



TIME RELAY, SOLID-STATE,  
WITH STAR-DELTA FUNCTION 2 NO 7 TIME RANGES  
0.05S...100H AC/DC 12...240V SCREW TERMINAL

### General technical data:

<b>product brand name</b>		SIRIUS
<b>product designation</b>		timing relay
<b>Adjustable time</b>	s	0.05 ... 360,000
<b>Protection class IP</b>		
• on the front		IP40
• of the terminal		IP20
<b>Resistance against shock</b>		15g / 11 ms
<b>Degree of pollution</b>		2
<b>mounting position</b>		any
<b>Supply voltage / strictly required / auxiliary voltage</b>		No
<b>Product function</b>		
• star-delta circuit		Yes
• with auxiliary voltage / pulse-shaping		No
• at the relay outputs / changeover delayed/without delay		No
<b>Product component / semi-conductor output</b>		No
<b>Product extension</b>		
• optional / remote control		No
• strictly required / remote control		No
<b>Installation altitude / at a height over sea level / maximum</b>	m	2,000

<b>Ambient temperature</b>		
• during storage	°C	-40 ... +70
• during operating	°C	-25 ... +55
• during transport	°C	-40 ... +70
<b>Relative humidity</b>		
• during operating phase	%	15 ... 85
<b>EMC immunity to interference / according to IEC 60947-1</b>		corresponds to degree of severity 3
<b>EMC emitted interference / according to IEC 60947-1</b>		IEC61000-6-3 (residential area)
<b>Conductor-bound parasitic coupling BURST / according to IEC 61000-4-4</b>		2 kV network connection / 1 kV control connection
<b>Conductor-bound parasitic coupling conductor-earth SURGE / according to IEC 61000-4-5</b>		2 kV
<b>Conductor-bound parasitic coupling conductor-conductor SURGE / according to IEC 61000-4-5</b>		1 kV
<b>Electrostatic discharge / according to IEC 61000-4-2</b>		4 kV contact discharge / 8 kV air discharge
<b>Field-bound parasitic coupling / according to IEC 61000-4-3</b>		10 V/m
<b>Resistance against vibration</b>		10 ... 55 Hz / 0.35 mm
<b>Impulse voltage resistance / rated value</b>	V	4,000
<b>Insulation voltage / rated value</b>	V	300
<b>Active power loss / total / typical</b>	W	2
<b>Item designation</b>		
• according to DIN 40719 extendable after IEC 204-2 / according to IEC 750		K
• according to DIN EN 61346-2		K

### Switching Function:

<b>Switching function</b>		
• making pulse contact		No
• firmly clocked beginning with pulse		No
• impuls variably clocked start with pause		No
• relapse delayed		No
• variably clocked start with impulse		No
• with auxiliary voltage		
• temporary line fault		No
• relapse delayed		No
• slow-operating/instantaneous contact		No
• making pulse contact/instantaneous contact		No
• firmly clocked beginning with pause		No
• with auxiliary voltage		
• in an additive way slow-operating		No
• temporary line fault/instantaneous contact		No

• without auxiliary voltage / relapse delayed		No
• slow-operating		No
• with auxiliary voltage		
• relapse delayed/instantaneous contact		No
• slow-operating/relapse delayed/instantaneous contact		No
• firmly clocked beginning with pause/instantaneous contact		No
Switching function / with auxiliary voltage / pulse modelling/instantaneous contact		No
• with auxiliary voltage		
• pulse-shaping		No
• slow-operating/instantaneous contact		No

#### Control circuit:

<b>Type of voltage / of the controlled supply voltage</b>		AC/DC
<b>Control supply voltage frequency / 1</b>		
• initial rated value	Hz	50
• final rated value	Hz	60
<b>Control supply voltage / 1</b>		
• at 50 Hz / for AC	V	12 ... 240
• at 60 Hz / for AC	V	12 ... 240
• for DC	V	12 ... 240
<b>Operating range factor control supply voltage rated value / of the solenoid</b>		
• initial value		0.85
• final value		1.1

#### Auxiliary circuit:

<b>Operating current / of the auxiliary contacts</b>		
• at AC-15 / at 24 V	A	3
• at AC-15 / at 250 V	A	3
• at DC-13		
• at 24 V	A	1
• at 125 V	A	0.22
• at 250 V	A	0.1
• maximum	A	1
<b>Number of NC contacts</b>		
• delayed switching		0
• non-delayed		0
<b>Number of NO contacts</b>		
• delayed switching		2
• non-delayed		0

<b>Number of change-over switches</b>		
• delayed switching		0
• non-delayed		0

#### Short-circuit:

<b>Design of the fuse link / for short-circuit protection of the auxiliary switch / required</b>		fuse gL/gG: 4 A
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#### Installation/mounting/dimensions:

<b>Type of mounting</b>		snap-on fastening on 35 mm standard rail
<b>Width</b>	mm	17.5
<b>Height</b>	mm	90
<b>Depth</b>	mm	66.7
<b>Distance, to be maintained, to the ranks assembly</b>		
• upwards	mm	0
• downwards	mm	0
• forwards	mm	0
• backwards	mm	0
• sideways	mm	0
<b>Distance, to be maintained, to earthed part</b>		
• upwards	mm	0
• downwards	mm	0
• forwards	mm	0
• backwards	mm	0
• sideways	mm	0
<b>Distance, to be maintained, conductive elements</b>		
• upwards	mm	0
• downwards	mm	0
• forwards	mm	0
• backwards	mm	0
• sideways	mm	0

#### Connections:

<b>Design of the electrical connection</b>		
• jumper socket		No
• for auxiliary and control current circuit		screw-type terminals
<b>Type of the connectable conductor cross-section</b>		
• for auxiliary contacts		
• solid		1x (0.2 ... 2.5 mm²)
• finely stranded		
• with conductor end processing		0.25 ... 1.5 mm²

<ul style="list-style-type: none"> <li>• without conductor final cutting</li> <li>• for AWG conductors / for auxiliary contacts</li> </ul>		1x (0.2 ... 1.5 mm <sup>2</sup> ) 1x (24 ... 14)
<b>Conductor cross-section that can be connected / for auxiliary contact</b> <ul style="list-style-type: none"> <li>• solid</li> <li>• finely stranded <ul style="list-style-type: none"> <li>• with conductor end processing</li> <li>• without conductor final cutting</li> </ul> </li> </ul>	mm <sup>2</sup>   mm <sup>2</sup> mm <sup>2</sup>	0.2 ... 2.5  0.25 ... 1.5 0.2 ... 1.5
<b>AWG number / as coded connectable conductor cross-section</b> <ul style="list-style-type: none"> <li>• for auxiliary contact</li> </ul>		14 ... 24

#### Certificates/approvals:

##### Verification of suitability

CE

##### General Product Approval

##### other



CCC



UL

[Confirmation](#)

[Declaration of Conformity](#)

#### Safety:

##### Category / according to EN 954-1

none

##### Protection against electrical shock

finger-safe

#### Further information:

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

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

##### Industry Mall (Online ordering system)

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

##### Cax online generator:

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

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

<http://support.automation.siemens.com/WW/view/en/7PV1578-1BW30/all>

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

[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=7PV1578-1BW30](http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=7PV1578-1BW30)

