SIEMENS

Data sheet

3RP2025-1AP30



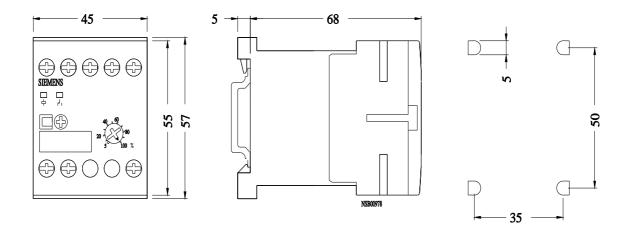
Timing relay, electronic ansprechverzögert 1 change-over contact 24 V AC/DC, 200 to 240 V AC at 50/60 Hz AC 0.05 s to 100 h Overall width 45 mm screw terminal

302015-14-30	
product brand name	SIRIUS
product designation	timing relay
design of the product	slow-operating
product type designation	3RP20
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
shock resistance acc. to IEC 60068-2-27	11g / 15 ms
vibration resistance acc. 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	0.05 100 s
relative setting accuracy relating to full-scale value	5 %; +/-
thermal current	5 A
recovery time	150 ms
reference code acc. to IEC 81346-2	К
relative repeat accuracy	1 %; +/-
influence of the surrounding temperature	±5 %
power supply influence	±1 %
Substance Prohibitance (Date)	01.05.2012
Control circuit/ Control	
type of voltage of the control supply voltage	AC/DC
control supply voltage 1 at AC	
• at 50 Hz rated value	24 V
• at 60 Hz rated value	24 V
control supply voltage 2 at AC	
• at 50 Hz	200 240 V
• at 60 Hz	200 240 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 passing break contact/instantaneous 	No
 passing break contact/instantaneous OFF delay 	No
OFF delay 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/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
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	AgSnO2 0
number of NC contacts delayed switching number of NO contacts delayed switching	-
	0

10414	
• at 24 V	3 A
• at 250 V	3 A
operational current of auxiliary contacts at DC-13	
• at 24 V	1A
• 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 acc. to IEC 61812-1	EN 61000-6-4(3)
EMC 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
 due to conductor-earth surge acc. to IEC 61000-4-5 	2 kV
 due to conductor-conductor surge acc. to IEC 61000-4-5 	1 kV
field-based interference acc. to IEC 61000-4-3	10 V/m
electrostatic discharge acc. to IEC 61000-4-2	4 kV contact discharge / 8 kV air discharge
Safety related data	
protection class IP on the front acc. to IEC 60529	IP20
touch protection on the front acc. to IEC 60529	finger-safe, for vertical contact from the front
type of insulation	Basic insulation
category acc. to EN 954-1	none
Connections/ Terminals	
product component removable terminal for auxiliary	No
and control circuit	
type of electrical connection for auxiliary and control circuit	screw-type terminals
type of connectable conductor cross-sections	
• solid	2x (0,51,5 mm²), 2x (0,75 2,5 mm²)
 finely stranded with core end processing 	2x (0,51,5 mm²), 2x (0,75 2,5 mm²)
 at AWG cables solid 	2x (18 14)
at AWG cables stranded	2x (18 14)
connectable conductor cross-section	
• solid	0.5 2.5 mm²
 finely stranded with core end processing 	0.5 2.5 mm ²
AWG number as coded connectable conductor cross	
section	
• solid	18 14
stranded	18 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 standard mounting rail
height	57 mm
width	45 mm
depth	73 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 - forwards 0 mm - forwards 0 mm - forwards 0 mm - backwards 0 mm - at the side 0 mm - during operation -25 +60 °C - etificates/ approval EMC Declaration <t< th=""><th></th></t<>				
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