



ALPIVAR² - Fixed power factor correction

Part number: VS.RS21640.189



Alpivar² capacitor bank, SAH Type, extra-reinforced class, is a fixed PFC system, with detuned reactor, mounted and wired in a cabinet of 1000 x 600 x 2100 mm.

Contents	Page
1. Technical data	1
2. Description	1
3. Additional equipment	1
4. Installation instructions	1

1. Technical data

Range:	ALPIVAR ²
Type:	SAH, Extra-Reinforced Class
Nominal power:	216 kVAr (3 x 72 kVAr fixe)
Nominal voltage:	400 V - 50 Hz - Tri
Max permissible voltage:	620 V (capacitors)
Max permissible current:	1.5 In
Harmonic level:	THDU > 6% & THDI > 40% 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:	320 kg
Dimensions (W x D x H mm) :	1000 x 600 x 2100
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 ALPIVAR² capacitor:
 - Totally dry unit (without oil impregnation)
 - Double insulation or class II
 - Electrical protection by internal self-healing film, electrical 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, extra-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 630 A, set at 600 A. (built-in on demand)

Power cables with minimum cross section of 2 x 95 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.