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ALPIVAR3 - Fixed power factor correction

Part number: VS.R20040.189

Alpivar3 capacitor bank, SAH Type, reinforced class, is a fixed PFC system, with detuned reactor, mounted and wired in a cabinet of 600 x 500 x 1400 mm or 800 x 500 x 1900 mm.

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1. Technical data

Range:	ALPIVAR3
Type:	SAH, Reinforced Class
Nominal power:	200 kVAr (40 + 2 x 80 kVAr fixe)
Nominal voltage:	400 V - 50 Hz - Tri
Max permissible voltage:	520 V (capacitors)
Max permissible current:	1.5 In
Harmonic level:	4% < THDU < 6% & 20% < THDI < 40%
	35% < SH/ST ≤ 50%
Insulation class:	6 kV / 25 kV
Loss factor:	6 W / kVAr
Temperature class:	-10°C / +45°C
	Average over 24H: +40°C
	Annual average: +35°C
Weight:	260 kg
Dimensions (W x D x H mm) :	800 x 500 x 1900
Type :	Indoor
Storage :	-30°C / +60°C
Environment :	Dry
	Dust-free
	Non-corrosive
	Vibration-free
Standard:	IEC 60831-1 and 2

2. Description

This fixed capacitor bank includes:

- **3 racks made of:**
  - 1 ALPIVAR3 capacitor:
    - Totally dry unit (without oil impregnation)
    - Double insulation or class II
    - Electrical protection by internal self-healing film, electric al fuse and disconnection device in case of overpressure
    - With discharge resistors (discharging time 3 minutes)
    - Complies with international standard (IEC 60831-1 & 2)
  - 1 detuned reactor, three-phase, reinforced class:
    - Tuning frequency = 189 Hz
    - Blocking factor p% = 7%
    - Thermal protection by temperature probe
- **1 three-phase power connection (busbar 30 x 5 mm with M10 screw)**
- **1 cubicle in which are mounted and wired the above components:**
  - IP 31-IK 05
  - Power cable entry from the bottom of the cabinet (from the top on request)
  - Ventilation louvers on the front, sides and rear
  - RAL 7035 grey, black base (height = 100 mm)

3. Additional equipment

The capacitor bank must be protected against overloads and short circuits with a thermal-magnetic circuit breaker rated 400 A, set at 400 A. (built-in on demand)

Power cables with minimum cross section of 150 mm² Cu / phase.

4. Installation instructions

Wait for 3 minutes before reconnecting the capacitor in compliance with mandatory discharging time.

External environment for the capacitor bank:

- Dry and dust free
- Non-corrosive
- Maximum temperature: +40°C
- Average over 24 hours: +35°C
- Annual average: +30°C

A minimum clearance distance of 200 mm must be respected against any obstacle (wall, distribution board) to insure good ventilation.

For more details on the commissioning and maintenance, refer to installation instructions.