



**Commercial  
Vehicles**

**Agreement for individual implementation of configuration for the customer-specific  
function control unit**

**by and between**

**Volkswagen AG  
Volkswagen Nutzfahrzeuge  
Berliner Ring 2  
38440 Wolfsburg  
Germany**  
Hereafter referred to as "VW AG"

**and**

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Hereafter referred to as the "Body Builder"

VW AG and the Body Builder are hereafter referred to individually as "party" and jointly as "parties".

**Preamble:**

To create network possibilities between the body and basic vehicle, VW AG has developed the customer-specific function control unit (hereafter: "CFCU") and included this in its range of products. This agreement is intended as a way in which the Body Builder can commission VW AG to implement requirements for the CFCU that are specific to the Body Builder during the period of this agreement.

In this context, the parties enter into the following agreement in terms of the collaboration.

**Article 1 – Individual commissioning within the scope of this agreement and responsibility**

1. For each individual commissioning of a specific configuration, the Body Builder shall fill out, sign and return the order form (sample in **appendix 1** of this agreement) to be made available to it by VW AG and send it to the address marked on the order form (offer on conclusion of a configuration contract).



**Commercial  
Vehicles**

2. Based on the documents and information sent, VW AG shall check the feasibility of implementing the specific configurations and, after receiving the order form at the registered address, shall confirm to the Body Builder that the order is accepted if implementation of the specific configurations is possible. If implementation of the specific configurations is not possible, VW AG shall notify the Body Builder accordingly.
3. Within the scope of this agreement, VW AG is responsible in all individual orders exclusively for implementation of the specific configuration as required by the Body Builder. The overall responsibility for configuration of the customer-specific function control unit remains wholly with the Body Builder. The Body Builder must independently look into the risks relating to the body and functions to be facilitated in the CFCU. To this end, the Body Builder will only commission VW AG to implement such configurations that it has checked against one of the current standards for functional safety (e.g. ISO26262 in the valid version) and in addition to the functional requirements can also verify all necessary safety requirements at the required safety level (e.g. ASIL in accordance with ISO26262 in the version as amended). No check will be carried out by VW AG. The Body Builder is solely and exclusively responsible for the check. The Body Builder agrees never to order configurations to be implemented by VW AG with requirements that go beyond safety level ASIL B as per ISO26262 (in the version as amended) or an equivalent safety level from another valid functional safety standard which corresponds to the state of the art at the time of introduction.

With each individual order, the Body Builder shall provide a detailed and professional description of the functional requirements and the associated safety requirements.

## **Article 2 – Execution by VW AG and co-operation with the Body Builder**

1. If implementation is possible, based on the documents provided, VW AG will carry out an appraisal of the amount of effort needed along with any additional information required and notify the Body Builder of this for further scheduling. Initial commissioning for implementation of configuration is free of charge to the Body Builder. If the Body Builder violates one of the obligations from articles 1–4 or if the Body Builder requests additional configurations for a vehicle already coded with a CFCU data file, VW AG will make implementation dependent on a declaration from the Body Builder to take over the costs.
2. The Body Builder undertakes to contribute towards the clarification of any unanswered questions and deal with and respond to queries from VW AG at all times in compliance with current applicable standards concerning functional safety (e.g. ISO 26262 in the version as amended).



**Commercial  
Vehicles**

### **Article 3 – Handover of the results of the work, acceptance by the Body Builder and future use of the CFCU data file**

1. Once the configuration has been implemented, VW AG will provide the Body Builder with a CFCU data file, which can be used by the Body Builder directly or by a Volkswagen Commercial Vehicles authorised workshop by means of an ODIS diagnostic system to code the vehicles in question.
2. The Body Builder undertakes to independently check the functionality of the CFCU data file supplied by VW AG and to document the results independently according to the selected safety standard, corresponding to the state of the art at the time of introduction. The Body Builder undertakes to keep the documentation and make it available to VW AG free of charge on request within five (5) working days.
3. The Body Builder shall only release the coding for customer vehicles if it has provided positive proof of safety (in accordance with the conditions and requirements stated in Article 3.2).
4. The Body Builder must ensure that the content and functions of the CFCU data file supplied by VW AG corresponds to the state of the art at the time of introduction.

### **Article 4 – Return documentation and authorisation for service**

1. The Body Builder agrees to confirm to VW AG the positive result of each safety certification (carried out in accordance with the conditions and requirements stated in Article 3.2), stating the data record ID number assigned by VW AG. The email address printed on the order form shall be used for this purpose.
2. The Body Builder shall document the coded vehicle identification numbers (VIN for short) during production with the data record ID numbers assigned by VW AG which are used in each case. The documentation is to be provided to VW AG by the Body Builder before delivery of the vehicle. The email address printed on the order form shall be used for this purpose. Should other systems be made available in future for return documentation, these are to be used by the Body Builder when notified by VW AG.
3. If a control unit for a CFCU coded by the Body Builder needs to be replaced (e.g. due to a defect), the Body Builder undertakes to confirm to VW AG that the documented configurations are up-to-date for the VIN (in accordance with Article 4.2 of the agreement) within 24 hours during the normal business of the Body Builder and to approve the use of the configuration documented for the VIN at the relevant Volkswagen Commercial Vehicles authorised workshops.



**Commercial  
Vehicles**

#### **Article 5 – Duration of contract and termination of contract**

1. This agreement comes into force upon its signing by the parties and is concluded for an indefinite period.
2. This agreement may be terminated by either party by means of a written declaration to the other party with a notice period of 3 months to the end of the month.
3. This agreement can be terminated for good cause in writing without notice.
4. The parties are both in agreement that upon termination of this agreement
  - a) any outstanding work shall be completed at the point of termination,
  - b) payments will be honoured,
  - c) any unanswered questions shall be clarified.

#### **Article 6 – Form, relationship to earlier agreements**

Amendments and supplements to this agreement shall require the written form. This also includes the waiver of written-form requirements. No supplementary oral agreements have been made.

#### **Article 7 – Transferability**

Rights and duties of the parties on the basis of this agreement shall not be assigned to other parties – in whole or in part – without the written approval of the other parties.

#### **Article 8 – Severability**

If individual provisions of this agreement are or become invalid or infeasible for legal or factual reasons, the remaining provisions hereof shall remain unaffected.

The parties shall replace the invalid provision with a valid provision which approximates most closely the economic intent of this agreement and the functions it governs. The same shall apply if the entire agreement is or becomes invalid.



**Commercial  
Vehicles**

**Article 9 – Place of jurisdiction**

The sole place of jurisdiction for the settlement of all disputes arising from or relating to this agreement is the court of jurisdiction responsible for the manufacturer's head office.

**Article 10 – Choice of law clause**

1. This agreement and all contractual rights and obligations contained in or connected to this agreement are subject solely to the law of the Federal Republic of Germany, to the exclusion of conflict-of-laws provisions and the UN Sales Convention.
2. All claims, rights and obligations outside this agreement are also subject to the law of the Federal Republic of Germany.

.....  
(Place, date)

.....  
Body builder (signature/company stamp)

Wolfsburg, date.....

Volkswagen AG  
i.V.



**Commercial  
Vehicles**

## **Annex 1**

Sample order form for the individual commissioning of a specific configuration



**Commercial  
Vehicles**

## Request for CFCU-configuration

### Important notes

- The completed form must be sent to [nsc.convert@volkswagen.de](mailto:nsc.convert@volkswagen.de) in digital form via the button below.
- Forms filled in by hand may not be sent. This also includes scanned forms.
- If verification of safety requirements is necessary for the configuration, please attach these to the email and name them in the "Attachment" field.
- The subject line of the email always begins with "CFCU" and can then be given another subject, separated by a long dash (e.g.: CFCU - configuration for an ambulance). This ensures that the order will be processed quickly.
- The initial configuration of a vehicle is free of charge.
- Please check if you made confirmation of the contract **"Agreement for individual implementation of configuration for CFCU"** by signing and sending it to [nsc.convert@volkswagen.de](mailto:nsc.convert@volkswagen.de).
- The specifications shall be governed by the agreement **"Agreement for individual implementation of configuration for CFCU"**

Sample



## Commercial Vehicles

### Address data / company delivery address

Body builder/dealership	Body builder	Volkswagen Commercial Vehicles authorised workshop
Dealership number (if stating a dealership)		
Name of body builder/authorised workshop		
Contact		
Street/no.		
Post code/town		
E-Mail adress		
Telephone number		

### Vehicle data

Vehicle identification number
Vehicle type
Mileage [km]

### Repeatability of configuration using an identical data record on other vehicles

Do you plan to apply this configuration file on other vehicles?      Yes      No

#### Notes

#### Repeatability of configuration using an identical data record on other vehicles

The configuration of a vehicle with an identical CFCU data record is only permitted if the vehicle has an identical PRNR scope to the initially requested and configured vehicle. If the PRNR scope is different from this originally configured vehicle, a check request with a description of the configuration and the different PRNR scope must be sent to [nsc.convert@volkswagen.de](mailto:nsc.convert@volkswagen.de).





## Commercial Vehicles

### Functional description

1. Body description (Briefly describe the type of body/modification):

### 2. Standard configuration

Required working speed	Fixed (US1)	Variable (US2)	Not stated
Working speed range	Min. working speed[rpm]:		
	Max. working speed [rpm]:		
Engine remote stop/start Circuit (MFSS) required?	Yes	No	Not stated
Control of CFCU via APP required?	Yes	No	Not stated

**If you require a fixed working speed, only enter the minimum speed in the speed range!**

#### Specifications for fixed/variable working speed

- min. 1.250 rpm
- max. 3.900 rpm without power take-off system
- max. 3.000 rpm with power take-off system
- Switching signal/activation takes place via PIN C35, function lighting via PIN C21, PTO button via PIN C22, response via PIN C23

MFSS pin assignment according to the...

**Only select activation of the CFCU via an app if you have commissioned or are going to commission the app from an external supplier!**

### Notes on items 3–4 on pages 4 & 5

If there is no preliminary selection of the inputs and outputs, they are specified by the manufacturer when configuring the CFCU. Note the load on each input and output when selecting the pin assignment. More information on the available basic vehicle signals and connection options for forming algorithms can be found in the technical customer documentation for the CFCU at [www.umbauportal.de](http://www.umbauportal.de).



**Commercial  
Vehicles**

### 3. CFCU pin assignment (Note: The plug assignment plan can be found on page 7.)

#### l) Outputs

Plug/pin	Signal	Pin designation	Required signal
ST3/1	MFA_15	Low- side output / 300 Hz PWM, 0.5A	
ST3/2	MFA_16	Low- side output / 300 Hz PWM, 0.5A	
ST3/3	MFA_13	Low- side output / 5 kHz PWM, 1A	
ST3/4	REL_NO1	N/O relay / floating (working) contact	
ST3/5	REL_COM1	Relay / floating changeover contact	
ST3/6	REL_NC1	N/O relay / floating (NC) contact	
ST3/11	MFA_17	Low- side output / 300 Hz PWM, 0.5A	
ST3/12	MFA_18	Low- side output / 300 Hz PWM, 0.5A	
ST3/13	MFA_14	Low- side output / 5 kHz PWM, 1A	
ST3/14	REL_NO2	N/O relay / floating (working) contact	
ST3/15	REL_COM2	Relay / floating changeover contact	
ST3/16	REL_NC2	N/O relay / floating (NC) contact	
ST3/21	MFA_11	High- side output / 300 Hz PWM/0.5A/T30_2	
ST3/22	MFA_12	High- side output / 300 Hz PWM/0.5A/T30_2	
ST3/31	MFA_9	High- side output / 300 Hz PWM/0.5A/T30_1	
ST3/32	MFA_10	High- side output / 300 Hz PWM/0.5A/T30_1	
ST2/1	MFA_7	High- side output / 5A/T30_2	
ST2/2	MFA_5	High- side output / 5A/T30_1	
ST2/3	MFA_6	High- side output / 5A/T30_1	
ST2/4	MFA_8	High- side output / 5A/T30_2	
ST2/5	MFA_4	High- side output / 10A/T30_2	
ST2/6	MFA_1	High- side output / 5A/T30_1	
ST2/7	MFA_3	High- side output / 5A/T30_2	
ST2/8	MFA_20	Half bridge2 output/ 5A/T30_1	
ST2/9	MFA_19	Half bridge1 output/ 5A/T30_1	
ST2/10	MFA_22	Half bridge2 output/ 5A/T30_2	
ST2/11	MFA_21	Half bridge1 output/ 5A/T30_2	
ST2/12	MFA_2	High- side output / 10A/T30_1	



**Commercial  
Vehicles**

### 3. CFCU pin assignment

#### II) Inputs

Plug/pin	Signal	Pin designation	Required signal
ST3/7	MFE_17	High-side input / wake-up capability / digital	
ST3/8	MFE_19	High-side input / wake-up capability / digital	
ST3/9	MFE_21	High-side input / wake-up capability / digital	
ST3/10	MFE_23	High-side input / wake-up capability / digital	
ST3/17	MFE_18	High-side input / wake-up capability / digital	
ST3/18	MFE_20	High-side input / wake-up capability / digital	
ST3/19	MFE_22	High-side input / wake-up capability / digital	
ST3/20	MFE_24	High-side input / wake-up capability / digital	
ST3/23	MFE_9	Low-side input / wake-up capability / digital	
ST3/24	MFE_11	Low-side input / wake-up capability / digital	
ST3/25	MFE_13	Low-side input / wake-up capability / digital	
ST3/26	MFE_15	Low-side input / wake-up capability / digital	
ST3/27	MFE_1	Low-side input / wake-up capability / analogue	
ST3/28	MFE_3	Low-side input / wake-up capability / analogue	
ST3/29	MFE_5	Low-side input / wake-up capability / analogue	
ST3/30	MFE_7	Low-side input / wake-up capability / analogue	
ST3/33	MFE_10	Low-side input / wake-up capability / digital	
ST3/34	MFE_12	Low-side input / wake-up capability / digital	
ST3/35	MFE_14	Low-side input / wake-up capability / digital	
ST3/36	MFE_16	Low-side input / wake-up capability / digital	
ST3/37	MFE_2	Low-side input / wake-up capability / analogue	
ST3/38	MFE_4	Low-side input / wake-up capability / analogue	
ST3/39	MFE_6	Low-side input / wake-up capability / analogue	
ST3/40	MFE_8	Low-side input / wake-up capability / analogue	



**Commercial  
Vehicles**

#### 4. Free coding

**Please send a precise functional description, if necessary with function plan, as an attachment.**

If you have formulated the free coding separately, you can also add it to the attachment and put a link to it here.

Sample

#### 5. Attachment for attention

List below all attachments you want to e-mail us with this order form. E.g.: function plan, logical links, any necessary safety requirements.

Attachment 1

Attachment 2

Attachment 3

Attachment 4

Attachment 5

Attachment 6

Attachment 7



Commercial  
Vehicles

CFCU pin assignment plan

