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| Application note | Wind Interface Box – Diversion load activation threshold | Revision: 000 | Date: 10-Mar-2010 |
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Prepared by Guido Fiesoli

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1. Introduction

The present paper describes how modifying the PVI-WIND-INTERFACE, below called WIB (Wind Interface Box), for different activation threshold of the diversion load output.

Standard factory setting is 530V diversion load activated and 430V disconnected.

2. Warranty

The modification described implies the use of a solder iron for shorting some internal resistors. This voids the warranty.

3. Remark

The modification implemented shall always be followed by the real connection of a diversion load dimensioned for being able to keep the Vdc at a value lower than the activation threshold itself when connected.

The crow bar will continue to operate at 600Vdc.

4. Diversion Load activation thresholds

For modifying the diversion load activation threshold, the resistive divider sensing the DC voltage has to be modified.

Further there are two dip switches, marked “1” and “2” that can be used to finely adjust.

By default there are 10 x 49.9kOhm resistors in series.

The indication in the table below for instance “8x49,9” has the meaning that just 8 resistors are remained, and it means that two of them are electrically short circuited.

Use the following table for choosing different activation thresholds.

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| R10+R12+R13+R16+ +R17+R18+R19+ +R20+R21+R22 | ON | OFF | Hysteresys | Jumpers | |
|---|-------|-------|------------|---------|-----|
| | V | V | V | "2" | "1" |
| 10 x49,9 | 559,5 | 459,3 | 100,2 | On | On |
| 10 x49,9 | 549,9 | 449,7 | 100,2 | On | Off |
| 10 x49,9 | 539,8 | 439,6 | 100,2 | Off | On |
| 10 x49,9 | 530,2 | 430 | 100,2 | Off | Off |
| 9 x49,9 | 503,8 | 413,6 | 90,2 | On | On |
| 9 x49,9 | 495,1 | 405 | 90,1 | On | Off |
| 9 x49,9 | 486,1 | 395,9 | 90,2 | Off | On |
| 9 x49,9 | 477,4 | 387,3 | 90,1 | Off | Off |
| 8 x49,9 | 448,1 | 367,9 | 80,2 | On | On |
| 8 x49,9 | 440,4 | 360,2 | 80,2 | On | Off |
| 8 x49,9 | 432,3 | 352,2 | 80,1 | Off | On |
| 8 x49,9 | 424,6 | 344,5 | 80,1 | Off | Off |
| 7 x49,9 | 392,4 | 322,2 | 70,2 | On | On |
| 7 x49,9 | 385,7 | 315,5 | 70,2 | On | Off |
| 7 x49,9 | 378,6 | 308,5 | 70,1 | Off | On |
| 7 x49,9 | 371,9 | 301,8 | 70,1 | Off | Off |
| 6 x49,9 | 336,7 | 276,6 | 60,1 | On | On |
| 6 x49,9 | 330,9 | 270,8 | 60,1 | On | Off |
| 6 x49,9 | 324,9 | 264,8 | 60,1 | Off | On |
| 6 x49,9 | 319,1 | 259 | 60,1 | Off | Off |
| 5 x49,9 | 281 | 230,9 | 50,1 | On | On |
| 5 x49,9 | 276,2 | 226,1 | 50,1 | On | Off |
| 5 x49,9 | 271,1 | 221 | 50,1 | Off | On |
| 5 x49,9 | 266,3 | 216,3 | 50 | Off | Off |
| 4 x49,9 | 225,3 | 185,2 | 40,1 | On | On |
| 4 x49,9 | 221,4 | 181,4 | 40 | On | Off |
| 4 x49,9 | 217,4 | 177,3 | 40,1 | Off | On |
| 4 x49,9 | 213,6 | 173,5 | 40,1 | Off | Off |

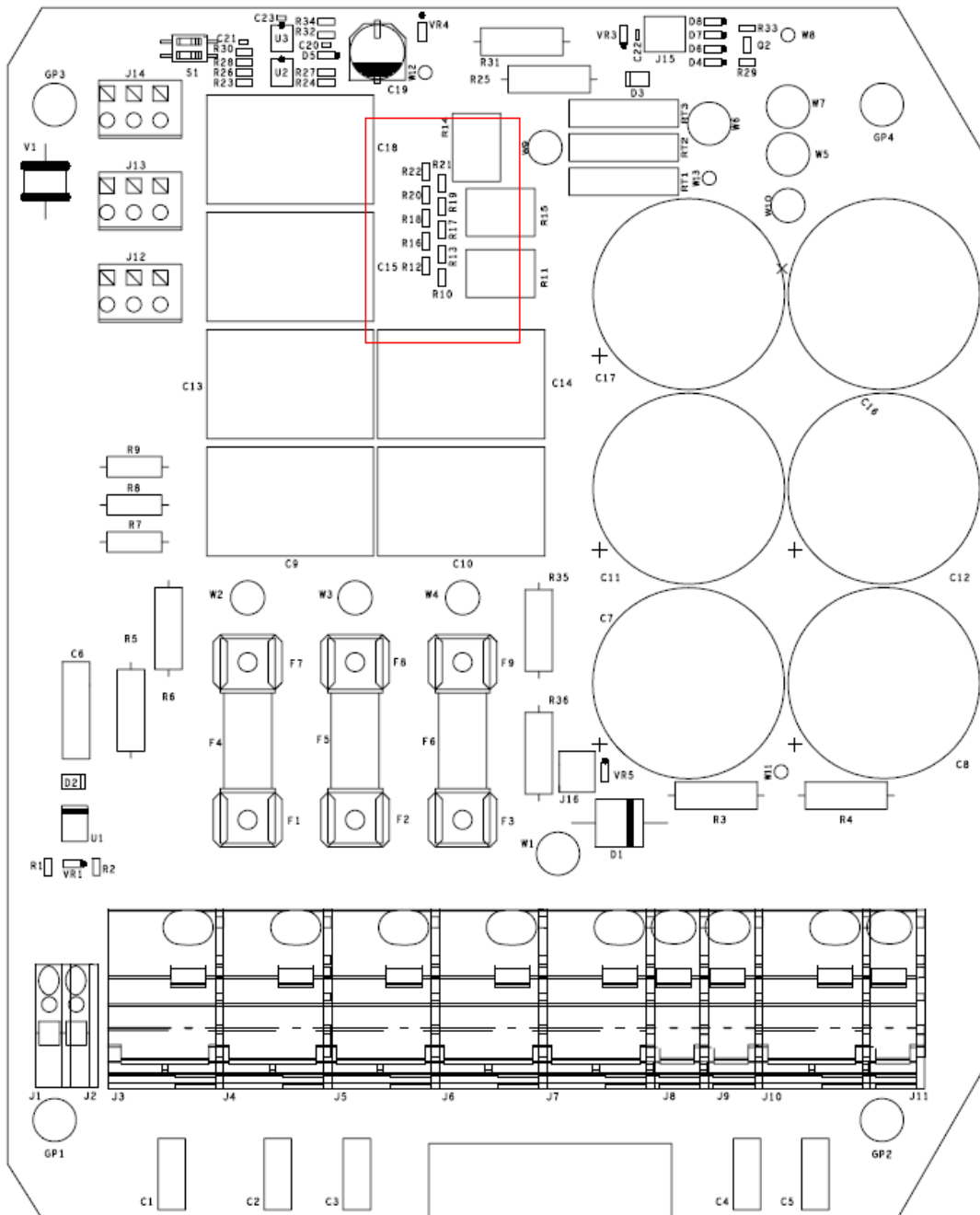
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5. Locating modification points

Locate the area here below enhanced in the WIB layout:



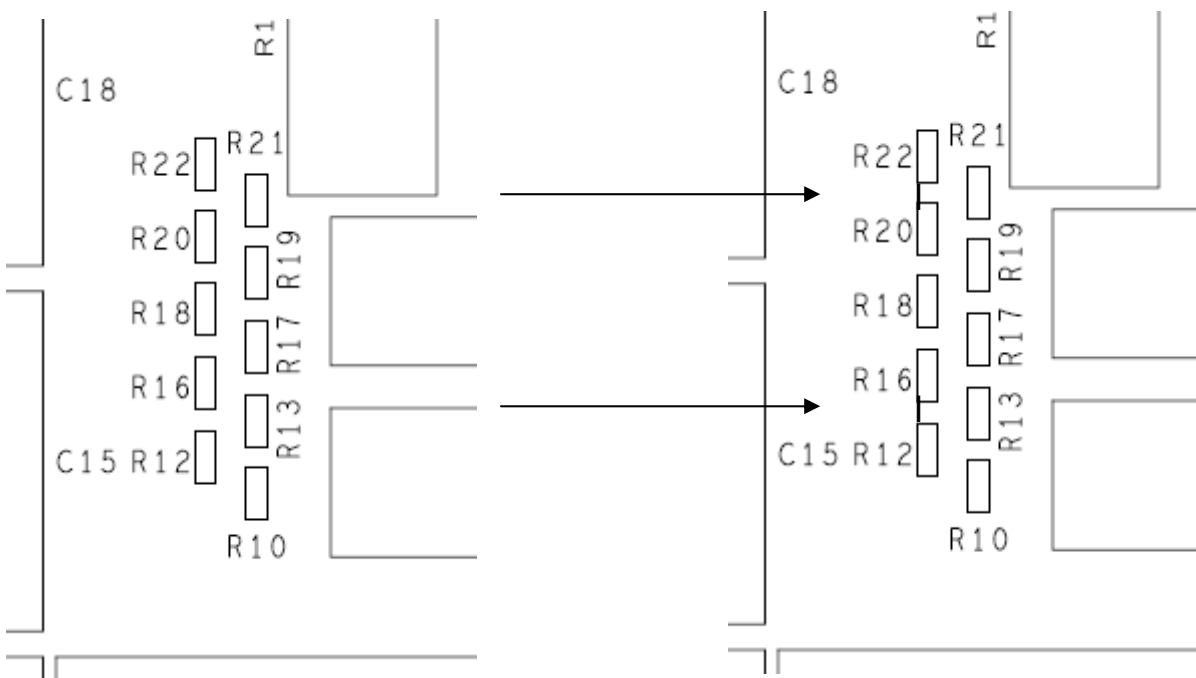
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Short circuiting R21 is possible soldering the two close terminals of the SMD resistors R22 and R20.

Short circuiting R13 is possible soldering the two close terminals of the SMD resistors R12 and R16.



End of document/

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