## **SIEMENS**

Data sheet 3RP2505-1BB30



Timing relay, Multifunction 2 change-over contacts, 27 functions 7 time ranges (0.05 s...100 h) 24 V AC/DC at 50/60 Hz AC with LED, Screw terminal

product yes designation  design of the product product yes designation  General technical data  product component	product brand name	SIRIUS
product type designation  General technical data  product component  • relay output  • semi-conductor output  Product extension optional remote control  product extension optional remote control  No  product extension optional remote control  No  power loss [W] maximum  2 W  Insulation voltage for overvoltage category III according to IEC  60664 with degree of pollution 3 rated value  test voltage for isolation test  2.5 kV  degree of pollution  3 surge voltage resistance rated value  protection class IP  IP20  shock resistance according to IEC 60068-2-27  vibration resistance according to IEC 60068-2-6  In 55 Hz / 0.35 mm  mechanical service life (operating cycles) typical  electrical endurance (operating cycles) at AC-15 at 230 V  typical  adjustable time  relative setting accuracy relating to full-scale value  5 %; +/-  thermal current  5 A  minimum ON period  reference code according to IEC 81346-2  Krolative repeat accuracy  In %; +/-  Influence of the surrounding temperature  1% in the whole temperature range to the set runtime  power supply influence  Substance Prohibitance (Date)  Control supply voltage of the control supply voltage  ontrol supply voltage of the control supply voltage  control supply voltage frequency 1  • at DC rated value  24 V  control supply voltage frequency 1  • at DC rated value  • at CD rated value  1 over the Control supply voltage frequency 1  • at DC rated value  • at DC rated value  1 over the CD rated value  24 V  control supply voltage frequency 1  • at DC rated value	product designation	timing relay
General technical data  product component  • relay output  • semi-conductor output  product extension required remote control  product extension required remote control  product extension optional remote control  No  product extension required remote control  No  power loss [W] maximum  2 W  insulation voltage for overvoltage category III according to IEC  80664 with degree of pollution 3 rated value  test voltage for isolation test  4 000 V  protection class IP  shock resistance according to IEC 60088-2-27  vibration resistance according to IEC 60088-2-27  vibration resistance according to IEC 60088-2-8  vibration resistance according to IEC 60088-2-8  vibration resistance according cycles) at AC-15 at 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  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  3 %; +/-  influence of the surrounding temperature  1% in the whole voltage range to the set runtime  2 wustance Prohibitance (Date)  Control circuit/ Control  Control supply voltage 1 at AC  • at 50 Hz rated value  • at 60 Hz rated value  • at 60 Hz rated value  • at 60 Hz rated value  • at 0C rated value  • at DC rated value	design of the product	27 functions
product component  • relay output  • semi-conductor output  product extension orquired remote control  product extension optional remote control  product extension optional remote control  power loss [W] maximum  2 W  insulation voltage for overvoltage category III according to IEC  60664 with degree of pollution 3 rated value  test voltage for isolation test  2.5 kV  degree of pollution  3 usrge voltage resistance rated value  4 000 V  protection class IP  shock resistance according to IEC 60068-2-7  11g / 15 ms  vibration resistance according to IEC 60068-2-6  10 55 Hz / 0.35 mm  mechanical service life (operating cycles) typical  electrical endurance (operating cycles) at AC-15 at 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  reference code according to IEC 81346-2  K  relative repeat accuracy  influence of the surrounding temperature  1% in the whole temperature range to the set runtime  power supply influence  3ubstance Prohibitance (Date)  Control supply voltage 1 at AC  • at 50 Hz rated value  • at 60 Hz rated value  • at 60 Hz rated value  • at DC rated value	product type designation	3RP25
* relay output     * semi-conductor output     No     Product extension required remote control     Product extension optional remote control     No     Insulation voltage for overvoltage category Ill according to IEC     Society     Insulation voltage for sloation test     Society	General technical data	
semi-conductor output     product extension required remote control     product extension required remote control     product extension optional remote control     power loss [W] maximum     2 W     insulation voltage for overvoltage category III according to IEC	product component	
product extension required remote control product extension optional remote control No power loss [W] maximum 2 W insulation voltage for overvoltage category III according to IEC 60664 with degree of pollution 3 rated value test voltage for isolation test 4 2.5 kV  degree of pollution 3 urge voltage resistance rated value protection class IP Final Protec	<ul><li>relay output</li></ul>	Yes
product extension optional remote control power loss [W] maximum linsulation voltage for overvoltage category III according to IEC 60664 with degree of pollution 3 rated value test voltage for isolation test degree of pollution surge voltage resistance rated value 4 000 V protection class IP shock resistance according to IEC 60068-2-27   IP20 shock resistance according to IEC 60068-2-61   IP20 shock resistance according to IEC 60068-2-62   IV   IV   IV   IV   IV   IV   IV   IV	<ul> <li>semi-conductor output</li> </ul>	No
power loss [W] maximum 2 W insulation voltage for overvoltage category III according to IEC 80064 with degree of pollution 3 rated value 2.5 kV  degree of pollution 3 area voltage resistance rated value 4 000 V protection class IP IP20 shock resistance according to IEC 60068-2-27 11g / 15 ms vibration resistance according to IEC 60068-2-6 10 55 Hz / 0.35 mm mechanical service life (operating cycles) typical 10 000 000 electrical endurance (operating cycles) typical 2 100 000 000 electrical endurance (operating cycles) at AC-15 at 230 V typical 35 ms 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 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 power supply influence 1% in the whole voltage range to the set runtime  power supply influence 10 09/12/2014  control supply voltage 1 at AC  at 50 Hz rated value 24 V  at 60 Hz rated value 24 V  control supply voltage frequency 1 50 60 Hz  control supply voltage frequency 1  at DC rated value 24 V  control supply voltage frequency 1  at DC rated value 44 V	product extension required remote control	No
insulation voltage for overvoltage category III according to IEC 60664 with degree of pollution 3 rated value test voltage for isolation test 2.5 kV degree of pollution 3 a surge voltage resistance rated value 4 000 V protection class IP IP20 IP20 IP20 IP20 IP20 IP20 IP20 I	product extension optional remote control	No
test voltage for isolation test degree of pollution surge voltage resistance rated value protection class IP shock resistance according to IEC 60068-2-27 11g / 15 ms vibration resistance according to IEC 60068-2-6 10 55 Hz / 0.35 mm mechanical service life (operating cycles) typical electrical endurance (operating cycles) at AC-15 at 230 V typical adjustable time relative setting accuracy relating to full-scale value thermal current 5 A minimum ON period recovery time 150 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 Substance Prohibitance (Date) Control circuit/ Control  type of voltage of the control supply voltage control supply voltage 1 at AC  • at 50 Hz rated value • at 60 Hz rated value • at 60 Hz rated value • at 0D C rated value • at DC rated value	power loss [W] maximum	2 W
degree of pollution  surge voltage resistance rated value  protection class IP  shock resistance according to IEC 60068-2-27  11g / 15 ms  vibration resistance according to IEC 60068-2-6  mechanical service life (operating cycles) typical  electrical endurance (operating cycles) at AC-15 at 230 V typical  adjustable time  oubside time  oubside time  relative setting accuracy relating to full-scale value  thermal current  frequence code according to IEC 81346-2  relative repeat accuracy  1 %; +/-  Influence of the surrounding temperature  power supply influence  Substance Prohibitance (Date)  Control circuit' Control  type of voltage of the control supply voltage  at 60 Hz rated value  at DC rated value  at DC rated value  at DC rated value  at DC rated value  24 V  control supply voltage frequency 1  substance Prohibits and Control supply voltage frequency 1  substance Prohibits are formal current  substance Prohibits are formal current  at 60 Hz rated value  24 V  control supply voltage frequency 1  substance Prohibits are formal current  substance Prohibits are formal current  at DC rated value  24 V  control supply voltage frequency 1  substance Prohibits are formal current  substance Prohibits are formal current  at 60 Hz rated value  24 V  control supply voltage frequency 1  substance Prohibits are formal current  substance Prohibits are f		300 V
surge voltage resistance rated value  protection class IP  shock resistance according to IEC 60068-2-27  vibration resistance according to IEC 60068-2-6  nechanical service life (operating cycles) typical  electrical endurance (operating cycles) at AC-15 at 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  reference code according to IEC 81346-2  Relative repeat accuracy  1 %; +/-  influence of the surrounding temperature  power supply influence  Substance Prohibitance (Date)  Control circuit/ Control  type of voltage of the control supply voltage  at 50 Hz rated value  24 V  control supply voltage frequency 1  e at DC rated value  24 V  control supply voltage frequency 1  control supply voltage frequency 1  e at DC rated value  24 V	test voltage for isolation test	2.5 kV
protection class IP  shock resistance according to IEC 60068-2-27  11g / 15 ms  vibration resistance according to IEC 60068-2-6  mechanical service life (operating cycles) typical  electrical endurance (operating cycles) at AC-15 at 230 V  typical  adjustable time  relative setting accuracy relating to full-scale value  5 %; +/-  thermal current  5 A  minimum ON period  7 so ms  recovery time  150 ms  reference code according to IEC 81346-2  relative repeat accuracy  1 %; +/-  influence of the surrounding temperature  power supply influence  2 us whole voltage range to the set runtime  power supply influence  1% in the whole voltage range to the set runtime  substance Prohibitance (Date)  Control circuit/ Control  type of voltage of the control supply voltage  at 50 Hz rated value  2 4 V  at 60 Hz rated value  2 4 V  control supply voltage frequency 1  5 0 60 Hz  control supply voltage frequency 1  control supply voltage frequency 1  at DC rated value  2 4 V  control supply voltage frequency 1  control supply voltage frequency 1  at DC rated value  2 4 V	degree of pollution	3
shock resistance according to IEC 60068-2-27  vibration resistance according to IEC 60068-2-6  mechanical service life (operating cycles) typical electrical endurance (operating cycles) at AC-15 at 230 V typical adjustable time  relative setting accuracy relating to full-scale value  thermal current  for A minimum ON period  reference code according to IEC 81346-2  reflative repeat accuracy influence of the surrounding temperature  power supply influence  Substance Prohibitance (Date)  control circuit/ Control  type of voltage of the control supply voltage  at 50 Hz rated value  at 60 Hz rated value  at DC rated value  at DC rated value  1 10 000 000  100 00  100 00	surge voltage resistance rated value	4 000 V
wibration resistance according to IEC 60068-2-6  mechanical service life (operating cycles) typical  electrical endurance (operating cycles) at AC-15 at 230 V typical  adjustable time  relative setting accuracy relating to full-scale value  thermal current  5 A  minimum ON period  35 ms  recovery time  150 ms  reference code according to IEC 81346-2  K  relative repeat accuracy  11%; +/-  influence of the surrounding temperature  2 win the whole temperature range to the set runtime  power supply influence  Substance Prohibitance (Date)  Control circuit/ Control  type of voltage of the control supply voltage  control supply voltage 1 at AC  • at 50 Hz rated value  • at 60 Hz rated value  • at 00 Hz rated value  • at DC rated value  24 V	protection class IP	IP20
mechanical service life (operating cycles) typical electrical endurance (operating cycles) at AC-15 at 230 V typical adjustable time 0.05 s 100 h relative setting accuracy relating to full-scale value thermal current 5 A minimum ON period 35 ms recovery time 150 ms reference code according to IEC 81346-2 K relative repeat accuracy 11 %; +/- influence of the surrounding temperature power supply influence 3ubstance Prohibitance (Date) 09/12/2014 Control circuit/ Control type of voltage of the control supply voltage at 50 Hz rated value 4 V control supply voltage frequency 1 control supply voltage frequency 1 control supply voltage 1 at 50 Hz rated value 24 V control supply voltage frequency 1 control supply voltage 1 o at DC rated value 24 V control supply voltage 1 o at DC rated value 24 V	shock resistance according to IEC 60068-2-27	11g / 15 ms
electrical endurance (operating cycles) at AC-15 at 230 V typical  adjustable time  0.05 s 100 h  relative setting accuracy relating to full-scale value  thermal current  5 A  minimum ON period  35 ms  recovery time  reference code according to IEC 81346-2  relative repeat accuracy  influence of the surrounding temperature  power supply influence  Substance Prohibitance (Date)  Control circuit/ Control  type of voltage of the control supply voltage  at 60 Hz rated value  at 60 Hz rated value  control supply voltage frequency 1  at DC rated value  at DC rated value  24 V  control supply voltage 1  at DC rated value  24 V  control supply voltage 1  at DC rated value  24 V	vibration resistance according to IEC 60068-2-6	10 55 Hz / 0.35 mm
adjustable time  relative setting accuracy relating to full-scale value  thermal current  5 A  minimum ON period  recovery time  reference code according to IEC 81346-2  relative repeat accuracy  influence of the surrounding temperature  power supply influence  Substance Prohibitance (Date)  Control circuit/ Control  type of voltage of the control supply voltage  at 50 Hz rated value  at 60 Hz rated value  at 0DC rated value  at DC rated value  at DC rated value  24 V  control supply voltage 1  at DC rated value  24 V  control supply voltage 1  at DC rated value  24 V  24 V  control supply voltage 1  at DC rated value  24 V	mechanical service life (operating cycles) typical	10 000 000
relative setting accuracy relating to full-scale value  thermal current  5 A  minimum ON period  35 ms  recovery time  150 ms  reference code according to IEC 81346-2  K  relative repeat accuracy  1 %; +/-  influence of the surrounding temperature  power supply influence  Substance Prohibitance (Date)  Control circuit/ Control  type of voltage of the control supply voltage  e at 50 Hz rated value  • at 60 Hz rated value  • at 60 Hz rated value  control supply voltage frequency 1  control supply voltage 1  • at DC rated value  24 V		100 000
thermal current  5 A  minimum ON period  35 ms  recovery time  150 ms  reference code according to IEC 81346-2  K  relative repeat accuracy  influence of the surrounding temperature  power supply influence  Substance Prohibitance (Date)  Control circuit/ Control  type of voltage of the control supply voltage  at 50 Hz rated value  at 60 Hz rated value  at 00 Hz rated value  at DC rated value  24 V	adjustable time	0.05 s 100 h
minimum ON period  recovery time  150 ms  reference code according to IEC 81346-2  K  relative repeat accuracy  influence of the surrounding temperature  power supply influence  Substance Prohibitance (Date)  Control circuit/ Control  type of voltage of the control supply voltage  o at 50 Hz rated value  • at 60 Hz rated value  • at 60 Hz rated value  control supply voltage 1  • at DC rated value	relative setting accuracy relating to full-scale value	5 %; +/-
recovery time  reference code according to IEC 81346-2  K  relative repeat accuracy  influence of the surrounding temperature  power supply influence  Substance Prohibitance (Date)  Control circuit/ Control  type of voltage of the control supply voltage  control supply voltage 1 at AC  at 60 Hz rated value  control supply voltage frequency 1  control supply voltage 1  at DC rated value  at DC rated value  24 V  24 V  24 V  24 V  24 V  25 0 60 Hz	thermal current	5 A
reference code according to IEC 81346-2  relative repeat accuracy  influence of the surrounding temperature  power supply influence  Substance Prohibitance (Date)  Control circuit/ Control  type of voltage of the control supply voltage  control supply voltage 1 at AC  • at 50 Hz rated value  • at 60 Hz rated value  control supply voltage frequency 1  control supply voltage 1  • at DC rated value  • at DC rated value  • at DC rated value  24 V	minimum ON period	35 ms
relative repeat accuracy  influence of the surrounding temperature  power supply influence  Substance Prohibitance (Date)  Control circuit/ Control  type of voltage of the control supply voltage  e at 50 Hz rated value  e at 60 Hz rated value  control supply voltage frequency 1  control supply voltage 1  control supply voltage 1  e at DC rated value  e at DC rated value  24 V  24 V  24 V  25 0 60 Hz	recovery time	150 ms
influence of the surrounding temperature  power supply influence  Substance Prohibitance (Date)  Control circuit/ Control  type of voltage of the control supply voltage  control supply voltage 1 at AC  at 50 Hz rated value  at 60 Hz rated value  control supply voltage frequency 1  control supply voltage 1  control supply voltage 1  at DC rated value  at DC rated value  24 V  24 V  24 V  24 V  26 U  27 U  28 U  29 U	reference code according to IEC 81346-2	K
power supply influence  Substance Prohibitance (Date)  O9/12/2014  Control circuit/ Control  type of voltage of the control supply voltage  control supply voltage 1 at AC  • at 50 Hz rated value  • at 60 Hz rated value  control supply voltage frequency 1  control supply voltage 1  • at DC rated value  24 V  24 V  24 V  25 60 Hz	relative repeat accuracy	1 %; +/-
Substance Prohibitance (Date)  Control circuit/ Control  type of voltage of the control supply voltage  control supply voltage 1 at AC  at 50 Hz rated value  at 60 Hz rated value  control supply voltage frequency 1  control supply voltage 1  at DC rated value  24 V  24 V  24 V  24 V  24 V  25 0 60 Hz	influence of the surrounding temperature	1% in the whole temperature range to the set runtime
type of voltage of the control supply voltage  control supply voltage 1 at AC  at 50 Hz rated value  at 60 Hz rated value  control supply voltage frequency 1  control supply voltage 1  at DC rated value  24 V	power supply influence	1% in the whole voltage range to the set runtime
type of voltage of the control supply voltage  control supply voltage 1 at AC  at 50 Hz rated value  at 60 Hz rated value  control supply voltage frequency 1  control supply voltage 1  at DC rated value  24 V  24 V  24 V  24 V  24 V  24 V	Substance Prohibitance (Date)	09/12/2014
control supply voltage 1 at AC       24 V         • at 50 Hz rated value       24 V         • at 60 Hz rated value       24 V         control supply voltage frequency 1       50 60 Hz         control supply voltage 1       24 V	Control circuit/ Control	
<ul> <li>at 50 Hz rated value</li> <li>at 60 Hz rated value</li> <li>24 V</li> <li>control supply voltage frequency 1</li> <li>control supply voltage 1</li> <li>at DC rated value</li> <li>24 V</li> </ul>	type of voltage of the control supply voltage	AC/DC
at 60 Hz rated value  control supply voltage frequency 1  control supply voltage 1      at DC rated value  24 V  24 V  24 V	control supply voltage 1 at AC	
control supply voltage frequency 1 50 60 Hz  control supply voltage 1  ● at DC rated value 24 V	• at 50 Hz rated value	24 V
control supply voltage 1  • at DC rated value 24 V	at 60 Hz rated value	24 V
• at DC rated value 24 V	control supply voltage frequency 1	50 60 Hz
	control supply voltage 1	
operating range factor control supply voltage rated value at	at DC rated value	24 V
1 0 0 ···············	operating range factor control supply voltage rated value at	

DC	
• initial value	0.85
• full-scale value	1.1
operating range factor control supply voltage rated value at AC at 50 Hz	
• initial value	0.85
full-scale value	1.1
operating range factor control supply voltage rated value at AC at 60 Hz	
initial value	0.85
full-scale value	1.1
inrush current peak	
• at 24 V	2 A
duration of inrush current peak	
• at 24 V	1 ms
Switching Function	
switching function	
ON-delay	Yes
<ul> <li>ON-delay/instantaneous contact</li> </ul>	Yes
<ul> <li>passing make contact</li> </ul>	Yes
<ul> <li>passing make contact/instantaneous contact</li> </ul>	Yes
OFF delay	No
switching function	
• flashing symmetrically with interval start/instantaneous	Yes
<ul> <li>flashing symmetrically with interval start</li> </ul>	Yes
• flashing symmetrically with pulse start/instantaneous	Yes
<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	Yes
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>	Yes
OFF delay	Yes
<ul> <li>OFF delay/instantaneous</li> </ul>	Yes
pulse delayed	Yes
<ul> <li>pulse delayed/instantaneous</li> </ul>	Yes
• pulse-shaping	Yes
<ul><li>pulse-shaping/instantaneous</li></ul>	Yes
<ul> <li>additive ON-delay/instantaneous</li> </ul>	Yes
<ul> <li>ON-delay/OFF-delay/instantaneous</li> </ul>	Yes
<ul> <li>passing make contact</li> </ul>	Yes
passing make contact/instantaneous contact	Yes
switching function of interval relay with control signal	
<ul> <li>retrotriggerable with deactivated control signal/instantaneous contact</li> </ul>	Yes
• retrotriggerable with switched-on control signal	Yes
<ul> <li>retrotriggerable with switched-on control signal/instantaneous contact</li> </ul>	Yes
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 auxiliary switch required	fuse gL/gG: 4 A
Auxiliary circuit	
material of switching contacts	AgSnO2
number of NC contacts	
delayed switching	0
• instantaneous contact	0

number of NO contacts	
<ul><li>delayed switching</li></ul>	0
instantaneous contact	0
number of CO contacts	
<ul> <li>delayed switching</li> </ul>	2
instantaneous contact	0
operational current of auxiliary contacts at AC-15	
● at 24 V	3 A
• at 250 V	3 A
operational current of auxiliary contacts at DC-13	
● at 24 V	1 A
• at 125 V	0.2 A
• at 250 V	0.1 A
operating frequency with 3RT2 contactor maximum	5 000 1/h
contact reliability of auxiliary contacts	one incorrect switching operation of 100 million switching operations (17 V, 5
	mA)
contact rating of auxiliary contacts according to UL	R300 / B300
switching capacity current with inductive load	0.01 3 A
Inputs/ Outputs	
product function	
<ul> <li>at the relay outputs switchover delayed/without delay</li> </ul>	Yes
non-volatile	No
Electromagnetic compatibility	
EMC emitted interference according to IEC 61812-1	ambience A (industrial sector)
EMC immunity according to IEC 61812-1	corresponds to degree of severity 3
conducted interference	
<ul> <li>due to burst according to IEC 61000-4-4</li> </ul>	2 kV network connection / 1 kV control connection
• due to conductor-earth surge according to IEC 61000-4-5	2 kV
due to conductor-conductor surge according to IEC	1 kV
61000-4-5	
field-based interference according to IEC 61000-4-3	10 V/m
electrostatic discharge according to IEC 61000-4-2	4 kV contact discharge / 8 kV air discharge
Safety related data	
protection class IP on the front according to IEC 60529	IP20
type of insulation	Basic insulation
3,60 0	
category according to EN 954-1	none
_ ·	none
category according to EN 954-1  Connections/ Terminals  product component removable terminal for auxiliary and	none Yes
category according to EN 954-1  Connections/ Terminals  product component removable terminal for auxiliary and control circuit	Yes
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	
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	Yes screw-type terminals
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	Yes screw-type terminals 1x (0.5 4.0 mm²), 2x (0.5 2.5 mm²)
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	Yes  screw-type terminals  1x (0.5 4.0 mm²), 2x (0.5 2.5 mm²) 1x (0.5 4 mm²), 2x (0.5 1.5 mm²)
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  • for AWG cables solid	Yes  screw-type terminals  1x (0.5 4.0 mm²), 2x (0.5 2.5 mm²)  1x (0.5 4 mm²), 2x (0.5 1.5 mm²)  1x (20 12), 2x (20 14)
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  • for AWG cables solid  • for AWG cables stranded	Yes  screw-type terminals  1x (0.5 4.0 mm²), 2x (0.5 2.5 mm²) 1x (0.5 4 mm²), 2x (0.5 1.5 mm²)
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  • for AWG cables solid	Yes  screw-type terminals  1x (0.5 4.0 mm²), 2x (0.5 2.5 mm²) 1x (0.5 4 mm²), 2x (0.5 1.5 mm²) 1x (20 12), 2x (20 14) 1x (20 12), 2x (20 14)
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  • for AWG cables solid  • for AWG cables stranded	Yes  screw-type terminals  1x (0.5 4.0 mm²), 2x (0.5 2.5 mm²)  1x (0.5 4 mm²), 2x (0.5 1.5 mm²)  1x (20 12), 2x (20 14)  1x (20 12), 2x (20 14)  0.5 4 mm²
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  • for AWG cables solid  • for AWG cables stranded  connectable conductor cross-section	Yes  screw-type terminals  1x (0.5 4.0 mm²), 2x (0.5 2.5 mm²) 1x (0.5 4 mm²), 2x (0.5 1.5 mm²) 1x (20 12), 2x (20 14) 1x (20 12), 2x (20 14)
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  • for AWG cables solid  • for AWG cables stranded  connectable conductor cross-section  • solid  • finely stranded with core end processing  AWG number as coded connectable conductor cross	Yes  screw-type terminals  1x (0.5 4.0 mm²), 2x (0.5 2.5 mm²)  1x (0.5 4 mm²), 2x (0.5 1.5 mm²)  1x (20 12), 2x (20 14)  1x (20 12), 2x (20 14)  0.5 4 mm²
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  • for AWG cables solid  • for AWG cables stranded  connectable conductor cross-section  • solid  • finely stranded with core end processing  AWG number as coded connectable conductor cross section	Yes  screw-type terminals  1x (0.5 4.0 mm²), 2x (0.5 2.5 mm²)  1x (0.5 4 mm²), 2x (0.5 1.5 mm²)  1x (20 12), 2x (20 14)  1x (20 12), 2x (20 14)  0.5 4 mm²  0.5 4 mm²
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  • for AWG cables solid  • for AWG cables stranded  connectable conductor cross-section  • solid  • finely stranded with core end processing  AWG number as coded connectable conductor cross section  • solid	Yes  screw-type terminals  1x (0.5 4.0 mm²), 2x (0.5 2.5 mm²)  1x (0.5 4 mm²), 2x (0.5 1.5 mm²)  1x (20 12), 2x (20 14)  1x (20 12), 2x (20 14)  0.5 4 mm²  0.5 4 mm²  20 12
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	Yes  screw-type terminals  1x (0.5 4.0 mm²), 2x (0.5 2.5 mm²)  1x (0.5 4 mm²), 2x (0.5 1.5 mm²)  1x (20 12), 2x (20 14)  1x (20 12), 2x (20 14)  0.5 4 mm²  0.5 4 mm²  20 12  20 14
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  • for AWG cables solid  • for AWG cables stranded  connectable conductor cross-section  • solid  • finely stranded with core end processing  AWG number as coded connectable conductor cross section  • solid  • stranded  tightening torque	Yes  screw-type terminals  1x (0.5 4.0 mm²), 2x (0.5 2.5 mm²)  1x (0.5 4 mm²), 2x (0.5 1.5 mm²)  1x (20 12), 2x (20 14)  1x (20 12), 2x (20 14)  0.5 4 mm²  0.5 4 mm²  20 12  20 14  0.6 0.8 N·m
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  • for AWG cables solid  • for AWG cables stranded  connectable conductor cross-section  • solid  • finely stranded with core end processing  AWG number as coded connectable conductor cross section  • solid  • stranded  tightening torque  design of the thread of the connection screw	Yes  screw-type terminals  1x (0.5 4.0 mm²), 2x (0.5 2.5 mm²)  1x (0.5 4 mm²), 2x (0.5 1.5 mm²)  1x (20 12), 2x (20 14)  1x (20 12), 2x (20 14)  0.5 4 mm²  0.5 4 mm²  20 12  20 14
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  • for AWG cables solid  • for AWG cables stranded  connectable conductor cross-section  • solid  • finely stranded with core end processing  AWG number as coded connectable conductor cross section  • solid  • stranded  tightening torque  design of the thread of the connection screw  Installation/ mounting/ dimensions	Yes  screw-type terminals  1x (0.5 4.0 mm²), 2x (0.5 2.5 mm²)  1x (0.5 4 mm²), 2x (0.5 1.5 mm²)  1x (20 12), 2x (20 14)  1x (20 12), 2x (20 14)  0.5 4 mm²  0.5 4 mm²  20 12  20 14  0.6 0.8 N·m  M3
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  • for AWG cables solid  • for AWG cables stranded  connectable conductor cross-section  • solid  • finely stranded with core end processing  AWG number as coded connectable conductor cross section  • solid  • stranded  tightening torque  design of the thread of the connection screw  Installation/ mounting/ dimensions  mounting position	Yes  screw-type terminals  1x (0.5 4.0 mm²), 2x (0.5 2.5 mm²)  1x (0.5 4 mm²), 2x (0.5 1.5 mm²)  1x (20 12), 2x (20 14)  1x (20 12), 2x (20 14)  0.5 4 mm²  0.5 4 mm²  20 12  20 14  0.6 0.8 N·m  M3
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	Yes  screw-type terminals  1x (0.5 4.0 mm²), 2x (0.5 2.5 mm²)  1x (0.5 4 mm²), 2x (0.5 1.5 mm²)  1x (20 12), 2x (20 14)  1x (20 12), 2x (20 14)  0.5 4 mm²  0.5 4 mm²  20 12  20 14  0.6 0.8 N·m  M3  any  screw and snap-on mounting onto 35 mm DIN rail
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	Yes  screw-type terminals  1x (0.5 4.0 mm²), 2x (0.5 2.5 mm²)  1x (0.5 4 mm²), 2x (0.5 1.5 mm²)  1x (20 12), 2x (20 14)  1x (20 12), 2x (20 14)  0.5 4 mm²  0.5 4 mm²  20 12  20 14  0.6 0.8 N·m  M3  any  screw and snap-on mounting onto 35 mm DIN rail  100 mm
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	Yes  screw-type terminals  1x (0.5 4.0 mm²), 2x (0.5 2.5 mm²)  1x (0.5 4 mm²), 2x (0.5 1.5 mm²)  1x (20 12), 2x (20 14)  1x (20 12), 2x (20 14)  0.5 4 mm²  0.5 4 mm²  20 12  20 14  0.6 0.8 N·m  M3  any  screw and snap-on mounting onto 35 mm DIN rail
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	Yes  screw-type terminals  1x (0.5 4.0 mm²), 2x (0.5 2.5 mm²)  1x (0.5 4 mm²), 2x (0.5 1.5 mm²)  1x (20 12), 2x (20 14)  1x (20 12), 2x (20 14)  0.5 4 mm²  0.5 4 mm²  20 12  20 14  0.6 0.8 N·m  M3  any  screw and snap-on mounting onto 35 mm DIN rail  100 mm
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	Yes  screw-type terminals  1x (0.5 4.0 mm²), 2x (0.5 2.5 mm²)  1x (0.5 4 mm²), 2x (0.5 1.5 mm²)  1x (20 12), 2x (20 14)  1x (20 12), 2x (20 14)  0.5 4 mm²  0.5 4 mm²  20 12  20 14  0.6 0.8 N·m  M3  any  screw and snap-on mounting onto 35 mm DIN rail  100 mm  22.5 mm

— 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	
<ul><li>during operation</li></ul>	-25 +60 °C
during storage	-40 +85 °C
during transport	-40 +85 °C
relative humidity during operation	10 95 %
Certificates/ approvals	

(I)



Confirmation







**EMC** 

**Declaration of Conformity** 

**General Product Approval** 

**Test Certificates** 

Marine / Shipping





Type Test Certificates/Test Report







Marine / Shipping

other







Confirmation

## Further information

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

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

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

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

Information on the packaging

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

Information- and Downloadcenter (Catalogs, Brochures,...)

https://www.siemens.com/ic10

Industry Mall (Online ordering system)

https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RP2505-1BB30

Cax online generator

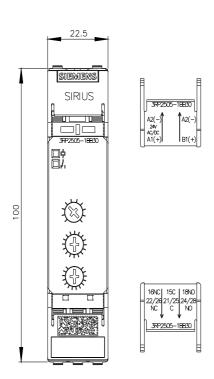
http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RP2505-1BB30

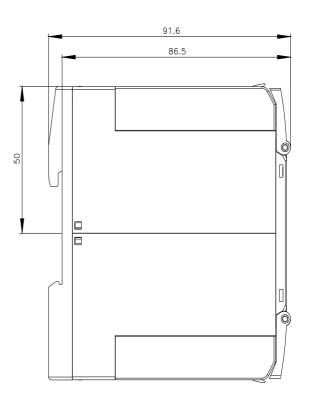
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

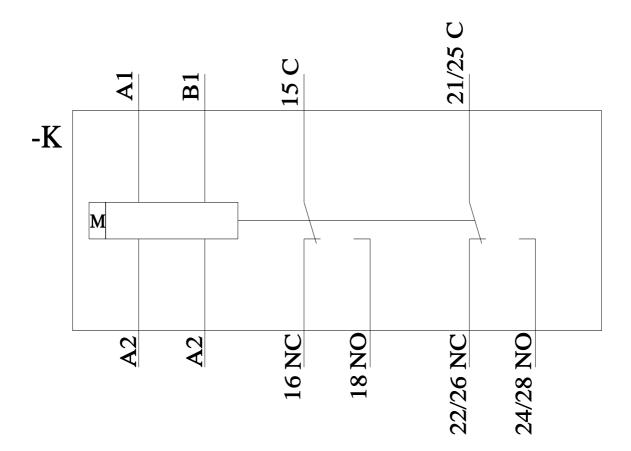
 $\underline{\text{https://support.industry.siemens.com/cs/ww/en/ps/3RP2505-1BB30}}$ 

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

 $\underline{\text{http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RP2505-1BB30\&lang=enderse$ 







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