# **SIEMENS**

### **Data sheet**

## 3RP2505-2AW30-0AX0



Timing relay, Multifunction with painted PCB 1 change-over contact, 13 functions 7 time ranges (0.05 s...100 h) 12-240 V AC/DC at 50/60 Hz AC with LED Spring-type terminal (push-in)

product brand name product designation design of the product product type designation SIRIUS timing relay 13 functions 3RP25

#### General technical data Yes; acc. to IPC-A-610 product feature protective coating on printed-circuit board 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 300 V IEC 60664 with degree of pollution 3 rated value test voltage for isolation test 2.5 kV degree of pollution 3 4 000 V surge voltage resistance rated value 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 10 000 000 mechanical service life (operating cycles) typical electrical endurance (operating cycles) at AC-15 at 100 000 230 V typical adjustable time 0.05 s ... 100 h relative setting accuracy relating to full-scale value 5 %; +/thermal current 5 A minimum ON period 35 ms recovery time 250 ms reference code according 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)** 09/12/2014 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

at DC

control supply voltage 1

control supply voltage frequency 1

50 ... 60 Hz

12 ... 240 V

operating range factor control supply voltage rated	
value at DC	
initial value	0.8
• full-scale value	1.1
operating range factor control supply voltage rated value at AC at 50 Hz	
	0.0
• initial value	0.8
full-scale value	1.1
operating range factor control supply voltage rated value at AC at 60 Hz	
• initial value	0.8
• full-scale value	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	0.0 1110
switching function	Voc
ON-delay	Yes
ON-delay/instantaneous contact     passing make contact	No You
passing make contact     passing make contact/instantaneous contact	Yes
passing make contact/instantaneous contact     OFF dolory	No No
OFF delay  avitabing function	NO
switching function	No
<ul> <li>flashing symmetrically with interval start/instantaneous</li> </ul>	IVO
flashing symmetrically with interval start	Yes
flashing symmetrically with pulse	No
start/instantaneous	
<ul> <li>flashing symmetrically with pulse start</li> </ul>	Yes
<ul> <li>flashing asymmetrically with interval start</li> </ul>	No
<ul> <li>flashing asymmetrically with pulse start</li> </ul>	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>	Yes
<ul> <li>passing break contact</li> </ul>	Yes
<ul> <li>passing break contact/instantaneous</li> </ul>	No
OFF delay	Yes
<ul> <li>OFF delay/instantaneous</li> </ul>	No
pulse delayed	Yes
<ul> <li>pulse delayed/instantaneous</li> </ul>	No
<ul><li>pulse-shaping</li></ul>	Yes
<ul><li>pulse-shaping/instantaneous</li></ul>	No
<ul> <li>additive ON-delay/instantaneous</li> </ul>	No
<ul> <li>ON-delay/OFF-delay/instantaneous</li> </ul>	No
<ul> <li>passing make contact</li> </ul>	Yes
<ul> <li>passing make contact/instantaneous contact</li> </ul>	No
switching function of interval relay with control signal	
retrotriggerable with deactivated control     signal/instantaneous contact	No
signal/instantaneous contact	Voc
<ul> <li>retrotriggerable with switched-on control</li> </ul>	Yes
<ul> <li>retrotriggerable with switched-on control signal/instantaneous contact</li> </ul>	No
retriggerable with deactivated control signal	Yes
design of the control terminal non-floating	Yes
Short-circuit protection	
design of the fuse link for short-circuit protection of the	fuse at /aC: A A
auxiliary switch required	fuse gL/gG: 4 A
Auxiliary circuit	
material of switching contacts	AgSnO2
number of NC contacts	Agono2
number of No contacts	

elidalyaed switching   0   0   0   0   0   0   0   0   0		
number of No contacts	<ul> <li>delayed switching</li> </ul>	0
• delayed switching     • instantaneous contact rumber of CO contacts     • delayed switching     • instantaneous contact     • or instantaneous contact     • or instantaneous contact     • or instantaneous contact     • at 24 V     • at 25 V     • or 24 V     • at 25 V     •		0
• instantaneous contact		
number of CD contacts	<ul><li>delayed switching</li></ul>	0
• delayed switching     • instantaneous contact     • in 24 V     • at 250 V     • or at 22 W     • at 250 V     • or at 22 W     • at 250 V     • or a		0
• instantaneous contact operational current of auxiliary contacts at AC-15  • at 24 V  • at 250 V  operational current of auxiliary contacts at DC-13  • at 24 V  • at 250 V  operating frequency with 3RT2 contacts at DC-13  • at 250 V  operating frequency with 3RT2 contactor maximum contact reliability of auxiliary contacts according to UL  switching capacity current with inductive load  (Inputs) Culputs  product function  • at the relay outputs switchover delayed/without  delay  • non-volatile  EMC emitted interference according to IEC 61812-1  EMC Immunity according to IEC 61812-1  EMC immunity according to IEC 61800-4-4  • due to burst according to IEC 6100-4-3  • due to conductor-conductor surge according to IEC  61000-4-5  • due to conductor-conductor surge according to IEC  61000-4-5  • due to conductor-conductor surge according to IEC  61000-4-5  • due to conductor-conductor surge according to IEC  61000-4-5  • due to conductor-conductor surge according to IEC  61000-4-5  • due to conductor-conductor surge according to IEC  61000-4-5  • due to conductor-conductor surge according to IEC  61000-4-5  • due to conductor-conductor surge according to IEC  61000-4-5  • due to conductor-conductor surge according to IEC  61000-4-5  • due to conductor-conductor surge according to IEC  61000-4-5  • due to conductor-conductor surge according to IEC  61000-4-5  • due to conductor-conductor surge according to IEC  61000-4-5  • due to conductor-conductor surge according to IEC  61000-4-5  • due to conductor-conductor surge according to IEC  61000-4-5  • due to conductor-conductor surge according to IEC  61000-4-5  • due to conductor-conductor surge according to IEC  61000-4-5  • due to conductor-conductor surge according to IEC  61000-4-5  • due to conductor-conductor surge according to IEC  61000-4-5  • due to conductor-conductor surge according to IEC  61000-4-5  • due to conductor-conductor conductor conducto	number of CO contacts	
sperational current of auxiliary contacts at AC-15 * at 32 V * at 250 V * of 32 A * at 250 V * of 12 EV * of 1	<ul> <li>delayed switching</li> </ul>	1
a til 24 V at 250 V soperational current of auxiliary contacts at DC-13 and 24 24 V at 125 V sold 250 V sold	<ul> <li>instantaneous contact</li> </ul>	0
a til 250 V a til 25 V at 125 V operational current of auxillary contacts at DC-13  a til 25 V operating frequency with 3RT2 contactor maximum contact relability of auxiliary contacts one incorrect switching operation of 100 million switching operations (17 V. 5 mA) contact rating of auxiliary contacts according to UL. switching capacity current with inductive load impute/ Dutyuts product function at the relay outputs switchover delayed/without by a con-volatile  Electromagnetic compatibility  EMC emitted interference according to IEC 61812-1 conducted interference a due to bust according to IEC 61812-1 conducted interference a due to output conductor earth surge according to IEC 61000-4-5 a due to conductor conductor surge according to IEC 61000-4-5 field-based interference according to IEC 61000-4-2 bus to conductor conductor surge according to IEC 61000-4-5 field-based interference according to IEC 61000-4-2 bus to conductor conductor surge according to IEC 61000-4-5 field-based interference according to IEC 61000-4-2 bus to conductor conductor surge according to IEC 61000-4-5 field-based interference according to IEC 61000-4-2 bus to conductor conductor surge according to IEC 61000-4-5 field-based interference according to IEC 61000-4-2 bus to conductor conductor surge according to IEC 61000-4-5 field-based interference according to IEC 61000-4-2 bus to conductor conductor surger according to IEC 61000-4-2 bus to conductor	operational current of auxiliary contacts at AC-15	
e at 25 V e at 2	• at 24 V	3 A
at 125 V at 125 V at 125 V at 125 V but 125 V at 125 V but 125 V	• at 250 V	3 A
at 1250 V at 1250 V operating frequency with 3RT2 contactor maximum contact reliability of auxiliary contacts contact rating of auxiliary contacts contact rating of auxiliary contacts according to UL switching capacity current with inductive load  Inputs/Outputs  product function at the relay outputs switchover delayed/without delay non-volatile  EMC emitted interference according to IEC 61812-1 EMC immunity according to IEC 61812-1 Conducted interference due to burst according to IEC 61000-4-2 due to conductor-earth surge according to IEC 61000-4-3 due to conductor-earth surge according to IEC 61000-4-3 electrostatic discharge according to IEC 61000-4-2 field-based interference according to IEC 61000-4-2 field-based interference according to IEC 61000-4-2 field-based interference according to IEC 61000-4-3 electrostatic discharge according to IEC 61000-4-2 field-based interference according to IEC 61000-4-3 electrostatic discharge according to IEC 61000-4-2 Safety related data protection class IP on the front according to IEC 61000-4-2 Safety related data protection class IP on the front according to IEC 61000-4-2 Safety related data protection class IP on the front according to IEC 61000-4-2 Safety related data protection class IP on the front according to IEC 61000-4-2 Safety related data protection class IP on the front according to IEC 61000-4-2 Safety related data protection class IP on the front according to IEC 61000-4-2 Safety related data  Protection class IP on the front according to IEC 61000-4-2 Safety related data  Protection class IP on the front according to IEC 61000-4-2 Safety related data  Protection class IP on the front according to IEC 61000-4-2 Safety related data  Protection class IP on the front according to IEC 61000-4-2 Safety related data  Protection class IP on the front according to IEC 61000-4-2 Safety related data  Protection class IP on the front according to IEC 61000-4-2 Safety related data  Protection class IP on the front according to IEC 61000-4-2 Safety related data  Prot	operational current of auxiliary contacts at DC-13	
one state of the contact rating of auxiliary contacts     contact rating of auxiliary contacts according to UL switching capacity current with inductive load     contact rating of auxiliary contacts according to UL switching capacity current with inductive load     contact rating of auxiliary contacts according to UL switching capacity current with inductive load     contact rating of auxiliary contacts according to UL switching capacity of the contact rating of auxiliary contacts     product function	• at 24 V	1 A
operating frequency with 3RT2 contactor maximum contact reliability of auxiliary contacts contact rating of auxiliary contacts according to UL switching capacity current with inductive load  Inputs/ Outputs  product function	● at 125 V	0.2 A
contact reliability of auxiliary contacts contact rating of auxiliary contacts according to UL switching capacity current with inductive load linputs/ Outputs  product function	● at 250 V	0.1 A
contact reliability of auxiliary contacts contact rating of auxiliary contacts according to UL switching capacity current with inductive load linputs/ Outputs  product function	operating frequency with 3RT2 contactor maximum	5 000 1/h
contact rating of auxiliary contacts according to UL switching capacity current with inductive load  Inputs Outputs  product function  • at the relay outputs switchover delayed/without delay • non-volatile  Electromagnetic compatibility  ambience A (industrial sector)  corresponds to degree of severity 3  conducted interference according to IEC 61000-4-4  • due to conductor-card surge according to IEC 61000-4-5  • due to conductor-conductor surge according to IEC 61000-4-3  • fleid-based interference according to IEC 61000-4-3  • fleid-based interference according to IEC 61000-4-2  Sofisty related data  protection class IP on the front according to IEC 61000-4-2  Sofisty related data  protection class IP on the front according to IEC 61000-4-2  Sofisty related data  protection class IP on the front according to IEC 61000-4-2  Sofisty related data  protection class IP on the front according to IEC 61000-4-2  Sofisty related data  protection class IP on the front according to IEC 61000-4-2  Sofisty related data  protection class IP on the front according to IEC 61000-4-2  Sofisty related data  protection class IP on the front according to IEC 61000-4-2  Sofisty related data  protection class IP on the front according to IEC 61000-4-2  Sofisty related data  protection class IP on the front according to IEC 61000-4-2  Sofisty related data  protection class IP on the front according to IEC 61000-4-2  Sofisty related data  protection class IP on the front according to IEC 61000-4-2  Sofisty related data  protection class IP on the front according to IEC 61000-4-2  Sofisty related data  protection class IP on the front according to IEC 61000-4-2  Sofisty related data  protection class IP on the front according to IEC 61000-4-3  Sofisty related		one incorrect switching operation of 100 million switching operations (17
Imputs/ Outputs  product function  • at the relay outputs switchover delayed/without delay • non-volatile  Electromagnetic compatibility  Electromagnetic compatibility  EMC emitted interference according to IEC 61812-1  e. due to burst according to IEC 61000-4-4 • due to conductor-earth surge according to IEC 61000-4-5 • due to burst according to IEC 61000-4-3 • electrostatic discharge according to IEC 61000-4-3 • electrostatic discharge according to IEC 61000-4-3 • electrostatic discharge according to IEC 61000-4-2  Safety related data  protection class IP on the front according to IEC 6000-4-2  type of insulation category according to EN 954-1  Connections/ Tominals  product component removable terminal for auxiliary and control circuit type of electrical connection for auxiliary and control circuit type of connectable conductor cross-sections • solid • if inely stranded without core end processing • finely stranded without core end processing • finely stranded with core end processing • solid • if nely stranded with core end processing • solid • solid • solid • solid • stranded • finely stranded with core end processing • solid • stranded • finely stranded with core end processing • solid • stranded • finely stranded without core end processing • solid • stranded • finely stranded without core end processing • solid • stranded • finely stranded without core end processing • solid • stranded • finely stranded with core end processing • solid • stranded • finely stranded with core end processing • solid • stranded • finely stranded without core end processing • stranded • finely stranded with core end processing • stranded • finely stranded without core end processing • stranded • finely stranded with core end processing • stranded • finely stranded without core end processing • stranded • finely stranded without core end processing • stranded • finely stranded without core end proce	, ,	
Inputs/ Outputs  product function	contact rating of auxiliary contacts according to UL	R300 / B300
product function at the relay outputs switchover delayed/without delay a non-volatile  ENC emitted interference according to IEC 61812-1 EMC immunity according to IEC 61812-1 conducted interference due to burst according to IEC 61000-4-4 due to conducted interference due to burst according to IEC 61000-4-4 due to conductor-earth surge according to IEC 61000-4-5 due to conductor-conductor surge according to IEC 61000-4-5 due to conductor disallation according to IEC 61000-4-2 d kV contact discharge / 8 kV air discharge  Safety related data  protection class IP on the front according to IEC 6822 type of insulation category according to EN 954-1  Connectable according to EN 954-1  Connectable conductor cross-sections a solid finely stranded with core end processing finely stranded without core end processing at AWG cables stranded connectable conductor cross-section  solid finely stranded with core end processing finely stranded with core end processing finely stranded with core end processing finely stranded without core end processing finely stranded with cor	switching capacity current with inductive load	0.01 3 A
product function at the relay outputs switchover delayed/without delay a non-volatile  ENC emitted interference according to IEC 61812-1 EMC immunity according to IEC 61812-1 conducted interference due to burst according to IEC 61000-4-4 due to conducted interference due to burst according to IEC 61000-4-4 due to conductor-earth surge according to IEC 61000-4-5 due to conductor-conductor surge according to IEC 61000-4-5 due to conductor disallation according to IEC 61000-4-2 d kV contact discharge / 8 kV air discharge  Safety related data  protection class IP on the front according to IEC 6822 type of insulation category according to EN 954-1  Connectable according to EN 954-1  Connectable conductor cross-sections a solid finely stranded with core end processing finely stranded without core end processing at AWG cables stranded connectable conductor cross-section  solid finely stranded with core end processing finely stranded with core end processing finely stranded with core end processing finely stranded without core end processing finely stranded with cor	Inputs/ Outputs	
* at the relay outputs switchover delayed/without delay * non-volatile		
e non-volatile No  Electromagnetic compatibility  EMC emitted interference according to IEC 61812-1 conducted interference according to IEC 61812-1 conducted interference  • due to burst according to IEC 61000-4-4 conducted interference according to IEC 61000-4-5 conductor-conductor-conductor surge according to IEC 61000-4-3 conductor-conductor-conductor surge according to IEC 61000-4-3 conductor-conductor-conductor surge according to IEC 61000-4-2 debt via flactoring to IEC 61000-4-3	•	No
• non-volatile      Electromagnetic compatibility      EMC emitted interference according to IEC 61812-1     EMC immunity according to IEC 61812-1     conducted interference     • due to burst according to IEC 61000-4-4     • due to burst according to IEC 61000-4-4     • due to conductor-earth surge according to IEC 61000-4-5     • due to conductor-conductor surge according to IEC 61000-4-5     feld-based interference according to IEC 61000-4-2     feled-based interference according to IEC 61000-4-3     electrostatic discharge according to IEC 61000-4-2     feled-based interference according to IEC 61000-4-3     feled-based interfere		NO
Electromagnetic compatibility  EMC emitted interference according to IEC 61812-1 EMC immunity according to IEC 61812-1 conducted interference  • due to burst according to IEC 61000-4-4 • due to conductor-centh surge according to IEC 61000-4-5 • due to conductor-conductor surge according to IEC 61000-4-5 • due to conductor-conductor surge according to IEC 61000-4-5 field-based interference according to IEC 61000-4-3 electrostatic discharge according to IEC 61000-4-2  Safety related data  protection class IP on the front according to IEC 60529 type of insulation category according to EN 954-1  Connections/ Terminals  product component removable terminal for auxiliary and control circuit type of electrical connection for auxiliary and control circuit type of connectable conductor cross-sections  • solid • finely stranded with core end processing • at AWG cables stranded • at AWG cables stranded • at AWG cables stranded • finely stranded with core end processing • finely stranded without core end processing • solid • stranded • strande	•	No
EMC emitted interference according to IEC 61812-1 EMC immunity according to IEC 61812-1 conducted interference  • due to burst according to IEC 61000-4-4 • due to conductor-earth surge according to IEC 61000-4-5 • due to conductor-earth surge according to IEC 61000-4-5 • due to conductor-conductor surge according to IEC 61000-4-5 • filed-based interference according to IEC 61000-4-3 electrostatic discharge according to IEC 61000-4-3 electrostatic discharge according to IEC 61000-4-2  Safety related data  protection class IP on the front according to IEC 6000-4-2  protection class IP on the front according to IEC 6000-4-2  protection class IP on the front according to IEC 60529  type of insulation category according to EN 954-1  Connections/ Torminals  Product component removable terminal for auxilliary and control circuit type of electrical connection for auxilliary and control circuit type of connectable conductor cross-sections  • solid  • finely stranded with core end processing • finely stranded with core end processing • at AWG cables stranded • at AWG cables stranded • finely stranded with core end processing • solid • stranded •		
eMC immunity according to IEC 61812-1 conducted interference  • due to burst according to IEC 61000-4-4 • due to conductor-earth surge according to IEC 61000-4-5 • due to conductor-conductor surge according to IEC 61000-4-5 • due to conductor-conductor surge according to IEC 61000-4-5 • due to conductor-conductor surge according to IEC 61000-4-3 • electrostatic discharge according to IEC 61000-4-2 • safety related data  protection class IP on the front according to IEC 60529 type of insulation category according to EN 954-1  Connections/ Terminals  product component removable terminal for auxiliary and control circuit type of electrical connection for auxiliary and control circuit type of electrical connection for auxiliary and control circuit type of electrical connection for auxiliary and at AWG cables stranded • finely stranded with core end processing • at AWG cables stranded • solid • finely stranded with core end processing • finely stranded with core end processing • solid • finely stranded with core end processing • finely stranded with core end processing • finely stranded with core end processing • solid • finely stranded with core end processing • finely stranded with core end processing • finely stranded with core end processing • solid • sinely stranded without core end processing • finely stranded without core end processing • solid • sinely stranded without core end processing • solid • stranded • stran		ambianas A (industrial asst)
conducted interference  • due to burst according to IEC 61000-4-4  • due to conductor-cardth surge according to IEC 61000-4-5  • due to conductor-conductor surge according to IEC 61000-4-5  • field-based interference according to IEC 61000-4-3  • delectrostatic discharge according to IEC 61000-4-2  Safety related data  protection class IP on the front according to IEC 6000-4-2  type of insulation actegory according to EN 954-1  Connections/ Terminals  product component removable terminal for auxiliary and control circuit type of electrical connection for auxiliary and control circuit type of connectable conductor cross-sections  • solid  • finely stranded with core end processing • at AVMC cables stranded  connectable conductor cross-section  • solid • finely stranded with core end processing • solid • stranded  20 12  • stranded  20 12  stranded  20 14  Installation/ mounting/ dimensions  mounting position fastening method height  100 mm	· · · · · · · · · · · · · · · · · · ·	
• due to burst according to IEC 61000-4-4     • due to conductor-earth surge according to IEC 61000-4-5     • due to conductor-conductor surge according to IEC 61000-4-5     • due to conductor-conductor surge according to IEC 61000-4-3     • field-based interference according to IEC 61000-4-2     • decentrostatic discharge according to IEC 61000-4-2     • Safety related data     protection class IP on the front according to IEC 61000-4-2     type of insulation     category according to EN 954-1     product component removable terminal for auxiliary and control circuit type of electrical connection for auxiliary and control circuit type of connectable conductor cross-sections     • solid     • finely stranded with core end processing     • at AWG cables solid     • at AWG cables solid     • at AWG cables stranded     connectable conductor cross-section     • solid     • finely stranded with core end processing     • finely stranded with core end processing     • finely stranded with core end processing     • solid     • at AWG cables of a connectable conductor cross-section     • solid     • solid     • stranded with core end processing     • finely stranded with core end processing     • finely stranded with core end processing     • solid     • solid     • solid     • solid     • stranded without core end processing     • Solid     • solid     • solid     • stranded without core end processing     • Solid     • solid     • solid     • stranded without core end processing     • Solid     • solid     • stranded without core end processing     • Solid     • sol		corresponds to degree of severity 3
• due to conductor-earth surge according to IEC 61000-4-5     • due to conductor-conductor surge according to IEC 61000-4-5     • due to conductor-conductor surge according to IEC 61000-4-3     • dive to conductor-conductor surge according to IEC 61000-4-3     • dectrostatic discharge according to IEC 61000-4-2  Safety related data  protection class IP on the front according to IEC 6529  type of insulation category according to EN 954-1  Connections/ Terminals  product component removable terminal for auxiliary and control circuit type of electrical connection for auxiliary and control circuit type of connectable conductor cross-sections      • solid     • finely stranded with core end processing     • at AWG cables solid     • at AWG cables stranded     connectable conductor cross-section      • solid     • finely stranded with core end processing     • solid     • stranded      • solid     • stranded      • solid     • solid     • stranded      • stranded      • solid     • stranded		
• due to conductor-conductor surge according to IEC 61000-4-5 field-based interference according to IEC 61000-4-2 electrostatic discharge according to IEC 61000-4-2  **Safety related data  **protection class IP on the front according to IEC 61000-4-2  **protection class IP on the front according to IEC 61000-4-1  **protection class IP on the front according to IEC 61000-4-1  **protection class IP on the		
• due to conductor-conductor surge according to IEC 61000-4-5 field-based interference according to IEC 61000-4-3 electrostatic discharge according to IEC 61000-4-2 4 kV contact discharge / 8 kV air discharge  Safety rolated data  protection class IP on the front according to IEC 61000-4-2 4 kV contact discharge / 8 kV air discharge  Safety rolated data  protection class IP on the front according to IEC 60529 4 kV contact discharge / 8 kV air discharge  Product component removable terminal for auxiliary and control circuit type of electrical connection for auxiliary and control circuit type of connectable conductor cross-sections  Solid 5 solid 5 solid 5 solid 5 solid 6 solid 7 solid 8 solid 9 so		2 kV
field-based interference according to IEC 61000-4-3 electrostatic discharge according to IEC 61000-4-2  Safety related data  protection class IP on the front according to IEC 60529 type of insulation category according to EN 954-1  Connections/ Terminals  product component removable terminal for auxiliary and control circuit type of electrical connection for auxiliary and control circuit type of connectable conductor cross-sections  • solid • finely stranded with core end processing • at AWG cables solid • at AWG cables stranded • finely stranded with core end processing • finely stranded without core end processing • finely stranded without core end processing • finely stranded without core end processing • solid • solid • solid • stranded  20 12  **Solid • stranded  **Dos 4 mm²  **A		4114
electrostatic discharge according to IEC 61000-4-2  Safety related data  protection class IP on the front according to IEC 60529 type of insulation category according to EN 954-1  Connections/ Terminals  product component removable terminal for auxiliary and control circuit type of connectable conductor cross-sections  • solid • finely stranded with core end processing • at AWG cables solid • at AWG cables stranded • finely stranded with core end processing • finely stranded without core end processing • solid • stranded  10 V/m  4 kV contact discharge / 8 kV air discharge  Basic insulation none  Pes  Safety related discharge / 8 kV air discharge  Basic insulation none  Pes  Safety related discharge / 8 kV air discharge  Basic insulation none  Pes  Safety related discharge / 8 kV air discharge  Basic insulation none  Pes  Safety related discharge / 8 kV air discharge  Basic insulation none  Pes  Safety related discharge / 8 kV air discharge  Basic insulation none  Pes  Safety related discharge / 8 kV air discharge  Basic insulation none  Pes  Safety related discharge / 8 kV air discharge  Basic insulation none  Pes  Safety related discharge / 8 kV air discharge  Basic insulation none  Pes  Safety related discharge / 8 kV air discharge  Basic insulation none  Pes  Safety related discharge / 8 kV air discharge  Basic insulation none  Pes  Safety related discharge / 8 kV air discharge  Pes  Safety related discharge  Safety and safety and safety and safety and safety		1 kV
electrostatic discharge according to IEC 61000-4-2  Safety related data  protection class IP on the front according to IEC 60529  type of insulation category according to EN 954-1  Connections/ Terminals  product component removable terminal for auxiliary and control circuit type of electrical connection for auxiliary and control circuit type of connectable conductor cross-sections  • solid  • finely stranded without core end processing • at AWG cables solid • at AWG cables stranded • finely stranded with core end processing • solid • finely stranded with core end processing • finely stranded with core end processing • finely stranded with core end processing • solid • finely stranded without core end processing • finely stranded without core end processing • solid • solid • stranded  20 12  AWG number as coded connectable conductor cross section • solid • stranded  105 4 mm²  0.5 4 mm²  0.5 4 mm²  0.5 4 mm²  105 4 mm²  105 4 mm²  105 4 mm²  106 4 mm²  107 4 mm²  108 4 mm²  109 4 mm²  100 mm		10.V/m
protection class IP on the front according to IEC 60529 type of insulation ategory according to EN 954-1 none  Connections/ Terminals product component removable terminal for auxiliary and control circuit type of electrical connection for auxiliary and control circuit type of connectable conductor cross-sections  • solid • sinely stranded with core end processing • at AWG cables solid • at AWG cables stranded • at AWG cables stranded • finely stranded with core end processing • solid • at AWG cables did end to the solid • at AWG cables did end to the solid • finely stranded with core end processing • solid • at AWG and the stranded • finely stranded with core end processing • solid • finely stranded with core end processing • finely stranded with core end processing • finely stranded without core end processing • solid • stranded • stranded  Installation/ mounting/ dimensions  mounting position fastening method height  100 mm		
protection class IP on the front according to IEC 60529 type of insulation category according to EN 954-1 none  Connections/ Terminals  product component removable terminal for auxiliary and control circuit type of electrical connection for auxiliary and control circuit type of connectable conductor cross-sections  • solid • finely stranded with core end processing • finely stranded without core end processing • at AWG cables solid • at AWG cables stranded • at AWG cables stranded • finely stranded with core end processing • solid • solid • solid • solid • finely stranded with core end processing • finely stranded with core end processing • solid • solid • solid • solid • finely stranded with core end processing • finely stranded with core end processing • finely stranded with core end processing • finely stranded without core end processing • finely stranded without core end processing • finely stranded without core end processing • solid • solid • solid • stranded  Installation/ mounting/ dimensions  mounting position fastening method height  100 mm		4 KV Contact discharge / 6 KV all discharge
type of insulation category according to EN 954-1  Connections/ Terminals  product component removable terminal for auxiliary and control circuit type of electrical connection for auxiliary and control circuit type of electrical connectable conductor cross-sections  • solid  • finely stranded with core end processing • finely stranded without core end processing • at AWG cables solid • at AWG cables solid • at AWG cables stranded connectable conductor cross-section  • solid • solid • finely stranded with core end processing • solid • solid • finely stranded with core end processing • solid • solid • finely stranded with core end processing • finely stranded with core end processing • finely stranded with core end processing • solid • stranded  Installation/ mounting/ dimensions  mounting position fastening method height  Basic insulation none   Basic insulation none   Serion  Basic insulation none    Serion   Basic insulation none   Serion     Serion   Basic insulation none    Serion     Serion    Basic insulation none      Sering-loaded terminals (push-in)       Sering-loaded terminals (push-in)       Sering-loaded terminals (push-in)     Sering-loaded terminals (push-in)      Sering-loaded terminals (push-in)     Sering-loaded terminals (push-in)     Sering-loaded terminals (push-in)      Sering-loaded terminals (push-in)		
type of insulation category according to EN 954-1 none  Connections/ Terminals  product component removable terminal for auxiliary and control circuit type of electrical connection for auxiliary and control circuit type of connectable conductor cross-sections  • solid • sinely stranded with core end processing • at AWG cables solid • at AWG cables stranded • at AWG cables stranded • solid • sinely stranded with core end processing • solid • solid • solid • solid • sinely stranded with core end processing • solid • sinely stranded with core end processing • solid • sinely stranded with core end processing • sinely stranded without core end processing • solid • solid • solid • solid • solid • solid • stranded  AWG number as coded connectable conductor cross section • solid • stranded • stranded  * strande		IP20
category according to EN 954-1  Connections/ Terminals  product component removable terminal for auxiliary and control circuit type of electrical connection for auxiliary and control circuit type of connectable conductor cross-sections  • solid  • finely stranded with core end processing • finely stranded without core end processing • at AWG cables solid • at AWG cables stranded • at AWG cables stranded • finely stranded with core end processing • at AWG cables stranded • at AWG cables stranded • one table conductor cross-section • solid • finely stranded with core end processing • finely stranded without core end processing • finely stranded without core end processing • solid • solid • solid • stranded  • stranded  100 12  100 12  101 12  102 12  103 14  105 14  105 14  106 14  107 15  108 15  109 15  10		D
product component removable terminal for auxiliary and control circuit type of electrical connection for auxiliary and control circuit type of connectable conductor cross-sections  • solid • finely stranded with core end processing • finely stranded without core end processing • at AWG cables solid • at AWG cables stranded • at AWG cables stranded • finely stranded with core end processing • solid • at AWG cables stranded • finely stranded with core end processing • solid • finely stranded with core end processing • solid • finely stranded with core end processing • finely stranded with core end processing • finely stranded without core end processing • finely stranded without core end processing • finely stranded without core end processing • solid • solid • solid • solid • stranded  • stranded  10.5 4 mm²  20 4 mm²  20.5 4 mm²  20.5 4 mm²  20.5 4 mm²  AWG number as coded connectable conductor cross section • solid • stranded  10.5 4 mm²  20.5 4 mm²  20.5 4 mm²  AWG number as coded connectable conductor cross section • solid • stranded  20 12  20 12  20 12  30	· ·	
product component removable terminal for auxiliary and control circuit type of electrical connection for auxiliary and control circuit type of connectable conductor cross-sections  • solid • finely stranded with core end processing • at AWG cables solid • at AWG cables stranded • finely stranded without core end processing • at AWG cables stranded • finely stranded with core end processing • finely stranded with core end processing • solid • finely stranded with core end processing • finely stranded with core end processing • finely stranded with core end processing • finely stranded without core end processing • finely stranded without core end processing • solid • solid • solid • stranded • stranded • stranded • stranded  Installation/ mounting/ dimensions  mounting position fastening method height  Yes  spring-loaded terminals (push-in)   0.5 4 mm²  0.5		none
and control circuit type of electrical connection for auxiliary and control circuit type of connectable conductor cross-sections  • solid • finely stranded with core end processing • at AWG cables solid • at AWG cables stranded • finely stranded with core end processing • at AWG cables stranded • finely stranded with core end processing • solid • finely stranded with core end processing • solid • finely stranded with core end processing • finely stranded with core end processing • finely stranded without core end processing • finely stranded without core end processing • finely stranded without core end processing • solid • solid • solid • stranded  20 4 mm²  0.5 4 mm²  0.5 4 mm²  0.5 4 mm²  0.5 4 mm²  1.5 4	Connections/ Terminals	
type of electrical connection for auxiliary and control circuit type of connectable conductor cross-sections  • solid • finely stranded with core end processing • finely stranded without core end processing • at AWG cables solid • at AWG cables stranded • finely stranded with core end processing • at AWG cables stranded • at AWG cables stranded • at AWG cables stranded • finely stranded with core end processing • finely stranded with core end processing • finely stranded with core end processing • finely stranded without core end processing • finely stranded • finely stranded without core end processing • finely stranded • finely stranded without core end processing • finely stranded • finely stranded without core end processing • finely stranded • finely stranded • finely stranded without core end processing • finely stranded • finely stranded without core end processing • finely stranded without core end processing • finely st		Yes
type of connectable conductor cross-sections  • solid • finely stranded with core end processing • finely stranded without core end processing • at AWG cables solid • at AWG cables stranded • at AWG cables stranded • solid • finely stranded with core end processing • at AWG cables stranded • at AWG cables stranded • at AWG cables stranded • solid • finely stranded with core end processing • finely stranded with core end processing • finely stranded without core end processing • finely stranded without core end processing • Solid • solid • solid • solid • stranded  20 12  20 12  Installation/ mounting/ dimensions  mounting position fastening method height  any screw and snap-on mounting onto 35 mm DIN rail homm		
<ul> <li>solid</li> <li>finely stranded with core end processing</li> <li>finely stranded without core end processing</li> <li>o.5 2.5 mm²</li> <li>finely stranded without core end processing</li> <li>o.5 4 mm²</li> <li>at AWG cables solid</li> <li>at AWG cables stranded</li> <li>at AWG number as coded conductor cross section</li> <li>at AWG number as coded connectable conductor cross section</li> <li>at AWG number as coded connectable conductor cross section</li> <li>at AWG number as coded connectable conductor cross section</li> <li>at AWG number as coded connectable conductor cross section</li> <li>at AWG number as coded connectable conductor cross section</li> <li>at AWG number as coded connectable conductor cross section</li> <li>at AWG number as coded connectable conductor cross section</li> <li>at AWG number as coded connectable conductor cross section</li> <li>at AWG number as coded connectable conductor cross section</li> <li>at AWG number as coded connectable conductor cross section</li> <li>at AWG number as coded connectable conductor cross section</li> <li>at AWG number as coded connectable conductor cross section</li> <li>at AWG number as coded connectable conductor cross section</li> <li>at AWG number as coded connectable conductor cross section</li> <li>at AWG number as coded connectable conductor cross section</li> <li>at AWG number as coded connectable conductor cross as a coded connectable conductor cross section</li> <li>at AWG number as coded connectable conductor cross as a coded connecta</li></ul>	**	spring-loaded terminals (push-in)
<ul> <li>finely stranded with core end processing</li> <li>finely stranded without core end processing</li> <li>at AWG cables solid</li> <li>at AWG cables stranded</li> <li>at AWG number and processing</li> <li>at AWMG number as coded connectable conductor cross section</li> <li>at AWG number as coded connectable conductor cross section</li> <li>at AWG number as coded connectable conductor cross section</li> <li>at AWG number as coded connectable conductor cross section</li> <li>at AWG number as coded connectable conductor cross section</li> <li>at AWG number as coded connectable conductor cross section</li> <li>at AWG number as coded connectable conductor cross section</li> <li>at AWG number as coded connectable conductor cross section</li> <li>at AWG number as coded connectable conductor cross section</li> <li>at AWG number as coded connectable conductor cross section</li> <li>at AWG number as coded connectable conductor cross section</li> <li>at AWG number as coded connectable conductor cross section</li> <li>at AWG number as coded connectable conductor cross section</li> <li>at AWG number as coded connectable conductor cross section</li> <li>at AWG number as coded connectable conductor cross section</li> <li>at AWG number as coded connectable conductor cross section</li> <li>at AWG number as coded connectable conductor cross section</li> <li>at AWG number as coded connectable conductor cross section</li> <li>at AWG number as coded connectable conductor cross section</li> <li>at AWG number as coded connectable conductor cross section</li> <li>at AWG number as coded connectable conductor cross section</li> <li>at AWG number as coded connectable conductor cross section</li> <li>at AWG number as coded connectable conductor cross section</li> <li>at AWG number</li></ul>	type of connectable conductor cross-sections	
<ul> <li>finely stranded without core end processing</li> <li>at AWG cables solid</li> <li>at AWG cables stranded</li> <li>at AWG number as code difference and processing</li> <li>at Amm²</li> <li>at Amm²<td>• solid</td><td>0.5 4 mm²</td></li></ul>	• solid	0.5 4 mm²
<ul> <li>at AWG cables solid</li> <li>at AWG cables stranded</li> <li>connectable conductor cross-section</li> <li>solid</li> <li>finely stranded with core end processing</li> <li>finely stranded without core end processing</li> <li>finely stranded without core end processing</li> <li>AWG number as coded connectable conductor cross section</li> <li>solid</li> <li>stranded</li> <li>tranded</li> <li>12</li> <li>stranded</li> <li>14</li> <li>Installation/ mounting/ dimensions</li> <li>any</li> <li>fastening method</li> <li>height</li> <li>any</li> <li>screw and snap-on mounting onto 35 mm DIN rail</li> <li>height</li> </ul>	<ul> <li>finely stranded with core end processing</li> </ul>	0.5 2.5 mm²
<ul> <li>at AWG cables stranded</li> <li>connectable conductor cross-section</li> <li>solid</li> <li>finely stranded with core end processing</li> <li>finely stranded without core end processing</li> <li>finely stranded without core end processing</li> <li>AWG number as coded connectable conductor cross section</li> <li>solid</li> <li>stranded</li> <li>stranded</li> <li>tranded</li> <li>tranded</li> <li>any</li> <li>fastening method</li> <li>height</li> <li>fastening method</li> <li>height</li> </ul>	<ul> <li>finely stranded without core end processing</li> </ul>	0.5 4 mm²
connectable conductor cross-section  • solid • finely stranded with core end processing • finely stranded without core end processing • finely stranded without core end processing  AWG number as coded connectable conductor cross section • solid • stranded  20 12 • stranded  Installation/ mounting/ dimensions  mounting position fastening method height  any fastening method height  100 mm	<ul> <li>at AWG cables solid</li> </ul>	20 12
connectable conductor cross-section  • solid • finely stranded with core end processing • finely stranded without core end processing • finely stranded without core end processing  AWG number as coded connectable conductor cross section • solid • stranded  20 12 • stranded  Installation/ mounting/ dimensions  mounting position fastening method height  any fastening method height  100 mm	<ul> <li>at AWG cables stranded</li> </ul>	20 12
<ul> <li>solid</li> <li>finely stranded with core end processing</li> <li>finely stranded without core end processing</li> <li>finely stranded without core end processing</li> <li>AWG number as coded connectable conductor cross section</li> <li>solid</li> <li>stranded</li> <li>stranded</li> <li>12</li> <li>stranded</li> <li>14</li> <li>Installation/ mounting/ dimensions</li> <li>mounting position</li> <li>fastening method</li> <li>height</li> <li>no mm</li> </ul>	connectable conductor cross-section	
<ul> <li>finely stranded with core end processing</li> <li>finely stranded without core end processing</li> <li>AWG number as coded connectable conductor cross section</li> <li>solid</li> <li>stranded</li> <li>stranded</li> <li>12</li> <li>stranded</li> <li>14</li> <li>Installation/ mounting/ dimensions</li> <li>mounting position</li> <li>fastening method</li> <li>height</li> <li>no 1.5 4 mm²</li> <li>0.5 4 mm²</li> <li>12</li> <li>any</li> <li>screw and snap-on mounting onto 35 mm DIN rail</li> <li>100 mm</li> </ul>		0.5 4 mm²
finely stranded without core end processing  AWG number as coded connectable conductor cross section     solid     stranded     stranded     20 12     stranded     Installation/ mounting/ dimensions  mounting position fastening method height     100 mm      0.5 4 mm²  20 12  any screw and snap-on mounting onto 35 mm DIN rail 100 mm		
AWG number as coded connectable conductor cross section  • solid • stranded 20 12 • stranded Installation/ mounting/ dimensions  mounting position fastening method height any 100 mm		
section  • solid  • stranded  20 12  • stranded  20 14  Installation/ mounting/ dimensions  mounting position fastening method height  any screw and snap-on mounting onto 35 mm DIN rail 100 mm		
<ul> <li>solid</li> <li>stranded</li> <li>12</li> <li>14</li> <li>Installation/ mounting/ dimensions</li> <li>mounting position</li> <li>fastening method</li> <li>height</li> <li>20 12</li> <li>any</li> <li>screw and snap-on mounting onto 35 mm DIN rail</li> <li>100 mm</li> </ul>		
● stranded 20 14  Installation/ mounting/ dimensions  mounting position any fastening method screw and snap-on mounting onto 35 mm DIN rail height 100 mm		20 12
Installation/ mounting/ dimensions  mounting position fastening method height any screw and snap-on mounting onto 35 mm DIN rail 100 mm		
mounting position any fastening method screw and snap-on mounting onto 35 mm DIN rail height 100 mm		
fastening method screw and snap-on mounting onto 35 mm DIN rail height 100 mm		
height 100 mm		,
		· · · · · · · · · · · · · · · · · · ·
wiatn 17.5 mm	_	
	wiath	17.5 MM

depth	90 mm
required spacing	
<ul><li>with side-by-side mounting</li></ul>	
— forwards	0 mm
— 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	0 mm
— upwards	0 mm
— at the side	0 mm
— downwards	0 mm
<ul> <li>for live parts</li> </ul>	
— 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	

-25 ... +60 °C

-40 ... +85 °C -40 ... +85 °C

10 ... 95 %

relative humidity during operation Certificates/ approvals

## **General Product Approval**

• during operation

during transport

during storage

**EMC** 





Confirmation







**Declaration of Conformity** 

**Test Certificates** 

Marine / Shipping





Type Test Certificates/Test Report







Marine / Shipping

other







Confirmation

## **Further information**

Information on the packaging

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

 $Information-\ and\ Download center\ (Catalogs,\ Brochures,...)$ 

https://www.siemens.com/ic10

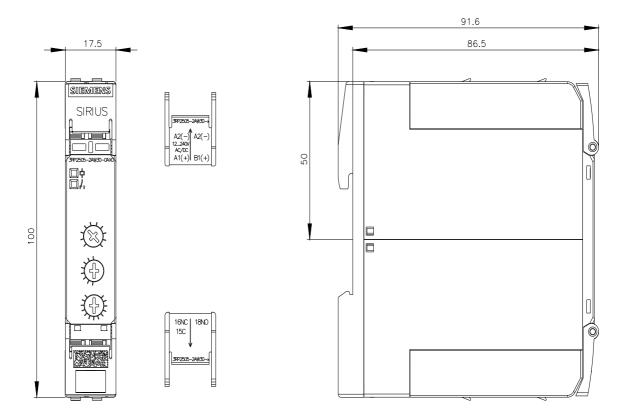
Industry Mall (Online ordering system)

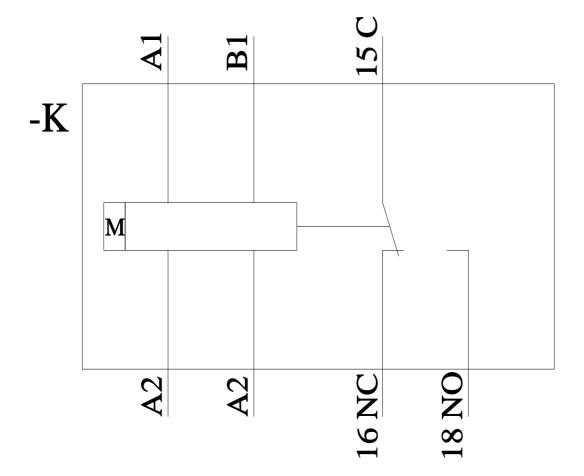
https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RP2505-2AW30-0AX0

Cax online generator

Service&Support (Manuals, Certificates, Characteristics, FAQs,...) https://support.industry.siemens.com/cs/ww/en/ps/3RP2505-2AW30-0AX0

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





last modified: 11/21/2022 ☑