RCL

Capacitor banks for COMAR switchboard type G9E



The RCL series drawers are designed for our **G9E-type** cabinets. Inside each drawer are assembled triads of single-phase capacitors. The versions shown in the catalogue are all equipped with blocking inductors, for applications with a high level of current harmonic distortion.

PERFORMANCE DATA

Tolerance on capacitance	-5% / +10
Rated frequency	50 Hz
Power supply	Three-phase + earth
Voltage overload	1.1 Un (max. 8 hrs. per 24)
Connection	M8 bolt on the fuse holder
Auxiliary circuits	230 Vac

HARMONIC CONTENT

RCL-AAR/138:	THD(I)max. = 100 % THD(U)max. = 6%.
RCL-AAR/D20	THD(I)max. = 100 % THD(U)max. = 20 %

TECHNICAL DATA

Rack	Made of galvanised sheet steel.
Ventilation	Not present. By the installer/assembler.
Installation	Indoor, in enclosure not exposed to direct sunlight.
Protection degree	IP 00.
Fuses	The capacitive banks are protected by fuses. The protection of the power circuits (fuses NH-00 curve gG) involves the use of high breaking capacity fuses (100kA).
Contactors	3-phase Class AC6-b contactor suitable for switching capacitive loads.
Capacitors	Single-phase capacitors made of self-healing (SH) metallised polypropylene (MKP) Over pressure safety device — Discharge resistor (75V within 3') PCB-free vegetable oil impregnation — Delta connection. Continuous service — Overvoltage: 1.1 x Un (8h / 24h) Current overload: 1.3 x In — Capacitance tollerance: -5% / +10% Dissipation losses: ≤0.4 W/kvar — Temperature category: -25 / D Rated voltage / max. voltage - AAR/138: 500 Vac / 550 Vac - AAR/D20: 550 Vac / 600 Vac
Tuning reactors	AAR/D20 • Tuning frequency: 189 Hz (p = 7%) • Power losses: 6 W / kvar (AVG) AAR/138 • Tuning frequency: 138 Hz (p = 14%) • Power losses: 6.5 W / kvar (AVG) Reactors are equipped with temperature probe to shut down the bank in case of overtemperature
Working temperature	-5°C / +40°C

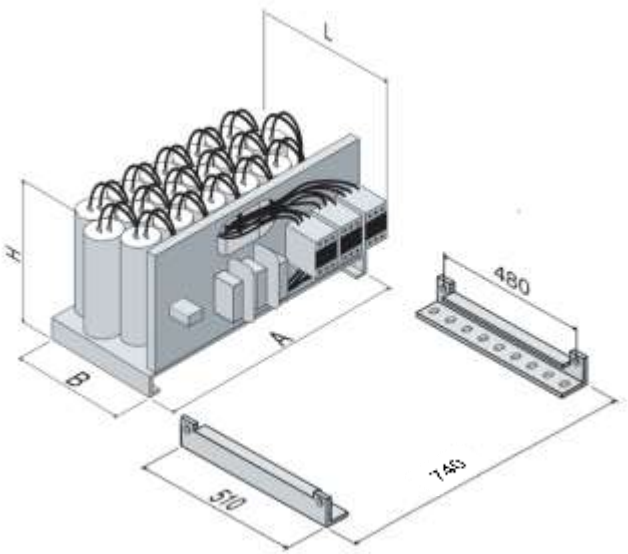
QUALITY AND TESTING

Regulations	IEC / EN 60831-1/2. EN 61921.
European Directives	Low voltage: 2014/35/EC; Electromagnetic compatibility: 2014/30/EC.
Testing	100% of equipment undergoes visual inspection, insulation testing: phase-to-phase and phase-to-ground, power testing checks

STANDARD CONFIGURATIONS

With tuning reactor Qn expressed at Un=400V

Code	Type	Qn (kvar)	In (A)	bank power (kvar)	Dimensions A x B x L x H (mm)	Weight (kg)
8831402250900	RCL-AAR/138	25	36	25	732 x 375 x 480 x 300	35
8831402500900	RCL-AAR/138	50	72	50	732 x 375 x 480 x 300	43
8831403050900	RCL-AAR/138	50	72	2x25	732 x 375 x 480 x 300	68
8831402750900	RCL-AAR/138	75	108	75	732 x 375 x 480 x 300	60
8901402250720	RCL-AAR/D20	25	36	25	732 x 375 x 480 x 300	44
8901402500720	RCL-AAR/D20	50	72	50	732 x 375 x 480 x 300	70
8901403050720	RCL-AAR/D20	50	72	2x25	732 x 375 x 480 x 300	74
8901402750720	RCL-AAR/D20	75	108	75	732 x 375 x 480 x 300	85



Note

- Capacitor banks must be protected by a disconnection and protection device and earthed. (in charge of installer)
- The racks are available in different series, for applications with different current harmonic content or different voltage harmonic content (series with inductances), permissible on capacitors.
- Dimension 'L' refers to the overall depth, taking the contactor into account.