# PCD7.L6xx Room-Controller - Recommended Valve List

# History

| Version | Date       | Changes         |
|---------|------------|-----------------|
| 1.00    | 15.08.2007 | Initial Version |

# PCD7.L6xx Room-Controller - Recommended Valve List

#### Dear Ladies and Gentlemen

With this information we would like to inform you about the recommended valves which are currently tested with our new room-controller. This is needed because of the different power consumption from the valves. Valves with high current peaks can damage the Triac outputs from the controller. Therefore we listed all recommended and not recommended valves in a list which you can find below.

#### **Technical Details:**

Our room controller has a stable and well tested hardware design. But every system has its limits. These limits are for the TRIAC outputs only. From technical aspects a TRIAC is an electronic switch which is build internally by silicon structures. These structures could be damaged by over load, high voltage or high current peaks.

A valve motor has electronic components insight. When a motor starts running, the starting current could be much higher than in normal operation. When an inductive load is switched off a high voltage peak can follow.

As we do not know about the valve behaviour and very often we could not get any detailed information from the valve, we recommend using only tested valves for new projects. If the customer wants to use valves which are not listed below, he has to follow these instructions.

#### What is to do, when you didn't find your valve type here in the list?

- 1. Send us detailed information about the valve type and the producer (correct type and the data sheet).
- 2. We will verify it.
- 3. You will get a feedback a.s.a.p. with the test results and the adapted list.

If you can not get detailed information from the valve producer (retrofitting systems with old installed valves) send us the valve motor, and we will test it.

In fact the list will grow over the time period and that will help us to ensure proper installations in the field.

Many thanks in advance for your understanding!

If you have any questions, please don't hesitate to contact us.

oliver.greune@saia-burgess.com

### **Recommended thermal valves**

|             |            |         |             | -            |                |
|-------------|------------|---------|-------------|--------------|----------------|
| Producer or | Туре       | Supply  | Power       | Peak         | Max. Nr of     |
| Distributor |            | Voltage | Consumption | Current      | Vales / output |
|             |            |         |             | [mA]         |                |
| Belpart     | BA 2001    | 230V AC | 1,8W        | 300mA /200ms | 3              |
| Belpart     | BA 2004    | 230V AC | 1,8W        | 300mA /200ms | 3              |
| Belpart     | HTM2       | 230V AC | 2,5W        | 150 mA       | 5              |
| Johnson     | VA-7040-23 | 230V AC | 2,5W        | 150 mA       | 5              |
| SIEMENS     | STE22      | 230V AC | 2.5W        | 270 mA       | 1              |
| SIEMENS     | STP21      | 230V AC | 2.5W        | 280 mA       | 1              |
| SIEMENS     | STA21      | 230V AC | 2.5W        | 260 mA       | 1              |
| HONEYWELL   | M100-BQ-CI | 230V AC | 3W          | 530 mA       | 1              |

### Not recommended thermal valve types

| Producer or   | Туре    | Supply  | Nominal      | Peak        | Reason         |
|---------------|---------|---------|--------------|-------------|----------------|
| Distributor   |         | Voltage | Current [mA] | Current     |                |
|               |         |         |              | [mA]        |                |
| FDC           | ATxxx   | 230V AC | 10           | Up to 1,85A | Peak Current > |
|               | +VFCxxx |         |              | measured    | Limit          |
|               |         |         |              |             |                |
| ELECTRO       | AT220   | 220V AC |              | 1,6A        | Peak Current > |
| THERMAL (FDC) |         |         |              | measured    | Limit          |
|               |         |         |              |             |                |

## Saia-Burgess Controls AG Bahnhofstrasse 18 I CH-3280 Murten I Switzerland T +41 (0)26 672 71 11 I F +41 (0)26 672 74 99 I <u>www.start-controls.com</u>

### **Recommended 3 point valves**

| Producer or<br>Distributor | Туре          | Supply<br>Voltage | Power<br>Consumption | Peak<br>Current<br>[mA] | Max. Nr of<br>Vales / output |
|----------------------------|---------------|-------------------|----------------------|-------------------------|------------------------------|
| Industrie Technik          | DB-SMF230     | 230V AC           | <800mA               | <800mA                  | 1                            |
| Siemens                    | SSA31 Acvatix | 230V AC           | <800mA               | <800mA                  | 1                            |

#### Not recommended 3 point valves

| Producer or   | Туре | Supply  | Nominal      | Peak     | Reason |
|---------------|------|---------|--------------|----------|--------|
| Distributor   |      | Voltage | Current [mA] |          |        |
|               |      |         |              | [[[[/]]] |        |
| Currently non | -    | -       | -            | -        | -      |