

# COMBIVERT



## F5/F6

**GB** Instruction Manual

Power Unit Special Version  
30F5H0P-Y20H  
30F5E1P-Y20H

Translation of Original Manual		
Document	Part	Version
20111691	GBR	00

**KEB**



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# Preface

## 1. Preface


The described hard- and software are developments of the Karl E. Brinkmann GmbH. The enclosed documents correspond to conditions valid at printing. Misprint, mistakes and technical changes reserved.


### 1.1 Information on special measures


The used pictograms have following significance:

**Danger**  Is used, when death or serious bodily injury may be the consequence of non-observance of the measure.

**Warning**  Is used, when bodily injury and/or substantial property damage may be the consequence of non-observance of the measure.

**Caution**  Is used, when property damage may be the consequence of non-observance of the measure.

**Attention**  Is used, when noise sensitive or unrequested operation may be the consequence of non-observance of the measure.

**Info**  Is used, when a better or simpler result can be the consequence of the measure.

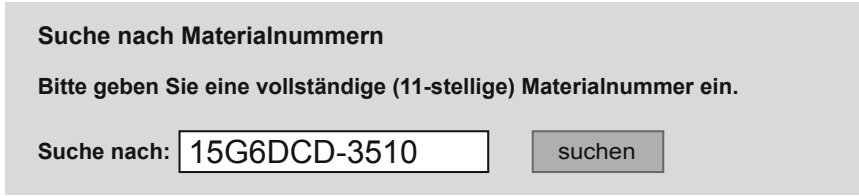
For a special case the instructions can be supplemented by additional pictograms and text.

### 1.2 Documentation


**Attention**  **Documentation via [www.keb.de](http://www.keb.de)**



Prior to performing any work on the unit, it is absolutely necessary to download and read the documentation, especially the safety precautions and instructions for use. Follow these steps to get the documentation:

Step 1	Read the material number (Mat.No.) from nameplate
Step 2	Input the material number at " <a href="http://www.keb.de">www.keb.de</a> => Service => Downloads" and click "search". <b>Downloads</b> 

further on next side

Step 3	The entire documentation associated with the device will be displayed, including the instruction manuals in German and English. If available, other translations are also indicated. Make sure that the user understands the provided language.
	<b>Should you be unable to read or understand the documentation, do not take any further steps. Please inform our support network for further assistance.</b>

Non-observance of the safety instructions leads to the loss of any liability claims. The warnings and safety instructions in this manual work only supplementary. This list is not exhaustive.



### 1.3 Validity and liability

**The use of our units in the target products is beyond of our control and therefore exclusively the responsibility of the machine manufacturer, system integrator or customer.**

The information contained in the technical documentation, as well as any user-specific advice in spoken and written and through tests, are made to best of our knowledge and information about the application. However, they are considered for information only without responsibility. This also applies to any violation of industrial property rights of a third-party.

Selection of our units in view of their suitability for the intended use must be done generally by the user.

**Tests can only be done within the application by the machine manufacturer. They must be repeated, even if only parts of hardware, software or the unit adjustment are modified.**

<b>Danger  by tamper from unauthorized personnel</b>	
	Unauthorised opening and tampering may lead to death, bodily injury, property damage and malfunctions. Modification or repair is permitted only by authorized personnel by KEB. Infringement will annul the liability for resulting consequences.

The suspension of liability is especially valid also for operation interruption loss, loss of profit, data loss or other damages. The disclaimer will void the warranty. This is also valid, if we referred first to the possibility of such damages.

If single regulations should be or become void, invalid or impracticable, the effectivity of all other regulations or agreements is not affected.

Through multitude applications not each possible case of installation, operation or maintenance can be considered. If you require further information or if special problems occur which are not treated detailed in the documentation, you can request the necessary information via the local Karl E.Brinkmann GmbH agency.

### 1.4 Copyright

The customer may use the instruction manual as well as further documents or parts from it for internal purposes. Copyrights are with KEB and remain valid in its entirety.

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Other wordmarks or/and logos are trademarks (<sup>™</sup>) or registered trademarks (<sup>®</sup>) of their respective owners and are listed in the footnote on the first occurrence.

When creating our documents we pay attention with the utmost care to the rights of third parties. Should we have not marked a trademark or breach a copyright, please inform us in order to have the possibility of remedy.

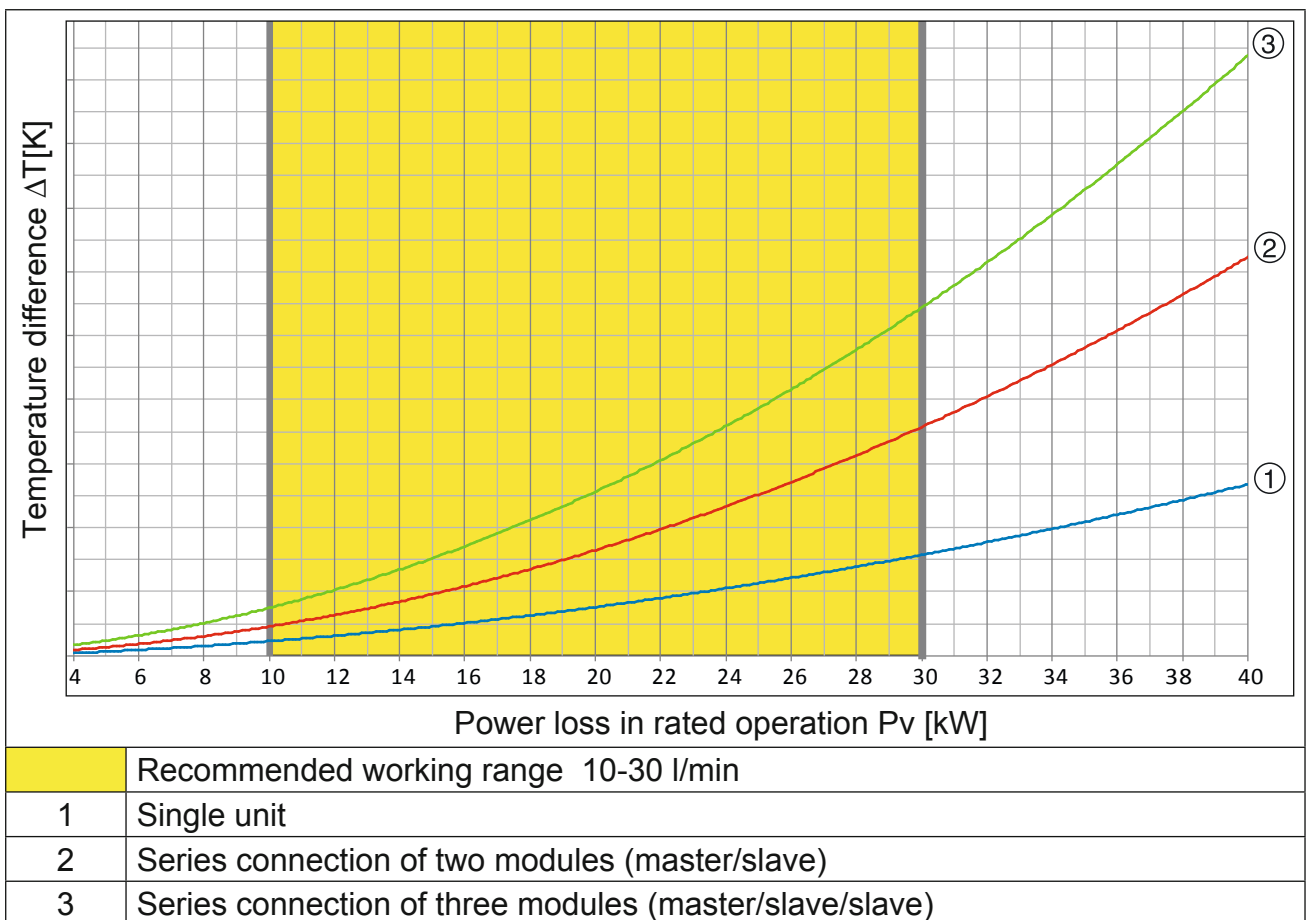
### **1.5 Valid range**

This manual contains only supplements for the units 30F5H0P-Y20H and 30F5E1P-Y20H. It is only valid in conjunction with the accompanying instruction manual.

## 2. Operating conditions

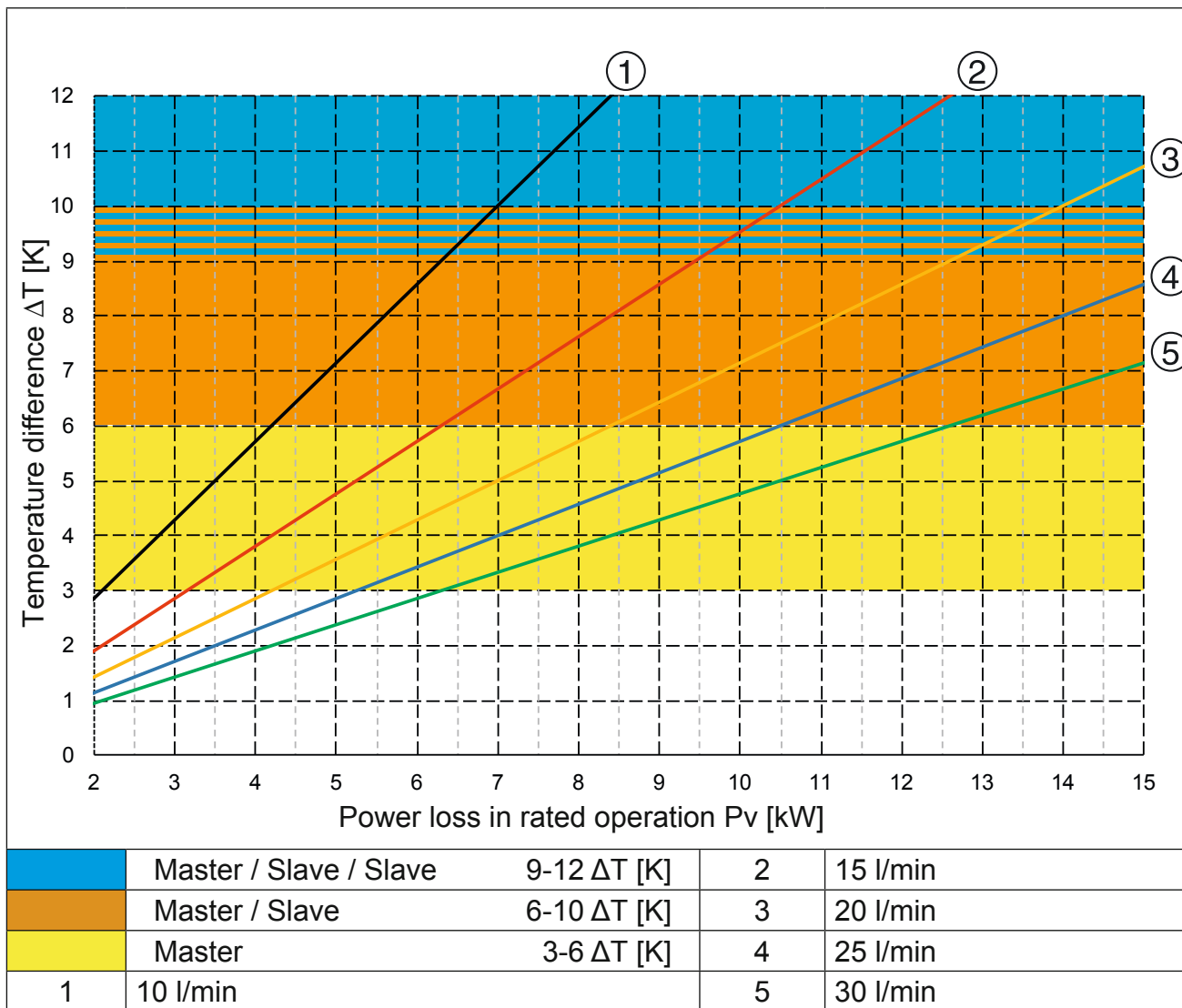
Max. switching frequency	8 kHz
Max. output frequency	500 Hz
Input voltage range	360 V - 480 V
Max. output current	510 A
Max. coolant flow temperatur	40 °C (194 °F)
Volume flow cooling medium	22-26l/min
Max. ambient temperature	45°C
Liquid cooler OH threshold	60°C

### 2.1 Fall of pressure of the liquid cooler depending on the volume flow




## Operating conditions

### 2.2 Volume flow depending on the heat dissipation and the temperature difference that must be observed



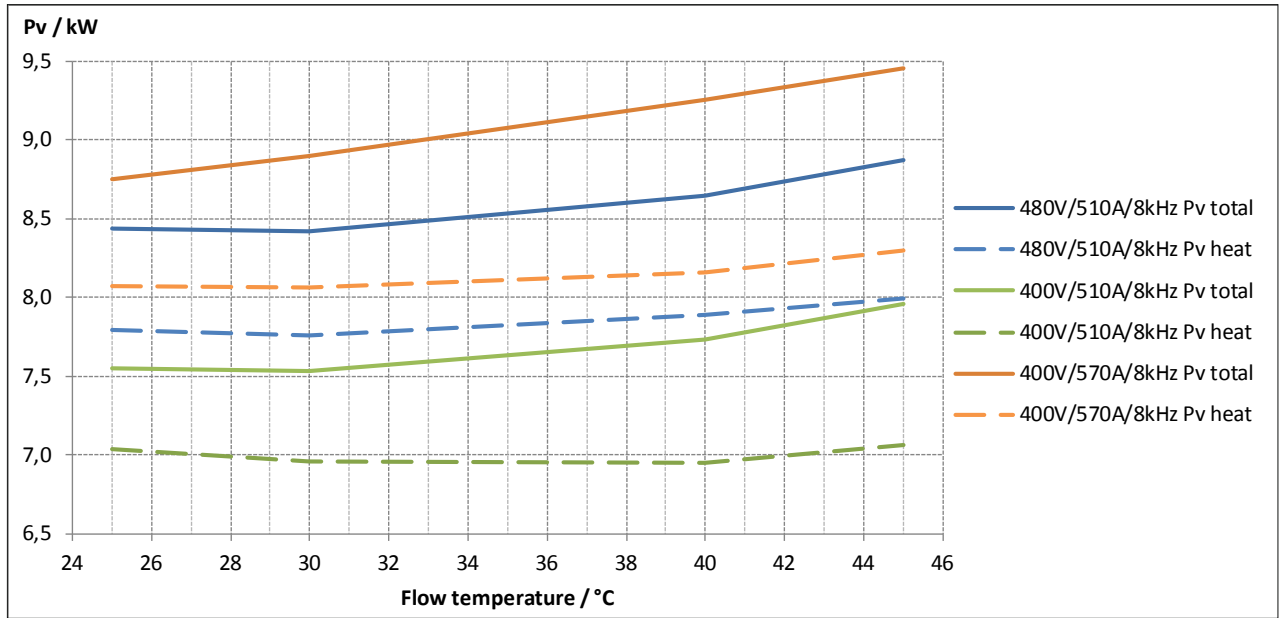
Recommended working range 3-6  $\Delta T$  [K]

 For further information, see instruction manual COMBIVERT F5/F6 Power unit housing P.

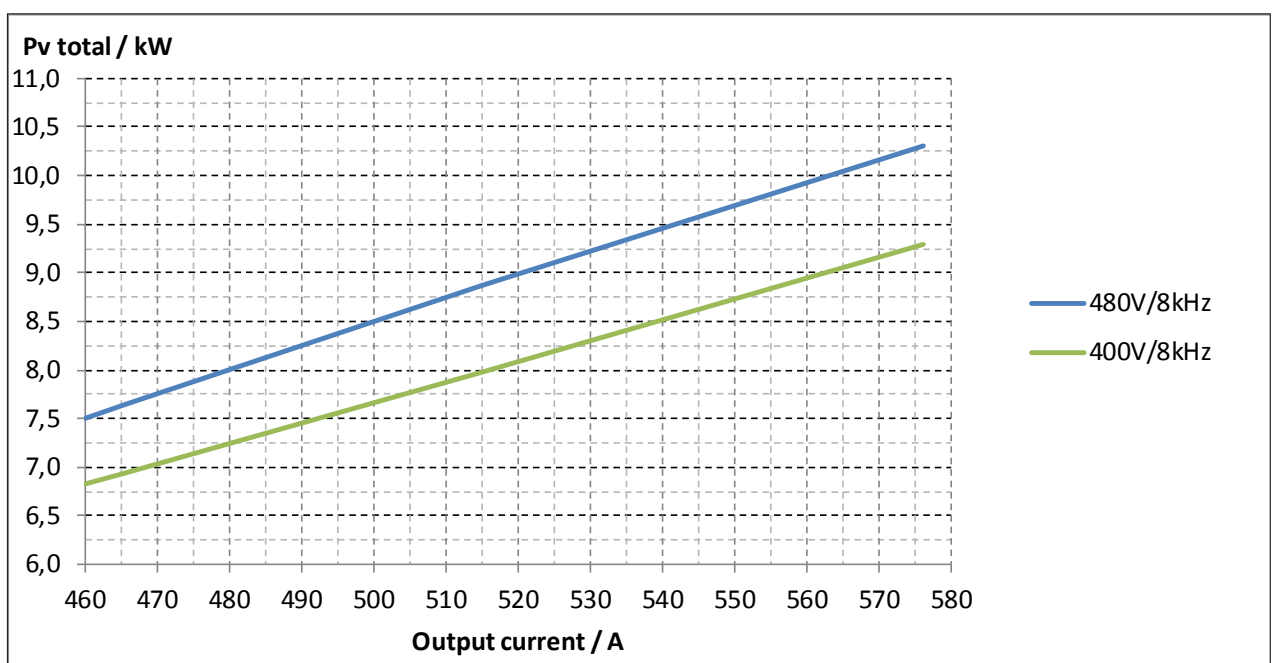


### 2.3 Power loss

Power loss depending on the flow temperature and the mains voltage



Power loss depending on the output current and the mains voltage





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