Reactive Energy Management

Low Voltage Capacitors

VarplusCan SDuty

A safe, reliable and high-performance solution for power factor correction in standard operating conditions.

VarplusCan SDuty

Operating conditions

- For networks with insignificant non-linear loads: (N_{LL}≤ 10%).
- Standard voltage disturbances.
- Standard operating temperature up to 55°C.
- Normal switching frequency up to 5000 /year.
- Maximum current (including harmonics) is 1.5xI_N.

Technology

Constructed internally with three single-phase capacitor elements assembled in an optimized design. Each capacitor element is manufactured with metallized polypropylene film as the dielectric having features such as heavy edge metallization and special profiles which enhance the “self-healing” properties.

The active capacitor elements are encapsulated in a specially formulated biodegradable, non-PCB, PUR (soft) resin which ensures thermal stability and heat removal from inside the capacitor.

The unique finger-proof CLAMPTITE termination is fully integrated with discharge resistors and allows suitable access to tightening and ensures cable termination without any loose connections. Once tightened, the design guarantees that the tightening torque is always maintained.

For lower ratings, double fast-on terminals with wires are provided.

Benefits

- Safety:
  - Self-healing.
  - Pressure-sensitive disconnector on all three phases.
  - Discharge resistor.
- Life expectancy up to 100,000 hours.
- Economic benefits and easy installation due to its compact size and low weight.
- Easy maintenance thanks to its unique finger-proof termination to ensure tightening.
- Also available in single-phase and small power ratings from 1 to 5kvar.

Schneider Electric

Technical specifications

General characteristics		
Standards		IEC 60831-1/-2
Voltage range		230 to 525 V
Frequency		50 / 60 Hz
Power range		1 to 30 kvar
Losses (dielectric)		< 0.2 W / kvar
Losses (total)		< 0.5 W / kvar
Capacitance tolerance		-5 %, +10 %
Voltage test	Between terminals	2.15 x U_N (AC), 10 s
	Between terminal & container	3 kV (AC), 10 s or 3.66 kV (AC), 2 s
	Impulse voltage	8 kV
Discharge resistor		Fitted, standard discharge time 60 s Discharge time 180 s on request

Working conditions	
Ambient temperature	-25 / 55 °C (Class D)
Humidity	95 %
Altitude	2,000 m above sea level
Overvoltage	1.1 x U_N 8 h in every 24 h
Overcurrent	Up to 1.5 x I_N
Peak inrush current	200 x I_N
Switching operations (max.)	Up to 5,000 switching operations per year
Mean Life expectancy	Up to 100,000 hrs
Harmonic content	N_{LL} ≤ 10 %

Installation characteristics	
Mounting position	Indoor, upright
Fastening	Threaded M12 stud at the bottom
Earthing	
Terminals	CLAMPTITE - three-way terminal with electric shock protection (finger-proof) & double fast-on terminal in lower kvar

Safety features	
Safety	Self-healing + Pressure-sensitive disconnector + Discharge device
Protection	IP20

Construction	
Casing	Extruded Aluminium Can
Dielectric	Metallized polypropylene film with Zn/Al alloy
Impregnation	Biodegradable, Non-PCB, PUR (soft) resin

Rated Voltage 440 V

50 Hz		µF (X3)	Case Code	Reference Number
Q_N (kvar)	I_N (A)			
5	6.6	**27.4**	HC	**BLRCS050A060B44**
10	13.1	**54.8**	LC	**BLRCS100A120B44**
12.5	16.4	**68.5**	NC	**BLRCS125A150B44**
15	19.7	**82.2**	NC	**BLRCS150A180B44**
20	26.2	**110**	SC	**BLRCS200A240B44**
25	32.8	**137**	SC	**BLRCS250A300B44**
30.3	39.8	**166**	SC	**BLRCS303A364B44**

* Other rating of voltages are available on request basic.
** Other rating of kVAr are available on request basic.

Rated Voltage 525 V

50 Hz		µF (X3)	Case Code	Reference Number
Q_N (kvar)	I_N (A)			
5	5.5	**19.2**	HC	**BLRCS050A060B52**
10.6	11.7	**40.8**	MC	**BLRCS106A127B52**
12.5	13.7	**48.1**	NC	**BLRCS125A150B52**
15.4	16.9	**59.3**	NC	**BLRCS154A185B52**
20	22	**77**	SC	**BLRCS200A240B52**
25	27.5	**96.2**	SC	**BLRCS250A300B52**

Schneider Electric Industries (M) Sdn Bhd (378576-M)
No.11, Jalan U1/19, Seksyen U1, Hicom-Glenmarie Industrial Park, 40150 Shah Alam, Selangor.
Tel : 603 – 7883 6333 | Fax : 603 – 7883 6188 | Email : care@schneider-electric.com | Customer Care Centre : 1-800-880-877 | www.schneider-electric.com.my