SIEMENS

Data sheet 3RP2540-1AW30



Timing relay, electronic OFF delay without control signal or smooth passing make contact non-volatile 7 time ranges 0.05...600 s 12-240 V AC/DC, 1 change-over contact at 50/60 Hz AC with LED, Screw terminal

product designation design of the product rückfallverzogert ohne Steuersignal, nullspannungssicher, einschaltwischend groduct type designation 3RP25 General technical data product component • relay output • semi-conductor output product extension required remote control product extension required remote control power loss [W] maximum susulation voltage for overvoltage category III according to IEC 60664 with degree of pollution 3 rated value test voltage for isolation test degree of pollution 3urge voltage resistance rated value protection class IP P20 shock resistance acc. to IEC 60068-2-6 ribration resistance acc. to IEC 60068-2-7 vibration resistance acc. to IEC 60068-2-6 mechanical service IIfe (switching cycles) typical electrical endurance (switching cycles) at AC-15 at 230 V typical adjustable time relative setting accuracy relating to full-scale value thermal current fan immum ON period z50 ms reference code acc. to IEC 81346-2 relative repeat accuracy 1 % Substance Prohibitance (Date) Control supply voltage f requency 1 e at 50 Hz • at 50 Hz • at 50 Hz • at 60 Hz control supply voltage frequency 1	product brand name	SIRIUS		
einschaltwischend general technical data product component	product designation	timing relay		
General technical data product component • relay output • semi-conductor output product extension required remote control product extension optional remote control No power loss [W] maximum pissulation voltage for overvoltage category III according to IEC 60064 with degree of pollution 3 rated value test voltage for isolation test degree of pollution surge voltage resistance rated value protection class IP ivbration resistance acc. to IEC 60068-2-27 ivbration resistance acc. to IEC 60068-2-6 mechanical service life (switching cycles) typical electrical endurance (switching cycles) typical adjustable time cleating accuracy relating to full-scale value thermal current frelative setting accuracy relating to full-scale value thermal current proference code acc. to IEC 81346-2 relative repeat accuracy the reference code acc. to IEC 81346-2 relative repeat accuracy type of voltage of the control supply voltage control supply voltage 1 at AC • at 50 Hz • at 60 Hz control supply voltage frequency 1 50 60 Hz control supply voltage frequency 1 50 60 Hz	design of the product			
product component • relay output • semi-conductor output Product extension required remote control product extension optional remote control power loss [W] maximum EC 00064 with degree of pollution 3 rated value test voltage for isolation test degree of pollution 3 surge voltage resistance rated value protection class IP shock resistance acc. to IEC 60068-2-7 wibration resistance acc. to IEC 60068-2-6 mechanical service life (switching cycles) typical electrical endurance (switching cycles) at AC-15 at 230 V typical adjustable time relative setting accuracy relating to full-scale value thermal current fundamm ON period reference code acc. to IEC 81346-2 relative repeat accuracy Substance Porbibitance (Date) Control sizepity voltage of the control supply voltage control supply voltage 1 at AC • at 50 Hz control supply voltage frequency 1 50 60 Hz Ves Ves Ves **Yes No No No No No No 100 Vol 2 W 300 V ELC 60068-2-8 100 V 100 V 100 V 100 V 100 V 100 000 100	product type designation	3RP25		
• relay output • semi-conductor output product extension required remote control No power loss [W] maximum 2 W insulation voltage for overvoltage category Ill according to IEC 60664 with degree of pollution 3 rated value test voltage for isolation test degree of pollution 3 urge voltage resistance rated value 4 000 V protection class IP IP20 shock resistance acc. to IEC 60068-2-7 11g / 15 ms vibration resistance acc. to IEC 60068-2-6 10 55 Hz / 0.35 mm mechanical service life (switching cycles) typical electrical endurance (switching cycles) typical adjustable time relative setting accuracy relating to full-scale value thermal current 5 A minimum ON period 250 ms reference code acc. to IEC 81346-2 relative repeat accuracy 1	General technical data			
semi-conductor output product extension required remote control product extension optional remote control power loss [W] maximum 2 W insulation voltage for overvoltage category III according to IEC 60664 with degree of pollution 3 rated value test voltage for isolation test degree of pollution 3 surge voltage resistance rated value protection class IP insulation voltage resistance rated value protection class IP insulation resistance acc. to IEC 60068-2-27 inj / 15 ms vibration resistance acc. to IEC 60068-2-6 in 55 Hz / 0.35 mm mechanical service life (switching cycles) typical algustable time relative setting accuracy relating to full-scale value thermal current insulative setting accuracy relating to full-scale value thermal current insulative repeat accuracy 1 % Substance Prohibitance (Date) Control circuit/ Control type of voltage of the control supply voltage control supply voltage frequency 1 so 60 Hz at 60 Hz control supply voltage frequency 1 so 60 Hz control supply voltage frequency 1 so 60 Hz control supply voltage frequency 1	product component			
product extension required remote control product extension optional remote control No power loss [W] maximum power loss [W] maximum sunsulation voltage for overvoltage category III according to IEC 60664 with degree of pollution 3 rated value test voltage for isolation test degree of pollution 3 surge voltage resistance rated value 4 000 V protection class IP IP20 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 electrical endurance (switching cycles) at AC-15 at 230 V typical adjustable time relative setting accuracy relating to full-scale value thermal current 5 A minimum ON period 250 ms recovery time 250 ms reference code acc. to IEC 81346-2 Krelative repeat accuracy 1 % Substance Prohibitance (Date) 12.09.2014 00:00:00 Control circuit/ Control type of voltage of the control supply voltage at 50 Hz at 50 Hz at 60 Hz 2.24 V control supply voltage frequency 1 50 60 Hz	relay output	Yes		
product extension optional remote control power loss [W] maximum Sumation voltage for overvoltage category III according to IEC 60664 with degree of pollution 3 rated value test voltage for isolation test 2.5 kV	 semi-conductor output 	No		
power loss [W] maximum insulation voltage for overvoltage category III according to IEC 60664 with degree of pollution 3 rated value test voltage for isolation test degree of pollution surge voltage resistance rated value protection class IP IP20 shock resistance acc. to IEC 60068-2-27 11g / 15 ms vibration resistance acc. to IEC 60068-2-6 mechanical service life (switching cycles) typical electrical endurance (switching cycles) at AC-15 at 230 V typical electrical endurance (switching cycles) at AC-15 at 230 V typical adjustable time relative setting accuracy relating to full-scale value thermal current minimum ON period recovery time 250 ms reference code acc. to IEC 81346-2 K relative repeat accuracy 1 % Substance Prohibitance (Date) Control circuit/ Control type of voltage of the control supply voltage control supply voltage 1 at AC at 50 Hz at 60 Hz 20 W 300 V 4000 V 4	product extension required remote control	No		
Insulation voltage for overvoltage category III according to IEC 60664 with degree of pollution 3 rated value test voltage for isolation test degree of pollution surge voltage resistance rated value protection class IP shock resistance acc. to IEC 60068-2-27 shock resistance acc. to IEC 60068-2-6 mechanical service life (switching cycles) typical electrical endurance (switching cycles) typical adjustable time relative setting accuracy relating to full-scale value thermal current shommum ON period recovery time reference code acc. to IEC 81346-2 relative repeat accuracy substance Prohibitance (Date) Control circuit/ Control type of voltage of the control supply voltage ontrol supply voltage 1 at AC e at 50 Hz control supply voltage frequency 1 50 60 Hz	product extension optional remote control	No		
test voltage for isolation test degree of pollution 3 surge voltage resistance rated value protection class IP 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 electrical endurance (switching cycles) at AC-15 at 230 V typical adjustable time relative setting accuracy relating to full-scale value thermal current 5 A minimum ON period recovery time reference code acc. to IEC 81346-2 relative repeat accuracy 1 % Substance Prohibitance (Date) Control circuit/ Control type of voltage of the control supply voltage at 50 Hz at 50 Hz at 60 Hz control supply voltage frequency 1 50 60 Hz control supply voltage frequency 1 50 60 Hz	power loss [W] maximum	2 W		
degree of pollution surge voltage resistance rated value protection class IP shock resistance acc. to IEC 60068-2-27 vibration resistance acc. to IEC 60068-2-6 mechanical service life (switching cycles) typical electrical endurance (switching cycles) at AC-15 at 230 V typical adjustable time adjustable time thermal current finimum ON period recovery time reference code acc. to IEC 81346-2 relative repeat accuracy 1 % Substance Prohibitance (Date) Control circuit/ Control type of voltage of the control supply voltage at 60 Hz control supply voltage frequency 1 supply voltage frequency 1 d 000 V IP20 liP20 11g / 15 ms 10 000 000 10 000 000 10 000 10 000 10 000 5 % 6 % 6 % 6 % 6 % 6 % 6 % 6 %		300 V		
surge voltage resistance rated value 4 000 V protection class IP IP20 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 0.05 600 s relative setting accuracy relating to full-scale value 5 % thermal current 5 A minimum ON period 250 ms recovery time 250 ms reference code acc. to IEC 81346-2 K relative repeat accuracy 1 % Substance Prohibitance (Date) 12.09.2014 00:00:00 Control circuit/ Control 4C/DC control supply voltage 1 at AC 4 ± 2 240 V at 50 Hz 12 240 V at 60 Hz 50 60 Hz	test voltage for isolation test	2.5 kV		
protection class IP 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 electrical endurance (switching cycles) at AC-15 at 230 V typical adjustable time 0.05 600 s relative setting accuracy relating to full-scale value thermal current 5 A minimum ON period 250 ms recovery time 250 ms reference code acc. to IEC 81346-2 K relative repeat accuracy 1 % Substance Prohibitance (Date) 12.09.2014 00:00:00 Control circuit/ Control type of voltage of the control supply voltage at 50 Hz at 50 Hz at 60 Hz control supply voltage frequency 1 50 60 Hz	degree of pollution	3		
shock resistance acc. to IEC 60068-2-27 vibration resistance acc. to IEC 60068-2-6 mechanical service life (switching cycles) typical electrical endurance (switching cycles) at AC-15 at 230 V typical adjustable time 0.05 600 s relative setting accuracy relating to full-scale value thermal current 5 A minimum ON period 250 ms reference code acc. to IEC 81346-2 relative repeat accuracy 1 % Substance Prohibitance (Date) type of voltage of the control supply voltage at 50 Hz at 50 Hz at 60 Hz control supply voltage frequency 1 50 60 Hz	surge voltage resistance rated value	4 000 V		
vibration resistance acc. to IEC 60068-2-6 mechanical service life (switching cycles) typical electrical endurance (switching cycles) at AC-15 at 230 V typical adjustable time 0.05 600 s relative setting accuracy relating to full-scale value thermal current 5 A minimum ON period recovery time reference code acc. to IEC 81346-2 relative repeat accuracy 1 % Substance Prohibitance (Date) Control circuit/ Control type of voltage of the control supply voltage	protection class IP	IP20		
mechanical service life (switching cycles) typical electrical endurance (switching cycles) at AC-15 at 230 V typical adjustable time	shock resistance acc. to IEC 60068-2-27	11g / 15 ms		
electrical endurance (switching cycles) at AC-15 at 230 V typical adjustable time 0.05 600 s relative setting accuracy relating to full-scale value thermal current 5 A minimum ON period 250 ms recovery time 250 ms reference code acc. to IEC 81346-2 K relative repeat accuracy 1 % Substance Prohibitance (Date) Control circuit/ Control type of voltage of the control supply voltage at 50 Hz at 60 Hz 100 000 100 000 AC-15 at 230 V 100 000 100 000 AC-15 at 230 V 100 000 100 000 100 000 AC-15 at 230 V 100 000 AC-1	vibration resistance acc. to IEC 60068-2-6	10 55 Hz / 0.35 mm		
adjustable time adjustable time relative setting accuracy relating to full-scale value thermal current 5 A minimum ON period 250 ms recovery time 250 ms reference code acc. to IEC 81346-2 K relative repeat accuracy 1 % Substance Prohibitance (Date) 12.09.2014 00:00:00 Control circuit/ Control type of voltage of the control supply voltage control supply voltage 1 at AC • at 50 Hz • at 60 Hz control supply voltage frequency 1 5 % 0.05 600 s 1 % Control supply voltage frequency 1	mechanical service life (switching cycles) typical	10 000 000		
relative setting accuracy relating to full-scale value thermal current 5 A minimum ON period 250 ms recovery time 250 ms reference code acc. to IEC 81346-2 K relative repeat accuracy 1 % Substance Prohibitance (Date) 12.09.2014 00:00:00 Control circuit/ Control type of voltage of the control supply voltage control supply voltage 1 at AC • at 50 Hz • at 60 Hz control supply voltage frequency 1 5 % 4 C/DC 5 M 12 240 V control supply voltage frequency 1 5 % 6 M 250 ms 7 M 6 M 7 M 7 M 7 M 7 M 7 M 7 M	· · · · · · · · · · · · · · · · · · ·	100 000		
thermal current minimum ON period z50 ms recovery time z50 ms reference code acc. to IEC 81346-2 K relative repeat accuracy 1 % Substance Prohibitance (Date) 12.09.2014 00:00:00 Control circuit/ Control type of voltage of the control supply voltage control supply voltage 1 at AC at 50 Hz at 60 Hz control supply voltage frequency 1 5 A AC/DC	adjustable time	0.05 600 s		
minimum ON period recovery time 250 ms reference code acc. to IEC 81346-2 K relative repeat accuracy 1 % Substance Prohibitance (Date) 12.09.2014 00:00:00 Control circuit/ Control type of voltage of the control supply voltage control supply voltage 1 at AC at 50 Hz at 60 Hz control supply voltage frequency 1 50 60 Hz	relative setting accuracy relating to full-scale value	5 %		
recovery time reference code acc. to IEC 81346-2 K relative repeat accuracy Substance Prohibitance (Date) 12.09.2014 00:00:00 Control circuit/ Control type of voltage of the control supply voltage control supply voltage 1 at AC at 50 Hz at 60 Hz control supply voltage frequency 1 50 60 Hz	thermal current	5 A		
reference code acc. to IEC 81346-2 Relative repeat accuracy Substance Prohibitance (Date) 12.09.2014 00:00:00 Control circuit/ Control type of voltage of the control supply voltage control supply voltage 1 at AC at 50 Hz at 60 Hz control supply voltage frequency 1 50 60 Hz	minimum ON period	250 ms		
relative repeat accuracy Substance Prohibitance (Date) 12.09.2014 00:00:00 Control circuit/ Control type of voltage of the control supply voltage control supply voltage 1 at AC at 50 Hz at 60 Hz 12 240 V control supply voltage frequency 1 50 60 Hz	recovery time	250 ms		
Substance Prohibitance (Date) Control circuit/ Control type of voltage of the control supply voltage control supply voltage 1 at AC at 50 Hz at 60 Hz control supply voltage frequency 1 50 60 Hz	reference code acc. to IEC 81346-2	K		
type of voltage of the control supply voltage control supply voltage 1 at AC at 50 Hz at 60 Hz control supply voltage frequency 1 control supply voltage frequency 1 control supply voltage frequency 1	relative repeat accuracy	1 %		
type of voltage of the control supply voltage control supply voltage 1 at AC at 50 Hz at 60 Hz control supply voltage frequency 1 control supply voltage frequency 1 AC/DC 12 240 V 50 60 Hz	Substance Prohibitance (Date)	12.09.2014 00:00:00		
control supply voltage 1 at AC ● at 50 Hz 12 240 V ● at 60 Hz 12 240 V control supply voltage frequency 1 50 60 Hz	Control circuit/ Control			
● at 50 Hz	type of voltage of the control supply voltage	AC/DC		
● at 60 Hz 12 240 V control supply voltage frequency 1 50 60 Hz	control supply voltage 1 at AC			
control supply voltage frequency 1 50 60 Hz	● at 50 Hz	12 240 V		
	• at 60 Hz	12 240 V		
control supply voltage 1	control supply voltage frequency 1	50 60 Hz		
	control supply voltage 1			

• at DC	12 240 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
inrush current peak	
• at 24 V	0.4 A
• at 240 V	5 A
duration of inrush current peak	
• at 24 V	0.3 ms
• at 240 V	0.5 ms
	0.0 1110
Switching Function	
switching function	
ON-delay	No
 ON-delay/instantaneous contact 	No
 passing make contact 	Yes
 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	INO .
_	No
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
-	No
ON-delay/OFF-delay/instantaneous pagaing make contact	
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
signal/instantaneous contact	Ma
retrotriggerable with switched-on control signal	No
retrotriggerable with switched-on control signal/instantaneous contact	No
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	0
number of NO contacts delayed switching	0
number of CO contacts delayed switching	1
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) $$
influence of the surrounding temperature	1% in the whole temperature range to the set runtime
power supply influence	1% in the whole voltage range to the set runtime
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	Yes
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
type of insulation	Basic insulation
category acc. 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 4 mm²), 2x (0.5 1.5 mm²)
 at AWG cables solid 	1x (20 12), 2x (20 14)
at AWG cables stranded	1x (20 12), 2x (20 14)
connectable conductor cross-section	
• solid	0.5 4 mm²
finely stranded with core end processing	0.5 4 mm²
AWG number as coded connectable conductor cross section	
• solid	20 12
• stranded	20 14
tightening torque	0.6 0.8 N·m
design of the thread of the connection screw	M3
Installation/ mounting/ dimensions	
mounting position	any

fastening method	screw and snap-on mounting	g onto 35 mm standard	mounting rail
height	100 mm		
width	22.5 mm		
depth	90 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 +60 °C		
during storage	-40 +85 °C		
during transport	-40 +85 °C		
relative humidity during operation	10 95 %		
Certificates/ approvals			
General Product Approval		EMC	Declaration of Conformity











Miscellaneous



Test Certificates

Marine / Shipping



Type Test Certificates/Test Report









Marine / Shipping

other





Confirmation

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=3RP2540-1AW30

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RP2540-1AW30

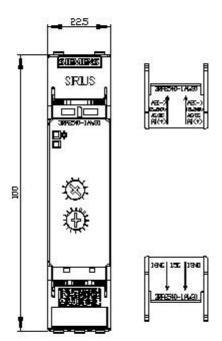
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

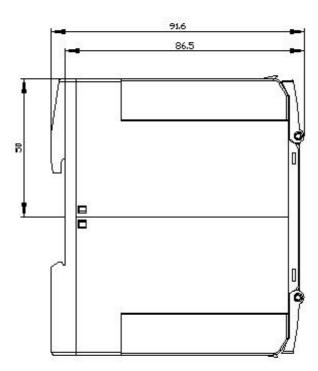
https://support.industry.siemens.com/cs/ww/en/ps/3RP2540-1AW30

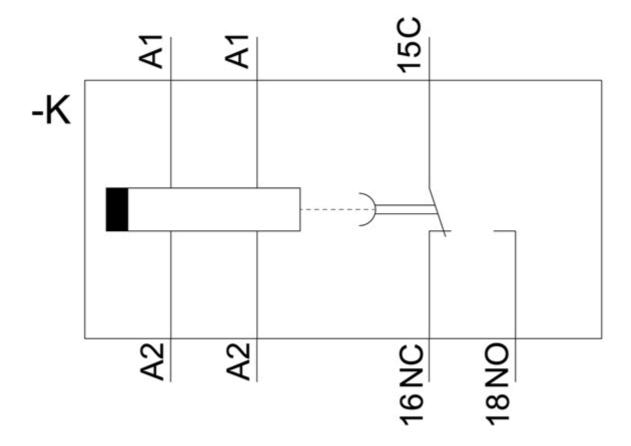
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RP2540-1AW30&lang=en

Characteristic: Derating

https://support.industry.siemens.com/cs/ww/en/ps/3RP2540-1AW30/manual







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