



# **VOLUREX**

## **UPDATE PROCEDURE**

### ***NEW SMH60 MOTOR***

### ***on Compax3 Servo-Drive***

**User Manual 582209110**

2022-01-21

Index C

Translation from the original instructions

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**Evolution table of the document**

<b>Recording revisions</b>				
<b>Editor</b>	<b>Object</b>	<b>Revision</b>	<b>Date</b>	<b>Modified by</b>
C. HUSSON	Procedure writing	A	Week 47/2021	N. FERRERE / B. BATTLO
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C. HUSSON	Links	C	Week 03/2022	-

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Dear customer, in order to offer a solution to guarantee the continuity of the operation of the installed base and to maintain our offer of proportioning units, we had to upgrade it by integrating a new electric motor.

We invite you to read carefully this procedure which describes step by step the update of the proportioning units and the replacement of the old motor NX210 by the new version SMH60. This manual also describes in detail the necessary configuration of the Compax3 Servo-Drive.

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**Personnel qualifications**

Tasks must only be performed in accordance with existing rules and statutory regulations, by personnel who have been instructed and are qualified in this regard, in compliance with due diligence obligations.

The following requirements must be fulfilled:

- ✓ Personnel must have special skills and experience in the respective technical area. This particularly applies for maintenance and repair tasks on mechanical and pneumatic fixtures of the VOLUREX.
- ✓ Personnel must have knowledge of applicable standards, directives, accident prevention regulations and operating conditions.
- ✓ Personnel must have been authorized by the person responsible for safety to perform the respectively required tasks.
- ✓ Personnel must be capable of recognizing and avoiding possible dangers.

The required personnel qualifications are subject to different statutory regulations depending on the implementation site. The owner must ensure compliance with the applicable laws.

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# 1. Safety instructions

## 1.1 Personal safety

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### Overview

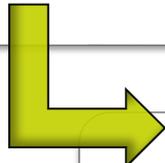
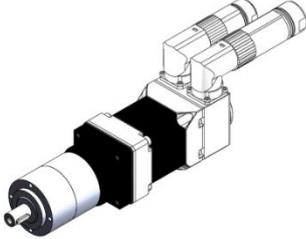
For more information, please refer to the corresponding VOLUREX user manuals.

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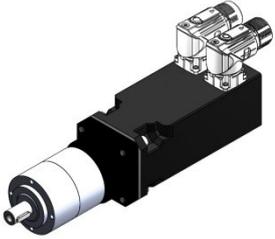
## 2. Description

You have purchased a VOLUREX proportioning system equipped with a PARKER motor and HARTING plug or you are in possession of a VOLUREX that you wish to update. Following the end of the NX210 motors range replaced by the SMH60 motors range, we suggest you to update the configuration of your Compax3 for a SMH60 motor by means of the procedure described in this document.

**NX210**  
**old motor**



**SMH60**  
**new motor**



The upgrade does not change the way the motor is mounted and can be installed on the VOLUREX instead.



**Caution: However, updating the motor requires updating the dosing support (part number 210 413) and changing the motor's power and Resolver cables.**

In the tables below, only the VOLUREX equipped with an NX210 motor whose references appear in column 1 are concerned by this procedure. The VOLUREX in column 2 are all equipped with an SMH60 motor.

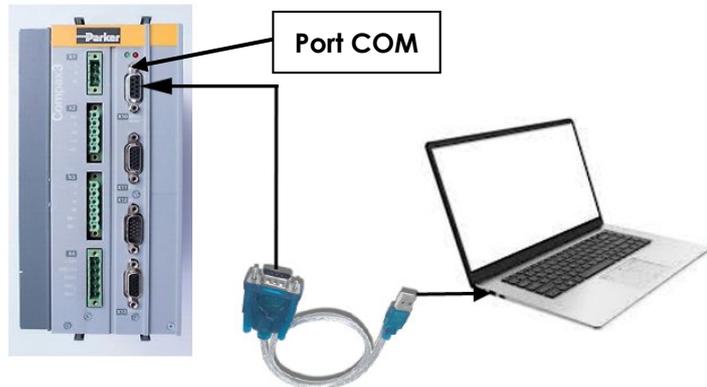
<b>Proportioning systems with outlet valves</b>		
<b># Current part numbers (VOLUREX equipped with NX210 motor)</b>	<b># New part numbers (VOLUREX equipped with SMH60 motor)</b>	<b>Description</b>
105 824 0408	105 824 0428	VOLUREX 25 cc ATG with HARTING
105 435 0408	105 435 0428	VOLUREX 50 cc ATG with HARTING
105 145 0408	105 145 0428	VOLUREX 100 cc ATG with HARTING
104 115 0408	104 115 0428	VOLUREX 150 cc ATG with HARTING
998 907 700	155 790 0428	VOLUREX 300 cc LP (WS) low pressure

<b>Proportioning systems with outlet flanges</b>		
<b># Current part numbers (VOLUREX equipped with NX210 motor)</b>	<b># New part numbers (VOLUREX equipped with SMH60 motor)</b>	<b>Description</b>
105 824 0208	105 824 0228	VOLUREX 25 cc with HARTING flange
105 435 0208	105 435 0228	VOLUREX 50 cc with HARTING flange
105 145 0208	105 145 0228	VOLUREX 100 cc with HARTING flange
104 115 0208	104 115 0228	VOLUREX 150 cc with HARTING flange

<b>Spiral proportioning systems</b>		
<b># Current part numbers (VOLUREX equipped with NX210 motor)</b>	<b># New part numbers (VOLUREX equipped with SMH60 motor)</b>	<b>Description</b>
998 000 787	105 824 1128	Spiral VOLUREX 25cc
105 435 1108	105 435 1128	Spiral VOLUREX 50cc
998 880 690	105 145 1128	Spiral VOLUREX 100cc

### 3. Loading procedure

- ✓ After connecting the serial converter to an USB port on the computer on one side to the drive on the other, connect the programming cable SSK01/02 to X10 of the Compax3 and the USB serial converter.



- ✓ Apply 24VDC control voltage to X4 to connect the Compax3 Servo-Drive.
- ✓ Start the C3 ServoManager software with the command



button

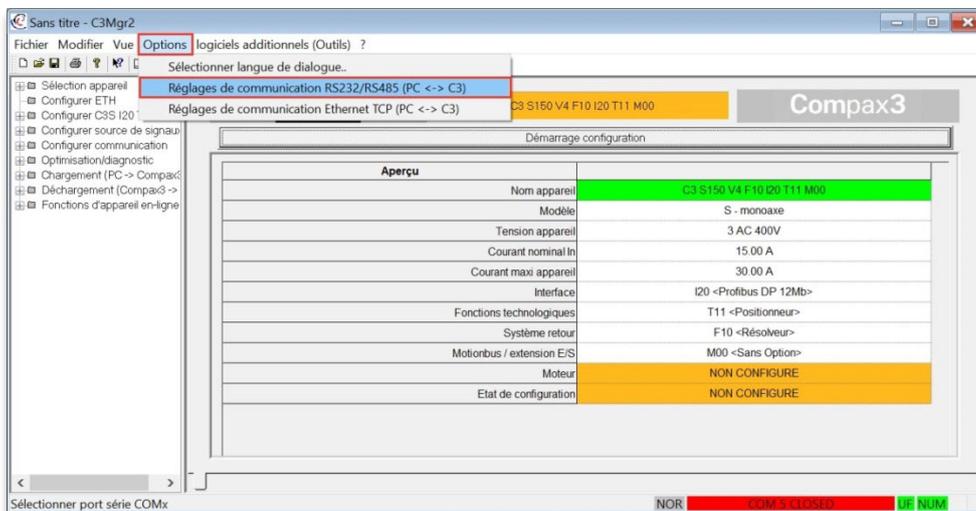
You will need to download previously the **Compax3 ServoManager (including PIET)** software from the link below :

[https://www.parker.com/Literature/Electromechanical%20Europe/Downloads/Compax3\\_support\\_page.pdf](https://www.parker.com/Literature/Electromechanical%20Europe/Downloads/Compax3_support_page.pdf)

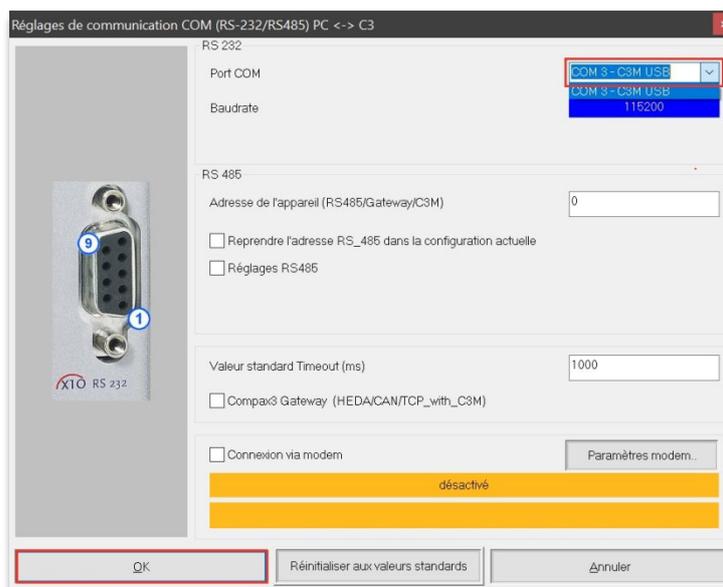
- ✓ Download the configuration file on our website via the following link:

[https://www.sames-kremlin.com/csx/scripts/downloader2.php?filename=T004/media/d4/88/FR.g4l5f0kyvx1o&mime=application%2Foctet-stream&originalname=SMH6045\\_Autostream.c3p&moid=93](https://www.sames-kremlin.com/csx/scripts/downloader2.php?filename=T004/media/d4/88/FR.g4l5f0kyvx1o&mime=application%2Foctet-stream&originalname=SMH6045_Autostream.c3p&moid=93)

- ✓ Select the **Options** tab in the ribbon and choose **RS232/RS485 communication settings (PC <-> C3)** as shown in the screen below:



- ✓ The following window is displayed:

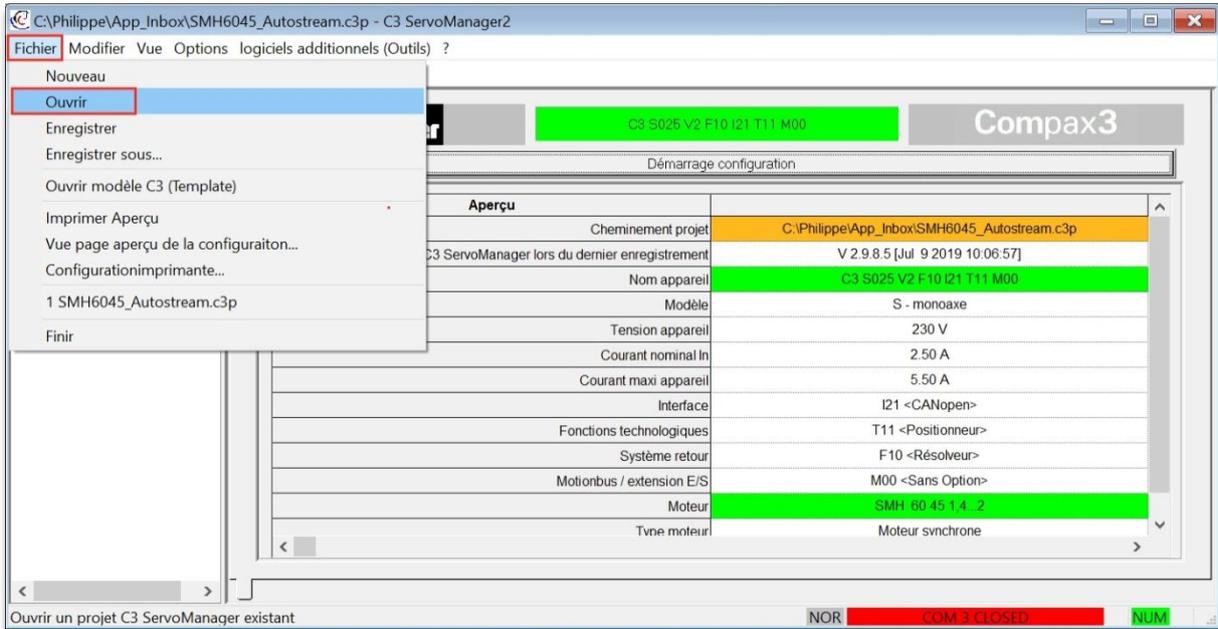


- ✓ Expand the contents of the 'Ports' line (COM 3 in this display) and click on OK.

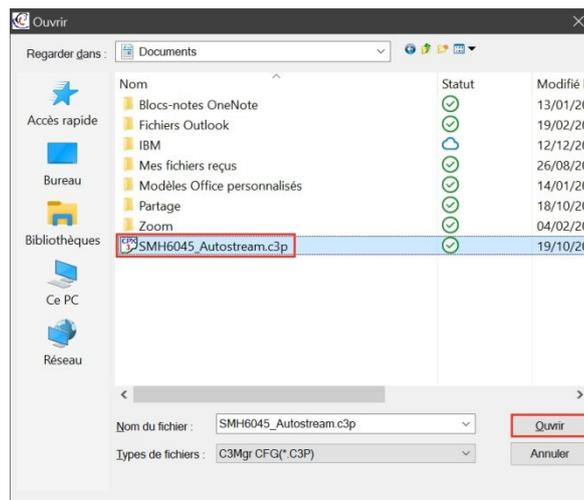


**Caution: A failed connection to the USB port typically results from a problem between the USB port and the serial communication adapter.**

- ✓ Select the **File** tab in the ribbon and choose **Open** as shown in the screen below:



- ✓ The following window is displayed:



- ✓ Select the 'SMH6045\_Autostream.c3p' line then click on Open.

- ✓ Click on the  button to download the .c3p file to the Compax3 Servo-Drive.

This button is located on the ribbon.



- ✓ Follow the instructions on the screen.
  - ✓ At the end of the operations, close the C3 ServoManager software.
  - ✓ Switch off the Compax3 Servo-Drive (supply 24VDC in X4).
-

### 3.1 Determine COM port

If you are using an USB communication port, follow this path to check if the communication port you are using is the right one.

Start → Control panel → System → Hardware → Device manager → Ports (COM & LPT).

A failed connection to the COM 1 port is typically a problem between the USB and the serial communication adapter.

Check the documentation for the serial USB/adapter and download an updated driver specific to the adapter used. Microsoft Windows will automatically select a driver for the new device if it is not properly installed.

Remove the device and start the installation again.

The properties of the communication port can be viewed by selecting the port .COM.

By checking the properties you can see that the .COM port is already in use or that there is a conflict between different drivers.

Disconnect programs that may be hogging the .COM port or resolve conflicts between drivers.

**Important: If the PC is equipped with a serial port, this port will normally be communication port number 1, "COM1".**

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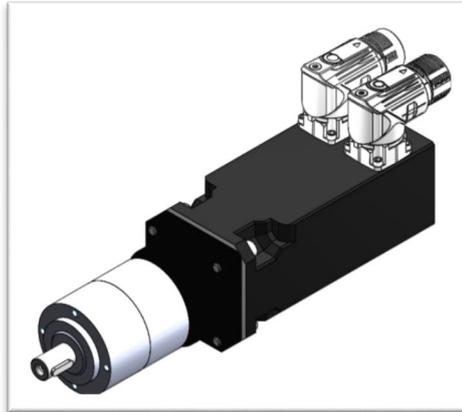
#### 4. Possible symptoms of faults / Causes of faults / Remedies to apply - fast operation

Defaults	Possible causes	Remedies
No connection to PLC	Cable not connected	Make sure the cable is connected to the Compax3 on one side and to the computer on the other side.
	Wrong COM Port	Review Determine COM Port Section for help. Try alternate COM Ports.
	Un-determine COM problem	Some programs, such as RS Links, will automatically use COM 1. Close all programs that may use the port. COM 1. Resolve conflicts between drivers by checking COM port properties.
		Remove and reinstall the link. Your computer must be connected to the Internet for a successful installation.
USB to serial adaptor being used	Review Determine COM Port Section for help. Resolve conflicts between drivers by checking COM port properties.	
	Update or reinstall the adapter and its driver.	
	Try another USB adapter and another driver.	
The equipment does not work even though the program has been downloaded	Corrupted download	Try downloading file again.

### 5. References needed to update the Compax3

Ind	# Part number	Description	Qty
-	155 730 028	Programming kit	1
-	901 250 232	▪ SSK01/02 programming cable	1
-	901 250 233	▪ USB RS232 programming interface	1

### 6. References needed for motor replacement



**SMH60 motoreducer**



**Proportioning system support**

Ind	# Part number	Description	Qty
-	917 480 426	SMH60 motoreducer	1
-	155 730 027	Programmed Servo-Drive	1
-	210 413	Proportioning system support	1

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**Accessories**

# Part number	Description
917 480 427	Power cable (length 5m / 16.4 ft)
917 480 428	Power cable (length 10m / 32.8 ft)
917 480 429	Power cable (length 15m / 49.2 ft)
917 480 430	Power cable (length 20m / 65.6 ft)
917 480 431	Resolver cable (length 5m / 16.4 ft)
917 480 432	Resolver cable (length 10m / 32.8 ft)
917 480 433	Resolver cable (length 15m / 49.2 ft)
917 480 434	Resolver cable (length 20m / 65.6 ft)

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