



Function

Your reactive energy consumption vary depending on the type and using conditions of the loads supplied by the network. **Automatic COSYS PFC** systems are intended to compensate this variable reactive energy.

General characteristics

- Self healing capacitors.
- Capacitor automatic disconnection in case of internal overpressure.
- Cabinet or enclosure colour RAL 7035.
- Protection index IP20 or IP30 depending on the model.
- Rated voltage: Three phase 400 V.
- Rated frequency: 50 Hz.
- Operating temperature: -5 °C to +40 °C.
- Tolerance of the capacitor value: -5, +5%.
- Discharge resistor on each load bank: < 50 V after 1 minute.
- Capacitor internal connection: delta mounting.

Composition of the range

- Power from 17,5 to 900 kvar.
- Harmonics from 0 to 100% over 4 levels: PFC41, PFC42, PFC43 and PFC44.
- Cable input from the bottom (from the top upon request).
- Thermal regulation using fan.
- Power factor regulator with 6 or 12 outputs, depending on the model, with alarm relay.

Conformity to standards

- EN 61439-1
- EN 61439-2
- IEC 61439-1
- IEC 61439-2
- IEC 60831-1
- EN 50082-2
- EN 50081-1
- EN 60439-1
- EN 60831-1
- EN 60831-2

Available on request

- Other voltages
- Other protection index
- Other enclosures

Harmonic levels	PFC41	PFC42	PFC43	PFC44
Detuned frequency (with reactor)		N = 3,78	N = 2,7	N = 4,3
Admissible overload current	2 In	2 In	2 In	2 In

References

PFC41 with heavy duty capacitor			Automatic capacitor bank without switch	Automatic capacitor bank with switch
Power at 400 VAC (kvar)	Steps (nb x kvar)	Switching sequence ⁽¹⁾	Reference	Reference
17,5	1x2,5 + 1x5 + 1x10	7	5977 2018	5977 1018
30	1x5 + 1x10 + 1x15	6	5977 2030	5977 1030
50	1x10 + 2x20	5	5977 2050	5977 1050
75	1x12,5 + 1x25 + 1x37,5	6	5977 2075	5977 1075
100	2x12,5 + 1x25 + 1x50	8	5977 2100	5977 1100
125	2x12,5 + 2x25 + 1x50	9	5977 2125	5977 1125
150	2x12,5 + 1x25 + 2x50	12	5977 2150	5977 1150
175	1x25 + 3x50	7	5977 2175	5977 3175
200	2x25 + 3x50	8	5977 2200	5977 3200
250	5x50	5	5977 4250	5977 3250
300	6x50	6	5977 4300	5977 3300
350	7x50	7	5977 4350	5977 3350
400	8x50	8	5977 4400	5977 3400
450	9x50	9	5977 4450	5977 3450
500	10x50	10	5977 4500	5977 3500
550	11x50	11	5977 4550	5977 3550
600	12x50	12	5977 4600	5977 3600
650	13x50	13	5977 4650	5977 3650
700	14x50	14	5977 4700	5977 3700
750	15x50	15	5977 4750	5977 3750
800	16x50	16	5977 4800	5977 3800
850	17x50	17	5977 4850	
900	18x50	18	5977 4900	

(1) Possible number of combinations to achieve the defined setpoint.

PFC42 with detuned filter reactor 3,78			Automatic capacitor bank without switch	Automatic capacitor bank with switch
Power at 400 VAC (kvar)	Steps (nb x kvar)	Switching sequence ⁽¹⁾	Reference	Reference
17,5	1x2,5 + 1x5 + 1x10	7	5978 2018	5978 1018
30	1x5 + 1x10 + 1x15	6	5978 2030	5978 1030
50	2x12,5 + 1x25	4	5978 2050	5978 1050
75	1x12,5 + 1x25 + 1x37,5	6	5978 2075	5978 1075
100	2x12,5 + 1x25 + 1x50	8	5978 2100	5978 1100
125	2x12,5 + 2x25 + 1x50	9	5978 4125	5978 3125
150	2x12,5 + 1x25 + 2x50	12	5978 4150	5978 3150
175	1x25 + 3x50	7	5978 4175	5978 3175
200	2x25 + 3x50	8	5978 4200	5978 3200
250	5x50	5	5978 4250	5978 3250
300	6x50	6	5978 4300	5978 3300
350	7x50	7	5978 4350	5978 3350
400	8x50	8	5978 4400	5978 3400
450	9x50	9	5978 4450	5978 3450
500	10x50	10	5978 4500	5978 3500
550	11x50	11	5978 4550	5978 3550
600	12x50	12	5978 4600	5978 3600
650	13x50	13	5978 4650	5978 3650
700	14x50	14	5978 4700	5978 3700
750	15x50	15	5978 4750	5978 3750
800	16x50	16	5978 4800	5978 3800
850	17x50	17	5978 4850	
900	18x50	18	5978 4900	

(1) Possible number of combinations to achieve the defined setpoint.

PFC43 with detuned filter reactor 2,7			Automatic capacitor bank without switch	Automatic capacitor bank with switch
Power at 400 VAC (kvar)	Steps (nb x kvar)	Switching sequence⁽¹⁾	Reference	Reference
25	2x6,25 + 1x12,5	4	5979 2025	5979 1025
50	2x12,5 + 1x25	4	5979 2050	5979 1050
75	1x12,5 + 1x25 + 1x37,5	6	5979 2075	5979 1075
100	1x16,7 + 1x33,5 + 1x50	8	5979 2100	5979 1100
125	2x12,5 + 2x25 + 1x50	9	5979 4125	5979 3125
150	2x12,5 + 1x25 + 2x50	12	5979 4150	5979 3150
175	1x25 + 3x50	7	5979 4175	5979 3175
200	2x25 + 3x50	8	5979 4200	5979 3200
250	5x50	5	5979 4250	5979 3250
300	6x50	6	5979 4300	5979 3300
350	7x50	7	5979 4350	5979 3350
400	8x50	8	5979 4400	5979 3400
450	9x50	9	5979 4450	5979 3450
500	10x50	10	5979 4500	5979 3500
550	11x50	11	5979 4550	5979 3550
600	12x50	12	5979 4600	5979 3600
650	13x50	13	5979 4650	5979 3650
700	14x50	14	5979 4700	5979 3700
750	15x50	15	5979 4750	5979 3750
800	16x50	16	5979 4800	5979 3800
850	17x50	17	5979 4850	
900	18x50	18	5979 4900	

(1) Possible number of combinations to achieve the defined setpoint.

PFC44 with detuned filter reactor 4,3			Automatic capacitor bank without switch	Automatic capacitor bank with switch
Power at 400 VAC (kvar)	Steps (nbxkvar)	Switching sequence⁽¹⁾	Reference	Reference
17,5	1x2,5 + 1x5 + 1x10	7	5975 2018	5975 1018
30	1x5 + 1x10 + 1x15	6	5975 2030	5975 1030
50	2x12,5 + 1x25	4	5975 2050	5975 1050
75	1x12,5 + 1x25 + 1x37,5	6	5975 2075	5975 1075
100	1x16,7 + 1x33,5 + 1x50	8	5975 2100	5975 1100
125	2x12,5 + 2x25 + 1x50	9	5975 4125	5975 3125
150	2x12,5 + 1x25 + 2x50	12	5975 4150	5975 3150
175	1x25 + 3x50	7	5975 4175	5975 3175
200	2x25 + 3x50	8	5975 4200	5975 3200
250	5x50	5	5975 4250	5975 3250
300	6x50	6	5975 4300	5975 3300
350	7x50	7	5975 4350	5975 3350
400	8x50	8	5975 4400	5975 3400
450	9x50	9	5975 4450	5975 3450
500	10x50	10	5975 4500	5975 3500
550	11x50	11	5975 4550	5975 3550
600	12x50	12	5975 4600	5975 3600
650	13x50	13	5975 4650	5975 3650
700	14x50	14	5975 4700	5975 3700
750	15x50	15	5975 4750	5975 3750
800	16x50	16	5975 4800	5975 3800
850	17x50	17	5975 4850	
900	18x50	18	5975 4900	

(1) Possible number of combinations to achieve the defined setpoint.

Fuse bases	Reference
Dimensions H x W x D (mm)	
100 x 600 x 600	5970 0951
100 x 800 x 600	5970 0952
200 x 600 x 600	5970 0954
200 x 800 x 600	5970 0955
100 x 600 x 400	5970 0961
100 x 800 x 400	5970 0962
100 x 800 x 500	5970 0963
200 x 600 x 400	5970 0964
200 x 800 x 400	5970 0965
200 x 800 x 500	5970 0966
200 x 600 x 311	5970 0971

Characteristics

PFC41 with heavy duty capacitor

Power at 400 VAC (kvar)	I nominal (A)	Fuse rating gG (A)	FUSERBLOC (A)	Cable Cu (3 x mm ²) ⁽¹⁾	Figure n°	Figure n° with switch	H x W x D (mm)	H x W x D (mm) with switch	Weight (kg)	Weight (kg) with switch
17,5	25	40	50	4	1	1	500x500x300	500x500x300	20	22
30	43	63	63	16	1	1	500x500x300	500x500x300	25	27
50	72	125	125	25	1	1	500x500x300	500x500x300	30	32
75	108	160	160	50	2	2	811x600x286	811x600x286	40	42
100	144	250	250	70	2	3	811x600x286	1211x600x311	50	52
125	180	315	400	120	3	3	1211x600x311	1211x600x311	58	60
150	217	315	400	120	3	3	1211x600x311	1211x600x311	65	67
175	253	400	400	150	3	4	1211x600x311	2000x600x400	70	185
200	289	500	630	240	3	4	1211x600x311	2000x600x400	80	195
250	361	630	630	240	4	4	2000x600x400	2000x600x400	220	225
300	433	630	630	2x120	4	4	2000x600x400	2000x600x400	240	245
350	505	800	800	2x150	4	4	2000x600x400	2000x600x600	260	270
400	577	1000	1250	2x185	4	4	2000x600x400	2000x600x600	280	290
450	650	1000	1250	2x240	4	5	2000x600x600	2000x(2x600)x600	400	415
500	722	1250	1250	2x240	4	5	2000x600x600	2000x(2x600)x600	450	465
550	794	1250	1250	4x150	5	5	2000x(2x600)x600	2000x(2x600)x600	480	495
600	866	1250	1250	4x150	5	5	2000x(2x600)x600	2000x(2x600)x600	500	515
650	938	1600	Consult us	4x150	5	5	2000x(2x600)x600	2000x(2x600)x600	520	535
700	1010	1600	Consult us	4x150	5	5	2000x(2x600)x600	2000x(2x600)x600	540	555
750	1083	1600	Consult us	4x150	5	5	2000x(2x600)x600	2000x(2x600)x600	550	565
800	1155	1800	Consult us	4x240	5	5	2000x(2x600)x600	2000x(2x600)x600	680	695
850	1227	1800	Consult us	4x240	5	5	2000x(2x600)x600	2000x(2x600)x600	690	Consult us
900	1299	2000	Consult us	4x240	5	5	2000x(2x600)x600	2000x(2x600)x600	720	Consult us

(1) Cable cross-sections are only indicative and must be validated as per standard NF C 15-100.

PFC42 with detuned filter reactor 3,78

Power at 400 VAC (kvar)	I nominal (A)	Fuse rating gG (A)	FUSERBLOC (A)	Cable Cu (3 x mm ²) ⁽¹⁾	Figure n°	Figure n° with switch	H x W x D (mm)	H x W x D (mm) with switch	Weight (kg)	Weight (kg) with switch
17,5	25	40	50	4	3	3	1211x600x311	1211x600x311	38	40
30	63	63	100	16	3	3	1211x600x311	1211x600x311	55	57
50	72	125	125	25	3	3	1211x600x311	1211x600x311	80	82
75	108	160	160	50	3	3	1211x600x311	1211x600x311	115	117
100	144	250	250	70	3	3	1211x600x311	1211x600x311	150	155
125	180	315	400	120	4	4	2000x800x400	2000x800x400	185	190
150	217	315	400	120	4	4	2000x800x400	2000x800x400	215	220
175	253	400	400	150	4	4	2000x800x400	2000x800x400	245	250
200	289	500	630	240	4	4	2000x800x400	2000x800x400	280	285
250	361	630	630	240	4	4	2000x800x400	2000x800x400	470	475
300	433	630	630	2x120	4	4	2000x800x400	2000x800x400	540	545
350	505	800	800	2x150	4	5	2000x800x400	2000x800x600	610	620
400	577	1000	1250	2x185	4	5	2000x800x400	2000x800x600	680	690
450	650	1000	1250	2x240	5	5	2000x800x600	2000x(2x800)x600	850	865
500	722	1250	1250	2x240	5	5	2000x800x600	2000x(2x800)x600	950	965
550	794	1250	1250	4x150	5	5	2000x(2x800)x600	2000x(2x800)x600	1030	1045
600	866	1250	1250	4x150	5	5	2000x(2x800)x600	2000x(2x800)x600	1100	1115
650	938	1600	Consult us	4x150	5	5	2000x(2x800)x600	2000x(2x800)x600	1170	1185
700	1010	1600	Consult us	4x150	5	5	2000x(2x800)x600	2000x(2x800)x600	1240	1255
750	1083	1600	Consult us	4x150	5	5	2000x(2x800)x600	2000x(2x800)x600	1300	1315
800	1155	1800	Consult us	4x240	5	5	2000x(2x800)x600	2000x(2x800)x600	1480	1495
850	1227	1800	Consult us	4x240	5	5	2000x(2x800)x600	2000x(2x800)x600	1500	Consult us
900	1299	2000	Consult us	4x240	5	5	2000x(2x800)x600	2000x(2x800)x600	1620	Consult us

(1) Cable cross-sections are only indicative and must be validated as per standard NF C 15-100.

PFC43 with detuned filter reactor 2,7

Power at 400 VAC (kvar)	I nominal (A)	Fuse rating gG (A)	FUSERBLOC (A)	Cable Cu (3 x mm ²) ⁽¹⁾	Figure n°	Figure n° with switch	H x W x D (mm)	H x W x D (mm) with switch	Weight (kg)	Weight (kg) with switch
25	36	63	63	10	3	3	1211x600x311	1211x600x311	50	52
50	72	125	125	25	3	3	1211x600x311	1211x600x311	80	82
75	108	160	160	50	3	3	1211x600x311	1211x600x311	115	118
100	144	250	250	70	3	3	1211x600x311	1211x600x311	150	155
125	180	315	400	120	4	4	2000x800x500	2000x800x500	185	190
150	217	315	400	120	4	4	2000x800x500	2000x800x500	215	220
175	253	400	400	150	4	4	2000x800x500	2000x800x500	245	250
200	289	500	630	240	4	4	2000x800x500	2000x800x500	280	285
250	361	630	630	240	4	4	2000x800x500	2000x800x500	470	475
300	433	630	630	2x120	4	4	2000x800x500	2000x800x500	540	545
350	505	800	800	2x150	4	5	2000x800x500	2000x800x600	610	620
400	577	1000	1250	2x185	4	5	2000x800x500	2000x800x600	680	690
450	650	1000	1250	2x240	5	5	2000x800x600	2000x(2x800)x600	850	865
500	722	1250	1250	2x240	5	5	2000x800x600	2000x(2x800)x600	950	965
550	794	1250	1250	4x150	5	5	2000x(2x800)x600	2000x(2x800)x600	1030	1045
600	866	1250	1250	4x150	5	5	2000x(2x800)x600	2000x(2x800)x600	1100	1115
650	938	1600	Consult us	4x150	5	5	2000x(2x800)x600	2000x(2x800)x600	1170	1185
700	1010	1600	Consult us	4x150	5	5	2000x(2x800)x600	2000x(2x800)x600	1240	1255
750	1083	1600	Consult us	4x150	5	5	2000x(2x800)x600	2000x(2x800)x600	1300	1315
800	1155	1800	Consult us	4x240	5	5	2000x(2x800)x600	2000x(2x800)x600	1480	1495
850	1227	1800	Consult us	4x240	5		2000x(2x800)x600		1500	Consult us
900	1299	2000	Consult us	4x240	5		2000x(2x800)x600		1620	Consult us

(1) Cable cross-sections are only indicative and must be validated as per standard NF C 15-100.

PFC44 with detuned filter reactor 4,3

Power at 400 VAC (kvar)	I nominal (A)	Fuse rating gG (A)	FUSERBLOC (A)	Cable Cu (3 x mm ²) ⁽¹⁾	Figure n°	Figure n° with switch	H x W x D (mm)	H x W x D (mm) with switch	Weight (kg)	Weight (kg) with switch
17,5	25	40	50	4	3	3	1211x600x311	1211x600x311	38	40
30	43	63	63	16	3	3	1211x600x311	1211x600x311	55	57
50	72	125	125	25	3	3	1211x600x311	1211x600x311	80	82
75	108	160	160	50	3	3	1211x600x311	1211x600x311	115	118
100	144	250	250	70	3	3	1211x600x311	1211x600x311	150	155
125	180	315	400	120	4	4	2000x800x400	2000x800x500	185	190
150	217	315	400	120	4	4	2000x800x400	2000x800x500	215	220
175	253	400	400	150	4	4	2000x800x400	2000x800x500	245	250
200	289	500	630	240	4	4	2000x800x400	2000x800x500	280	285
250	361	630	630	240	4	4	2000x800x400	2000x800x500	470	475
300	433	630	630	2x120	4	4	2000x800x400	2000x800x500	540	545
350	505	800	800	2x150	4	5	2000x800x400	2000x800x600	610	620
400	577	1000	1250	2x185	4	5	2000x800x400	2000x800x600	680	690
450	650	1000	1250	2x240	5	5	2000x800x600	2000x(2x800)x600	850	865
500	722	1250	1250	2x240	5	5	2000x800x600	2000x(2x800)x600	950	965
550	794	1250	1250	4x150	5	5	2000x(2x800)x600	2000x(2x800)x600	1030	1045
600	866	1250	1250	4x150	5	5	2000x(2x800)x600	2000x(2x800)x600	1100	1115
650	938	1600	Consult us	4x150	5	5	2000x(2x800)x600	2000x(2x800)x600	1170	1185
700	1010	1600	Consult us	4x150	5	5	2000x(2x800)x600	2000x(2x800)x600	1240	1255
750	1083	1600	Consult us	4x150	5	5	2000x(2x800)x600	2000x(2x800)x600	1300	1315
800	1155	1800	Consult us	4x240	5	5	2000x(2x800)x600	2000x(2x800)x600	1480	1495
850	1227	1800	Consult us	4x240	5		2000x(2x800)x600		1500	Consult us
900	1299	2000	Consult us	4x240	5		2000x(2x800)x600		1620	Consult us

(1) Cable cross-sections are only indicative and must be validated as per standard NF C 15-100.

➔ Dimensions

Figure 1

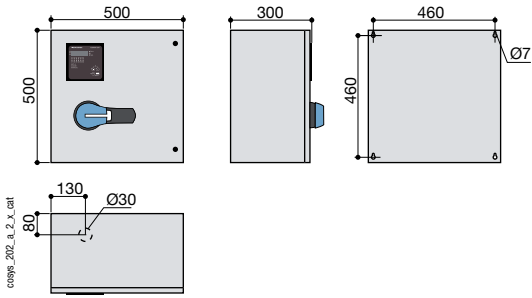


Figure 2

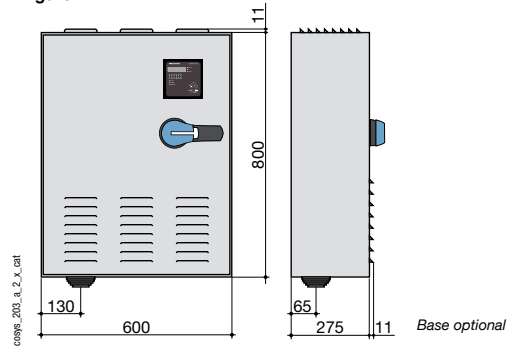


Figure 3

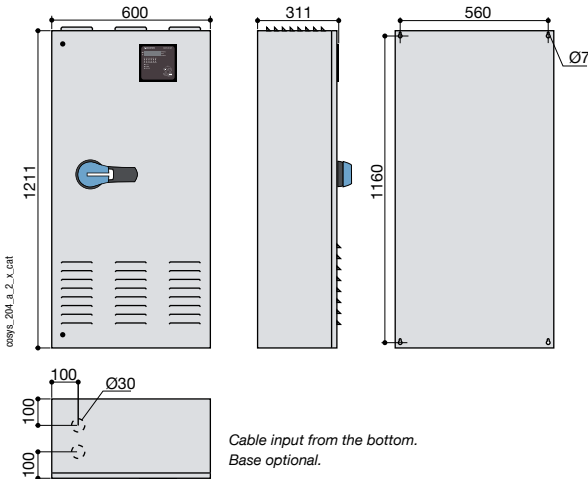


Figure 4

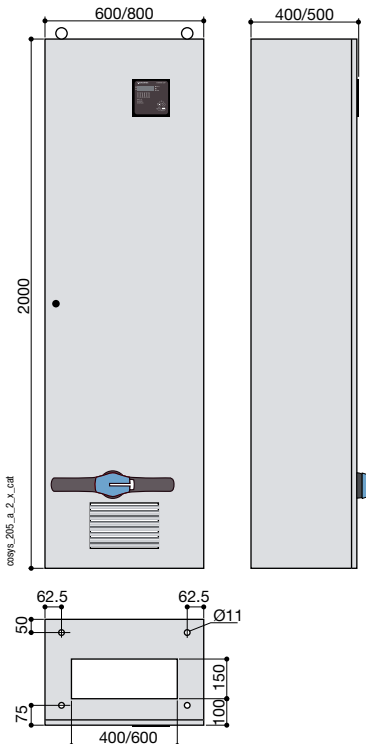
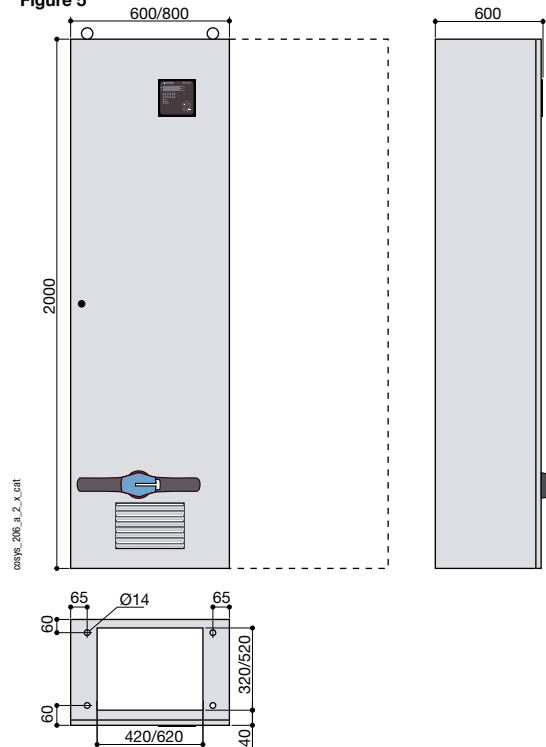


Figure 5



Cable input is from the bottom - can be from the top upon request.
Base optional.

Base optional.