

TIME RELAY, STAR-DELTA SINGLE TIME RANGE 20  
S AC 24 V DC 200...240 V 0.7...1.25 US

### General technical data:

product brand name		SIRIUS
Product designation		timing relay
mounting position		any
Product function non-volatile		No
Product component		Yes
• Relay output		No
• semi-conductor output		
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

Active power loss total typical	W	2
Equipment marking acc. to DIN 40719 extended according to IEC 204-2 acc. to IEC 750		K
Equipment marking acc. to DIN EN 81346-2		K
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 230 V typical		100 000
Operating frequency with 3RT2 contactor maximum	1/h	5 000
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 according to IEC 60664 with degree of pollution 3 Rated value	V	300
Relative setting accuracy relating to full-scale value	%	5

#### Switching Function:

Switching function		
• ON-delay		No
• ON-delay/instantaneous contact		No
• passing make contact		No
• passing make contact/instantaneous contact		No
• OFF delay		No
• flashing asymmetrically starting with interval		No
• flashing asymmetrically starting with pulse		No
• flashing symmetrically starting with pulse		No
• flashing symmetrically starting with pulse/instantaneous		No
• flashing symmetrically starting with interval		No
• 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		No
• passing break contact		No
• OFF delay		No
• pulse-shaping		No
• OFF delay/instantaneous		No
• ON-delay/OFF-delay/instantaneous		No

<ul style="list-style-type: none"> <li>• passing break contact/instantaneous</li> </ul>		No
<ul style="list-style-type: none"> <li>• additive ON delay/instantaneous</li> </ul>		No
<ul style="list-style-type: none"> <li>• ON-delay/OFF-delay</li> </ul>		No
<ul style="list-style-type: none"> <li>• passing make contact</li> </ul>		No
<ul style="list-style-type: none"> <li>• passing make contact/instantaneous contact</li> </ul>		No
<ul style="list-style-type: none"> <li>• pulse delayed</li> </ul>		No
<ul style="list-style-type: none"> <li>• pulse delayed/instantaneous</li> </ul>		No
<ul style="list-style-type: none"> <li>• pulse-shaping/instantaneous</li> </ul>		No
<b>Switching function of interval relay with control signal</b>		
<ul style="list-style-type: none"> <li>• retrotriggerable with deactivated control signal/instantaneous contact</li> </ul>		No
<ul style="list-style-type: none"> <li>• retrotriggerable with activated control signal</li> </ul>		No
<ul style="list-style-type: none"> <li>• retrotriggerable with activated control signal/instantaneous contact</li> </ul>		No
<ul style="list-style-type: none"> <li>• retriggerable with deactivated control signal</li> </ul>		No

#### Control circuit/ Control:

<b>Adjustable time</b>	s	1 ... 20
<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 frequency 2</b>	Hz	50 ... 60
Control supply voltage 2 with AC		
<ul style="list-style-type: none"> <li>• at 50 Hz</li> </ul>	V	200 ... 240
<ul style="list-style-type: none"> <li>• at 60 Hz</li> </ul>	V	200 ... 240
<b>Operating range factor control supply voltage rated value</b>		
<ul style="list-style-type: none"> <li>• with AC <ul style="list-style-type: none"> <li>— at 50 Hz</li> <li>— at 60 Hz</li> </ul> </li> <li>• for DC</li> </ul>		0.85 ... 1.1 0.85 ... 1.1 0.85 ... 1.1

#### Auxiliary circuit:

<b>Contact reliability of the 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 the 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>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>Number of NC contacts</b>		
• delayed switching		0
• instantaneous contact		0
<b>Number of NO contacts</b>		
• delayed switching		1
• instantaneous contact		1
<b>Number of CO contacts</b>		
• delayed switching		0
• instantaneous contact		0

#### 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	83
<b>Depth</b>	mm	91
<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>Type of connectable conductor cross-section</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
- for AWG conductors
  - stranded
  - solid

		1x (0.5 ... 2.5 mm <sup>2</sup> ), 2x (0.5 ... 1.5 mm <sup>2</sup> )
		2x (20 ... 14)
		2x (20 ... 14)
<b>Tightening torque</b>	N·m	0.8 ... 1.2

Certificates/ approvals:

General Product Approval	Declaration of Conformity	Test Certificates
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[Special Test Certificate](#)

Shipping Approval



Shipping Approval	other
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[Environmental Confirmations](#)

[Confirmation](#)

[other](#)

Further information

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

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

**Industry Mall (Online ordering system)**

<http://www.siemens.com/industrymall>

**Cax online generator**

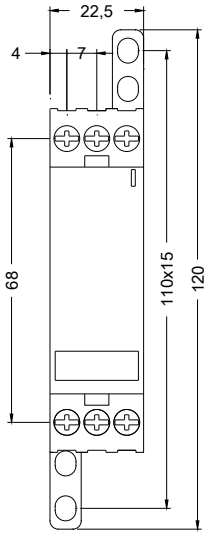
<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RP15741NP30>

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

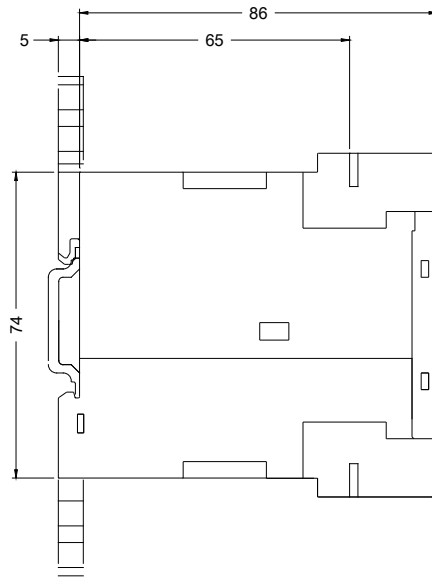
<https://support.industry.siemens.com/cs/ww/en/ps/3RP15741NP30>

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

[http://www.automation.siemens.com/bilddb/cax\\_de.aspx?mlfb=3RP15741NP30&lang=en](http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RP15741NP30&lang=en)



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