

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		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

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:

<b>Switching function</b>		
• 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

• passing break contact/instantaneous	No
• additive ON delay/instantaneous	No
• ON-delay/OFF-delay	No
• passing make contact	No
• passing make contact/instantaneous contact	No
• pulse delayed	No
• 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	No
• retrotriggerable with activated control signal/instantaneous contact	No
• retriggerable with deactivated control signal	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
<b>Control supply voltage 2 with AC</b>		
• at 50 Hz	V	200 ... 240
• at 60 Hz	V	200 ... 240
<b>Operating range factor control supply voltage rated value</b>		
• with AC		
— at 50 Hz		0.85 ... 1.1
— at 60 Hz		0.85 ... 1.1
• for DC		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>		
• at AC-15		
— at 24 V	A	3
— at 250 V	A	3
• at DC-13		
— at 24 V	A	1
— at 125 V	A	0.2
— at 250 V	A	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 mm²), 2x (0.5 ... 2.5 mm²)
• 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)

#### Tightening torque

N·m

0.8 ... 1.2

#### Certificates/ approvals:

##### General Product Approval

##### Declaration of Conformity

##### Test Certificates



CCC



CSA



UL



EG-Konf.

[Special Test  
Certificate](#)

#### Shipping Approval



GL



LRS



PRS



RINA

#### Shipping Approval

#### other



RMRS

[Environmental  
Confirmations](#)

[Confirmation](#)

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#### 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

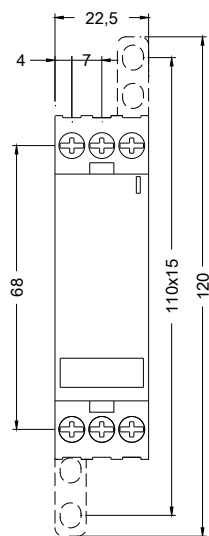
<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RP15741NP30>

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

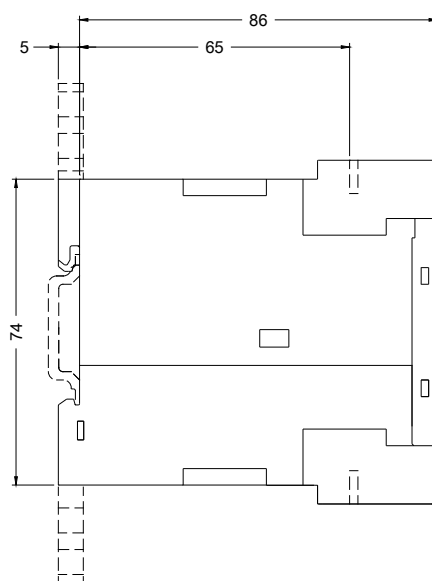
<https://support.industry.siemens.com/cs/ww/en/ps/3RP15741NP30>

##### 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)



last modified:



24.04.2015