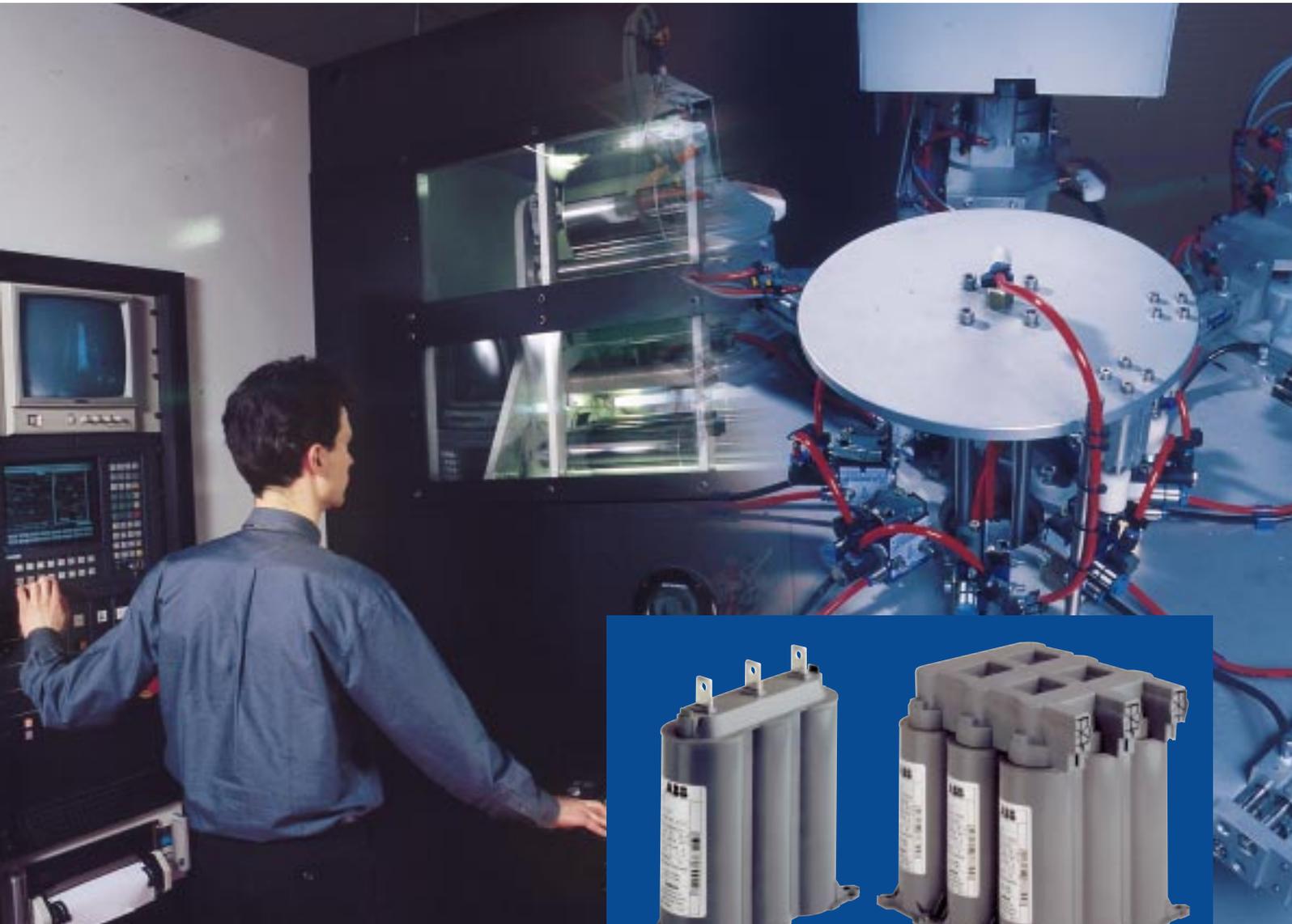


Low Voltage Capacitor LVCP

The new choice for Power Factor Correction



LVCP : the new choice for Power Factor Correction

The LVCP is a compact and powerful capacitor. It offers high modularity, unmatched performances and a state of the art integrated protection system.

The LVCP is the ideal capacitor for assembly in automatic power factor correction equipment.



Compact and flexible

- The LVCP offers high power density and small dimensions.
 - The modular design of the LVCP allows easy and quick assembly of capacitor modules. A wide rating range is covered with only a few different basic units.
 - Parallel connection between units is made easy by means of specially designed interconnection bars.
 - A clips system assures an excellent mechanical strength of the assembled units.
 - The base of the plastic enclosure offers multiple fixation possibilities (through-hole bolts, insertion-hole screws, DIN rail).
 - An easy to fix protective cover (option) allows IP 20 protection.
 - In addition to its built-in safety discharge resistors, the LVCP can be fitted with an external discharge device (option) for a safe discharge to less than 50V in 1 minute after a switch off.
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Safe

The LVCP protection system offers a reliable fault protection system.

Unique double-action safety system

The end of life safety system is based on the self-healing capability of the dielectric and the swift reaction of our revolutionary double-action disconnection device combining internal fuse and pressure sensitive disconnecter.

Double casing insulation

The capacitor windings are housed and fixed in an insulating enclosure with double casing insulation.

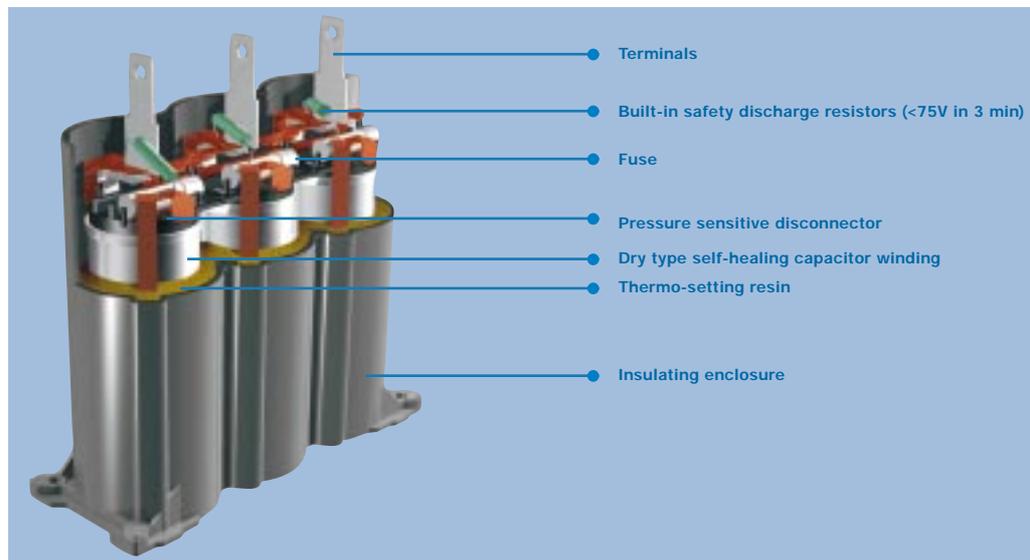
The LVCP construction protects the windings from the environment and assures a high capacitance stability over the whole capacitor service life.

Built-in safety discharge resistors

The LVCP is fitted with built-in safety discharge resistors.

IP 20 protection

An easy to fix protective insulating cover (option) allows IP 20 protection.



Reliable

In-house metallized film

The dielectric of the LVCP windings is made of in-house metallized polypropylene film giving :

- high voltage withstand capability
- excellent peak current handling capacity
- high capacitance stability
- long life even under high electrical stress
- very low losses
- exceptional self-healing properties

Automatized manufacturing process

The LVCP automatized manufacturing process results in high reliability, fully controlled performance and a guaranteed repeatable quality.

Comprehensive testing

The LVCP and its components are comprehensively tested both off and on the line.

Testing includes long term ageing, temperature, humidity, dielectric, self-healing, current and voltage tests.

ISO 9001

Our ISO 9001 Quality System registration provides the strongest assurance of our product quality.

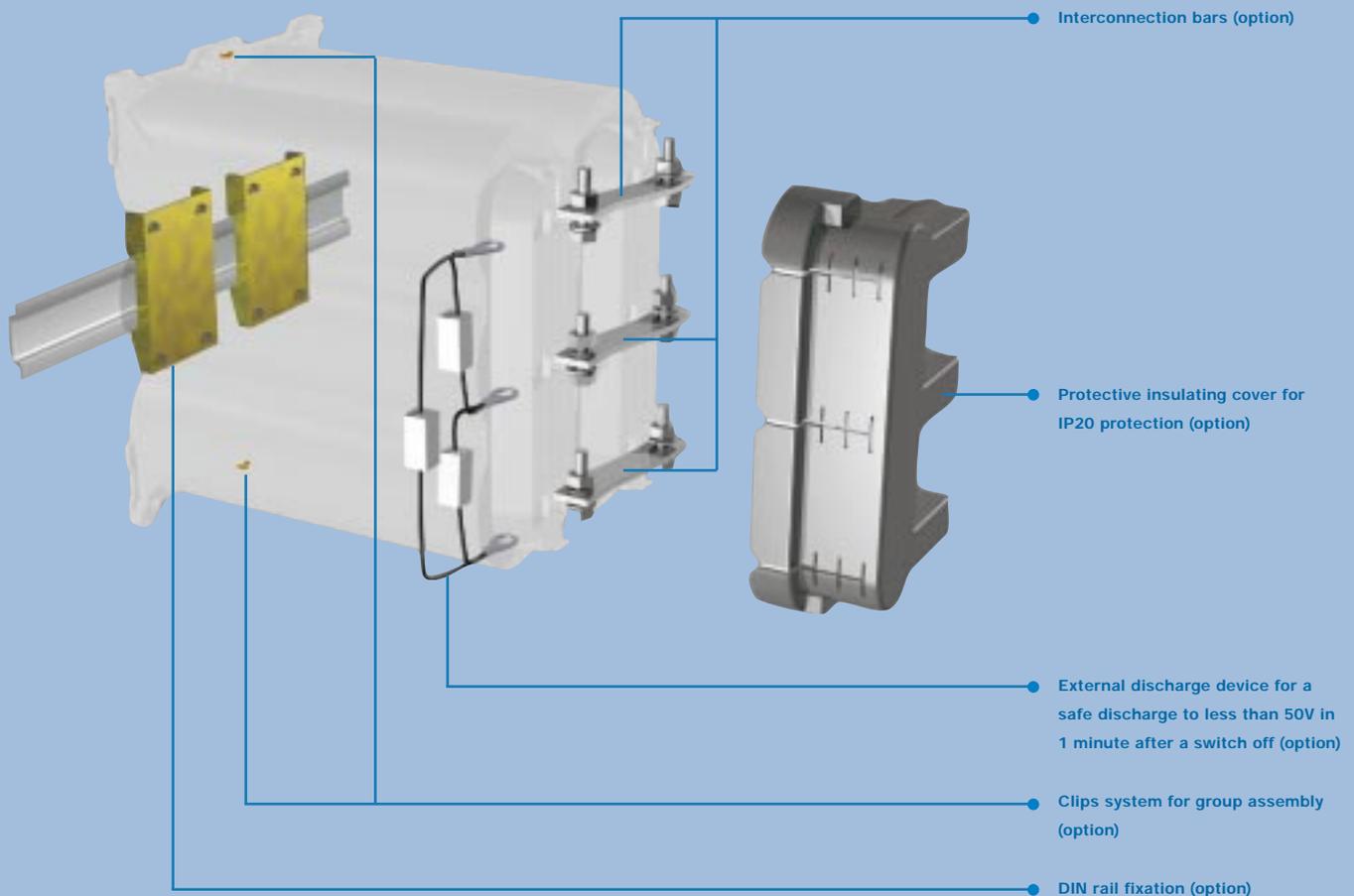
ISO 14001

The LVCP has a dry type dielectric and is free from liquids or other impregnating agents. It has been designed for environmentally friendly manufacturing. Our ISO 14001 certification guarantees our commitment to the environment.

Complies with international standards

The LVCP capacitor complies with the requirements of the IEC 60831 1 & 2 international standard and is CE marked.

Accessories



Examples of LVCP module assembly at 400V - 50Hz



■ $12.5 \text{ kvar} + 12.5 \text{ kvar} = 25 \text{ kvar}$



■ $15 \text{ kvar} + 15 \text{ kvar} = 30 \text{ kvar}$



■ $15 \text{ kvar} + 20 \text{ kvar} = 35 \text{ kvar}$



■ $20 \text{ kvar} + 20 \text{ kvar} = 40 \text{ kvar}$



■ $15 \text{ kvar} + 15 \text{ kvar} + 15 \text{ kvar} = 45 \text{ kvar}$



■ $16.7 \text{ kvar} + 16.7 \text{ kvar} + 16.7 \text{ kvar} = 50 \text{ kvar}$

Note : Interconnection bars supplied as option are capable of withstanding continuously a current of $72 \text{ A}_{\text{RMS}}$. Higher LVCP rating configurations are possible using interconnection bars capable of withstanding a higher current.

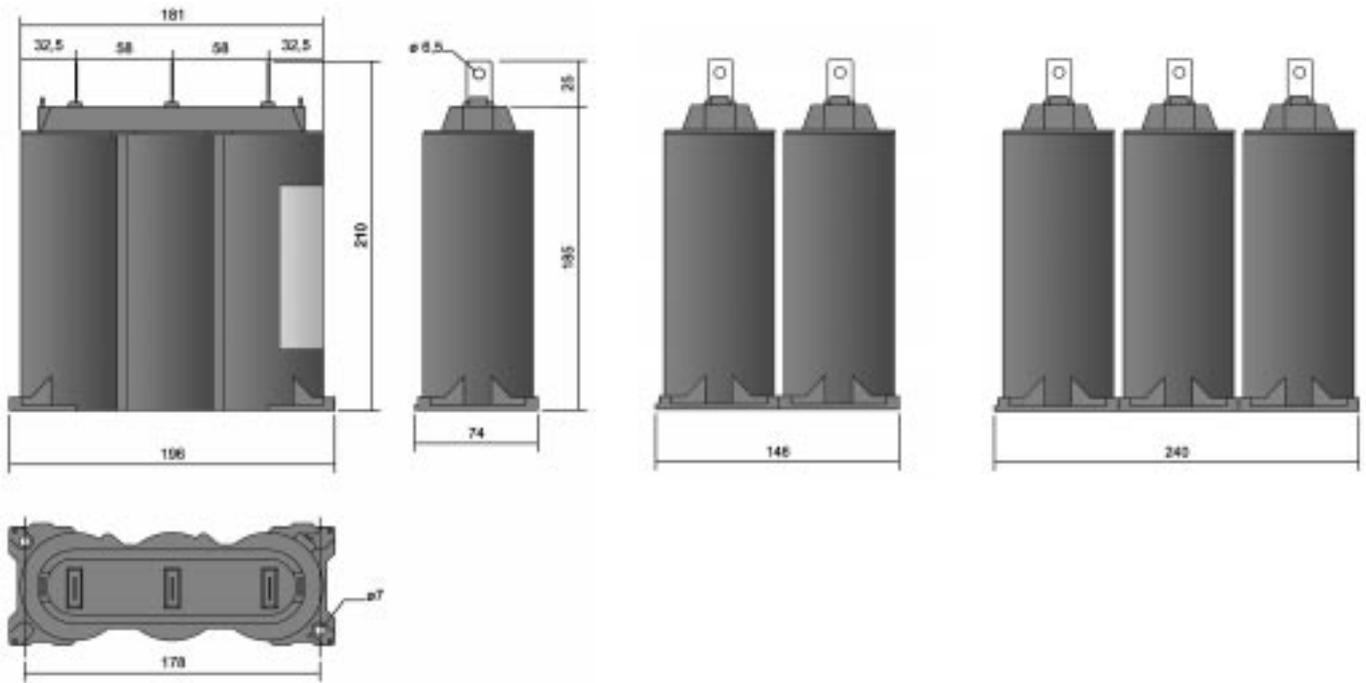
Technical specification

Voltage range	50Hz : 230, 400, 415, 450 and 465V. 60 Hz : 240 and 380V.
Connection	3-phase.
Discharge resistors	Built-in and sized for discharge of the capacitors to less than 75V in 3 min.
Terminals	Tinned copper bars with fixation hole.
Earth	No earth connection needed.
Colour	RAL 7035 (dark grey).
Fixing	Through-hole bolts, insertion-hole screws, DIN rail (with optional adaptor).
Execution	Indoor.
Protection	IP00. IP 20 with insulating cover.
Maximum ambient temperature	Class D (+55°C).
Minimum ambient temperature	-25°C.
Dielectric losses	< 0.2 Watt/kvar.
Total losses	< 0.5 Watt/kvar (discharge resistors included).
Tolerance on capacitance	0 +10 %.
Voltage test	Between terminals : 2.15 Un for 10 sec.
Acceptable overloads according to IEC 60831 1& 2	Overvoltage tolerance : 10 % max. intermittently. Overcurrent tolerance : 30 % permanently.

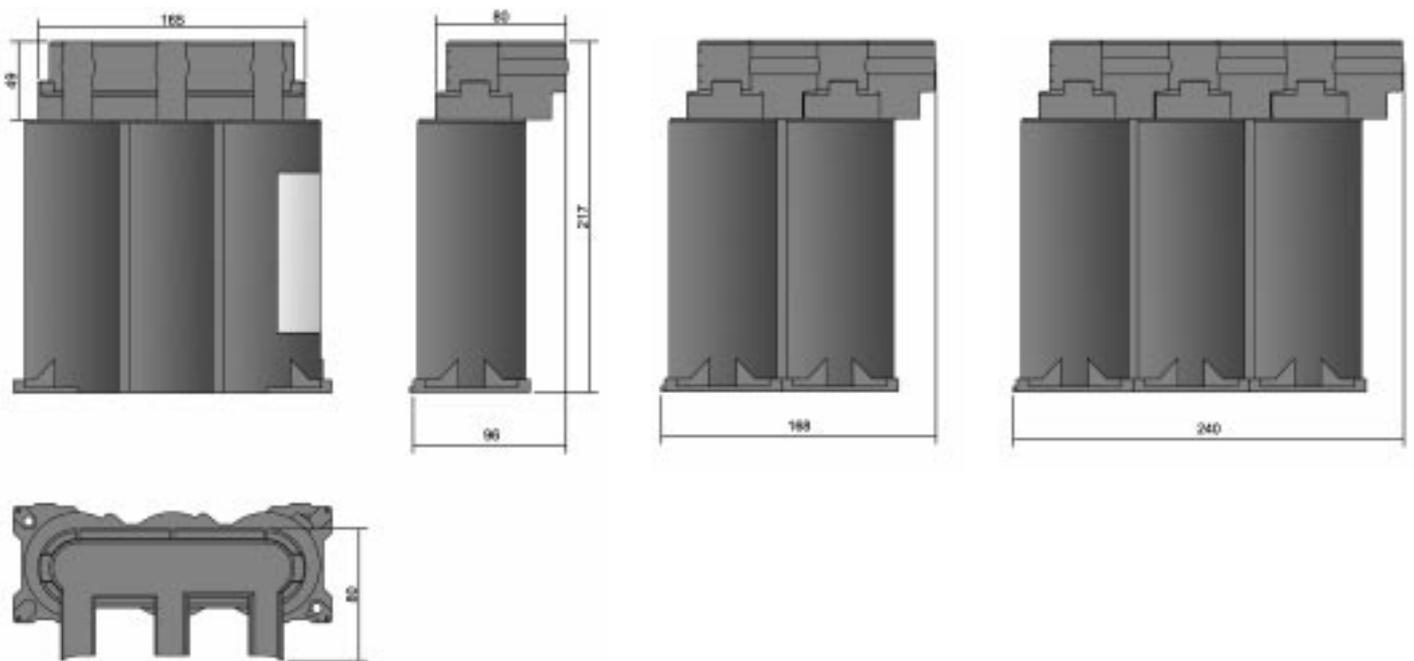
Important : the installation of capacitors on networks disturbed by harmonics may require special precautions, especially when there is a risk of resonance.

Dimensions

Without protective insulating cover (mm)



With protective insulating cover (mm)



Weight (unpacked) :

2.1 kg / LVCP unit (without cover).

Range

Voltage/Frequency	Power [kvar]	A/phase [A]	C _N /phase [μF]
230V/50Hz	2.5	6.3	49.8
	5.0	12.6	99.5
	7.5	18.8	149.8
	10.0	25.1	200.0
400V/50Hz	5.0	7.2	33.2
	7.5	10.8	49.8
	10.0	14.4	66.4
	12.5	18.0	83.0
	15.0	21.7	99.5
	16.7	24.1	111.0
	20.0	28.9	133.0
415V/50Hz	5.0	7.0	30.8
	10.0	13.9	61.6
	15.0	20.9	92.4
	16.7	23.2	102.7
	20.0	27.8	123.3
450V/50Hz	11.7	15.0	61.5
	17.6	22.8	92.3
	19.6	25.2	103.0
465V/50Hz	11.9	14.8	58.2
	17.8	22.1	87.3
	19.8	24.6	97.2
240V/60Hz	2.5	6.0	38.5
	5.0	12.0	77.0
	7.5	18.0	115.0
	10.0	24.1	153.0
380V/60Hz	5.0	7.6	30.6
	10.0	15.2	61.2
	15.0	22.8	91.9
	16.7	25.4	102.3
	20.0	30.4	122.5

