SIEMENS

Data sheet 3RP1540-1AJ31



Timing relay, electronic Phased-out product !!! For further information, please contact our sales department OFF delay 1 change-over contact, without auxiliary voltage 9 time ranges, 0.05 s...600 s 100...127 V AC/DC with LED, Screw terminal

product brand name	SIRIUS
product designation	timing relay
product type designation	3RP15
General technical data	
product component	
• relay output	Yes
• semi-conductor output	No
product extension required remote control	No
product extension optional remote control	No
power loss [W] maximum	2 W
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 kV
degree of pollution	3
surge voltage resistance rated value	4 000 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 (operating cycles) typical	10 000 000
electrical endurance (operating cycles) at AC-15 at 230 V typical	100 000
adjustable time	0.05 600 s
relative setting accuracy relating to full-scale value	5 %
thermal current	5 A
minimum ON period	200 ms
recovery time	150 ms
reference code according to IEC 81346-2	K
relative repeat accuracy	1 %
influence of the surrounding temperature	±5 %
power supply influence	±1 %
Substance Prohibitance (Date)	05/28/2009
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 frequency 1	50 60 Hz
control supply voltage 1	
• at DC	100 127 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	No
 ON-delay/instantaneous contact 	No
 passing make contact 	No
 passing make contact/instantaneous contact 	No
OFF delay	Yes
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 pulse delayed/instantaneous	No
pulse-shaping	No
 pulse-shaping pulse-shaping/instantaneous 	
	No No
additive ON-delay/instantaneousON-delay/OFF-delay/instantaneous	
	No No
passing make contact passing make contact/instantaneous contact	No No
passing make contact/instantaneous contact passing function of interval relay with control signal.	No
switching function of interval relay with control signal retrotriggerable with deactivated control	No
signal/instantaneous contact	No
retrotriggerable with switched-on control signal retrotriggerable with switched on control	No No
retrotriggerable with switched-on control signal/instantaneous contact retriggerable with deactivated central signal.	No No
retriggerable with deactivated control signal Short circuit protection	No
Short-circuit protection	from all acts A A
design of the fuse link for short-circuit protection of the auxiliary switch required	fuse gL/gG: 4 A
Auxiliary circuit	Acadi
material of switching contacts	AgNi
number of NC contacts	0
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		
• at 24 V	3 A	
• at 250 V	3 A	
operational current of auxiliary contacts at DC-13		
• at 24 V	1 A	
● at 125 V	0.2 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	R300 / B300	
Inputs/ Outputs		
product function		
non-volatile	No	
Electromagnetic compatibility		
EMC emitted interference according to IEC 61812-1	EN 61000-6-4(3)	
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	1 kV	
61000-4-5		
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		
protection class IP on the front according to IEC 60529	IP20	
type of insulation	Basic insulation	
category according to EN 954-1	none	
Connections/ Terminals		
product component removable terminal for auxiliary and control circuit	Yes	
type of electrical connection for auxiliary and control circuit	screw-type terminals	
type of connectable conductor cross-sections		
• solid	1x (0.5 4.0 mm²), 2x (0.5 2.5 mm²)	
 finely stranded with core end processing 	1x (0.5 2.5 mm²), 2x (0.5 1.5 mm²)	
 for AWG cables solid 	2x (20 14)	
 for AWG cables stranded 	2x (20 14)	
connectable conductor cross-section		
• solid	0.5 4 mm²	
 finely stranded with core end processing 	0.5 2.5 mm²	
AWG number as coded connectable conductor cross		
section		
• solid	20 14	
• stranded	20 14	
tightening torque	0.8 1.2 N·m	
design of the thread of the connection screw	M3	
Installation/ mounting/ dimensions		
mounting position	any	
fastening method	screw and snap-on mounting onto 35 mm DIN rail	
height	83 mm	
width	22.5 mm	
depth	91 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	

	EMC
10 95 %	
-40 +85 °C	
-40 +85 °C	
-25 +60 °C	
2 000 m	
0 mm	
0 mm	
0 mm	
0 mm	
	0 mm



Confirmation









Declaration of Conformity

Test Certificates

Marine / Shipping





Type Test Certificates/Test Report







Marine / Shipping

other

Railway





Miscellaneous

Confirmation

Special Test Certificate

Further information

Siemens has decided to exit the Russian market (see here).

https://press.siemens.com/global/en/pressrelease/siemens-wind-down-russian-business

Siemens is working on the renewal of the current EAC certificates.

Please contact your local Siemens office on the status of validity of the EAC certification if you intend to import or offer to supply these products to an EAC relevant market (other than the sanctioned EAEU member states Russia or Belarus).

Information on the packaging

https://support.industry.siemens.com/cs/ww/en/view/109813875

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=3RP1540-1AJ31

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RP1540-1AJ31

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

https://support.industry.siemens.com/cs/ww/en/ps/3RP1540-1AJ31

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

http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RP1540-1AJ31&lang=en

Characteristic: Derating

https://support.industry.siemens.com/cs/ww/en/ps/3RP1540-1AJ31/manual

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