



Product brochure

LV Capacitor Products and Guideline

LV Capacitor CLMD

from 200 to 1000 V

Standard	IEC 60831-1&2
Rated voltage	200 to 1000 V
Connection	3-phase (single-phase on request)
Rated frequency	50 and 60 Hz
Type	Self-healing, dry
Dielectric	Polypropylene (metallized)
Execution	Indoor (outdoor on request)
Overvoltage	1.1 U _n at intervals
Overcurrent	1.3 I _n
Maximum overload	1.35 times of nominal rating (IEEE Std.18-2002)
Maximum inrush current	200 I _n
Safety protection	Internal fuse within each element
Tolerance on capacitance	-5 /+10%
Temperature category	-25/D according to IEC 60831
Losses	Dielectric losses < 0.2 w/kvar Total < 0.5 w/kvar (discharge resistor included)
Degree of protection	IP42 (IP54 on request)
Voltage test	Between terminals 2.15 U _n for 10 seconds Between terminals and earth 3 kV for 10 seconds
Insulation level	3/15 kV
Discharge device	Internal discharge resistors
Discharge time	< 50 V in 1 minute
Minimum distance between unit	50 mm
Minimum distance between unit and wall	50 mm



UA Contactor

Standard	IEC 60947-4-1, EN 60947-4-1
Number of main pole	3 poles
Execution	Indoor
Control voltage	220 to 230 V (other on request)
Mechanical durability	10 millions operating cycles
Max.electrical switching frequency	240 cycle/h
Electrical durability AC-6b Ue ≤ 690V	For max. peak current 100 I _n of the capacitors 100,000 operating cycles
Rated insulation voltage	1000 V
Peak current	See the selection table

Selection table

Type	Power in kvar (based on 55°C)					Max. permissible peak current (A)	
	230 V	400/415 V	440 V	500 V	690 V	Ue < 500 V	Ue > 500 V
UA 30-30-11	16	27.5	30	34	45	3500	3100
UA 50-30-11	20	33	36	40	55	5000	4500
UA 63-30-11	25	45	50	50	70	6500	5800
UA 75-30-11	30	50	55	62	75	7500	6750
UA 95-30-11	35	60	65	70	80	9300	8000
UA 110-30-11	40	70	75	80	90	10500	9000



Detuning Reactor

Rated voltage	3-phase, up to 690 V
Protection degree	IP00
Core	Laminated sheet iron
Wiring	Aluminum or copper
Terminal	Copper-Bar
Ground terminal	Fixation holes
Impregnation	Completed unit impregnated under vacuum and overpressure in impregnation thermosetting resin temperature class H
Tolerance of inductance	$\pm 3\%$ when measured at 20°C ($\pm 5^{\circ}\text{C}$) at f_1 and I_n
Operation	The reactor is designed to operate continually at a network voltage equals to U_n with a current load of I_{th} at T_{max} and maintain sufficient safety margin to hot spot temperatures of its insulation while dissipating losses not exceeding P_{max}
Insulation test	Between winding and core of 3 kV at 1 minute according to IEC 76
Applicable standard	IEC 60076-6, VDE 0532, IEC 76
Operating temperature	Minimum -25°C , maximum 50°C
Storage temperature	Minimum -40°C , maximum 75°C
Thermal current	I_{th} is defined as the root mean square of ($I_1, I_3, I_5, I_7, I_{11}, I_{13}$) where I_1 is calculated from network voltage of $1.1 \times U_n$ $I_1, I_3, I_5, I_7, I_{11}, I_{13}$ are calculated from network Voltage spectrum of maximum $U_3/U_1 = 0.5\%$ $U_5/U_1 = 6.0\%$ $U_7/U_1 = 5.0\%$ $U_{11}/U_1 = 3.5\%$ $U_{13}/U_1 = 3.0\%$ but not exceeding a total THDU of 8%
Linearity current	$I_{lin} = 1.9 I_n$
Rated current	I_n = normal fundamental current of one phase of the capacitor-reactor combination in detuned filter
Maximum losses	P_{max}
Inductance	L_n = nominal inductance of one phase of reactor
Net reactive power	Q_{net} = net output reactive power of 3-phase capacitor-reactor combination in detuned filter at U_n

Reactor data

P (%)	Q_{net} (kvar)	L_n (mH)	I_n (A)	I_{th} (A)	I_{lin} (A)	P_{max} (W)	Weight (kg)
7	25	1.533	36.1	42.3	68.6	175	18
7	50	0.767	72.2	84.5	137.1	275	28



HRC Fuse Links & Fuse Bases

Low Voltage

Low loss low voltage high rupturing capacity fuse links type NH are supplied for 500 V. ABB HRC fuse of standard design are manufactured with flag indicators on the upper end cap. After operation, the red colored leaf spring tucks up and indicates the status of the operation

ABB Low Voltage HRC fuses are available for rated voltages 500 V service category gG, and are according to DIN VDE 0636 part 21; IEC 269-1/EN 60269-1; DIN VDE 0636 part 22. All fuse links according to VDE 0636 for rated voltages 500 V have a minimum breaking capacity of 120 kA.

The geometrical dimensions of the high rupturing capacity fuse links are according to DIN 43620



Fuse Bases type EasyLine XLP

Fuse Switch Disconnecter

Properties of the EasyLine-XLP :

- XLP00 and XLP1
- Typetested according to EN IEC 60947-3
- Fullfills BGV A2
- Easy to recycle/EN ISO 14001 standards
- Quick-make operation device
- Integrated IP20 cable termination
- IP30 degree of protection from the front
- Replacement compatible to similar types in the market
- Voltage measuring from the front
- V-0 plastic materials

Voltage measuring from the front

3 - pole:

- XLP00 160 A
- XLP1 250 A



Power Factor Controller RVC

Measuring system	Micro-processor system for balanced 3-phase networks or single-phase networks
Operating voltage	100 to 440 Vac
Voltage tolerance	± 10% on indicated operating voltages
Frequency range	50 or 60 Hz ± 5% (automatic adjustments to network frequency)
Measuring circuit terminals (L2, L3 and k, l)	CAT III rated
Current input	1 or 5 A (RMS)
Current input impedance	<0.1 Ohm
Consumption	8 VA max
Output contact rating	Max. continuous current : 1.5 A Max. peak current : 5 A Max. voltage : 440 Vac Terminal A is rated for a continuous current of 16 A
Alarm contact	Normally opened contact Max. continuous current: 5 A Rated/max. breaking votage: 250/440 Vac
Power factor setting	From 0.7 inductive to 0.7 capacitive
Starting current setting (C/k)	0.01 to 3 A



Power Factor Controller RVT

Measuring system	Micro-processor system for balanced 3-phase/single-phase networks and unbalanced network
Supply voltage	From 100 up to 460 Vac
Consumption	15 VA max
Voltage tolerance	± 10% on indicated supply voltages
Measurement category (according to IEC 61010-1)	CAT III
Voltage measurement	Up to 690 Vac or higher with voltage transformer
Frequency range	45 or 65 Hz (automatic adjustments to network frequency)
Current input	5 A or 1 A (RMS) (class 1 C.T.)
Current input impedance	<0.1 Ohm
Power outage release	Automatic disconnection of all capacitors in case of a power outage longer than 20ms
Number of outputs	RVT6/RVT12 Base Model: programmable up to 6 or 12 outputs RVT12-3P 3-phase Model: programmable up to 12 outputs
Output contact rating	Max. continuous current: 1.5 A (ac) - 0.3 A (110 Vdc) Max. peak current: 5 A Max. voltage: 440 Vac Terminal A-A are rated for a continuous current of 18 A (9 A/terminal)
Alarm contact rating (voltage free contact)	One normally closed contact and one normally open contact Max. continuous current: 1.5 A (ac) Rated voltage: 250 Vac (max. breaking voltage: 440 Vac)
Power factor setting	From 0.7 inductive to 0.7 capacitive
Starting current setting (C/k)	0.01 to 5 A
CAN connection	Support CAN 2.0B interface (for future use)
USB host connection	For future use
USB device connection	Available
Step configuration	Automatic, fixed, disabled
Display	QVGA 320 x 240 pixels colorful touch-screen



ติดต่อบริษัท :



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