

Data Act Annex A

Rev. 01 07/2026

Data Mapping and Access Procedures pursuant to Regulation (EU) 2023/2854 (Data Act).

1. Purpose

This Annex describes:

- the categories of data generated by STAR controllers;
- how to access the data;
- the available formats;
- how to export and transfer the data;
- the technical specifications for interoperability.

2. Involved products

- **STEC-520 (A,B)**
- **STEC-NC3**
- **STEC-510**

3. Categories of available data

The available data includes:

- current production figures;
- machine status data;
- alarms;
- maintenance data;
- software and firmware versions;
- energy data, where available.

Category	File	Accessibility
Production data	CSV00	Si
Alarms	CSV02	Si
Maintenance	CSV03	Si
Software versions	CSV04	Si

The following are not included amongst the data that may be shared: the controller software, the source code, proprietary algorithms, control models and the technical know-how of Star Automation Europe.

Data format

The data is made available primarily in the following format:

- CSV;
- other technically equivalent formats that may be implemented.

4. How to access

The data can be accessed via:

- local controller interface;
- FTP protocol;
- exporting files generated by the system

5. Update frequency

The frequency of data export can be configured by the user via the 'Upload Interval' parameter, which can be set to any value between 1 and 600 seconds.

Star Automation Europe S.p.A. hereby confirms, with regard to the connected products supplied and currently still in use in your facilities, that it has carried out a mapping of the data-related activities performed.

We confirm that the data from your machines equipped with 520 (A, B), NC3 and 510 controllers supplied by us can be:

1. **Visualized**
2. **Exported**
3. **Archived.**

The characteristics of the machine data generated are as follows:

- **Data type:** current values, production history, alarm history, maintenance history, software version, energy consumption (viewable by all controllers).
- **Data format:**

STEC 520 (A,B), NC3	CSV (can be viewed in Excel)
STEC 510	Stored using suitable devices via a flash card reader with our PCS software, which can be supplied free of charge

- **Estimated volume:** < 1 MB – approximate figure based on standard usage.

For all other controller models, we confirm that data can only be viewed in real time via the keyboard.

Star Automation Europe S.p.A. declares that it does not carry out any data storage operations, with the exception of the user programme created by the customer, the use of which is solely for the purpose of making changes requested by the customer and for back-up purposes related to maintenance.

We generally retain the user programme created by the customer for as long as it is necessary for the operation of the machine (e.g. software updates), for the provision of a related service, or for as long as there is a legally recognised interest in further retention (e.g. product improvement, statutory retention periods).

Basic procedure for exporting data from the ROBOT to the SERVER via the FTP protocol:

Data is sent to the server by the controller in the sequence described below.

1	The controller prepares the data file to be sent to the server. In this case, it exports the data as a .csv file.
	
2	The controller transfers the file to the server via a shared folder. As communication between the controller and the server takes place via the network router/gateway, the check relating to the gateway also applies and is satisfied..
	
3	The controller accesses the server's dedicated URL and uploads the file. During this process, the data is also recorded in the database.
	

As regards the STEC-520/NC3, production data is uploaded to the server via FTP. Press the **[ALL MENU]** button to access the sub-menu section.



Press the **[WEB]** button to access the FTP Data Monitoring settings menu.



Select the **[MONITORING SETTINGS]** tab to display the system monitoring screen.

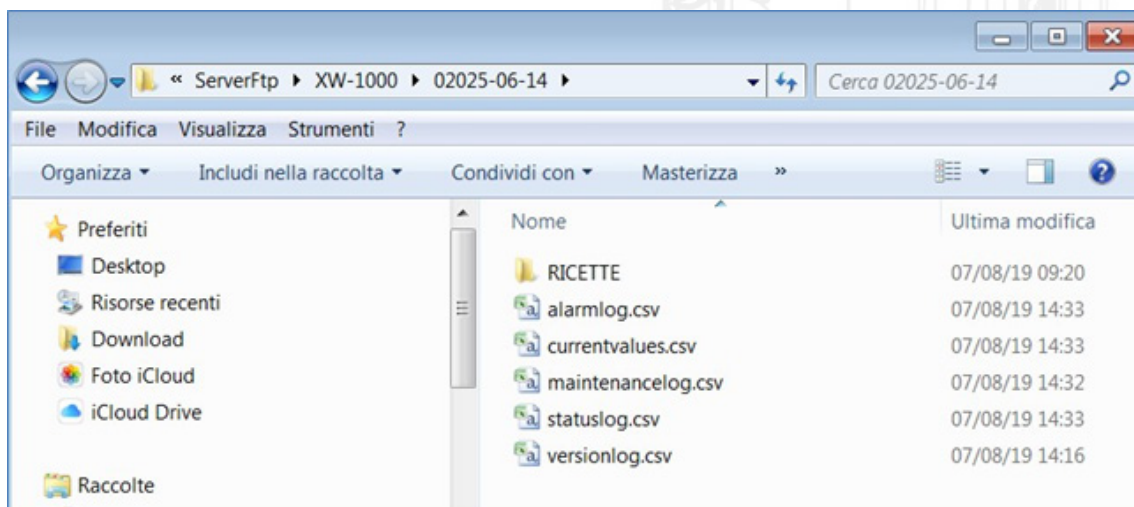


This window is used to configure the FTP connection settings.

No.	Entry	Info
1	System monitoring	System ON/OFF setting. When System Monitoring is ON, the robot sends .csv files to the server in the folder specified in step 5.
2	User name	Setting your username
3	Password	Setting your password to access the server. The characters are displayed as “*”.
4	IP address	Configuring the server’s IP address.
5	Upload directory	Setting up the shared folder on the server.
6	Upload interval	Setting the file upload/update interval.
7	Check connection	Performing a connection test (PING) on the IP address.
8	Log view	View the logs for FTP connections, disconnections, errors and uploads.

Once the configuration is complete, click the **[SYSTEM MONITORING]** button to enable the sending of CSV files to the shared folder on the server.

From now on, the following files will be visible in the shared folder:



File name	Data type	no. CSV
currentvalues.csv	Current data	CSV00
statuslog.csv	Production log	CSV01
alarmlog.csv	Alarm history	CSV02
maintenancelog.csv	Maintenance log	CSV03
versionlog.csv	Versions	CSV04

CSV00 - (currentvalues.csv) file description:

In the system's standard configuration, the CSV00 file contains the following log data.

Example: 945, 1097, 7060, 0,0, 42337,0,00000000000000,0,8, XW1800MVI, 054042303, 10000,10000,10000,10000,10000,10000,10000,10000,10000,10000,10000,10000.

1	2	3	4	5	6	7	8	9
945	1097	7060	0	0	42337	0	00000000000000	0
10	11	12	13	14	15	16	17	18
8	30580	XW-1800MVI	05404-2303	10000	10000	10000	10000	10000
19	20	21	22	23	24	25		
10000	10000	10000	10000	10000	10000	10000		

Entry	Data type	Data structure	Example
1	Extraction cycle	0.00~655.35 seconds	9.45s => 945
2	Total cycle	0.00~655.35 seconds	10.97s => 1097
3	Moulding cycle	0.00~655.35 seconds	70.67s=>7060
4	Number of rejects	0~4,294,967,295 pieces	0

5	Rejects %	0.0~100.0%, (100.0% = 1000)	0
6	Quantity produced	0~4,294,967,295 pieces	42337
7	Quantity to produce	0~4,294,967,295 pieces	0
8	End of production date	From left: sec, min, hour, day, month, year	59592331120616
9	Completion %	0.0~100.0%, (100.0% = 1000)	0
10	No. condition file	1~1000	8
11	Condition file name	0~20 characters	STAMPO001
12	No. robot (model)	0~20 characters	XW-1800MVI
13	No. controller (serial no.)	0~20 characters	05404-2303
14	X	Not used	10000
15	X	Not used	"
16	X	Not used	"
17	X	Not used	"
18	X	Not used	"
19	X	Not used	"
20	X	Not used	"
21	X	Not used	"
22	X	Not used	"
23	X	Not used	"
24	X	Not used	"
25	X	Not used	"

CSV01 - (statuslog.csv) file description:

In the system's standard configuration, the CSV01 file contains the following log data:

Example: **21031525090023,2,3,00031,8**

1	2	3	4	5
21031525090023	2	3	00031	8

Entry	Data type	Data structure	Example
1	Date and time	From left: sec, min, hour, day, month, year	21031525090023
2	Production conditions	0:no power_1:producing_2:alarm_3:stop	2
3	Alarm type	0:no_1:SYSALM_2:SPC ALM_3:TBLALM	3
4	Alarm no.	No. axis - No. Alarm	00-031=00031
5	Condition file no.	0 - 999	8

CSV02 - (alarmlog.csv) file description:

In the system's standard configuration, the CSV02 file contains the following log data.

Example: 3,00031,29041525090023,10000

1	2	3	4
3	00031	29041525090023	10000

Entry	Data type	Data structure	Example
1	Type	0:no 1:SYS ALM 2: AXIS ALM 3:TBLALM	3
2	Alarm no.	No. axis+ No. alarm	00+031=00031
3	Alarm time	From left: sec, min, hour, day, month, year	29041525090023
4	X	Not used	10000

CSV03 - (maintenancelog.csv) file description:

In the system's standard configuration, the CSV03 file contains the following log data.

Example: 25411026090023,24107,8138,0,33158,0,0,0,0,0,0,37011419050023,37011419050023.

1	2	3	4	5	6	7	8	9
25411026090023	24107	8138	0	33158	0	0	0	0
10	11	12	13-24	25-36				
0	0	0	37011419050023	37011419050023				

Entry	Data type	Data structure	Example
1	Date and time	From left: sec, min, hour, day, month, year	25411026090023
2	Axis 1 travelled distance	*0.01km	1.11km=>111
3	Axis 2 travelled distance	"	"
4	Axis 3 travelled distance	"	"
5	Axis 4 travelled distance	"	"
6	Axis 5 travelled distance	"	"
7	Axis 6 travelled distance	"	"
8	Axis 7 travelled distance	"	"
9	Axis 8 travelled distance	"	"
10	Axis 9 travelled distance	"	"
11	Axis 10 travelled distance	"	"
12	Axis 11 travelled distance	"	"
13	Checkup day point 1	From left: sec, min, hour, day, month, year	37011419050023

24	Checkup day point 10	From left: sec, min, hour, day, month, year	37011419050023
25	Greasing day. Axis 1	From left: sec, min, hour, day, month, year	37011419050023

36	Greasing day. Axis 1	From left: sec, min, hour, day, month, year	37011419050023

CSV04 - (versionlog.csv) file description:

Once the CSV04 file has been successfully uploaded, the value of the USB download counter (Log Data No. 21) is saved as a reference value. When a subsequent USB download is initiated, the system compares the current counter value with the saved value. If the two values do not match, the system versions associated with all the data configured in [SETTING04] of the CSV04 file are checked, and the resulting information is recorded in the CSV04 Data Buffer. The CSV04 Data Buffer is cleared during the initialisation phase following the upload of the CSV04 file.

In the system's standard configuration, the CSV04 file contains the following log data:

Example:

08211211070023, 520IPH, 52TMAT2, VCGP25N00E, Y000E-60, Y000E-60, 52TMAT2, Y000E-60, Y000E-60, 000E-60, Y000E-60, MSMC1G, MS2DDK

1	2	3	4	5	6	7	8	9
08211211070023	520IPH	52TMAT2	VCGP25N00E	Y000E-60	Y000E-60	52TMAT2	Y000E-60	Y000E-60
10	11	12	13-24					
Y000E-60	Y000E-60	MSMC1G	MS2DDK					

Entry	Data type	Data structure	Example
1	Date and time	From left: sec, min, hour, day, month, year	08211211070023
2	MainIPL version (620:IPL version)	0~20 characters; if download fails, 0	520IPH
3	Main program (620: sequencer version)	0~20 characters; if download fails, 0	52TMAT2
4	SPC version	0~20 characters; if download fails, 0	VCGP25N00E
5	Product data version	0~20 characters; if download fails, 0	Y000E-60
6	Initial version	0~20 characters; if download fails, 0	Y000E-60
7	Main program (620: pendant version)	0~20 characters; if download fails, 0	Y000E-60
8	Display version	0~20 characters; if download fails, 0	Y000E-60
9	Message 1 version	0~20 characters; if download fails, 0	Y000E-60
10	Message 2 version	0~20 characters; if download fails, 0	Y000E-60
11	Message 3 version	0~20 characters; if download fails, 0	Y000E-60
12	Motion version	0~20 characters; if download fails, 0	MSMC1G
13	Axis 1 CPU version	0~20 characters; if download fails, 0	MS2DDK

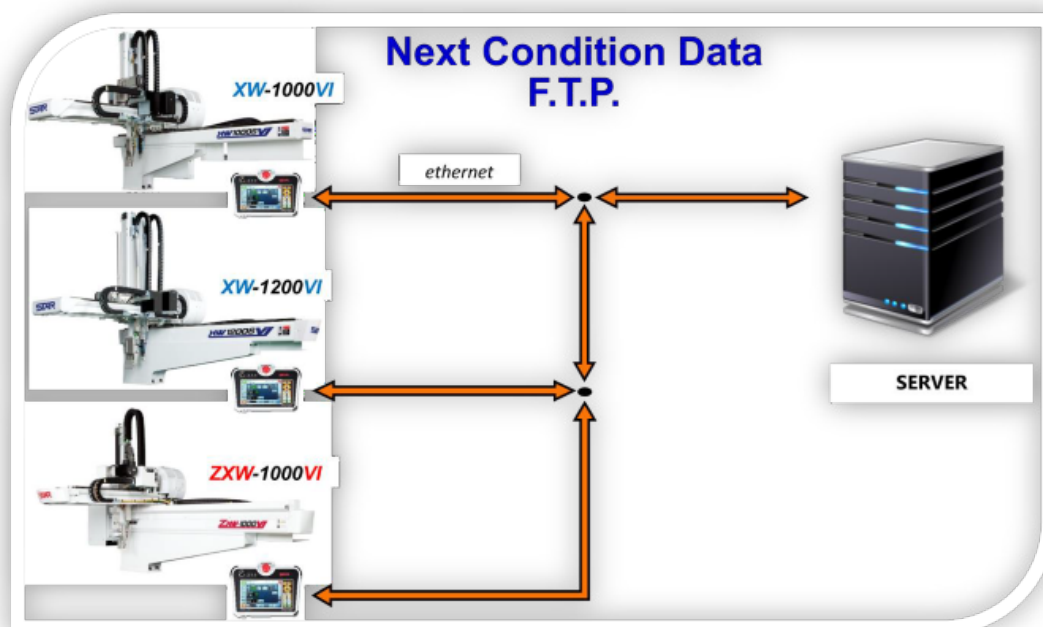
24	Axis 11 CPU version	0~20 characters; if download fails, 0	MS2DDK

Basic procedure for sending recipes from the SERVER to the robot via the FTP protocol.

The following requirements must be met to enable recipes to be transferred to the STEC-520 controller:

- An Ethernet connection must be available between the controller and the company server.
- Installation of the FileZilla Client software on an authorised company workstation.

FileZilla Client is a cross-platform application that enables two-way file transfer via the FTP protocol between the company's IT system and the STAR robot. This tool allows files relating to mould programmes to be transferred between the two systems.



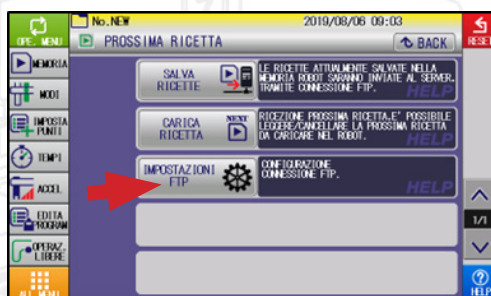
Press the **ALL MENU** button to access the settings menu.



Select **[RECIPE SETTINGS]**.



Go to the **[FTP SETTINGS]** menu.



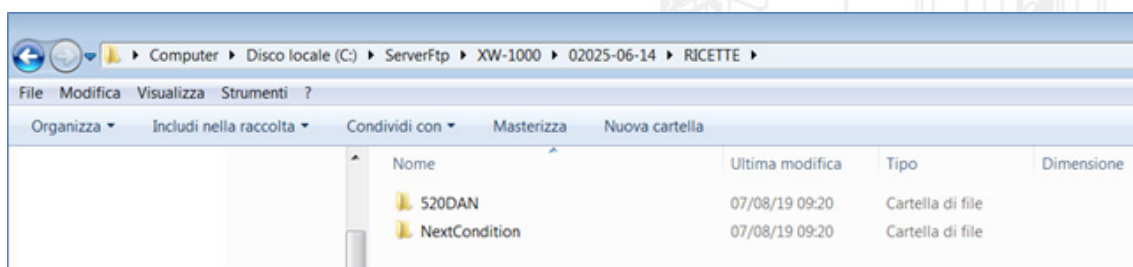
In the menu, you can configure the following settings:



Function	Description
ENABLE FTP RECIPES	Button to enable the sending and receiving of recipes. When set to ON , the controller creates a folder on the server with the name specified in the UPLOAD PATH.
USER NAME	Set a name for the server connection
PASSWORD	Setting a password for connecting to the server
IP ADDRESS	Set the server's IP address
PATH UPLOAD	Enter the name of the folder you wish to create on the server (within the shared folder). This folder will then be used to exchange recipes with the server. Please note: to create the folder correctly, you must use the ¥ symbol instead of the \ symbol.
UPLOAD INTERVAL	Set the file upload/update interval.
CONNECTION CHECK	Perform a connection test (PING) on the IP address.

Function	Description
LOG DISPLAY	View logs for FTP connections, disconnections, errors and uploads.

Once the configuration is complete, click the **[ENABLE FTP RECIPES]** button to enable files to be sent to the shared folder on the server.



The **[520DAN]** folder (the name of this folder depends on the STEC model; in this case, an STEC 520) contains all the recipes saved in the controller.

The **[NextCondition]** folder, on the other hand, is used to enter the programme to be loaded into the robot. It is not relevant to this document.