

Application Note: AN-107

PAM-192-P

PAM-193-P

PAM-199-P

Replacement of the PAM-191-P / PAM-192-P / PAM-193-P with the PAM-199-P



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1 Power amplifier

The power amplifier PAM-193-P (older versions = PPAM-191-P / PAM-192-P) and the PAM-199-P can be used to control proportional valves independent of the valve manufacturer. The PAM-191/192/193-P are adjusted by potentiometers and internal DIL switches. The PAM-199-P is parameterized via the program WPC-300 and a USB interface. The internal technology of the power amplifiers is always digital and the same power stage structure is used.

1.1 Advantages/disadvantages of the adjustment via potentiometer

- no computer required
- no reproducibility of the adjustment
- limited adjustment possibilities
- limited adjustments ranges

1.2 Advantages/disadvantages of the adjustments via WPC-300

- a computer is required
- the adjustment is reproducible (parameter file)
- more and expanded possibilities to adapt the power amplifier / valve
- expanded functionality

1.3 Technical differences

- The PAM-193-P, PAM-192-P and PAM-199-P are compatible (electrical data and wiring).
- The solenoid wiring of the PAM-192-P differs.

1.4 Replacement of PAM-191-P with PAM-199-P

The PAM-199-P can also be used to replace the PAM-191-P.
Please read the chapter of the FUNCTION = 196 and check the wiring.

1.5 Replacement of PAM-192-P with PAM-199-P

1. The PAM-199-P has to be configured with the FUNCTION command set to „195“.
2. The correct input signal muss be selected: AINA (+/- 10 V or 4...12... 20 mA). Different input signals (+/- 5 V, 0...5...10 V, 0... 4... 8 V, 0,5... 2,5... 4,5 V) can be adjusted flexibly in AINMODE = MATH with the AIN:A command.
3. **Changing of the output polarity via command POL = „-“**
4. MIN, MAX, RAMP, CURRENT, PWM frequency or a separate DITHER enables the exact and reproducible valve control.

1.6 Replacement of PAM-193-P with PAM-199-P

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3. MIN, MAX, RAMP, CURRENT, PWM frequency or a separate DITHER enables the exact and reproducible valve control.

2 Imprint

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The data and characteristics described herein serve only to describe the product. The user is required to evaluate this data and to check suitability for the particular application. General suitability cannot be inferred from this document. We reserve the right to make technical modifications due to further development of the product described in this manual. The technical information and dimensions are non-binding. No claims may be made based on them.

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Historie

Datum	Kurzzeichen	Bemerkung
26.06.2020	UV	Formatierung angeglichen
07.07.2020	GW	sprachliche Korrekturen
27.07.2020	UV	Tippfehler entfernt und PAM-191 in Deckblatt hinzugefügt