

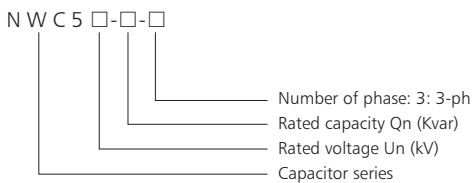


NWC5 series Self-healing Shunt Capacitor

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 60831-1996

2. Type Designation



3. Normal Operation & Mounting Conditions

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

4. Technical Parameters

- 4.1 Rated voltage: 0.4, 0.45, 0.525kV
- 4.2 Rated frequency: 50Hz or 60Hz.
- 4.3 Rated capacity: 10~25Kvar
- 4.4 Capacity error: $-5\% \sim +10\%$;
- 4.5 Dielectric loss tangent value: ≤ 0.0012 , at rated power frequency voltage
- 4.6 Withstand voltage:
 - a. Between poles : $2.15Un, 2s$
 - b. Between pole and enclosure : $3.6Kv, 5s (Un \leq 660V); 7.2Kv, 5s (Un > 660V)$
- 4.7 Max. allowed over-voltage: $1.1Un$, not exceed 8h in 24h
- 4.8 Max. allowed over-current: $1.3In$
- 4.9 Having Self-discharging property: power off, voltage reduces from $\sqrt{2} Un$ (DC) to 75V and below within 3min.
- 4.10 Model and Specifications



Serial number	Type and Specification	Rated voltage	Rated capacity	Rated frequency	Rated capacity	Rated current	Enclosure height	Dimensions
1	NWC5-0.4-10-3	0.4	10	50	199	14.4	$\phi 76 \times 240$	M12×16
2	NWC5-0.4-12-3	0.4	12	50	239	17.3	$\phi 76 \times 240$	
3	NWC5-0.4-14-3	0.4	14	50	279	20.2	$\phi 76 \times 280$	
4	NWC5-0.4-15-3	0.4	15	50	298	21.7	$\phi 76 \times 280$	
5	NWC5-0.4-16-3	0.4	16	50	318	23.1	$\phi 76 \times 280$	
6	NWC5-0.4-18-3	0.4	18	50	358	26.0	$\phi 86 \times 280$	
7	NWC5-0.4-20-3	0.4	20	50	398	28.9	$\phi 86 \times 280$	
8	NWC5-0.4-25-3	0.4	25	50	497	36.1	$\phi 96 \times 280$	M16×25
9	NWC5-0.45-10-3	0.45	10	50	157	12.8	$\phi 76 \times 240$	M12×16
10	NWC5-0.45-12-3	0.45	12	50	189	15.4	$\phi 76 \times 240$	
11	NWC5-0.45-14-3	0.45	14	50	220	18.0	$\phi 76 \times 280$	
12	NWC5-0.45-15-3	0.45	15	50	236	19.2	$\phi 76 \times 280$	
13	NWC5-0.45-16-3	0.45	16	50	252	20.5	$\phi 76 \times 280$	

Serial number	Type and Specification	Rated voltage	Rated capacity	Rated frequency	Rated capacity	Rated current	Enclosure height	Dimensions
14	NWC5-0.45-18-3	0.45	18	50	283	23.1	φ 86×280	M12×16
15	NWC5-0.45-20-3	0.45	20	50	314	25.7	φ 86×280	
16	NWC5-0.45-25-3	0.45	25	50	393	32.1	φ 96×280	M16×25
17	NWC5-0.525-10-3	0.525	10	50	115	11.0	φ 76×240	M12×16
18	NWC5-0.525-12-3	0.525	12	50	139	13.2	φ 76×240	
19	NWC5-0.525-14-3	0.525	14	50	162	15.4	φ 76×280	
20	NWC5-0.525-15-3	0.525	15	50	173	16.5	φ 76×280	
21	NWC5-0.525-16-3	0.525	16	50	185	17.6	φ 76×280	
22	NWC5-0.525-18-3	0.525	18	50	208	19.8	φ 86×280	
23	NWC5-0.525-20-3	0.525	20	50	231	22.0	φ 86×280	M12×16
24	NWC5-0.525-25-3	0.525	25	50	289	27.5	φ 96×280	

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. Notices

- 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. Overall and Mounting Dimensions (mm)

