

CHV-M

Single-phase capacitor (indoor and outdoor use)



Description

The **CHV** Medium Voltage capacitors are composed of different capacitive elements.

These basic units are connected in series and parallel with the purpose of obtaining the power at the necessary voltage.

All elements are protected with an internal fuse that will be disconnected in case of a fault, isolating the basic unit damaged.

The protection with internal fuses will increase the security of the system and continuity of the service.

Application

CHV-M capacitors are used to build fixed and automatic MV capacitor banks.

We will vary the number of capacitors in parallel and/or in series, depending on the power and voltage levels required.

Its stainless steel box means that the **CHV** capacitor is versatile and can be used in indoor and outdoor applications.

Features

Voltage	1 ... 20 kV
Nominal power	25 ... 600 kvar
Frequency	50 or 60 Hz
Dielectric losses	≤ 0.2 W / kvar
Capacity tolerance	-5 ... +10 %
Location	Indoor / Outdoor
Protection	Internal fuse (depending on the type)
Discharge resistance (in compliance with IEC 60871-1)	
Location	Indoor
Discharge time	≤ 10 minutes
Residual voltage	≤ 75 V
Insulators	
Material	Porcelain
Pollution level	16 mm / kV (other leakage lines, on demand)
Insulation level	12 - 17.5 - 24 - 36 kV (see table 1)
Overload	
In current	1.3 I_n permanent
In voltage	1.1 U_n 12 h in 24 hours
	1.15 U_n 30 min in 24 hours
	1.2 U_n 5 min in 24 hours
	1.30 U_n 1 min in 24 hours
Ambient conditions	
Operating temperature	Category C (in accordance with IEC 60871-1)
Maximum temperature (*2)	50° C
Maximum mean value during 24 hours	40° C
Maximum mean value during 1 year	30 °C
Build features	
Dielectric	Rough polypropylene film
Electrode	Aluminium sheet
Impregnating oil	SAS-40E or M/DBT (PCB-free)
Dimensions (mm)	depending on the type
Weight	depending on the type (see table)
Box	Painted stainless steel, RAL 7035 2 wings to fix to the frame and avoid mechanical efforts on porcelain terminals
Assembly position	Horizontal or vertical
Standards	
IEC 60871-1, IEC 60871-4	

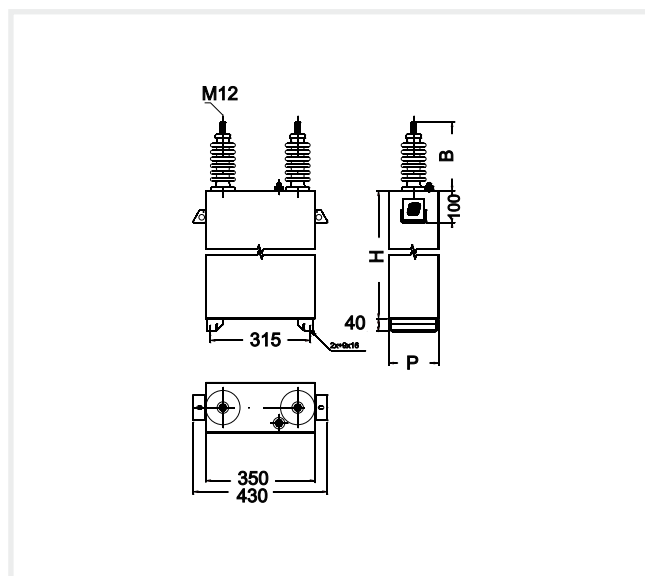
(*2) Understood as punctual

CHV-M

Single-phase capacitor (indoor and outdoor use)



Dimensions



References

BIL: 28 / 75 kV - 6.6 kV (Network 11 kV), 50 Hz

kvar	Weight (kg)	Dimensions (mm) width x height x depth	Type	Code
50	17	350x420x160	CHV-M 50 / 6.6(*)	R80193
75	20	350x520x160	CHV-M 75 / 6.6(*)	R80195
100	22	350x520x160	CHV-M 100 / 6.6	R80196
133	25	350x570x160	CHV-M 133 / 6.6	R80197
150	28	350x630x160	CHV-M 150 / 6.6	R80198
167	30	350x690x160	CHV-M 167 / 6.6	R80199
200	34	350x690x160	CHV-M 200 / 6.6	R8019A
250	40	350x800x160	CHV-M 250 / 6.6	R8019B
300	46	350x890x160	CHV-M 300 / 6.6	R8019C
400	57	350x1090x160	CHV-M 400 / 6.6	R8019F
500	68	350x1000x175	CHV-M 500 / 6.6	R8019G
600	79	350x1140x175	CHV-M 600 / 6.6	R8019H

BIL: 38 / 95 kV - 8 kV (Network 13.2 kV), 50 Hz

kvar	Weight (kg)	Dimensions (mm) width x height x depth	Type	Code
50	19	350x461x160	CHV-M 50 / 8(*)	R801B3
75	23	350x561x160	CHV-M 75 / 8(*)	R801B5
100	25	350x561x160	CHV-M 100 / 8(*)	R801B6
133	28	350x671x160	CHV-M 133 / 8	R801B7
150	31	350x671x160	CHV-M 150 / 8	R801B8
167	33	350x731x160	CHV-M 167 / 8	R801B9
200	38	350x841x160	CHV-M 200 / 8	R801BA
250	43	350x931x160	CHV-M 250 / 8	R801BB
300	49	350x931x160	CHV-M 300 / 8	R801BC
400	61	350x1211x160	CHV-M 400 / 8	R801BF
500	70	350x1041x175	CHV-M 500 / 8	R801BG
600	81	350x1181x175	CHV-M 600 / 8	R801BH

CHV-M

Single-phase capacitor (indoor and outdoor use)



References

BIL: 38 / 95 kV - 9.1 kV (Network 15 kV). 50 Hz

kvar	Weight (kg)	Dimensions (mm) width x height x depth	Type	Code
50	19	350x420x160	CHV-M 50 / 9.1(*)	R801D3
75	23	350x520x160	CHV-M 75 / 9.1(*)	R801D5
100	25	350x520x160	CHV-M 100 / 9.1(*)	R801D6
133	28	350x570x160	CHV-M 133 / 9.1	R801D7
150	31	350x630x160	CHV-M 150 / 9.1	R801D8
167	33	350x690x160	CHV-M 167 / 9.1	R801D9
200	38	350x690x160	CHV-M 200 / 9.1	R801DA
250	43	350x800x160	CHV-M 250 / 9.1	R801DB
300	49	350x890x160	CHV-M 300 / 9.1	R801DC
400	61	350x1090x160	CHV-M 400 / 9.1	R801DF
500	70	350x1000x175	CHV-M 500 / 9.1	R801DG
600	81	350x1140x175	CHV-M 600 / 9.1	R801DH

(*) No internal fuses

BIL: 50 / 125 kV - 12.1 kV (Network 20 kV). 50 Hz

kvar	Weight (kg)	Dimensions (mm) width x height x depth	Type	Code
50	19	350x595x160	CHV-M 50 / 12.1(*)	R801F3
75	23	350x595x160	CHV-M 75 / 12.1(*)	R801F5
100	25	350x645x160	CHV-M 100 / 12.1(*)	R801F6
133	28	350x705x160	CHV-M 133 / 12.1(*)	R801F7
150	31	350x765x160	CHV-M 150 / 12.1(*)	R801F8
167	33	350x765x160	CHV-M 167 / 12.1	R801F9
200	38	350x875x160	CHV-M 200 / 12.1	R801FA
250	43	350x965x160	CHV-M 250 / 12.1	R801FB
300	49	350x1035x160	CHV-M 300 / 12.1	R801FC
400	61	350x1245x160	CHV-M 400 / 12.1	R801FF
500	70	350x1075x175	CHV-M 500 / 12.1	R801FG
600	81	350x1215x175	CHV-M 600 / 12.1	R801FH

CHV-M

Single-phase capacitor (indoor and outdoor use)

References

BIL: 70 / 170 kV - 15.2 kV (Network 25 kV). 50 Hz

kvar	Weight (kg)	Dimensions (mm) width x height x depth	Type	Code
50	19	350x510x145	CHV-M 50 / 15.2(*)	R801H3
75	23	350x590x145	CHV-M 75 / 15.2(*)	R801H5
100	25	350x590x145	CHV-M 100 / 15.2(*)	R801H6
133	28	350x670x145	CHV-M 133 / 15.2(*)	R801H7
150	31	350x670x145	CHV-M 150 / 15.2(*)	R801H8
167	33	350x760x145	CHV-M 167 / 15.2(*)	R801H9
200	38	350x760x145	CHV-M 200 / 15.2(*)	R801HA
250	43	350x860x145	CHV-M 250 / 15.2	R801HB
300	49	350x940x145	CHV-M 300 / 15.2	R801HC
400	61	350x980x175	CHV-M 400 / 15.2	R801HF
500	70	350x1120x175	CHV-M 500 / 15.2	R801HG
600	81	350x1260x175	CHV-M 600 / 15.2	R801HH

BIL: 70/170 kV - 18.2 V (Network 30 kV). 50 Hz

kvar	Weight (kg)	Dimensions (mm) width x height x depth	Type	Code
50	19	350x510x145	CHV-M 50 / 18.2(*)	R801J3
75	23	350x590x145	CHV-M 75 / 18.2(*)	R801J5
100	25	350x590x145	CHV-M 100 / 18.2(*)	R801J6
133	28	350x670x145	CHV-M 133 / 18.2(*)	R801J7
150	31	350x670x145	CHV-M 150 / 18.2(*)	R801J8
167	33	350x760x145	CHV-M 167 / 18.2(*)	R801J9
200	38	350x760x145	CHV-M 200 / 18.2(*)	R801JA
250	43	350x860x145	CHV-M 250 / 18.2(*)	R801JB
300	49	350x940x145	CHV-M 300 / 18.2	R801JC
400	61	350x980x175	CHV-M 400 / 18.2	R801JF
500	70	350x1120x175	CHV-M 500 / 18.2	R801JG
600	81	350x1260x175	CHV-M 600 / 18.2	R801JH

(*) No internal fuses

CHV-T

Three-phase capacitor (Indoor use, with fuses and discharge resistor, internal)



Description

The **CHV** Medium Voltage capacitors are composed of different capacitive elements.

These basic units are connected in series and parallel with the purpose of obtaining the power at the necessary voltage.

All elements are protected with an internal fuse that will be disconnected in case of a fault, isolating the basic unit damaged.

The protection with internal fuses will increase the security of the system and continuity of the service.

Application

CHV-T capacitors are used to build fixed and automatic capacitor banks of up to 12 kV.

The stainless steel box of the **CHV-T** makes it a versatile product that can be used in indoor and outdoor applications.

Features

Voltage	1 ... 12 kV
Nominal power	25 ... 500 kvar
Frequency	50 or 60 Hz
Dielectric losses	≤ 0.2 W / kvar
Capacity tolerance	-5 ... +10 %
Location	Indoor / Outdoor
Protection	Internal fuse (depending on the type)
Discharge resistance (in compliance with IEC 60871-1)	
Location	Indoor
Discharge time	≤ 10 minutes
Residual voltage	≤ 75 V
Insulators	
Material	Porcelain
Pollution level	16 mm / kV (other leakage lines, on demand)
Insulation level	12 - 17.5 - 24 - 36 kV (see table 1)
Overload	
In current	$1.3 I_n$ permanent
In voltage	$1.1 U_n$ 12 h in 24 hours $1.15 U_n$ 30 min in 24 hours $1.2 U_n$ 5 min in 24 hours $1.30 U_n$ 1 min in 24 hours
Ambient conditions	
Operating temperature	Category C (in accordance with IEC 60871-1)
Maximum temperature (*2)	50 °C
Maximum mean value during 24 hours	40 °C
Maximum mean value during 1 year	30 °C
Build features	
Dielectric	Rough polypropylene film
Electrode	Aluminium sheet
Impregnating oil	SAS-40E or M/DBT (PCB-free)
Dimensions (mm)	depending on the type
Weight	depending on the type (see table)
Box	Painted stainless steel, RAL 7035 2 wings to fix to the frame and avoid mechanical efforts on porcelain terminals
Assembly position	Horizontal or vertical
Standards	
IEC 60871-1, IEC 60871-4	

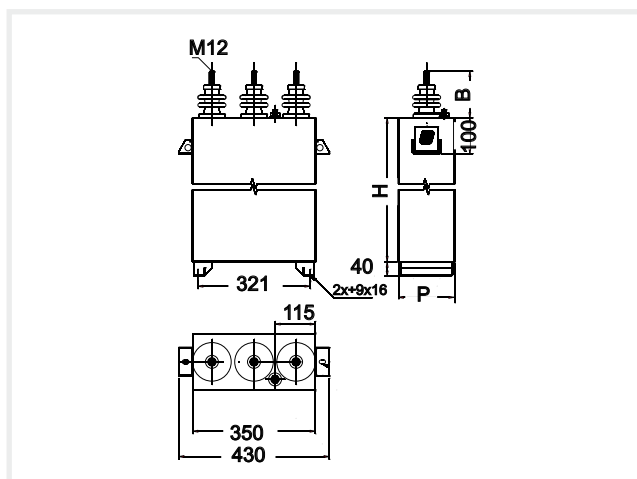
(*2) Understood as punctual

CHV-T

Three-phase capacitor (Indoor use, with fuses and discharge resistor, internal)



Dimensions



References

BIL: 20 / 60 kV - 3.3 kV . 50 Hz

kvar	Weight (kg)	Dimensions (mm) width x height x depth	Type	Code
50	17	350x420x160	CHV-T 50 /3.3	R80223
75	20	350x520x160	CHV-T 75 /3.3	R80225
100	22	350x520x160	CHV-T 100 /3.3	R80226
150	28	350x630x160	CHV-T 150 /3.3	R80228
200	34	350x800x160	CHV-T 200 /3.3	R8022A
250	40	350x800x160	CHV-T 250 /3.3	R8022B
300	46	350x890x160	CHV-T 300 /3.3	R8022C
400	57	350x1090x160	CHV-T 400 /3.3	R8022F
500	68	350x1030x175	CHV-T 500 /3.3	R8022G

BIL: 20 / 60 kV - 6.6 kV . 50 Hz

kvar	Weight (kg)	Dimensions (mm) width x height x depth	Type	Code
50	17	350x420x160	CHV-T 50 /6.6	R80283
75	20	350x520x160	CHV-T 75 /6.6	R80285
100	22	350x520x160	CHV-T 100 /6.6	R80286
150	28	350x630x160	CHV-T 150 /6.6	R80288
200	34	350x800x160	CHV-T 200 /6.6	R8028A
250	40	350x800x160	CHV-T 250 /6.6	R8028B
300	46	350x890x160	CHV-T 300 /6.6	R8028C
350	53	350x890x160	CHV-T 350 /6.6	R8028D
400	57	350x1090x160	CHV-T 400 /6.6	R8028F
500	68	350x1030x175	CHV-T 500 /6.6	R8028G

BIL: 28 / 75 kV - 11 kV

kvar	Weight (kg)	Dimensions (mm) width x height x depth	Type	Code
50	17	350x420x160	CHV-T 50 /11	R802B3
75	20	350x520x160	CHV-T 75 /11	R802B5
100	22	350x520x160	CHV-T 100 /11	R802B6
150	28	350x630x160	CHV-T 150 /11	R802B8
200	34	350x800x160	CHV-T 200 /11	R802BA
250	40	350x800x160	CHV-T 250 /11	R802BB
300	46	350x890x160	CHV-T 300 /11	R802BC
350	53	350x890x160	CHV-T 350 /11	R802BD
400	57	350x1090x160	CHV-T 400 /11	R802BF
500	68	350x1030x175	CHV-T 500 /11	R802BG