ALPIVAR³ - Fixed power factor correction

Part number: VH2540-3MONO

ALPIVAR³ capacitors are totally dry units designed by combining individual single phase windings to produce a three-phase unit.

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1. Technical data

Range:	ALPIVAR³ (6 terminals)
Type:	H
Nominal power:	25 kVAr
Nominal voltage:	400 V - 50 Hz - Tri
Max permissible voltage:	520 V
Max permissible current:	2 x In
Harmonic level:	THDU ≤ 4% & THDI ≤ 15%
Insulation class:	6 kV / 25 kV
Loss factor:	0.3 W / kVAr (including discharge resistor)
Temperature class:	-25°C / +55°C
	Average over 24H: +45°C
	Annual average: +35°C
Weight:	3.5 kg
Dimensions (W x D x H mm) :	230 x 93 x 214
Type :	Indoor
Storage :	-30°C / +60°C
Environment :	Dry
	Dust-free
	Non-corrosive
	Vibration-free
Standard:	IEC 60831-1 and 2

2. Description

Double insulation or class II:
No need for earthing. This guarantees a total safety.

Totally dry:
No risk of leakage: can be installed in any position.

Self-extinguishing polyurethane resin casing:
Very robust, compact, non corrosive.

Internal connexions:
Made with copper bars bolted between the different components (no risk of corrosion, untightening and overheating).

Vacuum coating technique for windings (patented by Alpes Technologies):
Vacuum sealing insures no air or moisture nearby windings. This design provides an excellent resistance to overvoltages and partial discharges.

Safety per coil:

- Self-healing metallised polypropylene film
- Electrical fuse
- Overpressure disconnector

Discharge resistors:
Fitted inside, they discharge the capacitor according to regulations (discharging time: 3 minutes).

Loss factor:
Alpivar3 capacitors have a loss factor less than 0.1 x 10^{-3}. This value leads to a power consumption of less than 0.3W per kVAr, including discharge resistors.

Capacitance :
Tolerance on the capacitance value: +/- 5%. Our manufacturing process, which avoids any inclusion of air in the coils, ensures excellent stability of the capacitance throughout the service life of the Alpivar3 capacitor.

3. Additional equipment

Protection against overloads and short circuits with HRC fuses or circuit breaker.

Power cables with minimum cross section of 16 mm² Cu / phase.

4. Installation instructions

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

Power cable connections on M8 screw, H head, with captive washers, tightening torque between 11 and 15 Nm.

External environment for the capacitor bank:

- Dry and dust free
- Non-corrosive
- Maximum temperature: +55°C
- Average over 24 hours: +45°C
- Annual average: +35°C

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