

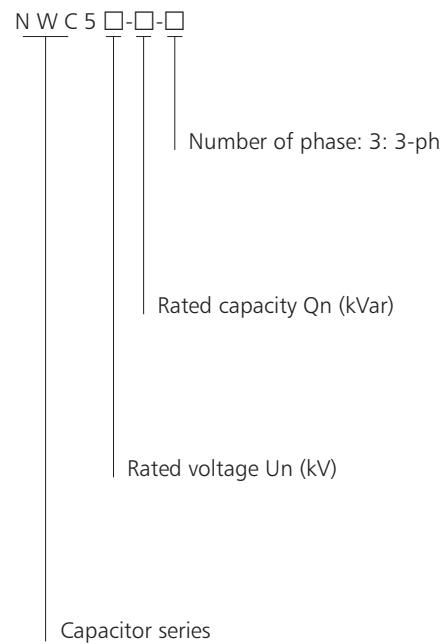


NWC5 Self-healing Shunt Capacitor

1. General

- 1.1 Electric ratings: \leq AC1000V.
- 1.2 Application: Newly developed energy-saving product for improvement of power factor and power quality;
- 1.3 Standards: IEC/EN 60831-1:2002

2. Type designation



3. Operating conditions

- 3.1 Ambient temperature: $-25^{\circ}\text{C} \sim +50^{\circ}\text{C}$
- 3.2 Relative humidity: $\leq 50\%$ at 40°C , $\leq 90\%$ at 20°C
- 3.3 Altitude: $\leq 2000\text{m}$
- 3.4 Environmental conditions: without dangerous gas & steam, insulated and explosive dust and dramatic mechanical vibration.

4. Technical data

- 4.1 Rated voltage: 0.23, 0.4, 0.45, 0.525kV
- 4.2 Rated frequency: 50Hz or 60Hz.
- 4.3 Rated capacity: 5~30kVar
- 4.4 Capacity error: $-5\% \sim +10\%$;
- 4.5 Dielectric loss tangent value: ≤ 0.0012 , at rated power frequency voltage
- 4.6 Max. allowed over-voltage: $1.1U_n$, not exceed 8h in 24h
- 4.7 Max. allowed over-current: $1.3I_n$
- 4.8 Having Self-discharging property: power off, voltage reduces from $\sqrt{2} U_n$ (DC) to 75V and below within 3min.
- 4.9 Model and Specifications

Serial number	Type and Specification	Rated voltage (kV)	Rated capacity (kVar)	Rated frequency (Hz)	Rated capacitor (μF)	Rated current (A)	Dimensions D×H(mm)	Mounting Dimensions (mm)
1	NWC5-0.4-5-3	0.4	5	50	99	7.2	φ 76×180	M12×16
2	NWC5-0.4-7.5-3	0.4	7.5	50	149	10.8	φ 76×180	
3	NWC5-0.4-10-3	0.4	10	50	199	14.4	φ 76×240	
4	NWC5-0.4-12-3	0.4	12	50	239	17.3	φ 76×240	
5	NWC5-0.4-14-3	0.4	14	50	279	20.2	φ 76×290	
6	NWC5-0.4-15-3	0.4	15	50	298	21.7	φ 76×290	
7	NWC5-0.4-16-3	0.4	16	50	318	23.1	φ 76×290	
8	NWC5-0.4-18-3	0.4	18	50	358	26.0	φ 86×290	
9	NWC5-0.4-20-3	0.4	20	50	398	28.9	φ 86×290	M16×25
10	NWC5-0.4-25-3	0.4	25	50	497	36.1	φ 96×290	
11	NWC5-0.4-30-3	0.4	30	50	597	43.3	φ 106×290	M16×25
12	NWC5-0.45-5-3	0.45	5	50	79	6.4	φ 76×180	M12×16
13	NWC5-0.45-7.5-3	0.45	7.5	50	118	9.6	φ 76×180	
14	NWC5-0.45-10-3	0.45	10	50	157	12.8	φ 76×240	
15	NWC5-0.45-12-3	0.45	12	50	189	15.4	φ 76×240	
16	NWC5-0.45-14-3	0.45	14	50	220	18.0	φ 76×290	
17	NWC5-0.45-15-3	0.45	15	50	236	19.2	φ 76×290	
18	NWC5-0.45-16-3	0.45	16	50	252	20.5	φ 76×290	
19	NWC5-0.45-18-3	0.45	18	50	283	23.1	φ 86×290	
20	NWC5-0.45-20-3	0.45	20	50	314	25.7	φ 86×290	M16×25
21	NWC5-0.45-25-3	0.45	25	50	393	32.1	φ 96×290	
22	NWC5-0.45-30-3	0.45	30	50	472	38.5	φ 106×290	M16×25
23	NWC5-0.525-5-3	0.525	5	50	58	5.5	φ 76×180	M16×25
25	NWC5-0.525-7.5-3	0.525	7.5	50	87	8.2	φ 76×180	
26	NWC5-0.525-10-3	0.525	10	50	115	11.0	φ 76×240	
27	NWC5-0.525-14-3	0.525	14	50	162	15.4	φ 76×290	
28	NWC5-0.525-15-3	0.525	15	50	173	16.5	φ 76×290	
29	NWC5-0.525-16-3	0.525	16	50	185	17.6	φ 76×290	
30	NWC5-0.525-18-3	0.525	18	50	208	19.8	φ 86×290	
31	NWC5-0.525-20-3	0.525	20	50	231	22.0	φ 86×290	
32	NWC5-0.525-25-3	0.525	25	50	289	27.5	φ 96×290	M16×25
33	NWC5-0.525-30-3	0.525	30	50	346	33.0	φ 106×290	M16×25
34	NWC5H-0.4-25-3	0.4	25	50	497	36.1	φ 96×280	M16×25
35	NWC5H-0.45-25-3	0.45	25	50	393	32.1	φ 96×280	M16×25
36	NWC5H-0.525-25-3	0.525	25	50	289	27.5	φ 96×280	M16×25

5. Features

- 5.1 Safe and reliable operation because of the independent protective enclosure;
- 5.2 With good sealing properties; and outgoing terminals for convenient wiring and reliable connection;
- 5.3 Available for use in the places with higher ambient temperature and voltage variation ;
- 5.4 Fixed type, convenient for mounting and elegant appearance due o to novel mounting pins.

6. Note

- 6.1 Please guarantee that the capacitors are operated under specified conditions, including the proper temperature, voltage and current, as over-voltage and over-current may shorten the life of the capacitor;
- 6.2 Please pay attention to the points following when the capacitor is shuntly connected in the system
 - a. For the system of current regulating system and the electric equipments system, the capacitor should not be directly connected;
 - b. Operational current of the capacitor should be less than the off-load current of the shuntly connected motor;
 - c. When the transformer is off-load, the capacitor should stop operating.
- 6.3 Specific switches, contactors and over-current relays should be adopted when the capacitor is shuntly connected in the system.

7. Mounting dimensions (mm)

