# SIEMENS

## Data sheet

## 3RP2505-2AB30



Timing relay, Multifunction 1 change-over contact, 13 functions 7 time ranges (0.05 s...100 h) 24 V AC/DC at 50/60 Hz AC with LED Spring-type terminal (push-in)

product brand name	SIRIUS
product designation	timing relay
design of the product	13 functions
product type designation	3RP25
General technical data	
product component	
relay output	Yes
<ul> <li>semi-conductor output</li> </ul>	No
product extension required remote control	No
product extension optional remote control	No
power loss [W] maximum	2 W
insulation voltage for overvoltage category III according to IEC 60664 with degree of pollution 3 rated value	300 V
test voltage for isolation test	2.5 kV
degree of pollution	3
surge voltage resistance rated value	4 000 V
protection class IP	IP20
shock resistance according to IEC 60068-2-27	11g / 15 ms
mechanical service life (operating cycles) typical	10 000 000
electrical endurance (operating cycles) at AC-15 at 230 V typical	100 000
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	150 ms
reference code according to IEC 81346-2	К
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
SVHC substance name	Blei - 7439-92-1 Bleimonoxid (Bleioxid) - 1317-36-8
Control circuit/ Control	
type of voltage of the control supply voltage	AC/DC
control supply voltage 1 at AC	
• at 50 Hz rated value	24 V
• at 60 Hz rated value	24 V
control supply voltage frequency 1	50 60 Hz
control supply voltage 1	
• at DC rated value	24 V

operating range factor control supply voltage rated value at DC	
initial value	0.85
	1.1
• 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> </ul>	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
ON-delay/instantaneous contact	No
passing make contact	Yes
<ul> <li>passing make contact/instantaneous contact</li> </ul>	No
OFF delay	No
switching function	
<ul> <li>flashing symmetrically with interval start/instantaneous</li> </ul>	No
flashing symmetrically with interval start	Yes
flashing symmetrically with pulse start/instantaneous	No
flashing symmetrically with pulse start	Yes
<ul> <li>flashing asymmetrically with interval start</li> </ul>	No
	No
flashing asymmetrically with pulse start     switching function	NU
	No
<ul> <li>star-delta circuit with delay time</li> <li>star-delta circuit</li> </ul>	No
switching function with control signal	NO
	Yes
additive ON-delay	
passing break contact	Yes
passing break contact/instantaneous	No
• OFF delay	Yes
OFF delay/instantaneous	No
• pulse delayed	Yes
pulse delayed/instantaneous	No
• pulse-shaping	Yes
pulse-shaping/instantaneous	No
additive ON-delay/instantaneous	No
ON-delay/OFF-delay/instantaneous	No
passing make contact	Yes
passing make contact/instantaneous contact	No
switching function of interval relay with control signal	
<ul> <li>retrotriggerable with deactivated control signal/instantaneous contact</li> </ul>	No
<ul> <li>retrotriggerable with switched-on control signal</li> </ul>	Yes
retrotriggerable with switched-on control     instanting control	No
signal/instantaneous contact	Vee
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

extendiatedus contact     edexyet switching     edexyet switc		
• elsiyet switching         0           • elsiyet switching         1           • elsiyet switching         1           • elsiyet switching         1           • elsiyet switching         3           • elsiyet switching         3           • elsityet switching         3           • elsityet switching contacts at AC+19         3           • elsityet switching contacts at DC+13         -           • elsityet switching contacts at DC+13         -           • elsityet switching contacts at DC+13         -           • elsityet switching contacts according to UL         8300 / 1300           • entration of auxiliary contacts         one incorrect switching coperation of 100 million switching operations (17V, 5           • entration of auxiliary contacts according to UL         8300 / 1300           • entration of auxiliary contacts according to UL         8300 / 1300           • entration of elsistiching elsistiching delsistiching operations (17V, 5         mrs.           • entration indicatoring to EC 61812-1         contact witching coperation of 100 million switching operations (17V, 5           • elsistiching according to EC 61802-1         contact switching coperation of 100 million switching operations (17V, 5           • elsistiching according to EC 61802-1         contact switching coperation of 100 million switching operation (17V, 5	instantaneous contact	0
• ensignameous contact         0           reaches of CO contacts         1           • ensignameous contacts         0		
number of C0 contacts         1           • idskyed awitching         1           • instatinaneous contact         0           Opperational current of auxiliary contacts at AC-15         3.4           • at 24 V         3.4           • at 25 OV         0.2.4           • at 25 V         0.2.4           • at 25 OV         0.1.4           operational current of auxiliary contacts         0.0.1.3           exticiting capacity current with inductive load         0.013.4           institution operations         0.13.4           institution         0.13.4           institution         0.13.4           institution         0.13.4           institution         0.10		
- elabyset switching     1       - intrastructure of suciliary contacts at AC-15     3 A       - el 26 V     3 A       operational current of suciliary contacts at DC-13     -       - el 24 V     0.2 A       - el 25 V     0.2 A       - el 25 V     0.1 A       operational current of suciliary contacts at DC-13     -       - el 24 V     0.1 A       operational current of suciliary contacts     0.0 I.A       operational current of suciliary contacts     one noncet switching operation of 100 million switching operations (17 V, 5       contact reliability of suxiliary contacts according to UL     R300 / B300       switching capacity current with inductive load     0.01 3 A       opprate Outputs     Mo       - non-vosticle     No       - non-vosticle     No       - on-vosticle     No       - out to suit according to IEC 01912-1     ambience A (industrial sector)       EMC milden informance according to IEC 61002-43     2 KV network connection / 1 KV control connection       - elute to conductor conductor and surge according to IEC 61002-43     2 KV network connection / 1 KV control connection       - elute to conductor conductor according to IEC 61002-43     1 KV control clainbarge / 8 KV and clainbarge       - elute to conductor conductor according to IEC 61002-43     1 KV control clainbarge / 8 KV and clainbarge       - field		0
Instantaneous contacts at AC-15     in 125 V         3 A         3 A         3 A		
operational current of auxiliary contacts at AC-15         3 A           • at 24 V         3 A           • at 25 V         3 A           operational current of auxiliary contacts at DC-13         1 A           • at 24 V         1 A           • at 25 V         0.1 A           operating frequency with SRT2 contactor maximum         5 000 fth           contact reliability of auxiliary contacts         one incorrect switching operation of 100 million switching operations (17 V, 5 on A)           contact reliability of auxiliary contacts according to UL         B300 / B300           switching capacity current with inductive load         0.01 3 A           inputs outputs         No           • control contage training contacts according to UL         B300 / B300           witching capacity current with inductive load         0.01 3 A           inputs outputs         No           Electronage train contage train contage to E0 f1912.1         contendentrial scotor)           conducted interference according to EC 61004-4         2 kV           • due to conductor-contage to E0 f1912.1         contact discharge / 8 kV air discharge           • due to conductor-contage to E0 f1912.1         contact discharge           • due to conductor-contage to E0 f1900.4.2         2 kV           • due to conductor-contage to E0 f1000.4.2 <t< td=""><td></td><td></td></t<>		
• at 250 V     3A       • at 250 V     3A       • at 250 V     3A       • at 250 V     0.2 A       • at 250 V     0.2 A       • at 250 V     0.2 A       • at 250 V     0.1 A       • operating frequency with SR12 contactor maximum     500 1/h       contact reliability of auxiliary contacts     one incorrect witching operation of 100 million switching operations (17 V, 5       mA,     emitted rating of auxiliary contacts according to UL     R300 / 1800       • at the relay opipuls switchover delayed/without delay     No     No       • on-un-volatile     on-on-volatile     No <b>Foldermany additionality of UEC 61812.1</b> emberse: A (industrial sector)       conducted function     Conducted interference     2kV network control on 4k contact discharge according to UEC 61802.4       • due to conductor enange according to UEC 61802.4     2kV network control on 4k contact discharge       • due to conductor enange according to UEC 61802.4     2kV network control on 4k contact discharge       • due to conductor enange according to UEC 61802.4     2kV network control on 4k contact discharge       • due to conductor enange according to UEC 61802.4     2kV network control on 4k contact discharge       • due to conductor enange according to UEC 61802.4     1kV contact discharge according to UEC 61802.4       • due to conductor enange according to UEC 61802.4     1kV contact discha	instantaneous contact	0
• at 250 V       3 A         operational current of auxiliary contacts at DC-13 <ul> <li>at 24 V</li> <li>at 250 V</li> <li>0.1 A</li> <li>operating frequency with SRT2 contactor maximum</li> <li>5 000 1/h</li> <li>contact reliability of auxiliary contacts</li> <li>contact reliability outputs switchwer delayed/without delay         <ul> <li>non-volatic</li> <li>non-volatic</li> <li>non-volatic</li> <li>non-volatic</li> <li>non-volatic</li> <li>conductor dimeterence according to IEC 6100-14</li> <li>due to conductor-onductor surge according to IEC 61000-4.5</li> <li>due to conductor onductor surge according to IEC 61000-4.5</li> <li>due to conductor-onductor surge according to IEC 61000-4.5</li> <li>defor stand thereforence</li> <li>actionary according to IEC 61000-4.5</li> <li>defor stand terms</li> <li>actionary according to IEC 61000-4.5</li> <li>defor conductor onductor surge according to IEC 61000-4.5</li> <li>defor conductor onductor surge according to IEC 61000-4.5</li> <li>defor conductor onductor according to IEC 61000-4.5</li> <li>defor conductor conducto</li></ul></li></ul>		
operational current of auxiliary contacts at DC-13         1 A           • at 24 V         0.2 A           • at 250 V         0.2 A           • at 250 V         0.2 A           • at 250 V         0.1 A           operating frequency with 3RT2 contactor maximum         5 000 th           contact reliability of auxiliary contacts         maximum           switching copacity current with inductive load         0.01 3 A           inputs/ Outputs         Product function           product function         on at the relay outputs switchiver delayed/without delay           No         non-volatile           EMC emitted interference according to IEC 61912-1         corresponds to degree of severity 3           conducted interference according to IEC 61912-1         corresponds to degree of severity 3           conducted interference according to IEC 6100-4-2         2 kV network connection 1 kV control connection           • due to conductor-enst surge according to IEC 6100-4-3         1 kV           electrostand decistrage according to IEC 6100-4-3         1 kV control connection           • due to conductor-enst surge according to IEC 6100-4-3         1 kV at discharge           electrostand decistrage according to IEC 6100-4-3         1 kV control connection           electrostand decistrage according to IEC 61000-4-3         1 kV control connection	• at 24 V	
a: 12 V       1 A         a: 12 SV       0.1 A         operating frequency with SRT2 contactor maximum       5000 1/h         contact relating of auxiliary contacts       one incorrect awithing operation of 100 million switching operations (17 V, 5 mA)         contact relating of auxiliary contacts       one incorrect awithing operation of 100 million switching operations (17 V, 5 mA)         contact relating of auxiliary contacts       R300 / R300         switching capacity current with inductive load       0.01 3 A         inputs/ Curputs       Product function         • at the relay outputs switchiver delayed/without delay       No         • non-volatile       No         Electromagnetic compatibility       contacted interference according to IEC 6100-4.4         • due to bandcolor-conductor suge according to IEC 6100-4.5       2 KV network connection / 1 KV control connection         • due to conductor-conductor suge according to IEC 6100-4.5       1 KV         • due to conductor-conductor suge according to IEC 6100-4.5       1 KV         • due to conductor-conductor suge according to IEC 6100-4.5       1 KV         • due to conductor-conductor suge according to IEC 6100-4.5       1 KV         • field-based interference according to IEC 6100-4.5       1 KV         • due to conductor-conductor suge according to IEC 6100-4.5       1 KV         • field-based		3 A
• st 250 V     0.1 A       operating fraguoncy with SRT2 contacts     5000 1/h       contact rating 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     0.1 3 A       Inputs/ Outputs     No       • at the relay outputs switchover delayed/without delay     No       • at the relay outputs switchover delayed/without delay     No       • non-volate     No       EMC emitted interference according to IEC 61812-1     corresponds to degree of severity 3       conductod interference     2 kV network connection / 1 kV control connection       • due to bonductor- earth surge according to IEC 6100-4.3     1 kV       • due to conductor- earth surge according to IEC 6100-4.5     1 kV       • due to conductor- earth surge according to IEC 6100-4.5     1 kV       • due to conductor- earth surge according to IEC 6100-4.5     1 kV       • due to conductor- earth surge according to IEC 6100-4.5     1 kV       • due to conductor- earth surge according to IEC 6100-4.5     1 kV       • due to conductor- earth surge according to IEC 6100-4.5     1 kV       • field-base interference according to IEC 6100-4.5     1 kV       • field-base interference according to IEC 6100-4.5     1 kV       • product component removable tem		
oparating frequency with 3RT2 contactor maximum         \$ 000 1/h           contact reliability of auxiliary contacts         ms incorrect switching oparation of 100 million switching operations (17 V, 5           mA)         contact rating of auxiliary contacts according to UL         R300 / 1300           switching capacity current with inductive load         0.13 A           inputs/Outputs         product function         0.13 A           in a the relay outputs switching operation of 100 million switching operation with inductive load           on volable         mone operation of 100 EC 61004-42         k/v network connection / 1 kV control connection           electronagnetic data         10 V/m         electronagnetic data         10 V/m           electronagnetic data         10 V/m         electronagnetic data         10 V/m           electronagnetic data         10 V/m         electronagnetine data         10 V/m <t< td=""><td></td><td></td></t<>		
contact rollability of auxiliary contacts         one incorrect switching operation of 100 million switching operations (17 V, 5           contact rating of auxiliary contacts according to UL         R300 / B300           switching capacity current with inductive load         0.01 3 A           Inputs/ Outputs         Product function           ent the relay outputs switchover delayed/without delay         No           v:non-volatie         No           Electromagnetic compatibility         Electromagnetic compatibility           Electromagnetic compatibility         ambience A (industrial sector)           Electromagnetic compatibility         Electromagnetic compatibility           Electromagnetic compatibility         Electromagnetic compatibility           Electromagnetic compatibility according to EIC 61000-4.4         2 kV network connection / 1 kV control connection           - due to bonductor-conductor surge according to EIC 61000-4.2         1 kV           electrostic discharge according to EIC 61000-4.2         1 kV           electrostic discharge according to EIC 61000-4.3         10 V/m           electrostic discharge according to EIC 61000-4.2         1 kV           rollow brain dotte         1 kV           rollow brain dotte         9 kV contact discharge / 8 kV air discharge           Safety rolated data         0 for totaclosconting to EIC 61000-4.3	• at 250 V	
mA)       mA)         contact rating of auxiliary contacts according to UL       R300 (B300)         switching capacity current with inductive load       0.01 3 A         Imputed Unitation       intervision         • at the relay outputs switchover delayed/without delay       No         • non-orbitle       No         Electromagnetic compatibility       ambience A (industrial sector)         ELMC Immunity according to IEC 61812-1       corresponds to degree of severity 3         conducted interference       2 kV network connection / 1 kV control connection         • due to conductor-earch surge according to IEC 61000-4.5       4 kV contact discharge / 8 kV air discharge         electrostatic discharge according to IEC 61000-4.2       4 kV contact discharge / 8 kV air discharge         Safety related data       none         category according to EIC 61000-4.2       4 kV contact discharge / 8 kV air discharge         Safety related data       none         category according to EIC 61000-4.2       10 V/m         electrostatic discharge according to IEC 61000-4.2       10 V/m         gradiet trainals       protection classharge according to IEC 61000-4.2         Safety related data       control discharge / 8 kV air discharge         Safety related data       control of the 14 stron according to IEC 61000-4.2         Safety relat		
contact rating of auxiliary contacts according to UL         R300 / B300           switching capacity current with inductive load         D.01 3.A           Product function         3.A           ext the relay outputs switchover delayed/without delay         No           • at the relay outputs switchover delayed/without delay         No           • non-volatile         8           EMC emited interference according to IEC 61012-1         contraction of the second state according to IEC 61000-4.4           • due to conductor-earth surge according to IEC 61000-4.5         2 kV network connection / 1 kV control connection           • due to conductor-earth surge according to IEC 61000-4.2         1 kV           • due to conductor-conductor surge according to IEC 61000-4.2         1 kV           • due to conductor-conductor surge according to IEC 61000-4.2         1 kV           elactoratic discharge according to IEC 61000-4.2         1 kV           elactoratic discharge according to IEC 61000-4.2         4 kV contact discharge           solid         0 km         1 kV           field-based interference according to IEC 61000-4.2         4 kV contact discharge           category according to IEN 6410         none           protection class IP on the front according to IEC 6000-4.2         4 kV contact discharge           field-based interference according to IEC 6000-4.2         0	contact reliability of auxiliary contacts	
switching capacity current with inductive load         0.01 3 A           Imputs/Outputs         product function                • at the relay outputs switchover delayed/without delay             • non-volatile          No           EMC emitted interference according to IEC 6102-1         ambience A (industrial sector)           EMC immunity according to IEC 6100-4-3         corresponds to degree of severity 3           conducted interference         due to burst according to IEC 61000-4-5         2 kV network connection / 1 kV control connection           • due to conductor-ent surge according to IEC 61000-4-5         1 kV         1 kV           field-based Interference according to IEC 61000-4-3         10 V/m         electronangreted data           category according to IEC 61000-4-3         10 V/m         electrostatic discharge           softy related data         category according to IEC 61000-4-3         10 V/m           category according to IEC 61000-4-3         10 V/m         electrostatic discharge           category according to IEC 61000-4-3         10 V/m         electrostatic discharge           category according to IEC 61000-4-3         10 V/m         electrostatic discharge           category according to IEC 61000-4-3         10 V/m         electrostatic discharge           category according to IEC 61000-4-1         No         No           cate	contact rating of auxiliary contacts according to III	
Imputs/Outputs         Imputs/Outputs           product function              in the relay outputs switchover delayed/without delay             No            is at the relay outputs switchover delayed/without delay             No               No            EMC emited interference according to IEC 61812-1               ambience A (industrial sector)            EMC emited interference               due to burst according to IEC 61000-4-5                 due to conductor-earth surge according to IEC 61000-4-5               2 KV             retwork connection / 1 KV control connection                 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 61000-4-2             1 KV               Two                 due to conductor-earth surge according to IEC 61000-4-2             due to conductor-conductor surge according to IEC 61000-4-2             to V/m             detecrostatic discharge according to IEC 61000-4-2             1 KV             contocoluto-4             due to conductor-conductor surge according to IEC 61000-4-2             to V/m             detecrostatic discharge according to IEC 61000-4-2             to V/m             detecrostatic discharge according to IEC 61000-4-2             to V/m             detecrostatic discharge according to IEC 61000-4-2             to XV component removable terminal for auxiliary and             connectable conductor cross-section             solid             finely stranded without core end processing		
product function         e at the relay outputs switchover delayed/without delay         No           • at the relay outputs switchover delayed/without delay         No           • endo-volatile         No           EMC compatibility         EMC compatibility           EMC compatibility according to EC 61812-1         ambience A (industrial sector)           EMC immunity according to EC 61812-1         corresponds to degree of severity 3           conducted interference         4 due to conductor-cenductor surge according to IEC 61000-4-5           • due to conductor-cenductor surge according to IEC 61000-4-5         2 kV           • field-based interference according to IEC 61000-4-2         4 kV contact discharge           Safety related data         eateopy according to EC 61000-4-2         4 kV contact discharge / 8 kV air discharge           Safety related data         eateopy according to EC 61000-4-2         4 kV contact discharge / 8 kV air discharge           Safety related data         eateopy according to EC 61000-4-2         4 kV contact discharge           Connections IP on the front according to IEC 60529         IP20         type of electrical connection for auxiliary and control circuit           type of electrical connection for auxiliary and control circuit         spring-loaded terminals (push-in)         type of electrical connection for auxiliary and control circuit           type of connectable conductor cross-sections         <		
• at the relay outputs switchover delayed/without delay     No       • non-volatile     No       EMC emitted interference according to IEC 61812-1     ambience A (industrial sector)       EMC immunity according to IEC 61812-1     corresponds to degree d severity 3       conducted interference     2 kV network connection / 1 kV control connection       • due to conductor-conductor surge according to IEC 61000-4-5     2 kV       • due to conductor-conductor surge according to IEC 61000-4-2     4 kV contact discharge / 8 kV air discharge       Safety related data     10 Vm       electron according to IEC 61000-4-2     4 kV contact discharge / 8 kV air discharge       Safety related data     category according to IEC 61000-4-2       category according to IEC 61000-4-2     4 kV contact discharge / 8 kV air discharge       Safety related data     category according to IEC 61000-4-2       category according to IEC 61000-4-2     4 kV contact discharge / 8 kV air discharge       Safety related data     category according to IEC 61000-4-2       category according to IEC 61000-4-2     4 kV contact discharge / 8 kV air discharge       Safety related data     category according to IEC 61000-4-2       category according to IEC 61000-4-2     4 kV contact discharge / 8 kV air discharge       Safety related data     control count       control crout     ging/adata       type of electrotal connection for auxiliary and control circuit<		
• non-volatie         No           Electromagnetic compatibility         ambience A (industrial sector)           EMC entited inference according to IEC 61812-1         corresponds to degree of sevenity 3           conducted interference         2 kV network connection / 1 kV control connection           • due to burst according to IEC 61000-4-4         2 kV network connection / 1 kV control connection           • due to conductor-conductor surge according to IEC 61000-4-5         1 kV           field-based interference         2 kV network connection / 1 kV control connection           gatacy related data         none           category according to IEC 61000-4-3         10 V/m           electrostatic discharge according to IEC 61000-4-3         10 V/m           electrostatic discharge according to IEC 61000-4-3         10 V/m           category according to EC 61000-4-3         10 V/m           electrostatic discharge according to IEC 61000-4-3         10 V/m           category according to EC 61000-4-3         10 V/m           pe of thecht	-	No
Electromagnetic compatibility         mathematical sector)           ENC immunity according to IEC 61812-1         ambience A (industrial sector)           Conducted Interference         corresponds to degree of severity 3           Conducted Interference         2 kV network connection / 1 kV control connection           • due to burst according to IEC 61000-4-4         2 kV network connection / 1 kV control connection           • due to conductor-endructors surge 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           Safaty related data         category according to IEC 61000-4-2         4 kV contact discharge / 8 kV air discharge           Safaty related data         category according to IEC 61000-4-2         4 kV contact discharge / 8 kV air discharge           Safaty related data         category according to IEC 61000-4-2         4 kV contact discharge / 8 kV air discharge           Safaty related data         category according to IEC 61000-4-2         10 V/m           electrostatic discharge according to IEC 61000-4-2         14 kV control connection           Safaty related data         category according to IEC 61000-4-2         14 kV control connection           Connection for taxillary and control circuit         spring-loaded terminals (push-in)         17 by of connectable conductor cross-sections           • sold         0		
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       attributed interference         • Gue to burst according to IEC 61000-4-5       2 kV network connection / 1 kV control connection         • Gue to conductor-earth surge according to IEC 61000-4-5       1 kV         field-based interference according to IEC 61000-4-3       10 V/m         electrostatic discharge according to IEC 61000-4-3       10 V/m         electrostatic discharge according to IEC 60529       1 kV         type of insulation       Basic insulation         Control clicuit       Terminals         product component removable terminal for auxiliary and control clicuit       ype of electrical connection for auxiliary and control clicuit         type of electrical connection cross-sections       0.5 4 mm <sup>3</sup> • solid       0.5 4 mm <sup>3</sup> • finely stranded with core end processing       0.5 4 mm <sup>3</sup> • for AWG cables stranded       20 12         connectable conductor cross-section       0.5 4 mm <sup>3</sup> • solid       0.5 4 mm <sup>3</sup> • finely stranded with core end processing       0.5 4 mm <sup>3</sup> • for AWG cables stranded       20 12         • solid <td></td> <td>INU</td>		INU
EMC immunity according to IEC 61812-1       corresponds to degree of severity 3         conducted interference       2 kV network connection / 1 kV control connection         • due to burst according to IEC 61000-4.4       2 kV network connection / 1 kV control connection         • due to conductor-conductor surge according to IEC 61000-4.5       1 kV         field-based interference according to IEC 61000-4.3       10 V/m         electrostatic discharge according to IEC 61000-4.2       4 kV contact discharge         Safety related data       category according to EN 954-1       none         protection class IP on the front according to IEC 60529       IP20         type of insulation       Basic insulation         Connectable Conductor cross-sections       ves         • solid       0.5 4 mm <sup>2</sup> • finely stranded with core end processing       0.5 4 mm <sup>2</sup> • for AWG cables solid       0.5 4 mm <sup>2</sup> • solid       0.5 4 mm <sup>2</sup> • solid       0.5 4 mm <sup>2</sup> • for AWG cables solid       0.5 4 mm <sup>2</sup> • for AWG cables conductor cross-section       0.5 4 mm <sup>2</sup> • solid       0.5 4 mm <sup>2</sup> <		ambienzo ( /industrial costor)
conducted Interference       2 kV network connection / 1 kV control connection         • due to burst according to IEC 61000-4-5       2 kV         • due to conductor-conductor surge according to IEC 61000-4-5       1 kV         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	· · · · · · · · · · · · · · · · · · ·	
• due to burst according to IEC 61000-4-4     2 kV network connection / 1 kV control connection       • due to conductor-earth surge according to IEC 61000-4-5     2 kV       • field-based interference according to IEC 61000-4-3     1 kV       • field-based interference according to IEC 61000-4-2     4 kV contact discharge / 8 kV air discharge       Safety related data     none       category according to EC 61000-4-2     4 kV contact discharge / 8 kV air discharge       Safety related data     none       category according to EC 61000-4-2     4 kV contact discharge / 8 kV air discharge       Safety related data     none       category according to EC 61000-4-2     4 kV contact discharge / 8 kV air discharge       Safety related data     relation       category according to EC 61000-4-2     4 kV contact discharge / 8 kV air discharge       Safety related data     relation       category according to EC 61000-4-2     4 kV contact discharge / 8 kV air discharge       Safety related data     relation       category according to EC 61000-4-2     4 kV contact discharge       Safety relation     Basic insulation       Connections/ Terminals     Basic insulation       type of electrical connection for auxiliary and control circuit     spring-loaded terminals (push-in)       type of connectable conductor cross-section     0.5 4 mm <sup>2</sup> • finely stranded withou core end processing		corresponds to degree of sevenity 5
• due to conductor-centh surge according to IEC 61000-4-5       2 kV         • field-based interference according to IEC 61000-4-3       1 kV         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		2 kV notwork connection (1 kV control connection
• due to conductor-conductor surge according to IEC       1 kV         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         Safey related data	-	
61000-4-5       61000-4-3       10 V/m         field-based interference according to IEC 61000-4-2       4 kV contact discharge / 8 kV air discharge         Safety related data <ul> <li>category according to EN 954-1</li> <li>none</li> <li>protection class IP on the front according to IEC 60529</li> <li>IP20</li> <li< td=""><td></td><td></td></li<></ul>		
electrostatic discharge according to IEC 61000-4-2       4 kV contact discharge / 8 kV air discharge         Safety related data		I KV
Safety related data       none         category according to EN 954-1       none         protection class IP on the front according to IEC 60529       IP20         type of insulation       Basic insulation         Connection/ Torminals       product component removable terminal for auxiliary and control circuit         type of electrical connection for auxiliary and control circuit       spring-loaded terminals (push-in)         type of electrical connectable conductor cross-sections       0.5 4 mm²         • solid       0.5 4 mm²         • finely stranded with core end processing       0.5 4 mm²         • for AWG cables solid       20 12         connectable conductor cross-section       0.5 4 mm²         • solid       0.5 4 mm²         • finely stranded with core end processing       0.5 4 mm²         • for AWG cables solid       0.5 4 mm²         • finely stranded with core end processing       0.5 4 mm²         • solid       20	field-based interference according to IEC 61000-4-3	10 V/m
category according to EN 954-1       none         protection class IP on the front according to IEC 60529       IP20         type of insulation       Basic insulation         Connections/ Terminals       product component removable terminal for auxiliary and control circuit         type of electrical connection for auxiliary and control circuit       spring-loaded terminals (push-In)         type of electrical connectable conductor cross-sections       0.5 4 mm²         • solid       0.5 4 mm²         • finely stranded without core end processing       0.5 4 mm²         • for AWG cables stranded       20 12         connectable conductor cross-section       0.5 4 mm²         • finely stranded without core end processing       0.5 4 mm²         • for AWG cables stranded       20 12         connectable conductor cross-section       0.5 4 mm²         • solid       0.5 4 mm²         • solid       0.5 4 mm²         • finely stranded without core end processing       0.5 4 mm²         • solid       20 12	electrostatic discharge according to IEC 61000-4-2	4 kV contact discharge / 8 kV air discharge
protection class IP on the front according to IEC 60529         IP20           type of insulation         Basic insulation           Connections/Terminals         Product component removable terminal for auxiliary and control circuit         Yes           type of electrical connection for auxiliary and control circuit         spring-loaded terminals (push-in)         type of electrical connectable conductor cross-sections           • solid         0.5 4 mm²         spring-loaded terminals (push-in)           type of connectable conductor cross-sections         0.5 4 mm²           • finely stranded with core end processing         0.5 4 mm²           • for AWG cables solid         20 12           • for AWG cables stranded         20 12           • for AWG cables stranded         0.5 4 mm²           • finely stranded with core end processing         0.5 4 mm²           • finely stranded with core end processing         0.5 4 mm²           • finely stranded with core end processing         0.5 4 mm²           • finely stranded with core end processing         0.5 4 mm²           • finely stranded with core end processing         0.5 4 mm²           • solid         0.5 4 mm²           • solid         20 12           • stranded         20 12           • stranded         20 12	Safety related data	
type of insulation         Basic insulation           Connections/ Terminals         Forduct component removable terminal for auxiliary and control circuit         Yes           type of electrical connection for auxiliary and control circuit         spring-loaded terminals (push-in)         type of electrical connection for auxiliary and control circuit           type of connectable conductor cross-sections         0.5 4 mm²         entities           • solid         0.5 4 mm²         0.5 4 mm²           • finely stranded with core end processing         0.5 4 mm²         0.5 4 mm²           • for AWG cables solid         20 12         0.5 4 mm²           • for AWG cables stranded         20 12         0.5 4 mm²           • finely stranded with core end processing         0.5 4 mm²         0.5 4 mm²           • for AWG cables stranded         20 12         0.5 4 mm²         0.5 4 mm²           • finely stranded with core end processing         0.5 4 mm²         0.5 4 mm²         0.5 4 mm²           • solid         0.5 4 mm²         0.5 4 mm²         0.5 4 mm²         0.5 4 mm²           • solid         0.5 4 mm²         0.5 4 mm²         0.5 4 mm²         0.5 4 mm²           • solid         0.5 4 mm²         0.5 4 mm²         0.5 4 mm²	category according to EN 954-1	none
Connections/ Terminals           product component removable terminal for auxiliary and control circuit         Yes           type of electrical connection for auxiliary and control circuit         spring-loaded terminals (push-in)           type of electrical connectable conductor cross-sections         spring-loaded terminals (push-in)           • solid         0.5 4 mm²           • finely stranded with core end processing         0.5 4 mm²           • finely stranded without core end processing         0.5 4 mm²           • for AWG cables solid         20 12           • for AWG cables stranded         20 12           connectable conductor cross-section         4 mm²           • finely stranded with core end processing         0.5 4 mm²           • finely stranded with core end processing         0.5 4 mm²           • finely stranded with core end processing         0.5 4 mm²           • finely stranded with core end processing         0.5 4 mm²           • solid         20 12           • stranded         20 12           Installation/ mounting/ dimensions         any	protection class IP on the front according to IEC 60529	IP20
product component removable terminal for auxiliary and control circuit         Yes           type of electrical connection for auxiliary and control circuit         spring-loaded terminals (push-in)           type of connectable conductor cross-sections            • solid         0.5 4 mm²           • finely stranded with core end processing         0.5 4 mm²           • for AWG cables solid         20 12           • for AWG cables stranded         20 12           • for AWG cables stranded         20 12           • finely stranded with core end processing         0.5 4 mm²           • for AWG cables stranded         20 12           connectable conductor cross-section            • solid         0.5 4 mm²           • finely stranded with core end processing         0.5 4 mm²           • finely stranded without core end processing         0.5 4 mm²           • solid         0.5 4 mm²           • solid         20 12           • stranded         20 12           • stranded         20 12           installation/ mounting/ dimensions         any           fastening method         screw and snap-on mounting onto 35 mm DIN rail           height         100 mm           width         17.5 mm	type of insulation	Basic insulation
control circuitspring-loaded terminals (push-in)type of electrical connection for auxiliary and control circuitspring-loaded terminals (push-in)type of connectable conductor cross-sections.5 4 mm²• solid0.5 4 mm²• finely stranded with core end processing0.5 4 mm²• for AWG cables solid20 12• for AWG cables stranded20 12• for AWG cables stranded20 12• for AWG cables stranded0.5 4 mm²• solid0.5 4 mm²• solid0.5 4 mm²• finely stranded with core end processing0.5 4 mm²• finely stranded with core end processing0.5 4 mm²• finely stranded with core end processing0.5 4 mm²• finely stranded without core end processing0.5 4 mm²• solid20 12• solid20 12• solid20 12• solid20 12• solid20 12Installation/ mounting/ dimensionsmounting positionanyfastening methodscrew and snap-on mounting onto 35 mm DIN railheight100 mmwidth17.5 mmdepth90 mm	Connections/ Terminals	
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Inely stranded with core end processing0.5 2.5 mm²Inely stranded without core end processing0.5 4 mm²Inely stranded without core end processing20 12Infor AWG cables stranded20 12Inforectable conductor cross-section0.5 4 mm²Infoley stranded with core end processing0.5 2.5 mm²Infoley stranded with core end processing0.5 2.5 mm²Infoley stranded with core end processing0.5 4 mm²Infoley stranded without core end processing0.5 4 mm²Infoley stranded20 12Installation/ mounting/ dimensions20 12Installation/ mounting/ dimensionsanyInstallation/ mounting positionanyInstallation/ mounting onto 35 mm DIN rail100 mmheight100 mmwidth17.5 mmInstallation90 mm	type of connectable conductor cross-sections	
• finely stranded without core end processing0.5 4 mm²• for AWG cables solid20 12• for AWG cables stranded20 12connectable conductor cross-section0.5 4 mm²• solid0.5 4 mm²• finely stranded with core end processing0.5 2.5 mm²• finely stranded without core end processing0.5 4 mm²• solid20 12• solid20 12• stranded20 12• stranded20 12Installation/ mounting/ dimensionsanyfastening methodscrew and snap-on mounting onto 35 mm DIN railheight100 mmwidth17.5 mm• depth90 mm	• solid	0.5 4 mm²
• for AWG cables solid20 12• for AWG cables stranded20 12connectable conductor cross-section 4 mm²• solid0.5 4 mm²• finely stranded with core end processing0.5 4 mm²• finely stranded without core end processing0.5 4 mm²AWG number as coded connectable conductor cross section20 12• solid20 12• solid20 12• solid20 12• stranded20 12• stranded20 12installation/ mounting/ dimensionsanyfastening methodscrew and snap-on mounting onto 35 mm DIN railheight100 mmwidth17.5 mmgepth90 mm	<ul> <li>finely stranded with core end processing</li> </ul>	0.5 2.5 mm²
• for AWG cables stranded       20 12         connectable conductor cross-section       0.5 4 mm²         • solid       0.5 4 mm²         • finely stranded with core end processing       0.5 4 mm²         • finely stranded with core end processing       0.5 4 mm²         • finely stranded without core end processing       0.5 4 mm²         • Solid       20 12         • stranded       20 12         Installation/ mounting/ dimensions       any         fastening method       screw and snap-on mounting onto 35 mm DIN rail         height       100 mm         width       17.5 mm         width       90 mm	<ul> <li>finely stranded without core end processing</li> </ul>	0.5 4 mm²
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• finely stranded with core end processing0.5 2.5 mm²• finely stranded without core end processing0.5 4 mm²AWG number as coded connectable conductor cross section20 12• solid20 12• stranded20 12Installation/ mounting/ dimensionsanyfastening methodscrew and snap-on mounting onto 35 mm DIN railheight100 mmwidth17.5 mmdepth90 mm	connectable conductor cross-section	
• finely stranded without core end processing       0.5 4 mm²         AWG number as coded connectable conductor cross section       20 12         • solid       20 12         • stranded       20 12         Installation/ mounting/ dimensions       any         fastening method       screw and snap-on mounting onto 35 mm DIN rail         height       100 mm         width       17.5 mm         depth       90 mm	• solid	0.5 4 mm²
AWG number as coded connectable conductor cross section       20 12         • solid       20 12         • stranded       20 12         Installation/ mounting/ dimensions       any         fastening method       screw and snap-on mounting onto 35 mm DIN rail         height       100 mm         width       17.5 mm         depth       90 mm	<ul> <li>finely stranded with core end processing</li> </ul>	0.5 2.5 mm²
section• solid20 12• stranded20 12Installation/ mounting/ dimensionsmounting positionanyfastening methodscrew and snap-on mounting onto 35 mm DIN railheight100 mmwidth17.5 mmdepth90 mm		
• stranded20 12Installation/ mounting/ dimensionsanymounting positionanyfastening methodscrew and snap-on mounting onto 35 mm DIN railheight100 mmwidth17.5 mmdepth90 mm		0.5 4 mm²
Installation/ mounting/ dimensions         mounting position       any         fastening method       screw and snap-on mounting onto 35 mm DIN rail         height       100 mm         width       17.5 mm         depth       90 mm	• finely stranded without core end processing AWG number as coded connectable conductor cross	0.5 4 mm²
mounting position     any       fastening method     screw and snap-on mounting onto 35 mm DIN rail       height     100 mm       width     17.5 mm       depth     90 mm	• finely stranded without core end processing AWG number as coded connectable conductor cross section	
fastening method     screw and snap-on mounting onto 35 mm DIN rail       height     100 mm       width     17.5 mm       depth     90 mm	finely stranded without core end processing     AWG number as coded connectable conductor cross     section         • solid	20 12
height         100 mm           width         17.5 mm           depth         90 mm	<ul> <li>finely stranded without core end processing</li> <li>AWG number as coded connectable conductor cross section         <ul> <li>solid</li> <li>stranded</li> </ul> </li> </ul>	20 12
width         17.5 mm           depth         90 mm	finely stranded without core end processing      AWG number as coded connectable conductor cross     section <ul> <li>solid</li> <li>stranded</li> </ul> <li>Installation/ mounting/ dimensions</li>	20 12 20 12
depth 90 mm	finely stranded without core end processing      AWG number as coded connectable conductor cross     section <ul> <li>solid</li> <li>stranded</li> </ul> <li>Installation/ mounting/ dimensions     mounting position</li>	20 12 20 12 any
	finely stranded without core end processing      AWG number as coded connectable conductor cross     section <ul> <li>solid</li> <li>stranded</li> </ul> <li>Installation/ mounting/ dimensions         mounting position         fastening method</li>	20 12 20 12 any screw and snap-on mounting onto 35 mm DIN rail
required spacing	finely stranded without core end processing     AWG number as coded connectable conductor cross     section <ul> <li>solid</li> <li>stranded</li> </ul> <li>Installation/ mounting/ dimensions     mounting position     fastening method     height</li>	20 12 20 12 any screw and snap-on mounting onto 35 mm DIN rail 100 mm
	finely stranded without core end processing      AWG number as coded connectable conductor cross     section <ul> <li>solid</li> <li>stranded</li> </ul> <li>Installation/ mounting/ dimensions         <ul> <li>mounting position</li> <li>fastening method</li> <li>height</li> <li>width</li> </ul> </li>	20 12 20 12 any screw and snap-on mounting onto 35 mm DIN rail 100 mm 17.5 mm

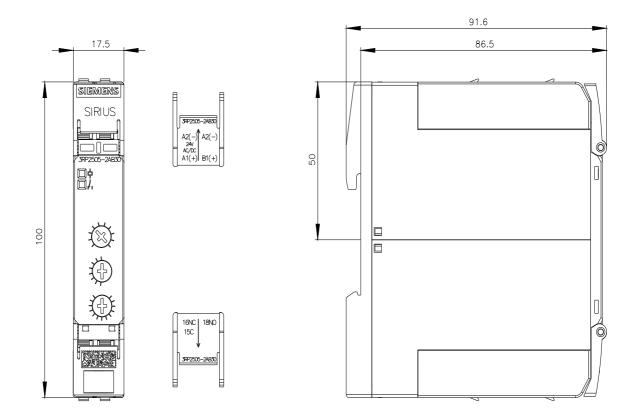
,	mounting				
— forwards	5		0 mm		
— backwards			0 mm		
— upwards			0 mm		
— downwards			0 mm		
— at the side			0 mm		
<ul> <li>for grounded par</li> </ul>	ts				
— forwards			0 mm		
— backwards			0 mm		
— upwards			0 mm		
- at the side			0 mm		
— downwards			0 mm		
<ul> <li>for live parts</li> </ul>					
— forwards			0 mm		
— backwards			0 mm		
— upwards			0 mm		
— downwards			0 mm		
— at the side			0 mm		
Ambient conditions					
installation altitude at h	eight above sea level max	kimum	2 000 m		
ambient temperature					
<ul> <li>during operation</li> </ul>			-25 +60 °C		
<ul> <li>during storage</li> </ul>			-40 +85 °C		
<ul> <li>during transport</li> </ul>			-40 +85 °C		
relative humidity during	operation		10 95 %		
Approvals Certificates					
General Product App	roval			EMC	Declaration of Con- formity
	roval Confirmation	(U) u	EAC	EMC RCM	
General Product App		UL Marine / Shippi	EAC	EMC RCM	formity
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General Product Appr	Confirmation Test Certificates	BUREAU	Llovds Register	EMC RCM	formity

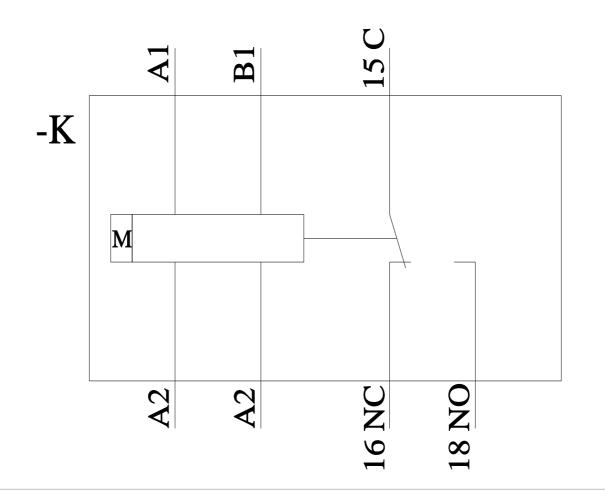
#### **Further information**

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 com/cs/ww/en/view/109813875 https://support.industry.sien 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=3RP2505-2AB30 Cax online generator emens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RP2505-2AB30 http://supp autor Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

### https://support.industry.siemens.com/cs/ww/en/ps/3RP2505-2AB30

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RP2505-2AB30&lang=en Characteristic: Derating https://support.industry.siemens.com/cs/ww/en/ps/3RP2505-2AB30/manual





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