# SIEMENS

### Data sheet

## 3RP2525-2BW30



Timing relay, electronic on-delay 2 change-over contacts, 7 time ranges 0.05 s...100 h 12-240 V AC/DC at 50/60 Hz AC with LED, Spring-type terminal (Push-In)

product brand name	SIRIUS
product designation	timing relay
design of the product	slow-operating
product type designation	3RP25
General technical data	
product component	
<ul> <li>relay output</li> </ul>	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
recovery time	250 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	12 240 V
• at 60 Hz	12 240 V
control supply voltage frequency 1	50 60 Hz
control supply voltage 1	
• at DC	12 240 V
operating range factor control supply voltage rated value at	

DC	-
initial value	0.8
• full-scale value	1.1
operating range factor control supply voltage rated value at AC at 50 Hz	
initial value	0.8
• full-scale value	1.1
operating range factor control supply voltage rated value at AC at 60 Hz	
• initial value	0.8
full-scale value	1.1
inrush current peak	- 1.1
• at 24 V	0.3 A
• at 240 V	5 A
duration of inrush current peak	
• at 24 V	0.3 ms
• at 240 V	0.5 ms
Switching Function	0.0 113
<ul><li>switching function</li><li>ON-delay</li></ul>	Yes
-	No
ON-delay/instantaneous contact     passing make contact	No
passing make contact     passing make contact/instantaneous contact	
<ul> <li>passing make contact/instantaneous contact</li> <li>OFE dolay</li> </ul>	No
OFF delay	NO
switching function	No
flashing symmetrically with interval start/instantaneous	
flashing symmetrically with interval start	No
flashing symmetrically with pulse start/instantaneous	No
flashing symmetrically with pulse start	No
flashing asymmetrically with interval start	No
flashing asymmetrically with pulse start	No
switching function	A la
star-delta circuit with delay time	No
star-delta circuit	No
switching function with control signal	Ne
additive ON-delay	No
passing break contact	No
passing break contact/instantaneous	No
OFF delay	No
OFF delay/instantaneous	No
pulse delayed	No
pulse delayed/instantaneous	No
pulse-shaping	No
pulse-shaping/instantaneous	No
additive ON-delay/instantaneous     ON delay/OFE delay/instantaneous	No
ON-delay/OFF-delay/instantaneous     passing make contact	No
passing make contact	No
passing make contact/instantaneous contact	No
switching function of interval relay with control signal	No
<ul> <li>retrotriggerable with deactivated control signal/instantaneous contact</li> </ul>	No
<ul> <li>retrotriggerable with switched-on control signal</li> </ul>	No
<ul> <li>retrotriggerable with switched-on control</li> </ul>	No
signal/instantaneous contact	
<ul> <li>retriggerable with deactivated control signal</li> </ul>	No
Short-circuit protection	
design of the fuse link for short-circuit protection of the auxiliary switch required	fuse gL/gG: 4 A
Auxiliary circuit	
material of switching contacts	AgSnO2
number of NC contacts	
delayed switching	0

instantaneous contact	0
number of NO contacts	
delayed switching	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	
at the relay outputs switchover delayed/without delay	No
non-volatile	No
Electromagnetic compatibility	
EMC emitted interference according to IEC 61812-1	ambience A (industrial sector)
EMC immunity according to IEC 61812-1 conducted interference	corresponds to degree of severity 3
due to burst according to IEC 61000-4-4	2 kV network connection / 1 kV control connection
-	2 kV
• due to conductor-earth surge according to IEC 61000-4-5	2 KV 1 KV
<ul> <li>due to conductor-conductor surge according to IEC 61000-4-5</li> </ul>	I KV
	10 V/m
field-based interference according to IEC 61000-4-3	io v/ii
electrostatic discharge according to IEC 61000-4-3	4 kV contact discharge / 8 kV air discharge
electrostatic discharge according to IEC 61000-4-2	
electrostatic discharge according to IEC 61000-4-2 Safety related data	4 kV contact discharge / 8 kV air discharge
electrostatic discharge according to IEC 61000-4-2 Safety related data category according to EN 954-1	4 kV contact discharge / 8 kV air discharge none
electrostatic discharge according to IEC 61000-4-2 Safety related data category according to EN 954-1 protection class IP on the front according to IEC 60529	4 kV contact discharge / 8 kV air discharge none IP20
electrostatic discharge according to IEC 61000-4-2 Safety related data category according to EN 954-1 protection class IP on the front according to IEC 60529 type of insulation	4 kV contact discharge / 8 kV air discharge none IP20
electrostatic discharge according to IEC 61000-4-2 Safety related data category according to EN 954-1 protection class IP on the front according to IEC 60529 type of insulation Connections/ Terminals product component removable terminal for auxiliary and	4 kV contact discharge / 8 kV air discharge none IP20 Basic insulation
electrostatic discharge according to IEC 61000-4-2 Safety related data category according to EN 954-1 protection class IP on the front according to IEC 60529 type of insulation Connections/ Terminals product component removable terminal for auxiliary and control circuit	4 kV contact discharge / 8 kV air discharge none IP20 Basic insulation Yes
electrostatic discharge according to IEC 61000-4-2         Safety related data         category according to EN 954-1         protection class IP on the front according to IEC 60529         type of insulation         Connections/ Terminals         product component removable terminal for auxiliary and control circuit         type of electrical connection for auxiliary and control circuit	4 kV contact discharge / 8 kV air discharge none IP20 Basic insulation Yes
electrostatic discharge according to IEC 61000-4-2         Safety related data         category according to EN 954-1         protection class IP on the front according to IEC 60529         type of insulation         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	4 kV contact discharge / 8 kV air discharge none IP20 Basic insulation Yes spring-loaded terminals (push-in)
electrostatic discharge according to IEC 61000-4-2 Safety related data category according to EN 954-1 protection class IP on the front according to IEC 60529 type of insulation 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	4 kV contact discharge / 8 kV air discharge none IP20 Basic insulation Yes spring-loaded terminals (push-in) 0.5 4 mm <sup>2</sup>
electrostatic discharge according to IEC 61000-4-2         Safety related data         category according to EN 954-1         protection class IP on the front according to IEC 60529         type of insulation         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	4 kV contact discharge / 8 kV air discharge none IP20 Basic insulation Yes spring-loaded terminals (push-in) 0.5 4 mm <sup>2</sup> 0.5 2.5 mm <sup>2</sup>
electrostatic discharge according to IEC 61000-4-2         Safety related data         category according to EN 954-1         protection class IP on the front according to IEC 60529         type of insulation         Connections/ Terminals         product component removable terminal for auxiliary and control circuit         type of electrical connection for auxiliary and control circuit         type of connectable conductor cross-sections         • solid         • finely stranded with core end processing         • finely stranded without core end processing	4 kV contact discharge / 8 kV air discharge none IP20 Basic insulation Yes spring-loaded terminals (push-in) 0.5 4 mm <sup>2</sup> 0.5 4 mm <sup>2</sup>
electrostatic discharge according to IEC 61000-4-2         Safety related data         category according to EN 954-1         protection class IP on the front according to IEC 60529         type of insulation         Connections/ Terminals         product component removable terminal for auxiliary and control circuit         type of electrical connection for auxiliary and control circuit         type of connectable conductor cross-sections         • solid         • finely stranded with core end processing         • finely stranded without core end processing         • for AWG cables solid	4 kV contact discharge / 8 kV air discharge none IP20 Basic insulation Yes spring-loaded terminals (push-in) 0.5 4 mm <sup>2</sup> 0.5 2.5 mm <sup>2</sup> 0.5 4 mm <sup>2</sup> 20 12
electrostatic discharge according to IEC 61000-4-2         Safety related data         category according to EN 954-1         protection class IP on the front according to IEC 60529         type of insulation         Connections/ Terminals         product component removable terminal for auxiliary and control circuit         type of electrical connection for auxiliary and control circuit         type of connectable conductor cross-sections         • solid         • finely stranded with core end processing         • finely stranded without core end processing         • for AWG cables solid         • for AWG cables stranded	4 kV contact discharge / 8 kV air discharge none IP20 Basic insulation Yes spring-loaded terminals (push-in) 0.5 4 mm <sup>2</sup> 0.5 2.5 mm <sup>2</sup> 0.5 4 mm <sup>2</sup> 20 12
electrostatic discharge according to IEC 61000-4-2         Safety related data         category according to EN 954-1         protection class IP on the front according to IEC 60529         type of insulation         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-sections	4 kV contact discharge / 8 kV air discharge none IP20 Basic insulation Yes spring-loaded terminals (push-in) 0.5 4 mm <sup>2</sup> 0.5 2.5 mm <sup>2</sup> 0.5 4 mm <sup>2</sup> 20 12 20 12
electrostatic discharge according to IEC 61000-4-2         Safety related data         category according to EN 954-1         protection class IP on the front according to IEC 60529         type of insulation         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	4 kV contact discharge / 8 kV air discharge         none         IP20         Basic insulation         Yes         spring-loaded terminals (push-in)         0.5 4 mm²         0.5 4 mm²         20 12         0.5 4 mm²
electrostatic discharge according to IEC 61000-4-2         Safety related data         category according to EN 954-1         protection class IP on the front according to IEC 60529         type of insulation         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         • for AWG cables stranded         connectable conductor cross-section         • solid         • for AWG cables stranded         connectable conductor cross-section	4 kV contact discharge / 8 kV air discharge         none         IP20         Basic insulation         Yes         spring-loaded terminals (push-in)         0.5 4 mm²         0.5 4 mm²         20 12         0.5 4 mm²         0.5 2.5 mm²
electrostatic discharge according to IEC 61000-4-2         Safety related data         category according to EN 954-1         protection class IP on the front according to IEC 60529         type of insulation         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         • for AWG cables stranded         connectable conductor cross-section         • solid         • finely stranded with core end processing         • finely stranded without core end proc	4 kV contact discharge / 8 kV air discharge         none         IP20         Basic insulation         Yes         spring-loaded terminals (push-in)         0.5 4 mm²         0.5 4 mm²         20 12         0.5 4 mm²
electrostatic discharge according to IEC 61000-4-2 Safety related data category according to EN 954-1 protection class IP on the front according to IEC 60529 type of insulation Connections/ Terminals product component removable terminal for auxiliary and control circuit type of electrical connection for auxiliary and control circuit type of electrical connection for auxiliary and control circuit type of connectable conductor cross-sections <ul> <li>solid</li> <li>finely stranded with core end processing</li> <li>for AWG cables solid</li> <li>for AWG cables stranded</li> </ul> <li>connectable conductor cross-section         <ul> <li>solid</li> <li>finely stranded with core end processing</li> <li>for AWG cables stranded</li> </ul> </li> <li>connectable conductor cross-section         <ul> <li>solid</li> <li>finely stranded with core end processing</li> <li>finely stranded with core end processing</li> <li>for AWG cables stranded</li> </ul> </li> <li>AWG number as coded connectable conductor cross section         <ul> <li>solid</li> <li>solid</li> <li>solid</li> </ul> </li>	4 kV contact discharge / 8 kV air discharge         none         IP20         Basic insulation         Yes         spring-loaded terminals (push-in)         0.5 4 mm²         0.5 4 mm²         20 12         0.5 4 mm²         0.5 4 mm²         0.5 4 mm²         20 12         0.5 4 mm²         0.5 2.5 mm²         0.5 4 mm²         0.5 2.5 mm²         0.5 2.5 mm²         0.5 4 mm²         20 12
electrostatic discharge according to IEC 61000-4-2 Safety related data category according to EN 954-1 protection class IP on the front according to IEC 60529 type of insulation Connections/ Terminals product component removable terminal for auxiliary and control circuit type of electrical connection for auxiliary and control circuit type of electrical connection for auxiliary and control circuit type of connectable conductor cross-sections <ul> <li>solid</li> <li>finely stranded with core end processing</li> <li>for AWG cables solid</li> <li>for AWG cables stranded</li> </ul> <li>connectable conductor cross-section         <ul> <li>solid</li> <li>finely stranded with core end processing</li> <li>for AWG cables solid</li> <li>for AWG cables stranded</li> </ul> </li> <li>connectable conductor cross-section         <ul> <li>solid</li> <li>finely stranded with core end processing</li> <li>solid</li> <li>for AWG cables stranded</li> </ul> </li> <li>connectable conductor cross-section         <ul> <li>solid</li> <li>finely stranded with core end processing</li> <li>solid</li> <li>solid</li> <li>solid</li> <li>solid</li> <li>solid</li> <li>solid</li> <li>solid</li> <li>solid</li> <li>stranded</li> </ul> </li>	4 kV contact discharge / 8 kV air discharge         none         IP20         Basic insulation         Yes         spring-loaded terminals (push-in)         0.5 4 mm²         0.5 4 mm²         20 12         0.5 4 mm²
electrostatic discharge according to IEC 61000-4-2         Safety related data         category according to EN 954-1         protection class IP on the front according to IEC 60529         type of insulation         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         • for AWG cables stranded         connectable conductor cross-section         • solid         • finely stranded with core end processing         • finely stranded with core end process	4 kV contact discharge / 8 kV air discharge         none         IP20         Basic insulation         Yes         spring-loaded terminals (push-in)         0.5 4 mm²         0.5 4 mm²         20 12         0.5 4 mm²         0.5 4 mm²         20 12         0.5 4 mm²         0.5 4 mm²         20 12         0.5 4 mm²         0.5 4 mm²         12         0.5 4 mm²         12         13         14 mm²         15 4 mm²         15 4 mm²         16         17         18         19         10         11         12         13         14         15         16         17         18         19         10         11         12         13          14          15          16          17          18 <td< td=""></td<>
electrostatic discharge according to IEC 61000-4-2         Safety related data         category according to EN 954-1         protection class IP on the front according to IEC 60529         type of insulation         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         • finely stranded with core end processing	4 kV contact discharge / 8 kV air discharge         none         IP20         Basic insulation         Yes         spring-loaded terminals (push-in)         0.5 4 mm²         0.5 4 mm²         20 12         20 12         0.5 4 mm²         0.5 4 mm²         20 12         20 12         20 12         20 12         20 12         any
electrostatic discharge according to IEC 61000-4-2 Safety related data category according to EN 954-1 protection class IP on the front according to IEC 60529 type of insulation 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	4 kV contact discharge / 8 kV air discharge         none         IP20         Basic insulation         Yes         spring-loaded terminals (push-in)         0.5 4 mm²         0.5 4 mm²         20 12         20 12         0.5 4 mm²         0.5 2.5 mm²         0.5 4 mm²         20 12         20 12         20 12         any         screw and snap-on mounting onto 35 mm DIN rail
electrostatic discharge according to IEC 61000-4-2 Safety related data category according to EN 954-1 protection class IP on the front according to IEC 60529 type of insulation 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	4 kV contact discharge / 8 kV air discharge         none         IP20         Basic insulation         Yes         spring-loaded terminals (push-in)         0.5 4 mm²         0.5 2.5 mm²         0.5 4 mm²         0.5 4 mm²         0.5 4 mm²         1.12         20 12         20 12         20 12         any         screw and snap-on mounting onto 35 mm DIN rail         100 mm
electrostatic discharge according to IEC 61000-4-2 Safety related data category according to EN 954-1 protection class IP on the front according to IEC 60529 type of insulation 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	4 kV contact discharge / 8 kV air discharge none IP20 Basic insulation Yes spring-loaded terminals (push-in) 0.5 4 mm² 0.5 4 mm² 20 12 20 12 0.5 4 mm² 0.5 4 mm² 0.5 2.5 mm² 0.5 4 mm² 20 12 20 25 mm
electrostatic discharge according to IEC 61000-4-2 Safety related data category according to EN 954-1 protection class IP on the front according to IEC 60529 type of insulation 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	4 kV contact discharge / 8 kV air discharge         none         IP20         Basic insulation         Yes         spring-loaded terminals (push-in)         0.5 4 mm²         0.5 2.5 mm²         0.5 4 mm²         0.5 4 mm²         0.5 4 mm²         0.5 4 mm²         1.5 12         1.12         1.12         1.12         1.12         1.12         1.12         1.12         1.12 <td< td=""></td<>

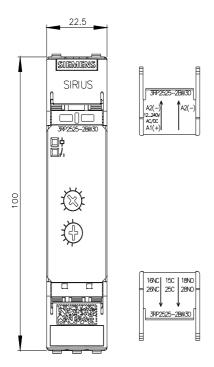
<ul> <li>with side-by-side</li> <li>forwards</li> </ul>					
— IOI wards			0 mm		
— backwards			0 mm		
— upwards			0 mm		
— downwards			0 mm		
— at the side			0 mm		
<ul> <li>for grounded par</li> </ul>	ts				
— forwards			0 mm		
— backwards			0 mm		
— upwards			0 mm		
— at the side			0 mm		
— downwards			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 he	eight above sea level max	kimum	2 000 m		
ambient temperature	0				
<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
General Product Appr	roval <u>Confirmation</u>	(h	EAC	EMC	formity
General Product Appr	Confirmation		EAC	EMC RCM	
ccc		UL UL	FRE	EMC RCM	formity
ccc Declaration of Con-	Confirmation	UL Marine / Shippi	ng	EMC RCM	formity
CCC Declaration of Con- formity CCC EG-Konf.	Confirmation Test Certificates	Marine / Shippi	ng Liks	EMC RCM	formity
Declaration of Con- formity	Confirmation Test Certificates	BUREAU	Llovds Register	EMC RCM	formity

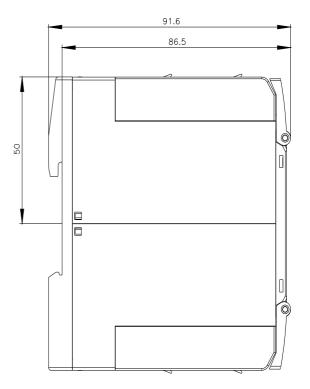
#### **Further information**

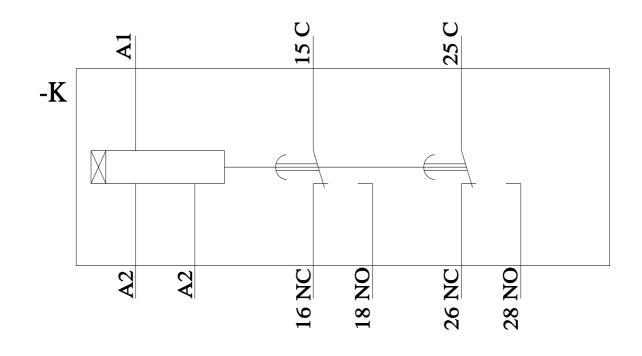
Siemens has decided to exit the Russian market (see here). https://press.siemens.com/global/en/pressrelease/siemens-wind-down-russian-business Siemens is working on the renewal of the current EAC certificates. Please contact your local Siemens office on the status of validity of the EAC certification 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 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=3RP2525-2BW30 Cax online generator http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RP2525-2BW30

#### https://support.industry.siemens.com/cs/ww/en/ps/3RP2525-2BW30

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RP2525-2BW30&lang=en Characteristic: Derating https://support.industry.siemens.com/cs/ww/en/ps/3RP2525-2BW30/manual







last modified:

8/7/2023 🖸