SIEMENS

Data sheet 7PV1512-1AQ30

Timing relay, electronic ON delay 1 change-over contact, 1 time range 0.5...10 s 24/110 V AC and 24 V DC with LED, Screw terminal

product brand name	SIRIUS
product designation	timing relay
design of the product	slow-operating
product type designation	7PV15
General technical data	
product component semi-conductor output	No
product extension required remote control	No
product extension optional remote control	No
insulation voltage for overvoltage category III according to IEC 60664 with degree of pollution 3 rated value	300 V
test voltage for isolation test	2.2 kV
degree of pollution	2
surge voltage resistance rated value	4 000 V
test voltage for surge voltage test	4 800 V
protection class IP	IP20
shock resistance according to IEC 60068-2-27	11g / 15 ms
vibration resistance according to IEC 60068-2-6	10 ... 55 Hz: 0.35 mm
mechanical service life (switching cycles) typical	10 000 000
electrical endurance (switching cycles) at AC-15 at 230 V typical	100 000
adjustable time	0.5 ... 10 s
relative setting accuracy relating to full-scale value	5 %; +/-
minimum ON period	35 ms
recovery time	500 ms
reference code according to IEC 81346-2	K
relative repeat accuracy	2 %; +/-
influence of the surrounding temperature	2% in complete temperature range for the set duration
power supply influence	2% in complete voltage range for the set duration
Substance Prohibitance (Date)	05/01/2012
Control circuit/ Control	
type of voltage of the control supply voltage	AC/DC
control supply voltage 1 at AC	
● at 50 Hz	100 ... 127 V
● at 60 Hz	100 ... 127 V
control supply voltage 2 at AC	
● at 50 Hz rated value	24 V
● at 60 Hz rated value	24 V
control supply voltage frequency 1	50 ... 60 Hz
control supply voltage 1	
● at DC rated value	24 V

operating range factor control supply voltage rated value at DC	
● initial value	0.85
● full-scale value	1.1
operating range factor control supply voltage rated value at AC at 50 Hz	
● initial value	0.85
● full-scale value	1.1
operating range factor control supply voltage rated value at AC at 60 Hz	
● initial value	0.85
● full-scale value	1.1
Switching Function	
switching function	
● ON-delay	Yes
● ON-delay/instantaneous contact	No
● passing make contact	No
● passing make contact/instantaneous contact	No
● OFF delay	No
switching function	
● flashing symmetrically with interval start/instantaneous	No
● flashing symmetrically with interval start	No
● flashing symmetrically with pulse start/instantaneous	No
● flashing symmetrically with pulse start	No
● flashing asymmetrically with interval start	No
● flashing asymmetrically with pulse start	No
switching function	
● star-delta circuit with delay time	No
● star-delta circuit	No
switching function with control signal	
● additive ON-delay	No
● passing break contact	No
● passing break contact/instantaneous	No
● OFF delay	No
● OFF delay/instantaneous	No
● pulse delayed	No
● pulse delayed/instantaneous	No
● pulse-shaping	No
● pulse-shaping/instantaneous	No
● additive ON-delay/instantaneous	No
● ON-delay/OFF-delay	No
● ON-delay/OFF-delay/instantaneous	No
● passing make contact	No
● passing make contact/instantaneous contact	No
switching function of interval relay with control signal	
● retrotriggerable with deactivated control signal/instantaneous contact	No
● retrotriggerable with switched-on control signal	No
● retrotriggerable with switched-on control signal/instantaneous contact	No
● retriggerable with deactivated control signal	No
design of the control terminal non-floating	No
Short-circuit protection	
design of the fuse link for short-circuit protection of the auxiliary switch required	fuse gL/gG: 4 A
Auxiliary circuit	
material of switching contacts	AgSnO2
number of NC contacts	
● delayed switching	0
● instantaneous contact	0

number of NO contacts	
● delayed switching	0
● instantaneous contact	0
number of CO contacts	
● delayed switching	1
● instantaneous contact	0
operational current of auxiliary contacts at AC-15	
● maximum	3 A
● at 24 V	3 A
● at 250 V	3 A
operational current of auxiliary contacts as NC contact at AC-15	
● at 24 V	3 A
● at 250 V	3 A
operational current of auxiliary contacts as NO contact at AC-15	
● at 24 V	3 A
● at 250 V	3 A
operational current of auxiliary contacts at DC-13	1 ... 0.01
operational current of auxiliary contacts at DC-13	
● at 24 V	1 A
● at 125 V	0.22 A
● at 250 V	0.1 A
operating frequency with 3RT2 contactor maximum	5 000 1/h
contact reliability of auxiliary contacts	one incorrect switching operation of 100 million switching operations (17 V, 5 mA)
contact rating of auxiliary contacts according to UL	R150 / B300
switching capacity current with inductive load	0.01 ... 3 A
Inputs/ Outputs	
product function	
● at the relay outputs switchover delayed/without delay	No
● non-volatile	No
Electromagnetic compatibility	
EMC immunity according to IEC 61812-1	EN 61000-6-2
conducted interference	
● due to burst according to IEC 61000-4-4	2 kV network connection / 1 kV control connection
● due to conductor-earth surge according to IEC 61000-4-5	2 kV
● due to conductor-conductor surge according to IEC 61000-4-5	1 kV
field-based interference according to IEC 61000-4-3	10 V/m
electrostatic discharge according to IEC 61000-4-2	4 kV contact discharge / 8 kV air discharge
Safety related data	
type of insulation	Basic insulation
category according to EN 954-1	none
Connections/ Terminals	
product component removable terminal for auxiliary and control circuit	No
type of electrical connection for auxiliary and control circuit	screw-type terminals
type of connectable conductor cross-sections	
● solid	1x (0.2 ... 2.5 mm²)
● finely stranded with core end processing	1x (0.25 ... 1.5 mm²)
● finely stranded without core end processing	1x (0.2 ... 1.5 mm²)
● at AWG cables solid	1x (24 ... 14)
● at AWG cables stranded	1x (24 ... 14)
connectable conductor cross-section	
● solid	0.2 ... 2.5 m²
● finely stranded with core end processing	0.25 ... 1.5 m²
● finely stranded without core end processing	0.2 ... 1.5 m²
AWG number as coded connectable conductor cross	

section	
● solid	24 ... 14
● stranded	24 ... 14
Installation/ mounting/ dimensions	
mounting position	any
fastening method	snap-on fastening on 35 mm standard rail
height	90 mm
width	17.5 mm
depth	66.7 mm
required spacing	
● with side-by-side mounting	
— forwards	0 mm
— backwards	0 mm
— upwards	0 mm
— downwards	0 mm
— at the side	0 mm
● for grounded parts	
— forwards	0 mm
— backwards	0 mm
— upwards	0 mm
— at the side	0 mm
— downwards	0 mm
● for live parts	
— forwards	0 mm
— backwards	0 mm
— upwards	0 mm
— downwards	0 mm
— at the side	0 mm
Ambient conditions	
installation altitude at height above sea level maximum	2 000 m
ambient temperature	
● during operation	-25 ... +55 °C
● during storage	-40 ... +70 °C
● during transport	-40 ... +70 °C
relative humidity during operation	15 ... 85 %

Certificates/ approvals

General Product Approval				EMC	Declaration of Conformity
CCC	Confirmation	UL	EAC	RCM	EG-Konf.

Declaration of Conformity	Test Certificates	other	
UKCA	Type Test Certificates/Test Report	Confirmation	Environmental Confirmations

Further information

Information- and Downloadcenter (Catalogs, Brochures,…)
https://www.siemens.com/ic10
Industry Mall (Online ordering system)
https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=7PV1512-1AQ30
Cax online generator
http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=7PV1512-1AQ30

Service&Support (Manuals, Certificates, Characteristics, FAQs,...)
https://support.industry.siemens.com/cs/ww/en/ps/7PV1512-1AQ30
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=7PV1512-1AQ30&lang=en
Characteristic: Derating
https://support.industry.siemens.com/cs/ww/en/ps/7PV1512-1AQ30/manual

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