SIEMENS

Product data sheet 7PV1578-1BW30



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

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

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

Auxiliary circuit:		
Operating current / of the auxiliary contacts		
• at AC-15 / at 24 V	Α	3
• at AC-15 / at 250 V	Α	3
• at DC-13		
• at 24 V	Α	1
• at 125 V	Α	0.22
• at 250 V	Α	0.1
• maximum	Α	1
Number of NC contacts		
delayed switching		0
• non-delayed		0
Number of NO contacts		
delayed switching		2
• non-delayed		0

Number of change-over switches	
delayed switching	0
• non-delayed	0

Short-circuit:	
Design of the fuse link / for short-circuit protection of the auxiliary switch / required	fuse gL/gG: 4 A

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

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

 without conductor final cutting 		1x (0.2 1.5 mm²)
• for AWG conductors / for auxiliary contacts		1x (24 14)
Conductor cross-section that can be connected / for auxiliary contact		
• solid	mm²	0.2 2.5
finely stranded		
 with conductor end processing 	mm²	0.25 1.5
without conductor final cutting	mm²	0.2 1.5
AWG number / as coded connectable conductor cross-section		
for auxiliary contact		14 24

Certificates/approvals:

Verification of suitability CE

General Product Approval other

(W)



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,...)

 $\underline{\text{http://www.siemens.com/industrial-controls/catalogs}}$

Industry Mall (Online ordering system)

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

Cax online generator:

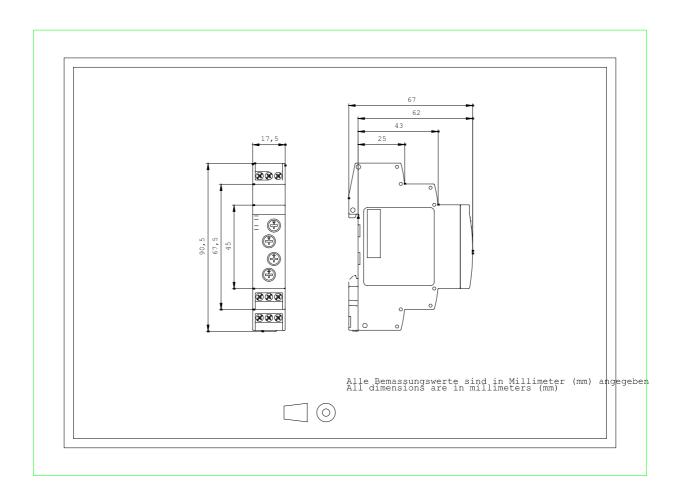
http://www.siemens.com/cax

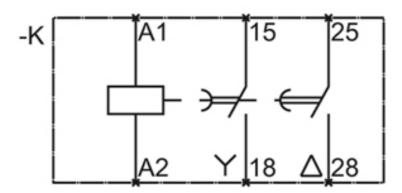
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

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

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

 $\underline{\text{http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=7PV1578-1BW30}$





last change: Sep 2, 2013