## 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

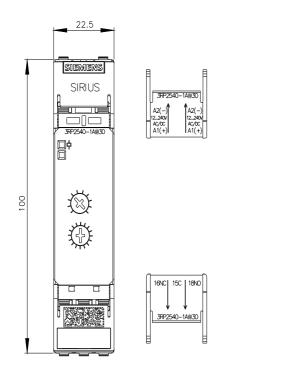
| product brand name         SIRIUS           design of the product         timing relay           rückfallverzögert ohne Steuersignal, nullspannungssicher,<br>einschaltwischend         siries           product designation         3RP25           General technical data  |  |  |  |  |
|--|--|--|--|--|
| design of the product       rückfallverzögert öhne Steuersignal, nullspannungssicher, einischaltWischend         product type designation       3RP25         General technical data   | •  |  |  |  |
| einschaltwischend einschaltwischend einschaltwischend einschaltwischend einschaltwischend erelavorseteinschaltwischend erelavorsetei |  |  |  |  |
| General technical data     Source       product component     • relay output       • semi-conductor output     No       product extension required remote control     No       product extension optional remote control     No       power loss [W] maximum     2       insulation voltage for overvoltage category III according to<br>IEC 6064 with degree of pollution 3 rated value     300 V       test voltage for isolation test     2.5 kV       degree of pollution     3       surge voltage resistance rated value     4000 V       protection class IP     IP20       shock resistance acc. to IEC 60068-2-27     11g / 15 ms       vibration resistance acc. to IEC 60068-2-27     10 000 000       electrical endurance (switching cycles) typical     1000 000       electrical endurance (switching cycles) typical     000 000       electrical endurance (switching cycles) typical     000 000       electrical endurance (switching cycles) at AC-15 at 230 V     100 0000       typical     adjustable time     0.5 600 s       relative setting accuracy relating to full-scale value     5 %; +/-       thermal current     5 A     Source       influence of the surrounding temperature     1%; in the whole temperature range to the set runtime       power supply influence     1% in the whole temperature range to the set runtime       type of  | design of the product                                  |  |  |  |
| product component     Yes       • 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 isovatoge category II according to     300 V       EC 60664 with degree of pollution 3 rated value     2.5 kV       degree of pollution     3       surge voltage for isolation test     2.5 kV       degree of pollution     3       surge voltage resistance arted value     4 000 V       protection class IP     IP20       shock resistance act. to IEC 60068-2-6     1055 klz / 0.35 mm       mechanical service life (switching cycles) typical     10 000 000       electrical endurance (switching cycles) typical     10 0000       adjustable time     0.05 600 s       relative setting accuracy relating to full-scale value     5 %; +/-       thermal current     5 A       minimum ON period     250 ms       reference code acc. to IEC 81346-2     K       relative repeat accuracy     1 %; in the whole temperature range to the set runtime       power supply influence     1%; in the whole voltage range to the set runtime       power supply influence     1%; in the whole voltage range to the set runtime       tot   | product type designation                               | 3RP25  |  |  |
| • relay output     Yes       • semi-conductor output     No       product extension required remote control     No       power loss [W] maximum     2 W       insulation voltage for overvoltage category III according to<br>IEC 60064 with degree of pollution 3 rated value     300 V       test voltage for isolation test     2.5 kV       degree of pollution     3       surge voltage resistance rated value     4000 V       protact extension extend value     1P20       shock resistance acc. to IEC 60068-2-27     11g / 15 ms       vibration resistance acc. to IEC 60068-2-6     10 65 Hz / 0.35 mm       mechanical service life (switching cycles) typical     100 000       electrical endurance (switching cycles) at AC-15 at 230 V     100 000       typical     0.05 600 s       relative setting accuracy relating to full-scale value     5 %; +/-       thermal current     5 A       minimum ON period     250 ms       releate accuracy     1%; +/-       influence of the surrounding temperature     1%; h/-       influence of the surrounding temperature     1%; h/-       influence of the surrounding temperature     1%; h/-       power supply influence     1%; h/-       power supply influence     20.0214       Control circuit/ control     20.02014       Control circuit/ control </th <th>General technical data</th> <th></th>   | General technical data                                 |  |  |  |
| • 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<br>IEC 00064 with degree of pollution 3 rated value         300 V           test voltage for isolation test         2.5 kV           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 IIF (switching cycles) typical         100 000           electrical endurance (switching cycles) typical         100 000           electrical endurance (switching cycles) typical         0.05 600 s           relative setting accuracy relating to full-scale value         5 % . +/-           thermal current         5 A           reference code acc. to IEC 81346-2         K           reference code acc. to IEC 81346-2   | product component                                      |  |  |  |
| product extension required remote control         No           product extension optional remote control         No           power loss [W] maximum         2 W           insulation voltage for vervoltage category III according to<br>IEC 60664 with degree of pollution 3 rated value         300 V           test voltage for isolation test         2.5 kV           degree of pollution         3 a           surge voltage resistance rated value         4000 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 IIf (exisching cycles) typical         10 000 000           electrical endurance (switching cycles) typical         10 000 000           electrical endurance (switching cycles) typical         0.05 600 s           relative setting accuracy relating to full-scale value         5 %; +/-           thermal current         5 A           relative repeat accuracy         1 %; +/-           influence of the surrounding temperature         1% in the whole temperature range to the set runtime           power supply influence         12.0.9.2014           Control circuit/ Control         12.0.9.2014           Control circuit/ Control         12 240 V <td><ul> <li>relay output</li> </ul></td> <td>Yes</td>   | <ul> <li>relay output</li> </ul>                       | Yes  |  |  |
| product extension optional remote controlNopower loss [W] maximum2 Winsulation voltage for overvoltage category III according to<br>IEC 60664 with degree of pollution 3 rated value300 Vtest voltage for isolation test2.5 kVdegree of pollution3surge voltage resistance rated value4 000 Vprotection class IPIP20shock resistance acc. to IEC 60068-2-2711g / 15 msvibration resistance acc. to IEC 60068-2-61055 Hz / 0.35 mmmechanical service life (switching cycles) typical100 000electrical endurance (switching cycles) typical0.05 600 srelative setting accuracy relating to full-scale value5 %; +/-thermal current5 Arelative setting accuracy1 %; +/-influence of the surrounding temperature1 %; in the whole temperature range to the set runtimepower supply influence12 2240 Vsubstance Prohibitance (Date)AC/DCcontrol supply voltage frequency 150 600 Hz   | semi-conductor output                                  | No   |  |  |
| power loss [W] maximum2 Winsulation voltage for overvoltage category III according to<br>IEC 60664 with degree of pollution 3 rated value300 Vtest voltage for isolation test2.5 kVdegree of pollution3surge voltage resistance rated value4 000 Vprotection class IPIP20shock resistance acc. to IEC 60068-2-2711g / 15 msvibration resistance acc. to IEC 60068-2-610 55 Hz / 0.35 mmmechanical service life (switching cycles) typical10 000 000electrical endurance (switching cycles) at AC-15 at 230 V100 000typical0.05 600 srelative setting accuracy relating to full-scale value5 %; +/-thermal current5 Aminimum ON period250 msrecovery time250 msreference code acc. to IEC 81346-2Krelative repeat accuracy1 %; +/-influence of the surrounding temperature1% in the whole temperature range to the set runtimepower supply influence12 09.2014Control circuit/ Control4C/DCvibration c for blz12 240 Vat 50 Hz12 240 Vat 50 Hz12 240 Vat 50 Hz12 240 Vat 50 Hz50 60 Hz  | product extension required remote control              | No   |  |  |
| Insulation voltage for overvoltage category III according to<br>IEC 60664 with degree of pollution 3 rated value       300 V         test voltage for isolation test       2.5 kV         degree of pollution       3         surge voltage resistance rated value       4000 V         protection class IP       IP20         shock resistance acc. to IEC 60068-2-27       11g / 15 ms         vibration resistance acc. to IEC 60068-2-6       1055 Hz / 0.35 mm         mechanical service life (switching cycles) typical       100 000         electrical endurance (switching cycles) at AC-15 at 230 V       100 000         typical       0.05 600 s         relative setting accuracy relating to full-scale value       5%; +/-         thermal current       5 A         minimum ON period       250 ms         reference code acc. to IEC 81346-2       K         relative repeat accuracy       1%; +/-         influence of the surrounding temperature       1% in the whole temperature range to the set runtime         power supply influence       1% in the whole temperature range to the set runtime         power supply voltage of the control supply voltage       AC/DC         control supply voltage 1 at AC       12 240 V         • at 50 Hz       12 240 V         • at 50 Hz       12 240 V <td>product extension optional remote control</td> <td>No</td>  | product extension optional remote control              | No   |  |  |
| IEC 60664 with degree of pollution 3 rated value       2.5 kV         test voltage for isolation test       2.5 kV         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       1055 Hz / 0.35 mm         mechanical service life (switching cycles) typical       100 000         electrical endurance (switching cycles) at AC-15 at 230 V       100 000         typical       0.05 600 s         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 %; +/-         influence       11 %; in the whole temperature range to the set runtime         power supply influence       1%; in the whole temperature range to the set runtime         substance Prohibitance (Date)       12  | power loss [W] maximum                                 | 2 W  |  |  |
| degree of pollution3surge voltage resistance rated value4 000 Vprotection class IPIP20shock resistance acc. to IEC 60068-2-2711g / 15 msvibration resistance acc. to IEC 60068-2-610 55 Hz / 0.35 mmmechanical service life (switching cycles) typical10 000 000electrical endurance (switching cycles) at AC-15 at 230 V100 000typical0.05 600 srelative setting accuracy relating to full-scale value5 %; +/-thermal current5 Aminimum ON period250 msreference code acc. to IEC 81346-2Krelative repeat accuracy1 %; +/-influence of the surrounding temperature1% in the whole temperature range to the set runtimepower supply influence1% in the whole voltage range to the set runtimesubstance Prohibitance (Date)12.09.2014Control circuit Control12 240 Ve at 50 Hz12 240 Ve at 60 Hz12 240 Ve ontrol supply voltage frequency 150 60 Hz   | o o , o  | 300 V  |  |  |
| Surge voltage resistance rated value4 000 Vprotection class IPIP20shock resistance acc. to IEC 60068-2-2711g / 15 msvibration resistance acc. to IEC 60068-2-610 55 Hz / 0.35 mmmechanical service life (switching cycles) typical10 000 000electrical endurance (switching cycles) at AC-15 at 230 V100 000typical0.05 600 srelative setting accuracy relating to full-scale value5 %; +/-thermal current5 Aminimum ON period250 msrecovery time250 msreference code acc. to IEC 81346-2Krelative repeat accuracy1 %; +/-influence of the surrounding temperature1% in the whole temperature range to the set runtimepower supply influence1% in the whole voltage range to the set runtimesubstance Prohibitance (Date)2.00 Vtype of voltage of the control supply voltageAC/DCcontrol supply voltage 1 at AC12 240 Ve at 50 Hz12 240 Ve at 60 Hz12 240 Vcontrol supply voltage frequency 150 60 Hz  | test voltage for isolation test                        | 2.5 kV   |  |  |
| Protection class IPIP20shock resistance acc. to IEC 60068-2-2711g / 15 msvibration resistance acc. to IEC 60068-2-610 55 Hz / 0.35 mmmechanical service life (switching cycles) typical10 000 000electrical endurance (switching cycles) at AC-15 at 230 V<br>typical100 000adjustable time0.05 600 srelative setting accuracy relating to full-scale value5 %; +/-thermal current5 Aminimum ON period250 msrecovery time250 msreference code acc. to IEC 81346-2Krelative repeat accuracy1 %; +/-influence of the surrounding temperature1% in the whole temperature range to the set runtimepower supply influence12.09.2014Control circuit/ Control250 CCetation control supply voltageAC/DCcontrol supply voltage frequency 150 60 Hz  | degree of pollution                                    | 3  |  |  |
| shock resistance acc. to IEC 60068-2-2711g / 15 msvibration resistance acc. to IEC 60068-2-610 55 Hz / 0.35 mmmechanical service life (switching cycles) typical10 000 000electrical endurance (switching cycles) at AC-15 at 230 V<br>typical100 000adjustable time0.05 600 srelative setting accuracy relating to full-scale value5 %; +/-thermal current5 Aminimum ON period250 msreference code acc. to IEC 81346-2Krelative repeat accuracy1%; +/-influence of the surrounding temperature1% in the whole temperature range to the set runtimepower supply influence10% in the whole voltage range to the set runtimesubstance Prohibitance (Date)12.09.2014Control circuit/ Control4C/DC• at 50 Hz12 240 V• at 60 Hz12 240 V• at 60 Hz12 240 V• control supply voltage frequency 150 60 Hz   | surge voltage resistance rated value                   | 4 000 V  |  |  |
| vibration resistance acc. to IEC 60068-2-610 55 Hz / 0.35 mmmechanical service life (switching cycles) typical10 000 000electrical endurance (switching cycles) at AC-15 at 230 V<br>typical100 000adjustable time0.05 600 srelative setting accuracy relating to full-scale value5 %; +/-thermal current5 Aminimum ON period250 msrecovery time250 msreference code acc. to IEC 81346-2Krelative repeat accuracy1 %; +/-influence of the surrounding temperature1 %; i +/-influence of the surrounding temperature1 %; in the whole temperature range to the set runtimepower supply influence12.09.2014Control circuit/ Controltype of voltage of the control supply voltageAC/DCe at 50 Hz12 240 V• at 60 Hz12 240 V• at 60 Hz50 60 Hzcontrol supply voltage frequency 150 60 Hz  | protection class IP                                    | IP20   |  |  |
| mechanical service life (switching cycles) typical10 000 000electrical endurance (switching cycles) at AC-15 at 230 V<br>typical100 000adjustable time0.05 600 srelative setting accuracy relating to full-scale value5 %; +/-thermal current5 Aminimum ON period250 msrecovery time250 msreference code acc. to IEC 81346-2Krelative repeat accuracy1 %; +/-influence of the surrounding temperature1% in the whole temperature range to the set runtimepower supply influence1% in the whole voltage range to the set runtimeSubstance Prohibitance (Date)12.09.2014Control circuit/ ControlYpe of voltage of the control supply voltagee at 50 Hz12 240 Ve at 60 Hz12 240 Ve at 60 Hz12 240 Vcontrol supply voltage frequency 150 60 Hz   | shock resistance acc. to IEC 60068-2-27                | 11g / 15 ms  |  |  |
| electrical endurance (switching cycles) at AC-15 at 230 V<br>typical100 000adjustable time0.05 600 srelative setting accuracy relating to full-scale value5 %; +/-thermal current5 Aminimum ON period250 msrecovery time250 msreference code acc. to IEC 81346-2Krelative repeat accuracy1 %; +/-influence of the surrounding temperature1% in the whole temperature range to the set runtimepower supply influence1% in the whole voltage range to the set runtimeSubstance Prohibitance (Date)12.09.2014Control circuit/ ControlAC/DCe at 50 Hz12 240 Ve at 60 Hz12 240 Vs at 60 Hz50 60 Hzcontrol supply voltage frequency 150 60 Hz  | vibration resistance acc. to IEC 60068-2-6             | 10 55 Hz / 0.35 mm                                   |  |  |
| typicaladjustable time0.05 600 srelative setting accuracy relating to full-scale value5 %; +/-thermal current5 Aminimum ON period250 msrecovery time250 msreference code acc. to IEC 81346-2Krelative repeat accuracy1 %; +/-influence of the surrounding temperature1% in the whole temperature range to the set runtimepower supply influence1% in the whole voltage range to the set runtimeSubstance Prohibitance (Date)12.09.2014Control supply voltage of the control supply voltageAC/DCe at 50 Hz12 240 V• at 60 Hz12 240 V• at 60 Hz12 240 V• at 60 Hz50 60 Hzcontrol supply voltage frequency 150 60 Hz  | mechanical service life (switching cycles) typical     | 10 000 000   |  |  |
| 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 %; +/-         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         Substance Prohibitance (Date)       12.09.2014         Control circuit/ Control       V         e at 50 Hz       12 240 V         • at 60 Hz       12 240 V         • at 60 Hz       12 240 V         control supply voltage frequency 1       50 60 Hz   |  | 100 000  |  |  |
| thermal current5 Aminimum ON period250 msrecovery time250 msreference code acc. to IEC 81346-2Krelative repeat accuracy1 %; +/-influence of the surrounding temperature1% in the whole temperature range to the set runtimepower supply influence1% in the whole voltage range to the set runtimeSubstance Prohibitance (Date)12.09.2014Control circuit/ ControlAC/DCtype of voltage of the control supply voltageAC/DC• at 50 Hz12 240 V• at 60 Hz12 240 V• control supply voltage frequency 150 60 Hz  | adjustable time  | 0.05 600 s   |  |  |
| minimum ON period250 msrecovery time250 msreference code acc. to IEC 81346-2Krelative repeat accuracy1 %; +/-influence of the surrounding temperature1% in the whole temperature range to the set runtimepower supply influence1% in the whole voltage range to the set runtimeSubstance Prohibitance (Date)12.09.2014Control circuit/ ControlAC/DCtype of voltage of the control supply voltageAC/DC• at 50 Hz12 240 V• at 60 Hz12 240 V• control supply voltage frequency 150 60 Hz  | relative setting accuracy relating to full-scale value | 5 %; +/-   |  |  |
| recovery time250 msreference code acc. to IEC 81346-2Krelative repeat accuracy1 %; +/-influence of the surrounding temperature1% in the whole temperature range to the set runtimepower supply influence1% in the whole voltage range to the set runtimeSubstance Prohibitance (Date)12.09.2014Control circuit/ ControlAC/DCtype of voltage of the control supply voltageAC/DC• at 50 Hz12 240 V• at 60 Hz12 240 V• control supply voltage frequency 150 60 Hz   | thermal current  | 5 A  |  |  |
| reference code acc. to IEC 81346-2       K         relative repeat accuracy       1 %; +/-         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         Substance Prohibitance (Date)       12.09.2014         Control circuit/ Control       AC/DC         type of voltage of the control supply voltage       AC/DC         • at 50 Hz       12 240 V         • at 60 Hz       12 240 V         control supply voltage frequency 1       50 60 Hz   | minimum ON period                                      | 250 ms   |  |  |
| relative repeat accuracy       1 %; +/-         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         Substance Prohibitance (Date)       12.09.2014         Control circuit/ Control       AC/DC         type of voltage of the control supply voltage       AC/DC         e at 50 Hz       12 240 V         • at 60 Hz       12 240 V         control supply voltage frequency 1       50 60 Hz  | recovery time  | 250 ms   |  |  |
| influence of the surrounding temperature1% in the whole temperature range to the set runtimepower supply influence1% in the whole voltage range to the set runtimeSubstance Prohibitance (Date)12.09.2014Control circuit/ Controltype of voltage of the control supply voltageAC/DCcontrol supply voltage 1 at AC• at 50 Hz12 240 V• at 60 Hz12 240 Vcontrol supply voltage frequency 150 60 Hz  | reference code acc. to IEC 81346-2                     | К  |  |  |
| power supply influence1% in the whole voltage range to the set runtimeSubstance Prohibitance (Date)12.09.2014Control circuit/ ControlAC/DCtype of voltage of the control supply voltageAC/DCcontrol supply voltage 1 at AC12 240 V• at 50 Hz12 240 V• at 60 Hz12 240 Vcontrol supply voltage frequency 150 60 Hz   | relative repeat accuracy                               | 1 %; +/-   |  |  |
| Substance Prohibitance (Date)       12.09.2014         Control circuit/ Control          type of voltage of the control supply voltage       AC/DC         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   | influence of the surrounding temperature               | 1% in the whole temperature range to the set runtime |  |  |
| Control circuit/ Control         type of voltage of the control supply voltage       AC/DC         control supply voltage 1 at AC       12 240 V         • at 50 Hz       12 240 V         • at 60 Hz       12 240 V         control supply voltage frequency 1       50 60 Hz   | power supply influence                                 | 1% in the whole voltage range to the set runtime     |  |  |
| type of voltage of the control supply voltageAC/DCcontrol supply voltage 1 at ACImage: mail of the control supply voltage 1 at AC• at 50 Hz12 240 V• at 60 Hz12 240 Vcontrol supply voltage frequency 150 60 Hz  | Substance Prohibitance (Date)                          | 12.09.2014   |  |  |
| control supply voltage 1 at AC• at 50 Hz12 240 V• at 60 Hz12 240 Vcontrol supply voltage frequency 150 60 Hz   | Control circuit/ Control                               |  |  |  |
| • at 50 Hz       12 240 V         • at 60 Hz       12 240 V         control supply voltage frequency 1       50 60 Hz  | type of voltage of the control supply voltage          | AC/DC  |  |  |
| • at 60 Hz 12 240 V<br>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                               |  |  |  |

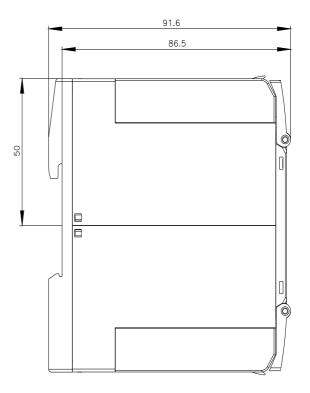
| • at DC  | 12 240 V        |
|--|-----------------|
| operating range factor control supply voltage rated  |                 |
| value at DC  |                 |
| <ul> <li>initial value</li> </ul>  | 0.85            |
| full-scale value   | 1.1             |
| operating range factor control supply 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   |                 |
| <ul> <li>initial value</li> <li>full-scale value</li> </ul>                                    | 0.85<br>1.1     |
| inrush current peak  | 1.1             |
| • 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          |
| Switching Function   |                 |
| switching function   |                 |
| • ON-delay   | No              |
| <ul> <li>ON-delay/instantaneous contact</li> </ul>   | No              |
| passing make contact   | Yes             |
| <ul> <li>passing make contact/instantaneous contact</li> <li>OFF delay</li> </ul>              | No<br>Yes       |
| switching function   |                 |
| flashing symmetrically with interval   | No              |
| start/instantaneous  |                 |
| <ul> <li>flashing symmetrically with interval start</li> </ul>                                 | No              |
| <ul> <li>flashing symmetrically with pulse</li> </ul>  | No              |
| <ul><li>start/instantaneous</li><li>flashing symmetrically with pulse start</li></ul>          | No              |
| <ul> <li>flashing asymmetrically with interval start</li> </ul>                                | No              |
| flashing asymmetrically with pulse start   | No              |
| switching function   |                 |
| <ul> <li>star-delta circuit with delay time</li> </ul>   | No              |
| star-delta circuit   | No              |
| switching function with control signal   |                 |
| <ul> <li>additive ON-delay</li> </ul>  | No              |
| <ul> <li>passing break contact</li> </ul>  | No              |
| passing break contact/instantaneous  | No              |
| OFF delay  | No              |
| <ul> <li>OFF delay/instantaneous</li> <li>pulse delayed</li> </ul>                             | No              |
| <ul> <li>pulse delayed/instantaneous</li> </ul>  | No              |
| pulse-shaping  | No              |
| pulse-shaping/instantaneous  | No              |
| additive ON-delay/instantaneous  | No              |
| ON-delay/OFF-delay/instantaneous   | No              |
| <ul> <li>passing make contact</li> </ul>   | No              |
| <ul> <li>passing make contact/instantaneous contact</li> </ul>                                 | No              |
| switching function of interval relay with control signal                                       |                 |
| <ul> <li>retrotriggerable with deactivated control<br/>signal/instantaneous contact</li> </ul> | No              |
| retrotriggerable with switched-on control signal   | No              |
| <ul> <li>retrotriggerable with switched-on control<br/>signal/instantaneous contact</li> </ul> | No              |
| <ul> <li>retriggerable with deactivated control signal</li> </ul>                              | No              |
| Short-circuit protection   |                 |
| design of the fuse link for short-circuit protection of the                                    | fuse gL/gG: 4 A |
| auxiliary switch required  |                 |

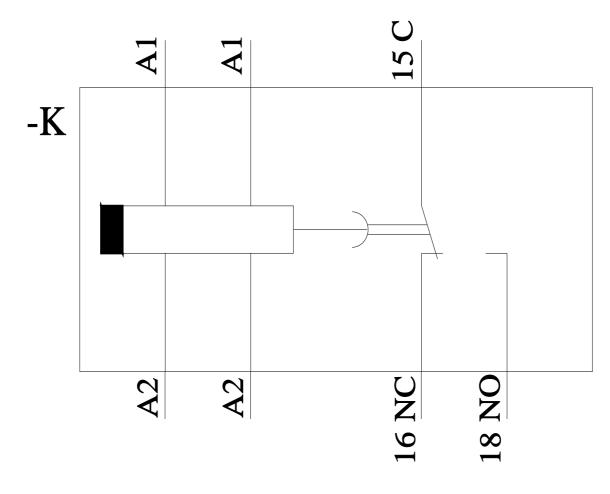
| Auxiliary circuit  |   |  |  |  |
|--|---|--|--|--|
| material of switching contacts   | AgSnO2  |  |  |  |
| number of NC contacts delayed switching  | 0   |  |  |  |
| number of NO contacts delayed switching  | 0   |  |  |  |
| number of CO contacts delayed switching  | 1   |  |  |  |
| operational 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)  |  |  |  |
| switching capacity current with inductive load   | 0.01 3 A  |  |  |  |
| Inputs/ Outputs  |   |  |  |  |
| product function   |   |  |  |  |
| • at the relay outputs switchover delayed/without  | No  |  |  |  |
| delay<br>● non-volatile  | Yes   |  |  |  |
|  |   |  |  |  |
| Electromagnetic compatibility  |   |  |  |  |
| EMC emitted interference acc. to IEC 61812-1   | ambience A (industrial sector)  |  |  |  |
| EMC immunity acc. to IEC 61812-1   | corresponds to degree of severity 3   |  |  |  |
| conducted interference   |   |  |  |  |
| <ul> <li>due to burst acc. to IEC 61000-4-4</li> </ul>   | 2 kV network connection / 1 kV control connection   |  |  |  |
| <ul> <li>due to conductor-earth surge acc. to IEC 61000-4-5</li> </ul>   | 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   |   |  |  |  |
| Connections/ Terminals<br>product component removable terminal for auxiliary<br>and control circuit  | Yes   |  |  |  |
| product component removable terminal for auxiliary and control circuit   |   |  |  |  |
| product component removable terminal for auxiliary<br>and control circuit<br>type of electrical connection for auxiliary and control circuit   | Yes<br>screw-type terminals   |  |  |  |
| product component removable terminal for auxiliary<br>and control circuit  | screw-type terminals  |  |  |  |
| product component removable terminal for auxiliary<br>and control circuit<br>type of electrical connection for auxiliary and control circuit<br>type of connectable conductor cross-sections<br>• solid  | screw-type terminals<br>1x (0.5 4.0 mm²), 2x (0.5 2.5 mm²)  |  |  |  |
| product component removable terminal for auxiliary<br>and control circuittype of electrical connection for auxiliary and control circuittype of connectable conductor cross-sections   | screw-type terminals<br>1x (0.5 4.0 mm²), 2x (0.5 2.5 mm²)<br>1x (0.5 4 mm²), 2x (0.5 1.5 mm²)  |  |  |  |
| product component removable terminal for auxiliary<br>and control circuit         type of electrical connection for auxiliary and control circuit         type of connectable conductor cross-sections <ul> <li>solid</li> <li>finely stranded with core end processing</li> <li>at AWG cables solid</li> </ul>  | screw-type terminals<br>1x (0.5 4.0 mm <sup>2</sup> ), 2x (0.5 2.5 mm <sup>2</sup> )<br>1x (0.5 4 mm <sup>2</sup> ), 2x (0.5 1.5 mm <sup>2</sup> )<br>1x (20 12), 2x (20 14)  |  |  |  |
| product component removable terminal for auxiliary<br>and control circuit         type of electrical connection for auxiliary and control circuit         type of connectable conductor cross-sections <ul> <li>solid</li> <li>finely stranded with core end processing</li> <li>at AWG cables solid</li> <li>at AWG cables stranded</li> </ul>  | screw-type terminals<br>1x (0.5 4.0 mm²), 2x (0.5 2.5 mm²)<br>1x (0.5 4 mm²), 2x (0.5 1.5 mm²)  |  |  |  |
| product component removable terminal for auxiliary<br>and control circuit         type of electrical connection for auxiliary and control circuit         type of connectable conductor cross-sections <ul> <li>solid</li> <li>finely stranded with core end processing</li> <li>at AWG cables solid</li> <li>at AWG cables stranded</li> </ul> <li>connectable conductor cross-section</li>   | screw-type terminals<br>1x (0.5 4.0 mm <sup>2</sup> ), 2x (0.5 2.5 mm <sup>2</sup> )<br>1x (0.5 4 mm <sup>2</sup> ), 2x (0.5 1.5 mm <sup>2</sup> )<br>1x (20 12), 2x (20 14)<br>1x (20 12), 2x (20 14)  |  |  |  |
| product component removable terminal for auxiliary<br>and control circuit         type of electrical connection for auxiliary and control circuit         type of connectable conductor cross-sections <ul> <li>solid</li> <li>finely stranded with core end processing</li> <li>at AWG cables solid</li> <li>at AWG cables stranded</li> </ul> <li>connectable conductor cross-section         <ul> <li>solid</li> <li>at AWG cables stranded</li> </ul> </li>  | screw-type terminals<br>1x (0.5 4.0 mm <sup>2</sup> ), 2x (0.5 2.5 mm <sup>2</sup> )<br>1x (0.5 4 mm <sup>2</sup> ), 2x (0.5 1.5 mm <sup>2</sup> )<br>1x (20 12), 2x (20 14)<br>1x (20 12), 2x (20 14)<br>0.5 4 mm <sup>2</sup>   |  |  |  |
| product component removable terminal for auxiliary<br>and control circuit         type of electrical connection for auxiliary and control circuit         type of connectable conductor cross-sections <ul> <li>solid</li> <li>finely stranded with core end processing</li> <li>at AWG cables solid</li> <li>at AWG cables stranded</li> </ul> connectable conductor cross-section <ul> <li>solid</li> <li>finely stranded with core end processing</li> <li>solid</li> <li>finely stranded with core end processing</li> </ul>   | screw-type terminals<br>1x (0.5 4.0 mm <sup>2</sup> ), 2x (0.5 2.5 mm <sup>2</sup> )<br>1x (0.5 4 mm <sup>2</sup> ), 2x (0.5 1.5 mm <sup>2</sup> )<br>1x (20 12), 2x (20 14)<br>1x (20 12), 2x (20 14)  |  |  |  |
| product component removable terminal for auxiliary<br>and control circuit         type of electrical connection for auxiliary and control circuit         type of connectable conductor cross-sections <ul> <li>solid</li> <li>finely stranded with core end processing</li> <li>at AWG cables solid</li> <li>at AWG cables stranded</li> </ul> <li>connectable conductor cross-section         <ul> <li>solid</li> <li>at AWG cables stranded</li> </ul> </li>  | screw-type terminals<br>1x (0.5 4.0 mm <sup>2</sup> ), 2x (0.5 2.5 mm <sup>2</sup> )<br>1x (0.5 4 mm <sup>2</sup> ), 2x (0.5 1.5 mm <sup>2</sup> )<br>1x (20 12), 2x (20 14)<br>1x (20 12), 2x (20 14)<br>0.5 4 mm <sup>2</sup>   |  |  |  |
| product component removable terminal for auxiliary<br>and control circuit         type of electrical connection for auxiliary and control circuit         type of connectable conductor cross-sections <ul> <li>solid</li> <li>finely stranded with core end processing</li> <li>at AWG cables solid</li> <li>at AWG cables stranded</li> </ul> connectable conductor cross-section         solid           inely stranded with core end processing           at AWG cables stranded           connectable conductor cross-section           inely stranded with core end processing           AWG number as coded connectable conductor cross   | screw-type terminals<br>1x (0.5 4.0 mm <sup>2</sup> ), 2x (0.5 2.5 mm <sup>2</sup> )<br>1x (0.5 4 mm <sup>2</sup> ), 2x (0.5 1.5 mm <sup>2</sup> )<br>1x (20 12), 2x (20 14)<br>1x (20 12), 2x (20 14)<br>0.5 4 mm <sup>2</sup>   |  |  |  |
| product component removable terminal for auxiliary<br>and control circuit         type of electrical connection for auxiliary and control circuit         type of connectable conductor cross-sections <ul> <li>solid</li> <li>finely stranded with core end processing</li> <li>at AWG cables solid</li> <li>at AWG cables stranded</li> </ul> connectable conductor cross-section         solid           et at AWG cables stranded           connectable conductor cross-section           e solid           finely stranded with core end processing           AWG number as coded connectable conductor cross section   | screw-type terminals<br>1x (0.5 4.0 mm <sup>2</sup> ), 2x (0.5 2.5 mm <sup>2</sup> )<br>1x (0.5 4 mm <sup>2</sup> ), 2x (0.5 1.5 mm <sup>2</sup> )<br>1x (20 12), 2x (20 14)<br>1x (20 12), 2x (20 14)<br>0.5 4 mm <sup>2</sup><br>0.5 4 mm <sup>2</sup>  |  |  |  |
| product component removable terminal for auxiliary<br>and control circuit<br>type of electrical connection for auxiliary and control circuit<br>type of connectable conductor cross-sections<br>• solid<br>• finely stranded with core end processing<br>• at AWG cables solid<br>• at AWG cables stranded<br>connectable conductor cross-section<br>• solid<br>• finely stranded with core end processing<br>AWG number as coded connectable conductor cross<br>section<br>• solid<br>• stranded  | screw-type terminals<br>1x (0.5 4.0 mm <sup>2</sup> ), 2x (0.5 2.5 mm <sup>2</sup> )<br>1x (0.5 4 mm <sup>2</sup> ), 2x (0.5 1.5 mm <sup>2</sup> )<br>1x (20 12), 2x (20 14)<br>1x (20 12), 2x (20 14)<br>0.5 4 mm <sup>2</sup><br>0.5 4 mm <sup>2</sup><br>20 12   |  |  |  |
| product component removable terminal for auxiliary<br>and control circuit         type of electrical connection for auxiliary and control circuit         type of connectable conductor cross-sections <ul> <li>solid</li> <li>finely stranded with core end processing</li> <li>at AWG cables solid</li> <li>at AWG cables stranded</li> </ul> connectable conductor cross-section         solid           inely stranded with core end processing           at AWG cables stranded           connectable conductor cross-section           solid           finely stranded with core end processing           AWG number as coded connectable conductor cross section         solid           solid         stranded           tightening torque         tightening torque | screw-type terminals<br>1x (0.5 4.0 mm <sup>2</sup> ), 2x (0.5 2.5 mm <sup>2</sup> )<br>1x (0.5 4 mm <sup>2</sup> ), 2x (0.5 1.5 mm <sup>2</sup> )<br>1x (20 12), 2x (20 14)<br>1x (20 12), 2x (20 14)<br>0.5 4 mm <sup>2</sup><br>0.5 4 mm <sup>2</sup><br>20 12<br>20 12  |  |  |  |
| product component removable terminal for auxiliary<br>and control circuit         type of electrical connection for auxiliary and control circuit         type of connectable conductor cross-sections <ul> <li>solid</li> <li>finely stranded with core end processing</li> <li>at AWG cables solid</li> <li>at AWG cables stranded</li> </ul> connectable conductor cross-section         solid           e at AWG cables stranded           connectable conductor cross-section           e solid           e finely stranded with core end processing           AWG number as coded connectable conductor cross section           e solid           e stranded         tightening torque           design of the thread of the connection screw                          | screw-type terminals<br>1x (0.5 4.0 mm <sup>2</sup> ), 2x (0.5 2.5 mm <sup>2</sup> )<br>1x (0.5 4 mm <sup>2</sup> ), 2x (0.5 1.5 mm <sup>2</sup> )<br>1x (20 12), 2x (20 14)<br>1x (20 12), 2x (20 14)<br>0.5 4 mm <sup>2</sup><br>0.5 4 mm <sup>2</sup><br>20 12<br>20 12<br>20 14<br>0.6 0.8 N·m  |  |  |  |
| product component removable terminal for auxiliary<br>and control circuit<br>type of electrical connection for auxiliary and control circuit<br>type of connectable conductor cross-sections<br>• solid<br>• finely stranded with core end processing<br>• at AWG cables solid<br>• at AWG cables stranded<br>connectable conductor cross-section<br>• solid<br>• finely stranded with core end processing<br>AWG number as coded connectable conductor cross<br>section<br>• solid<br>• stranded<br>tightening torque<br>design of the thread of the connection screw<br>Installation/ mounting/ dimensions   | screw-type terminals<br>1x (0.5 4.0 mm <sup>2</sup> ), 2x (0.5 2.5 mm <sup>2</sup> )<br>1x (0.5 4 mm <sup>2</sup> ), 2x (0.5 1.5 mm <sup>2</sup> )<br>1x (20 12), 2x (20 14)<br>1x (20 12), 2x (20 14)<br>0.5 4 mm <sup>2</sup><br>0.5 4 mm <sup>2</sup><br>20 12<br>20 12<br>20 14<br>0.6 0.8 N·m<br>M3  |  |  |  |
| product component removable terminal for auxiliary<br>and control circuit<br>type of electrical connection for auxiliary and control circuit<br>type of connectable conductor cross-sections<br>• solid<br>• finely stranded with core end processing<br>• at AWG cables solid<br>• at AWG cables stranded<br>connectable conductor cross-section<br>• solid<br>• finely stranded with core end processing<br>AWG number as coded connectable conductor cross<br>section<br>• solid<br>• stranded<br>tightening torque<br>design of the thread of the connection screw<br>Installation/ mounting/ dimensions<br>mounting position  | screw-type terminals<br>$1x (0.5 4.0 \text{ mm}^2), 2x (0.5 2.5 \text{ mm}^2)$<br>$1x (0.5 4 \text{ mm}^2), 2x (0.5 1.5 \text{ mm}^2)$<br>1x (20 12), 2x (20 14)<br>1x (20 12), 2x (20 14)<br>$0.5 4 \text{ mm}^2$<br>$0.5 4 \text{ mm}^2$<br>20 12<br>20 14<br>0.6 0.8  N·m<br>M3<br>any   |  |  |  |
| product component removable terminal for auxiliary<br>and control circuit<br>type of electrical connection for auxiliary and control circuit<br>type of connectable conductor cross-sections<br>• solid<br>• finely stranded with core end processing<br>• at AWG cables solid<br>• at AWG cables stranded<br>connectable conductor cross-section<br>• solid<br>• finely stranded with core end processing<br>AWG number as coded connectable conductor cross<br>section<br>• solid<br>• stranded<br>tightening torque<br>design of the thread of the connection screw<br>Installation/ mounting/ dimensions<br>mounting position<br>fastening method  | screw-type terminals<br>1x (0.5 4.0 mm <sup>2</sup> ), 2x (0.5 2.5 mm <sup>2</sup> )<br>1x (0.5 4 mm <sup>2</sup> ), 2x (0.5 1.5 mm <sup>2</sup> )<br>1x (20 12), 2x (20 14)<br>1x (20 12), 2x (20 14)<br>0.5 4 mm <sup>2</sup><br>0.5 4 mm <sup>2</sup><br>20 12<br>20 12<br>20 14<br>0.6 0.8 N·m<br>M3<br>any<br>screw and snap-on mounting onto 35 mm standard mounting rail           |  |  |  |
| product component removable terminal for auxiliary<br>and control circuit<br>type of electrical connection for auxiliary and control circuit<br>type of connectable conductor cross-sections<br>• solid<br>• finely stranded with core end processing<br>• at AWG cables solid<br>• at AWG cables stranded<br>connectable conductor cross-section<br>• solid<br>• finely stranded with core end processing<br>AWG number as coded connectable conductor cross<br>section<br>• solid<br>• stranded<br>tightening torque<br>design of the thread of the connection screw<br>Installation/ mounting/ dimensions<br>mounting position<br>fastening method<br>height  | screw-type terminals<br>1x (0.5 4.0 mm <sup>2</sup> ), 2x (0.5 2.5 mm <sup>2</sup> )<br>1x (0.5 4 mm <sup>2</sup> ), 2x (0.5 1.5 mm <sup>2</sup> )<br>1x (20 12), 2x (20 14)<br>1x (20 12), 2x (20 14)<br>0.5 4 mm <sup>2</sup><br>0.5 4 mm <sup>2</sup><br>20 12<br>20 12<br>20 14<br>0.6 0.8 N·m<br>M3<br>any<br>screw and snap-on mounting onto 35 mm standard mounting rail<br>100 mm |  |  |  |
| product component removable terminal for auxiliary<br>and control circuit<br>type of electrical connection for auxiliary and control circuit<br>type of connectable conductor cross-sections<br>• solid<br>• finely stranded with core end processing<br>• at AWG cables solid<br>• at AWG cables stranded<br>connectable conductor cross-section<br>• solid<br>• finely stranded with core end processing<br>AWG number as coded connectable conductor cross<br>section<br>• solid<br>• stranded<br>tightening torque<br>design of the thread of the connection screw<br>Installation/ mounting/ dimensions<br>mounting position<br>fastening method  | screw-type terminals<br>1x (0.5 4.0 mm <sup>2</sup> ), 2x (0.5 2.5 mm <sup>2</sup> )<br>1x (0.5 4 mm <sup>2</sup> ), 2x (0.5 1.5 mm <sup>2</sup> )<br>1x (20 12), 2x (20 14)<br>1x (20 12), 2x (20 14)<br>0.5 4 mm <sup>2</sup><br>0.5 4 mm <sup>2</sup><br>20 12<br>20 12<br>20 14<br>0.6 0.8 N·m<br>M3<br>any<br>screw and snap-on mounting onto 35 mm standard mounting rail           |  |  |  |

|  | o mounting                                     |                     |           |                            |     |                                    |
|--|--|---------------------|-----------|----------------------------|-----|------------------------------------|
| <ul> <li>with side-by-sid</li> </ul>   | emounting                                      |                     | 0 mm      |                            |     |                                    |
| — forwards<br>— backwards  |  |                     |           |                            |     |                                    |
|  |  | 0 mm                |           |                            |     |                                    |
| — upwards  |  | 0 mm                |           |                            |     |                                    |
| — downwards  |  | 0 mm                |           |                            |     |                                    |
| — at the side  |  | 0 mm                |           |                            |     |                                    |
|  | <ul> <li>for grounded parts</li> </ul>         |                     |           |                            |     |                                    |
| — forwards   |  |                     | 0 mm      |                            |     |                                    |
| — backwards  | 3  |                     | 0 mm      |                            |     |                                    |
| — upwards  |  |                     | 0 mm      |                            |     |                                    |
| — at the side  |  |                     | 0 mm      |                            |     |                                    |
| — downward   | S  |                     | 0 mm      |                            |     |                                    |
| <ul> <li>for live parts</li> </ul>   |  |                     |           |                            |     |                                    |
| — forwards   |  |                     | 0 mm      |                            |     |                                    |
| - backwards  | 6  |                     | 0 mm      |                            |     |                                    |
| — upwards  |  |                     | 0 mm      |                            |     |                                    |
| — downward   | S  |                     | 0 mm      |                            |     |                                    |
| — at the side  |  |                     | 0 mm      |                            |     |                                    |
| Ambient conditions   |  |                     |           |                            |     |                                    |
|  | height above sea level                         | maximum             | 2 000 m   |                            |     |                                    |
|  | -  |                     | 2 000 111 |                            |     |                                    |
| ambient temperature  |  |                     | 05 .0     |                            |     |                                    |
| <ul> <li>during operation</li> </ul>   | n  |                     | -25 +6    |                            |     |                                    |
| during storage   |  |                     | -40 +8    |                            |     |                                    |
| <ul> <li>during transport</li> </ul>   |  |                     | -40 +8    |                            |     |                                    |
| relative humidity durir  |  |                     | 10 95     | %                          |     |                                    |
| Certificates/ approval   | S  |                     |           |                            |     |                                    |
| (S)P   | <b>3</b>                                       | ٩                   |           | EAC                        |     | Conformity<br><u>Miscellaneous</u> |
| Declaration of<br>Conformity   | Test Certificates                              | Marine / Ship       | pping     |                            |     |                                    |
| CE<br>EG-Konf.   | <u>Type Test Certific-</u><br>ates/Test Report | B U REAU<br>VERITAS |           | Lloyd's<br>Register<br>uis | PRS | RINA                               |
| Marine / Shipping  |  | other               |           |                            |     |                                    |
| RMRS   | DNV-GL   | <u>Confirmatic</u>  | <u>on</u> |                            |     |                                    |
| Further information  | wnloadcenter (Catalo                           | as Brochures        |           |                            |     |                                    |
| https://www.siemens.com/ic10<br>Industry Mall (Online ordering system)<br>https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RP2540-1AW30<br>Cax online generator<br>http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RP2540-1AW30<br>Service&Support (Manuals, Certificates, Characteristics, FAQs,)<br>https://support.industry.siemens.com/cs/ww/en/ps/3RP2540-1AW30<br>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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