at 125 V	А	0.2
— at 250 V	А	0.1
Design of the fuse link for short-circuit protection of		fuse gL/gG: 4 A
the auxiliary switch required		
Thermal current	А	5
Number of NC contacts		
<ul> <li>delayed switching</li> </ul>		0
<ul> <li>instantaneous contact</li> </ul>		0
Number of NO contacts		
<ul> <li>delayed switching</li> </ul>		1
<ul> <li>instantaneous contact</li> </ul>		1
Number of CO contacts		
<ul> <li>delayed switching</li> </ul>		0
<ul> <li>instantaneous contact</li> </ul>		0

### Installation/ mounting/ dimensions:

Mounting type		screw and snap-on mounting onto 35 mm standard
		mounting rail
Width	mm	22.5
Height	mm	83
Depth	mm	91
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

<ul> <li>upwards</li> </ul>		mm	0		
Connections/ Terminals:					
Type of electrical connection for aux current circuit	iliary and control		screw-type t	erminals	
Type of connectable conductor cross	s-section				
• solid			1x (0.5 4.0	0 mm²), 2x (0.5 2.	5 mm²)
<ul> <li>finely stranded</li> </ul>					
— with core end processing			1x (0.5 2.	5 mm²), 2x (0.5 1.	5 mm²)
<ul> <li>for AWG conductors</li> </ul>					
— stranded			2x (20 14)	)	
— solid			2x (20 14)	)	
Tightening torque		N∙m	0.8 1.2		
Certificates/ approvals:					
General Product Approval				Declaration of Conformity	Test Certificates
	EHC	(		EG-Konf.	spezielle Prüfbescheinigunge <u>n</u>
Shipping Approval					
BUREAU VERITAS	GL	Re	ovd's grister Lrs	PRS	RINA
Shipping other Approval					
sonstig RMRS	<u>Bestätigung</u>	i <u>en</u> Um	weltbestätigung		
Further information Information- and Downloadcenter (C	atalogs, Brochures,	)			

Information- and Downloadcenter (Catalogs, Brochures,...) http://www.siemens.com/industrial-controls/catalogs

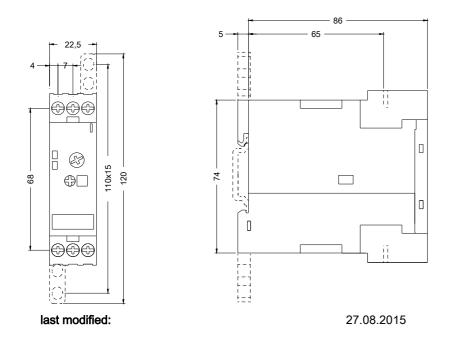
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Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RP15761NP30&lang=en



### Data sheet

### 3RP15 31-1AP30



TIME RELAY, OFF-DELAY W. AUXIL. SW.,1 C, 0.5 S...10 S AC 24,200...240 V AND DC 24 V, WITH LED

General technical data:		
product brand name		SIRIUS
Product designation		timing relay
mounting position		any
Product function non-volatile		No
Product component		
<ul> <li>Relay output</li> </ul>		Yes
<ul> <li>semi-conductor output</li> </ul>		No
Installation altitude at height above sea level	m	2 000
maximum		
Ambient temperature		
<ul> <li>during operation</li> </ul>	°C	-25 +60
<ul> <li>during storage</li> </ul>	°C	-40 +85
<ul> <li>during transport</li> </ul>	°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	_	2 kV
acc. to IEC 61000-4-5		
Conducted interference due to conductor-conductor		1 kV
surge acc. to IEC 61000-4-5	-	
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
Active power loss total typical	W	2
Equipment marking acc. to DIN 40719 extended according to IEC 204-2 acc. to IEC 750		К
Equipment marking acc. to DIN EN 81346-2	-	К
Category acc. to EN 954-1	-	none
Protection against electrical shock		finger-safe
Protection class IP	-	IP20
Mechanical service life (switching cycles) typical	-	10 000 000
Electrical endurance (switching cycles) at AC-15 at		100 000
230 V typical		
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	V	300
according to IEC 60664 with degree of pollution 3		
Rated value Relative setting accuracy relating to full-scale value	%	5
Relative setting accuracy relating to full-scale value	70	5
Switching Function:		
Switching function		
• ON-delay		No
<ul> <li>ON-delay/instantaneous contact</li> </ul>		No
<ul> <li>passing make contact</li> </ul>		No
<ul> <li>passing make contact/instantaneous contact</li> </ul>		No
• OFF delay		No
<ul> <li>flashing asymmetrically starting with interval</li> </ul>		No
<ul> <li>flashing asymmetrically starting with pulse</li> </ul>		No
<ul> <li>flashing symmetrically starting with pulse</li> </ul>		No
<ul> <li>flashing symmetrically starting with pulse/instantaneous</li> </ul>		No
<ul> <li>flashing symmetrically starting with interval</li> </ul>		No
<ul> <li>flashing symmetrically starting with interval/instantaneous</li> </ul>		No
• star-delta circuit		No

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

Adjustable time	S	0.5 10
Type of voltage of the control supply voltage		AC/DC
Control supply voltage frequency 1	Hz	50 60
Control supply voltage frequency 2	Hz	50 60
Control supply voltage 2 at AC		
• at 50 Hz	V	200 240
• at 60 Hz	V	200 240
Operating range factor control supply voltage rated value	_	
• at AC		
— at 50 Hz		0.85 1.1
— at 60 Hz		0.85 1.1
● at DC		0.85 1.1

Auxiliary circuit:	
Contact reliability of the auxiliary contacts	one incorrect switching operation of 100 million
	switching operations (17 V, 5 mA)
Material of switching contacts	AgSnO2

Operating current of the auxiliary contacts		
• at AC-15		
— at 24 V	А	3
— at 250 V	А	3
• at DC-13		
— at 24 V	А	1
— at 125 V	А	0.2
— at 250 V	А	0.1
Design of the fuse link for short-circuit protection of the auxiliary switch required		fuse gL/gG: 4 A
Thermal current	A	5
Short-time current resistance (Icw) limited to 10 ms	А	10
Number of NC contacts		
<ul> <li>delayed switching</li> </ul>		0
<ul> <li>instantaneous contact</li> </ul>		0
Number of NO contacts		
<ul> <li>delayed switching</li> </ul>		0
<ul> <li>instantaneous contact</li> </ul>		0
Number of CO contacts		
<ul> <li>delayed switching</li> </ul>		1
<ul> <li>instantaneous contact</li> </ul>		0

Installation/ mounting/ dimensions:

Mounting type		screw and snap-on mounting onto 35 mm standard mounting rail
Width	mm	22.5
Height	mm	102
Depth	mm	91
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		
Type of connectable conductor cross-section				
• solid		1x (0.5 4.0 mm²), 2x (0.5 2.5 mm²)		
<ul> <li>finely stranded</li> </ul>				
— with core end processing		1x (0.5 2.5 mm²), 2x (0.5 1.5 mm²)		
<ul> <li>for AWG conductors</li> </ul>				
— stranded		2x (20 14)		
— solid		2x (20 14)		
Tightening torque	N∙m	0.8 1.2		

Certificates/ approvals:

General Prod	uct Approval		Declaration of	Test
			Conformity	Certificates
	(SA)	EHC	EG-Konf.	spezielle Prüfbescheinigunge <u>n</u>

**Shipping Approval** 















Further information

Information- and Downloadcenter (Catalogs, Brochures,...) http://www.siemens.com/industrial-controls/catalogs

Industry Mall (Online ordering system) http://www.siemens.com/industrymall

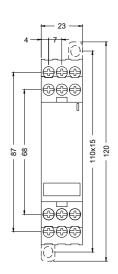
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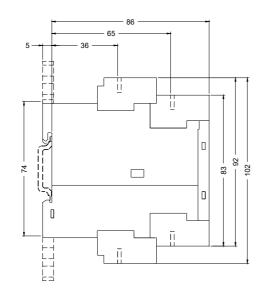
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Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RP15311AP30&lang=en





last modified:



### Data sheet

### 3RP15 33-1AP30



TIME RELAY, OFF-DELAY WITH AUXILIARY SWITCH,1C, RANGE 5 S...100 S AC 24,200...240 V AND DC 24 V, WITH LED

General technical data:		
product brand name		SIRIUS
Product designation		timing relay
mounting position		any
Product function non-volatile		No
Product component		
<ul> <li>Relay output</li> </ul>		Yes
<ul> <li>semi-conductor output</li> </ul>		No
Installation altitude at height above sea level	m	2 000
maximum		
Ambient temperature		
<ul> <li>during operation</li> </ul>	°C	-25 +60
<ul> <li>during storage</li> </ul>	°C	-40 +85
<ul> <li>during transport</li> </ul>	°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	_	2 kV
acc. to IEC 61000-4-5		
Conducted interference due to conductor-conductor		1 kV
surge acc. to IEC 61000-4-5	-	
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
Active power loss total typical	W	2
Equipment marking acc. to DIN 40719 extended according to IEC 204-2 acc. to IEC 750		К
Equipment marking acc. to DIN EN 81346-2	-	К
Category acc. to EN 954-1	-	none
Protection against electrical shock		finger-safe
Protection class IP	-	IP20
Mechanical service life (switching cycles) typical	-	10 000 000
Electrical endurance (switching cycles) at AC-15 at		100 000
230 V typical		
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	V	300
according to IEC 60664 with degree of pollution 3		
Rated value Relative setting accuracy relating to full-scale value	%	5
Relative setting accuracy relating to full-scale value	70	5
Switching Function:		
Switching function		
• ON-delay		No
<ul> <li>ON-delay/instantaneous contact</li> </ul>		No
<ul> <li>passing make contact</li> </ul>		No
<ul> <li>passing make contact/instantaneous contact</li> </ul>		No
• OFF delay		No
<ul> <li>flashing asymmetrically starting with interval</li> </ul>		No
<ul> <li>flashing asymmetrically starting with pulse</li> </ul>		No
<ul> <li>flashing symmetrically starting with pulse</li> </ul>		No
<ul> <li>flashing symmetrically starting with pulse/instantaneous</li> </ul>		No
<ul> <li>flashing symmetrically starting with interval</li> </ul>		No
<ul> <li>flashing symmetrically starting with interval/instantaneous</li> </ul>		No
• star-delta circuit		No

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

Adjustable time	S	5 100
Type of voltage of the control supply voltage		AC/DC
Control supply voltage frequency 1	Hz	50 60
Control supply voltage frequency 2	Hz	50 60
Control supply voltage 2 at AC	_	
• at 50 Hz	V	200 240
• at 60 Hz	V	200 240
Operating range factor control supply voltage rated value		
• at AC		
— at 50 Hz		0.85 1.1
— at 60 Hz		0.85 1.1
• at DC		0.85 1.1

Auxiliary circuit:	
Contact reliability of the auxiliary contacts	one incorrect switching operation of 100 million
	switching operations (17 V, 5 mA)
Material of switching contacts	AgSnO2

Operating current of the auxiliary contacts		
• at AC-15		
— at 24 V	А	3
— at 250 V	А	3
• at DC-13		
— at 24 V	А	1
— at 125 V	А	0.2
— at 250 V	А	0.1
Design of the fuse link for short-circuit protection of		fuse gL/gG: 4 A
the auxiliary switch required		
Thermal current	А	5
Number of NC contacts		
<ul> <li>delayed switching</li> </ul>		0
<ul> <li>instantaneous contact</li> </ul>		0
Number of NO contacts		
<ul> <li>delayed switching</li> </ul>		0
<ul> <li>instantaneous contact</li> </ul>		0
Number of CO contacts		
<ul> <li>delayed switching</li> </ul>		1
• instantaneous contact		0

### Installation/ mounting/ dimensions:

Mounting type		screw and snap-on mounting onto 35 mm standard mounting rail
Width	mm	22.5
Height	mm	102
Depth	mm	91
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		screw-type terminals
current circuit		
Type of connectable conductor cross-section		
• solid		1x (0.5 4.0 mm²), 2x (0.5 2.5 mm²)
<ul> <li>finely stranded</li> </ul>		
— with core end processing		1x (0.5 2.5 mm²), 2x (0.5 1.5 mm²)
<ul> <li>for AWG conductors</li> </ul>		
— stranded		2x (20 14)
— solid		2x (20 14)
Tightening torque	N∙m	0.8 1.2
Certificates/ approvals:		

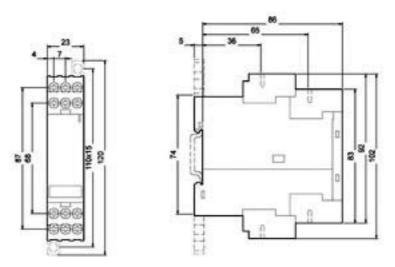
General Prod	uct Approval			Declaration of Conformity	Test Certificates
	CSA	EHC		EG-Konf.	spezielle Prüfbescheinigunge <u>n</u>
Shipping App	roval				
BUREAU VERITAS		GL	Llovd's Kegister	PRS	RINA

Shipping Approval	other			
	sonstig	Umweltbestätigung	Bestätigungen	



RMRS

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RP15331AP30&lang=en



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### Data sheet

### 3RP15 05-1AW30



TIME RELAY, MULTI-FUNCTION 1 CHANGEOVER, 8 FUNCTIONS, 15 TIME SETTING RANGES AC/DC 24... 240 V, WITH LED, SCREW CONNECTION

General technical data:				
product brand name		SIRIUS		
Product designation		timing relay		
mounting position		any		
Product function non-volatile		No		
Product component				
<ul> <li>Relay output</li> </ul>		Yes		
<ul> <li>semi-conductor output</li> </ul>		No		
Installation altitude at height above sea level	m	2 000		
maximum				
Ambient temperature				
<ul> <li>during operation</li> </ul>	°C	-25 +60		
<ul> <li>during storage</li> </ul>	°C	-40 +85		
<ul> <li>during transport</li> </ul>	°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		2 kV	
acc. to IEC 61000-4-5	_		
Conducted interference due to conductor-conductor surge acc. to IEC 61000-4-5		1 kV	
Electrostatic discharge acc. to IEC 61000-4-2	_	4 k / contact discharge / 8 k / air discharge	
Field-bound parasitic coupling acc. to IEC 61000-4-2	4 kV contact discharge / 8 kV air discharge 10 V/m		
Surge voltage resistance Rated value	V	4 000	
Active power loss total typical	W	2	
Equipment marking acc. to DIN 40719 extended	V V	z K	
according to IEC 204-2 acc. to IEC 750		ĸ	
Equipment marking acc. to DIN EN 81346-2	_	К	
Category acc. to EN 954-1	-	none	
Protection against electrical shock	-	finger-safe	
Protection class IP	-	IP20	
Mechanical service life (switching cycles) typical	_	10 000 000	
Electrical endurance (switching cycles) at AC-15 at		100 000	
230 V typical			
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	V	300	
according to IEC 60664 with degree of pollution 3			
Rated value		_	
Relative setting accuracy relating to full-scale value	%	5	
Switching Function:			
Switching function			
<ul> <li>ON-delay</li> </ul>		Yes	
<ul> <li>ON-delay/instantaneous contact</li> </ul>		No	
<ul> <li>passing make contact</li> </ul>		Yes	
<ul> <li>passing make contact/instantaneous contact</li> </ul>		No	
• OFF delay		No	
<ul> <li>flashing asymmetrically starting with interval</li> </ul>		No	
<ul> <li>flashing asymmetrically starting with pulse</li> </ul>		No	
<ul> <li>flashing symmetrically starting with pulse</li> </ul>		No	
flashing symmetrically starting with		No	
pulse/instantaneous			
<ul> <li>flashing symmetrically starting with interval</li> </ul>		Yes	
<ul> <li>flashing symmetrically starting with interval/instantaneous</li> </ul>		No	
star-delta circuit		No	

<ul> <li>star-delta circuit with delay time</li> </ul>	No
Switching function with control signal	
• additive ON delay	Yes
<ul> <li>passing break contact</li> </ul>	Yes
• OFF delay	Yes
• pulse-shaping	Yes
<ul> <li>OFF delay/instantaneous</li> </ul>	No
<ul> <li>ON-delay/OFF-delay/instantaneous</li> </ul>	No
<ul> <li>passing break contact/instantaneous</li> </ul>	No
<ul> <li>additive ON delay/instantaneous</li> </ul>	No
<ul> <li>ON-delay/OFF-delay</li> </ul>	Yes
<ul> <li>passing make contact</li> </ul>	No
<ul> <li>passing make contact/instantaneous contact</li> </ul>	No
• pulse delayed	No
<ul> <li>pulse delayed/instantaneous</li> </ul>	No
<ul> <li>pulse-shaping/instantaneous</li> </ul>	No
Switching function of interval relay with control signal	
<ul> <li>retrotriggerable with deactivated control</li> </ul>	No
signal/instantaneous contact	
<ul> <li>retrotriggerable with activated control signal</li> </ul>	No
<ul> <li>retrotriggerable with activated control</li> </ul>	No
signal/instantaneous contact	
<ul> <li>retriggerable with deactivated control signal</li> </ul>	No
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				
• at AC				
— at 50 Hz	V	24 240		
— at 60 Hz	V	24 240		
• at DC	V	24 240		
Operating range factor control supply voltage rated value				
• at AC				
— at 50 Hz		0.8 1.1		
— at 60 Hz		0.8 1.1		
• at DC		0.7 1.1		

### Auxiliary circuit:

Contact reliability of the auxiliary contacts

one incorrect switching operation of 100 million switching operations (17 V, 5 mA)

Material of switching contacts		AgSnO2	
Operating current of the auxiliary contacts	_		
● at AC-15			
— at 24 V	А	3	
— at 250 V	А	3	
• at DC-13			
— at 24 V	А	1	
— at 125 V	А	0.2	
— at 250 V	А	0.1	
Design of the fuse link for short-circuit protection of	_	fuse gL/gG: 4 A	
the auxiliary switch required			
Thermal current	А	5	
Number of NC contacts	_		
<ul> <li>delayed switching</li> </ul>		0	
<ul> <li>instantaneous contact</li> </ul>		0	
Number of NO contacts	_		
<ul> <li>delayed switching</li> </ul>		0	
<ul> <li>instantaneous contact</li> </ul>		0	
Number of CO contacts			
<ul> <li>delayed switching</li> </ul>		1	
• instantaneous contact		0	

Installation/ mounting/ dimensions:

Mounting type		screw and snap-on mounting onto 35 mm standar mounting rail	
Width	mm	22.5	
Height	mm	102	
Depth	mm	91	
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	
<ul> <li>Backwards</li> </ul>	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		
Type of connectable conductor cross-section				
• solid		1x (0.5 4.0 mm²), 2x (0.5 2.5 mm²)		
<ul> <li>finely stranded</li> </ul>				
- with core end processing		1x (0.5 2.5 mm²), 2x (0.5 1.5 mm²)		
<ul> <li>for AWG conductors</li> </ul>				
— stranded		2x (20 14)		
— solid		2x (20 14)		
Tightening torque	N∙m	0.8 1.2		

Certificates/ approvals:

General Produ	uct Approval		Declaration of Conformity	Test Certificates
	CSA	EHC	EG-Konf.	spezielle Prüfbescheinigunge <u>n</u>





Information- and Downloadcenter (Catalogs, Brochures,...) http://www.siemens.com/industrial-controls/catalogs

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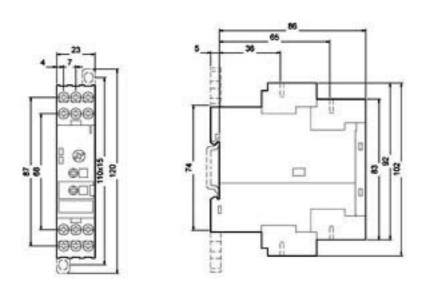
Industry Mall (Online ordering system) http://www.siemens.com/industrymall

#### Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RP15051AW30

### Service&Support (Manuals, Certificates, Characteristics, FAQs,...) https://support.industry.siemens.com/cs/ww/en/ps/3RP15051AW30

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