

CATALOG 2017



CISAR[®]
POWER FACTOR CORRECTION AND HARMONICS, SINCE 1979

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CONDENSADORES INDUSTRIALES, S.L.
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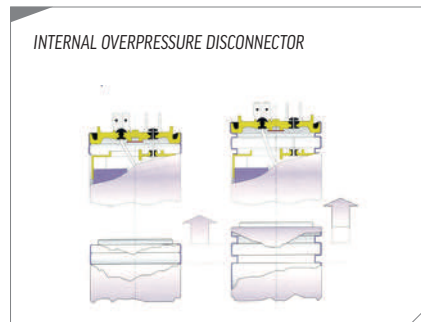
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“CRM” SINGLE PHASE_CYLINDRICAL

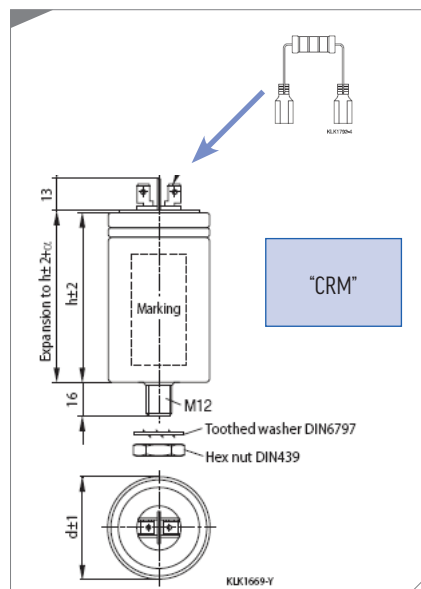
“CRM” SINGLE PHASE_CYLINDRICAL

1/2

Technical Characteristics in 02_p.5



KVAr (II)_50 Hz	Un	KVAr (II)_60 Hz	capacity	dimens. (mm) Ø x H	code	P.R.P.
1,70 kvar	230 V	2 kvar	100 µF	63,5 x 142	68217230	TO CONSULT
3,30 kvar	400 V	4 kvar	66 µF	63,5 x 105	68233400	
3,30 kvar	440 V	4 kvar	55 µF	63,5 x 142	68233440	
5 kvar	400 V	6 kvar	99 µF	63,5 x 142	68250400	
5 kvar	440 V	6 kvar	82 µF	63,5 x 142	68250440	
3,30 kvar	525 V	4 kvar	38 µF	63,5 x 142	68233525	



discharge resistor included

(*) creepage distance: 10 mm.
clearance: 16,5 mm.
expansion: max. 12 mm.

02_p.4

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"CRM" SINGLE PHASE_CYLINDRICAL

2/2

TECNICAL FEATURES

- "dual system safety"
- metalized polypropylene dielectric film
- "MKP" technology
- "self healing" properties
- internal overpressure disconnecter
- discharge resistors included
- extruded aluminium can case
- impregnation: semi-dry biodegradable resin

ELECTRICAL CHARACTERISTICS

- overvoltage : V_{max} :
- $V_r+10\%$ (≤ 8 h./day)
- $V_r+15\%$ (≤ 30 min./day)
- $V_r+20\%$ (≤ 5 min./day)
- $V_r+30\%$ (≤ 1 min./day)
- max. overcurrent I_{max} : $\leq 1,5 \times I_r$
- (included harmonics, overvoltages and capacitance)
- admissible I_{max} . (I_s) : $\leq 200 \times I_r$
- failure I_{max} . : 10000 Amp. (UL810 Standard)
- capacitance tolerance : $-5\% / +10\%$
- 50 Hz / 60 Hz
- dielectric losses $< 0,2$ W/kvar
- total losses (without discharge resistors) $< 0,45$ W/kvar
- temperature class. : -40/D
- t_{max} . : 55°C
- mean temp. max. during 24 hours : 45°C
- mean temp. max. during 1 year : 35°C
- minimum temperature : -40°C
- relat. humidity (Hrel) : 95%

MOUNTING

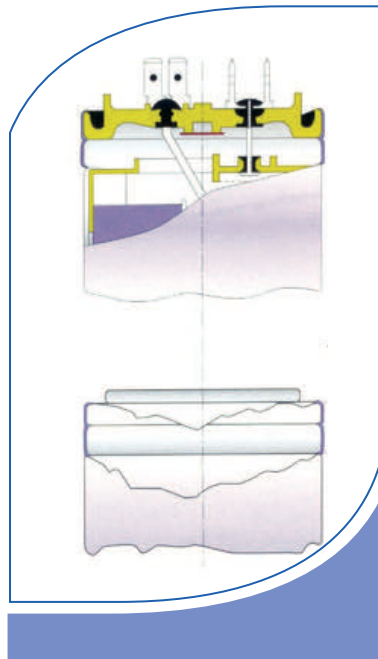
- assembly position : upright
- threaded : M12 (10 Nm)
- main plugs "fast-on" up to 5 kvar
- admissible wire section : 16 mm² ($I_{max} = 50$ Amp.)
- permissible cooling : natural or forced
- max. mounting altitude : 4000 m.a.s.l.

TEST VALUES

- test supply terminals V_{tAc_2s} = $2,15 \times V_r$
- test supply terminals/case V_{tAc_10s} = 3000 V
- switching year oper. : 5000/year (según IEC831-1/+2)
- mean life expectancy according temperature class. (TLD-Co):
- up to 135000 h. to -40/C
- up to 100000 h. to -40/D

STANDARDS

IEC 60831-1/+2
EN 60831-1/+2
GOST
UL810 (5° ed.)



02_p.5

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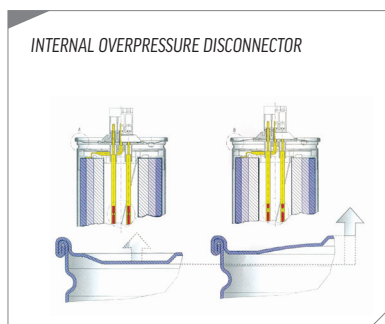
POWER FACTOR CORRECTION AND HARMONICS. SINCE 1979

“CRT” THREE PHASE_CYLINDRICAL

"CRT" THREE PHASE CYLINDRICAL

1/2

Technical Characteristics in 02_p.8



400 V

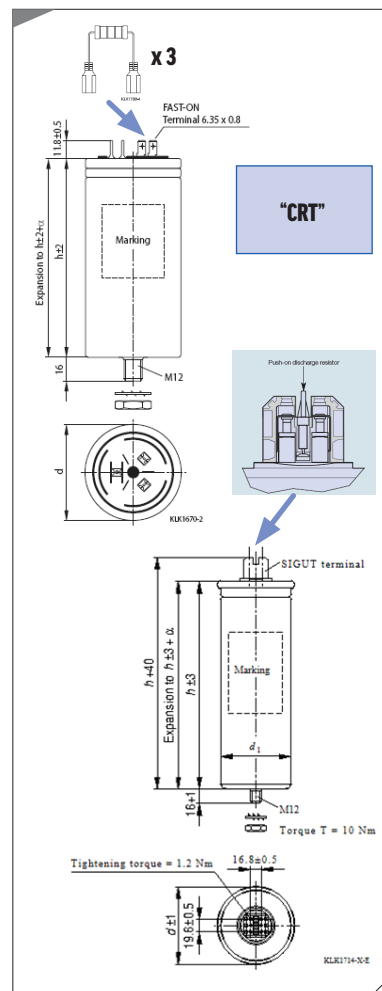
KVAr (III) 50 Hz	KVAr (III) 60 Hz	capacity	dimens. (mm) Ø x H (*)	code	P.R.P.
0,5	0,6	3 x 3,5 µF	53 x 114	68300540	TO CONSULT
1	1,2	3 x 7 µF	53 x 114	68301400	
1,5	1,8	3 x 10 µF	53 x 114	68301540	
2,5	3	3 x 17 µF	63,5 x 129	68302400	
5	6	3 x 33 µF	63,5 x 129	68305400	
7,5	9	3 x 50 µF	75 x 160	68307400	
10	12	3 x 67 µF	75 x 198	68310400	
12,5	15	3 x 83 µF	85 x 198	68312400	
15	18	3 x 100 µF	85 x 198	68315400	
20	24	3 x 133 µF	85 x 273	68320400	
25	—	3 x 166 µF	85 x 273	68325400	

440 V

KVAr (III) 50 Hz	KVAr (III) 60 Hz	capacity	dimens. (mm) Ø x H (*)	code	P.R.P.
2,5	3	3 x 14 µF	63,5 x 114	68302440	TO CONSULT
5	6	3 x 27 µF	63,5 x 154	68305440	
7,5	9	3 x 41 µF	75 x 160	68307440	
10	12	3 x 55 µF	75 x 198	68310440	
12,5	15	3 x 69 µF	85 x 198	68312440	
15	18	3 x 82 µF	85 x 273	68315440	
20	24	3 x 114 µF	85 x 273	68320440	
25	30	3 x 138 µF	85 x 348	68325440	
30	—	3 x 165 µF	85 x 348	68330440	

230 V

KVAr (III) 50 Hz	KVAr (III) 60 Hz	capacity	dimens. (mm) Ø x H (*)	code	P.R.P.
2,5	3	3 x 50 µF	75 x 138	68302230	TO CONSULT
5	6	3 x 100 µF	75 x 198	68305230	
7,5	9	3 x 150 µF	85 x 198	68307230	
10	12	3 x 200 µF	85 x 273	68310230	



discharge resistor included

(*) creepage distance: 9 ÷ 10,5 mm.
clearance: 16,5 mm.
expansion: max. 13 mm.

02_p.7

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“CRT” THREE PHASE CYLINDRICAL

TECHNICAL CHARACTERISTICS

- “dual system safety”
- metalized polypropylene dielectric film
- “MKP” technology
- “self healing” properties
- internal overpressure disconnecter
- discharge resistors included
- extruded aluminium can case
- impregnation: semi-dry biodegradable resin

ELECTRICAL CHARACTERISTICS

- overvoltage : V_{max} :
- $V_r+10\%$ (≤ 8 h./day)
- $V_r+15\%$ (≤ 30 min./day)
- $V_r+20\%$ (≤ 5 min./day)
- $V_r+30\%$ (≤ 1 min./day)
- max. overcurrent I_{max} : $\leq 1,5 \times I_r$
- (included harmonics, overvoltages and capacitance)
- admissible I_{max} . (I_s) : $\leq 200 \times I_r$
- failure I_{max} . : 10000 Amp. (UL810 Standard)
- capacitance tolerance : $-5\% / +10\%$
- 50 Hz / 60 Hz
- dielectric losses $< 0,2$ W/kvar
- total losses (without discharge resistors) $< 0,45$ W/kvar
- temperature class. : -40/D
- t_{max} . : 55°C
- mean temp. max. during 24 hours : 45°C
- mean temp. max. during 1 year : 35°C
- minimum temperature : -40°C
- relat. humidity (Hrel) : 95%

MOUNTING

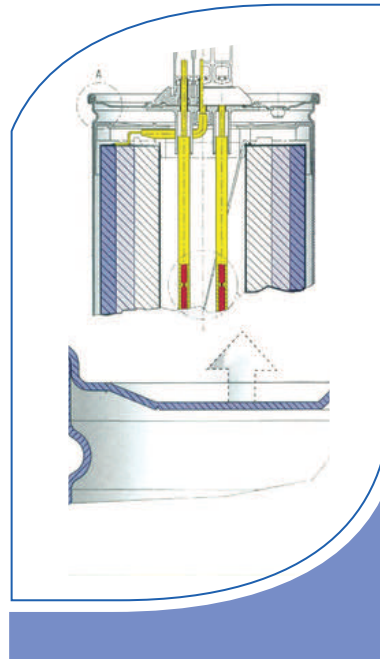
- assembly position : upright
- threaded : M8 (4 Nm) and M12 (10 Nm)
- main plugs “fast-on” up to 5 kvar
- admissible wire section : 16 mm² ($I_{max} = 50$ Amp.)
- permissible cooling : natural or forced
- max. mounting altitude : 4000 m.a.s.l.

TEST VALUES

- test supply terminals V_{tAc} 2 s. = $2,15 \times V_r$
- test supply terminals/case V_{tAc} 10 s. = 3000 V
- switching year oper. : 5000/year (según IEC831-1/+2)
- mean life expectancy according temperature class. (TLD-Co):
- up to 135000 h. to -40°C
- up to 100000 h. to -40°D

STANDARDS

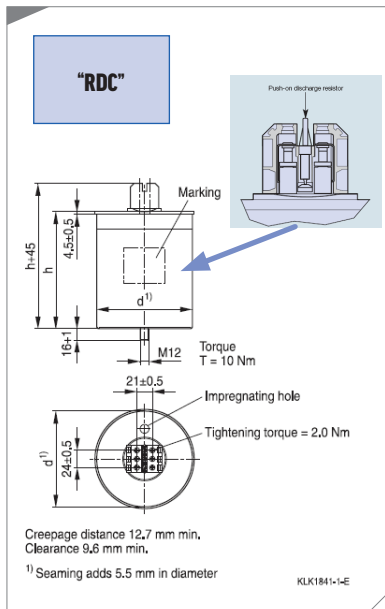
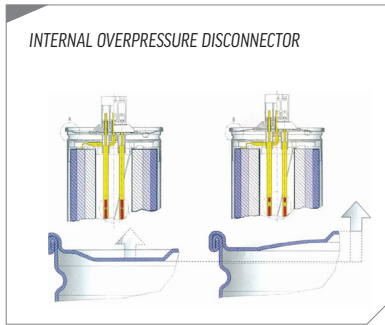
- IEC 60831-1/+2
- EN 60831-1/+2
- GOST
- UL810 (5° ed.)



“RDC” THREE PHASE_CYLINDRICAL

"RDC" THREE PHASE CYLINDRICAL

Technical Characteristics in 02_p.12



400 V

KVAr (III) 50 Hz	KVAr (III) 60 Hz	capacity	dimens. (mm) Ø x H (*)	code	P.R.P.
5	6	3 x 32 µF	116 x 164	68405400	TO CONSULT
7,5	9	3 x 50 µF	116 x 164	68407400	
10	12	3 x 64 µF	116 x 164	68410400	
12,5	15	3 x 83 µF	116 x 164	68412400	
15	18	3 x 100 µF	116 x 164	68415400	
20	24	3 x 133 µF	116 x 164	68420400	
25	—	3 x 165 µF	116 x 200	68425400	
50	—	3 x 330 µF	142 x 355	68450400	

440 V

KVAr (III) 50 Hz	KVAr (III) 60 Hz	capacity	dimens. (mm) Ø x H (*)	code	P.R.P.
5	6	3 x 27 µF	116 x 164	68405440	TO CONSULT
7,5	9	3 x 41 µF	116 x 164	68407440	
10,4	12,5	3 x 57 µF	116 x 164	68410440	
12,5	15	3 x 69 µF	116 x 164	68412440	
14,2	17	3 x 77 µF	116 x 164	68414440	
20	24	3 x 111 µF	116 x 200	68420440	
25	30	3 x 137 µF	136 x 200	68425440	
28,2	—	3 x 154 µF	136 x 200	68428440	
50	—	3 x 274 µF	136 x 355	68450440	

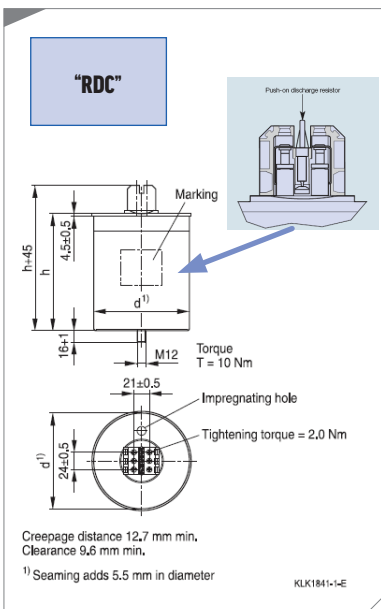
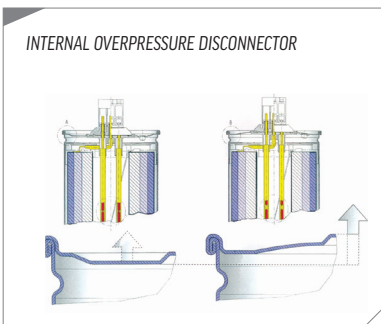
discharge resistor included

(*) creepage distance: 9 ÷ 10,5 mm.
clearance: 16,5 mm.
expansion: max. 13 mm.

“RDC” THREE PHASE CYLINDRICAL

2/3

Technical Characteristics in 02_p.12



480 V

KVAr (III) 50 Hz	KVAr (III) 60 Hz	capacity	dimens. (mm) Ø x H (\varnothing)	code	P.R.P.
16,7	20	3 x 77 μ F	116 x 200	68416480	TO CONSULT
20	24	3 x 92 μ F	116 x 200	68420480	
30	—	3 x 138 μ F	136 x 200	68430480	
33	—	3 x 152 μ F	136 x 200	68433480	

525 V

KVAr (III) 50 Hz	KVAr (III) 60 Hz	capacity	dimens. (mm) Ø x H (\varnothing)	code	P.R.P.
5	6	3 x 20 μ F	116 x 164	68405525	TO CONSULT
10	12	3 x 39 μ F	116 x 164	68410525	
12,5	15	3 x 48 μ F	116 x 164	68412525	
15	18	3 x 58 μ F	116 x 164	68415525	
20	25	3 x 77 μ F	116 x 200	68420525	
25	—	3 x 96 μ F	136 x 200	68425525	

690 V

KVAr (III) 50 Hz	KVAr (III) 60 Hz	capacity	dimens. (mm) Ø x H (\varnothing)	code	P.R.P.
5	6	3 x 11 μ F	116 x 164	68405690	TO CONSULT
10	12	3 x 23 μ F	116 x 164	68410690	
12,5	15	3 x 28 μ F	116 x 164	68412690	
15	18	3 x 34 μ F	116 x 164	68415690	
20,8	25	3 x 47 μ F	136 x 200	68420690	
25	30	3 x 56 μ F	136 x 200	68425690	

800 V

KVAr (III) 50 Hz	KVAr (III) 60 Hz	capacity	dimens. (mm) Ø x H (\varnothing)	code	P.R.P.
5	6	3 x 8 μ F	116 x 164	68405800	TO CONSULT
10	12	3 x 17 μ F	116 x 164	68410800	
12,5	15	3 x 21 μ F	116 x 164	68412800	
15	18	3 x 25 μ F	116 x 164	68415800	
20	25	3 x 33 μ F	136 x 200	68420800	
25	30	3 x 41 μ F	136 x 200	68425800	
28	33	3 x 46 μ F	136 x 200	68428400	

discharge resistor included

(*) creepage distance: 9 ÷ 10,5 mm.
clearance: 16,5 mm.
expansion: max. 13 mm.

“RDC” THREE PHASE_CYLINDRICAL

TECHNICAL CHARACTERISTICS

- triple safety system
- concentric winding
- “MKK” technology with wavy cut
- metalized polypropylene dielectric film
- “self healing” properties
- internal overpressure disconnecter
- discharge resistors included
- extruded aluminium can case
- impregnation:
- semi-dry biodegradable resin
- inert gas (N₂)

ELECTRICAL CHARACTERISTICS

- overvoltage : V_{max.} :
- Vr+10% (≤ 8 h./day)
- Vr+15% (≤ 30 min./day)
- Vr+20% (≤ 5 min./day)
- Vr+30% (≤ 1 min./day)
- max. overcurrent I_{max.} : ≤ 1,6 x I_r
- (included harmonics, overvoltages and capacitance)
- admissible I_{max.} (I_s) : ≤ 300 x I_r
- failure I_{max.} : 10000 Amp. (UL810 Standard)
- capacitance tolerance : -5% / +10%
- 50 Hz / 60 Hz
- dielectric losses < 0,2 W/kvar
- total losses (without discharge resistors) < 0,45 W/kvar
- temperature class. : -40/D
- t_{max.} : 55°C
- mean temp. max. during 24 hours : 45°C
- mean temp. max. during 1 year : 35°C
- minimum temperature : -40°C
- relat. humidity (Hrel) : 95%

MOUNTING

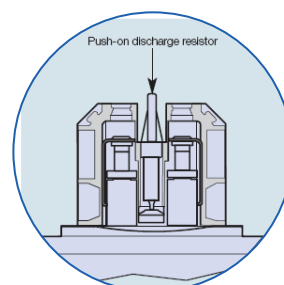
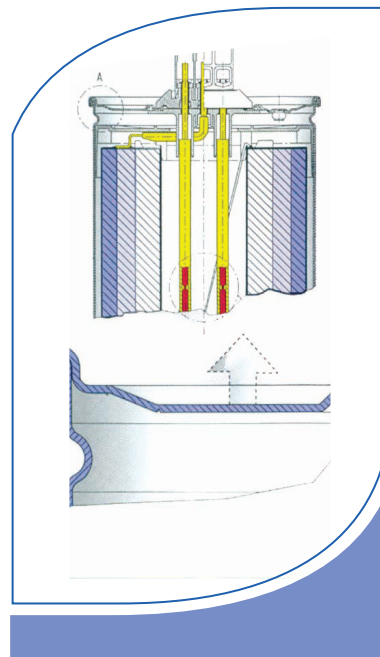
- assembly position : upright
- threaded : M12 (10 Nm)
- main plugs “fast-on” up to 5 kvar
- admissible wire section : 16 mm² (I_{max} = 50 Amp.)
- permissible cooling : natural or forced
- max. mounting altitude : 4000 m.a.s.l.

TEST VALUES

- test supply terminals V_{tAc_2 s.} = 2,15 x V_r
- test supply terminals/case :
 - V_{tAc_10 s.} = 3000 V (to V_r ≤ 660 V)
 - V_{tAc_10 s.} = 6000 V (to V_r > 660 V)
- switching year oper. : 7500/year (según IEC831-1/+2)
- mean life expectancy according temperature class. (TLD-Co):
- up to 180000 h. to -40/C
- up to 130000 h. to -40/D

STANDARDS

IEC 60831-1/+2
 EN 60831-1/+2
 GOST
 UL810 (5° ed.)



PRISMATIC IP31_THREE PHASE

PRISMATIC IP31_THREE PHASE

to direct power factor correction in motors

Technical Characteristics in 02_p.15



400 V

KVAR (III) 50 Hz	Dimens. (mm) H x A x P	Kg	code	P.R.P.
2,5	240x80x200	2,3	60024300	TO CONSULT
5	240x80x200	2,5	60054300	
7,5	240x80x200	3	60074300	
10	240x80x200	3	60104300	
12,5	240x80x200	4,5	60124300	
15	240x80x200	5	60154300	
20	300x150x240	5,5	60204300	
25	500x150x240	8,7	60254300	
30	500x150x240	9	60304300	
40	500x150x240	10	60404300	
50	700x150x240	13	60504300	
60	700x150x240	15	60604300	
80	550x300x210	14	60804300	
100	550x300x210	14,5	61004300	

525 V

KVAR (III) 50 Hz	Dimens. (mm) H x A x P	Kg	code	P.R.P.
10	240x80x200	3	60105300	TO CONSULT
20	300x150x240	5,5	60205300	
25	300x150x240	5,8	60255300	
30	500x150x240	9	60305300	
40	500x150x240	10	60405300	
50	700x150x240	13	60505300	
60	700x150x240	13,5	60605300	

440 V

KVAR (III) 50 Hz	Dimens. (mm) H x A x P	Kg	code	P.R.P.
5	240x80x200	2,5	60056300	TO CONSULT
10	240x80x200	3	60106300	
15	240x80x200	5	60156300	
20	300x150x240	5,5	60206300	
25	500x150x240	8,7	60256300	
30	500x150x240	9	60306300	
40	500x150x240	10	60406300	
50	700x150x240	13	60506300	
60	700x150x240	13,5	60606300	
80	550x300x210	14	60806300	
100	550x300x210	14,5	61006300	

230 V

KVAR (III) 50 Hz	Dimens. (mm) H x A x P	Kg	code	P.R.P.
2,5	240x80x200	2,7	60022300	TO CONSULT
5	240x80x200	3	60052300	
7,5	300x150x240	5	60072300	
10	300x150x240	5,5	60102300	
12,5	500x150x240	8,7	60122300	
15	500x150x240	9	60152300	
20	500x150x240	10	60202300	
25	700x150x240	13	60252300	
30	700x150x240	13,5	60302300	

other voltages on request:
690 V / 800 V / 1050 V (50-60 Hz)

PRISMATIC IP31_THREE PHASE

2/2

TECHNICAL CHARACTERISTICS

- Service voltage : 230 V / 400 V / 440 V
- Other voltages on request

CAPACITORS

- "CRM / CRT" (Characteristics in their specific tech. features)

MECHANICAL CHARACTERISTICS

- Metal cabinet IP31. RAL 7035
- Input wires from the top
- Mounting position : upright
- In metallic box : floor mounting
- Natural cooling

ENVIRONMENTAL CONDITIONS

- Permissible humidity without condensing : 80%
- Mean temp. during 24 h. : -5°C / +35°C
- Max. Temperature during 24 h. : 40°C
- Max. Altitude mounting : 4000 m.a.s.l.

STANDARDS

IEC60831-1+2
2006/95/CE / 2004/108/CE
IEC 61921
IEC 61439-1/2



PRISMATIC IP31_THREE PHASE WITH ADDITIONAL PROTECTION

PRISMATIC IP31_THREE PHASE WITH ADDITIONAL PROTECTION

1/3

to direct power factor correction

Technical Characteristics in 02_p.19



with "HRC" FUSES

400 V

KVAr (III) 50 Hz	dimens. (mm) H x A x P	Kg	code	P.R.P.
5	300x150x240	4,4	60054301	TO CONSULT
7,5	300x150x240	4,5	60074301	
10	300x150x240	4,6	60104301	
12,5	300x150x240	4,7	60124301	
15	300x150x240	5,2	60154301	
20	300x150x240	5,7	60204301	
25	500x150x240	8,9	60254301	
30	500x150x240	9,2	60304301	
40	500x150x240	10,2	60404301	
50	550x300x210	13,5	60504301	
60	550x300x210	13,7	60604301	
80	550x300x210	14,4	60804301	
100	550x300x210	14,5	61004301	

440 V

KVAr (III) 50 Hz	dimens. (mm) H x A x P	Kg	code	P.R.P.
5	300x150x240	4,4	60056301	TO CONSULT
7,5	300x150x240	4,5	60076301	
10	300x150x240	4,6	60106301	
12,5	300x150x240	4,7	60126301	
15	300x150x240	5,2	60156301	
20	300x150x240	5,7	60206301	
25	500x150x240	8,9	60256301	
30	500x150x240	9,2	60306301	
40	500x150x240	10,2	60406301	
50	550x300x210	13,5	60506301	
60	550x300x210	13,7	60606301	
80	550x300x210	14,4	60806301	
100	550x300x210	14,5	61006301	

other voltages on request

02_p.17

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POWER FACTOR CORRECTION AND HARMONICS. SINCE 1979

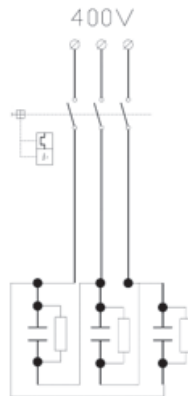
c/. Coboalto, 110 - 08907 Hospitalet de Llobregat (Barcelona - Spain) - tel. +(34) 933 378 264 - fax +(34) 933 378 169 - cisarbcn@cisar.es - WWW.CISAR.ES - CONDENSADORES INDUSTRIALES, S.L.

PRISMATIC IP31_THREE PHASE WITH ADDITIONAL PROTECTION

2/3

to direct power factor correction

Technical Characteristics in 02_p.19



with aut. circuit breaker (6 kA)

400 V

KVAr (III) 50 Hz	Dimens. (mm) H x A x P	Kg	code	P.R.P.
5	300x150x240	4,6	60054302	TO CONSULT
7,5	300x150x240	4,65	60074302	
10	300x150x240	4,7	60104302	
12,5	300x150x240	4,8	60124302	
15	300x150x240	5,3	60154302	
20	300x150x240	5,8	60206302	
25	500x150x240	9	60254302	
30	500x150x240	9,3	60304302	
40	500x150x240	10,3	60404302	

440 V

KVAr (III) 50 Hz	Dimens. (mm) H x A x P	Kg	code	P.R.P.
5	300x150x240	4,6	60056302	TO CONSULT
7,5	300x150x240	4,65	60076302	
10	300x150x240	4,7	60106302	
12,5	300x150x240	4,8	60126302	
15	300x150x240	5,3	60156302	
20	300x150x240	5,8	60206302	
25	500x150x240	9	60256302	
30	500x150x240	9,3	60306302	
40	500x150x240	10,3	60406302	

con Interruptor automático "APC" / with "HRC" aut. circuit breaker / avec disjoncteur aut. "HPC" (35 kA)

400 V

KVAr (III) 50 Hz	Dimens. (mm) H x A x P	Kg	code	P.R.P.
30	550x300x210	9,5	60304303	TO CONSULT
40	550x300x210	10,5	60404303	
50	550x300x210	13,8	60504303	
60	550x300x210	14	60604303	
80	550x300x210	14,8	60804303	
100	550x300x210	15	61004303	

440 V

KVAr (III) 50 Hz	Dimens. (mm) H x A x P	Kg	code	P.R.P.
30	550x300x210	9,5	60306303	TO CONSULT
40	550x300x210	10,5	60406303	
50	550x300x210	13,8	60506303	
60	550x300x210	14	60606303	
80	550x300x210	14,8	60806303	
100	550x300x210	15	61006303	

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other voltages on request

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PRISMATIC IP31_THREE PHASE WITH ADDITIONAL PROTECTION

3/3

TECHNICAL CHARACTERISTICS

- Service voltage : 230 V / 400 V / 440 V
- Other voltages on request

CAPACITORS

- "CRM / CRT" (Characteristics in their specific tech. features)

PROTECTIONS to CHOOSE

- Fuses : "HRC" (high rupturing capacity)
- Aut. circuit breaker with 6 kA rupturing capacity
- Aut. circuit breaker with 35 kA rupturing capacity

MECHANICAL CHARACTERISTICS

- Metal cabinet IP31. RAL 7035
- Input wires from the top
- Mounting position : upright
- In metallic box : floor mounting
- Natural cooling

ENVIRONMENTAL CONDITIONS

- Permissible humidity without condensing : 80%
- Mean temp. during 24 h. : -5°C / +35°C
- Max. Temperature during 24 h.: 40°C
- Max. Altitude mounting : 4000 m.a.s.l.

STANDARDS

IEC60831-1+2
2006/95/CE / 2004/108/CE
IEC 61921
IEC 61439-1/2



MURAL SERIES IP31_THREE PHASE WITH ADDITIONAL PROTECTION

MURAL SERIES IP31_THREE PHASE WITH ADDITIONAL PROTECTION 1/3

to direct power factor correction

Technical Characteristics in 02_p.23

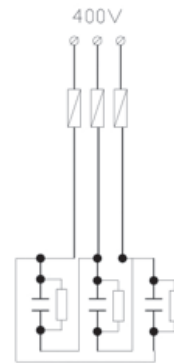
with "HRC" FUSES

400 V

KVAR (III) 50 Hz	Dimens. (mm) H x A x P	Kg	code	P.R.P.
10	450 x 264 x 150	5,7	31010400	TO CONSULT
12,5		5,9	31012400	
15		6,1	31015400	
20		6,2	31020400	
25		6,5	31025400	

230 V

KVAR (III) 50 Hz	Dimens. (mm) H x A x P	Kg	code	P.R.P.
5	450 x 264 x 150	5,7	31005200	TO CONSULT
7,5		6,1	31007200	
10		6,2	31010200	



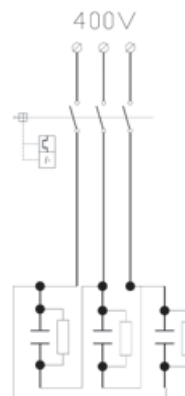
with automatic circuit breaker (p.c. = 6 kA)

400 V

KVAR (III) 50 Hz	Dimens. (mm) H x A x P	Kg	code	P.R.P.
10	450 x 264 x 150	7,1	33010400	TO CONSULT
12,5		7,3	33012400	
15		7,4	33015400	
20		7,5	33020400	
25		7,6	33025400	

230 V

KVAR (III) 50 Hz	Dimens. (mm) H x A x P	Kg	code	P.R.P.
5	450 x 264 x 150	7	33005200	TO CONSULT
7,5		7,2	33007200	
10		7,3	33010200	



other voltages on request

02_p.21

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MURAL SERIES IP31_THREE PHASE WITH ADDITIONAL PROTECTION 2/3

to direct power factor correction

Technical Characteristics in O2_p.23

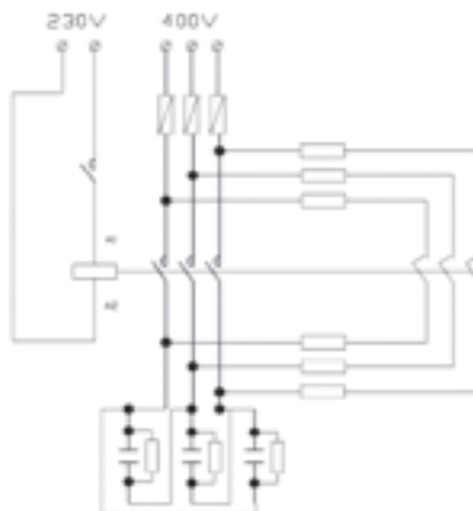
with automatic circuit breaker + contactor

400 V

KVAR (III) 50 Hz	Dimens. (mm) H x A x P	Kg	code	P.R.P.
10	450 x 264 x 150	5,7	34010400	TO CONSULT
12,5		5,9	34012400	
15		6,1	34015400	
20		6,2	34020400	
25		6,5	34025400	

230 V

KVAR (III) 50 Hz	Dimens. (mm) H x A x P	Kg	code	P.R.P.
5	450 x 264 x 150	5,7	34005200	TO CONSULT
7,5		6,1	34007200	
10		6,2	34010200	



other voltages on request

MURAL SERIES IP31_THREE PHASE WITH ADDITIONAL PROTECTION 3/3

TECHNICAL CHARACTERISTICS

- Service voltage : 230 V / 400 V / 440 V
- Other voltages on request

CAPACITORS

- "CRM / CRT" (Characteristics in their specific tech. features)

CONTACTORS

- special class_Ac6b
- inrush current damping resistors
- aux. rated voltage : 230 Vac
- UL 224924 Cert.

PROTECTIONS to CHOOSE

- Fuses : "HRC" (high rupturing capacity)
- Automatic circuit breaker (RC : 6 kA)
- Aut. circuit breaker 6 kA rc + contactor

MECHANICAL CHARACTERISTICS

- Metal cabinet IP31. RAL 7035
- Input wires from the top
- Mounting position : upright
- Natural cooling

ENVIRONMENTAL CONDITIONS

- Permissible humidity without condensing : 80%
- Mean temp. during 24 h. : -5°C / +35°C
- Max. Temperature during 24 h. : 40°C
- Max. Altitude mounting : 4000 m.a.s.l.

STANDARDS

IEC60831-1+2
2006/95/CE / 2004/108/CE
IEC 61921
IEC 61439-1/2



WITH DETUNED REACTOR (>5TH HARMONIC)

WITH DETUNED REACTOR (>5TH HARMONIC)

1/2

To "fixed" compensation in electric networks with high level of harmonic distortion

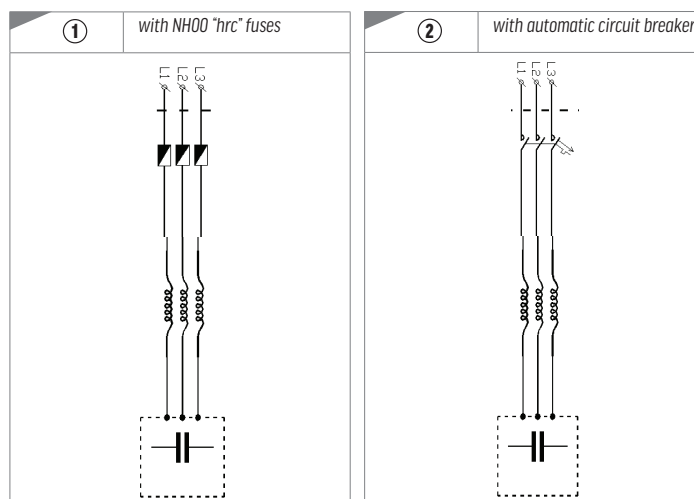
ThdI>10% ThdU≤6% (1) p=7%

with a detuned reactor to block above the 5th harmonic value

Technical Characteristics in 02_p.26



KVAr/440 V (50 Hz)	KVAr/400 V (50 Hz)	dimens. (mm) H x A x P	kg	code ①	P.R.P ①	code ②	P.R.P. ②
7,5	6,25	1110 x 500 x 400	45	1953007440	969 €	1953007442	
15	12,5		47	1953015440	1.085 €	1953015442	
30	25		59	1953030440	1.291 €	1953030442	
45	37,5		71	1953045440	1.794 €	1953045442	
60	50		81	1953060440	1.897 €	1953060442	
90	75		82	1953090440	2.398 €	1953090442	
120	100		84	1953120440	2.765 €	1953120442	
150	125		89	1953150440	3.410 €	1953150442	



(1) p=7%
that avoid harmonic amplifications above 189 Hz

Power capacitors with detuned filters up to 3th harmonic value : on request

02_p.25

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WITH DETUNED REACTOR (>5TH HARMONIC)

TECHNICAL CHARACTERISTICS

- Service voltage : 440 V

CAPACITORS

- "RDC" reinforced at 480 V (characteristics in their specific tech. features)

PROTECTIONS to CHOOSE

- Fuses : NH00 "HRC" (high rupturing capacity)
- Aut. circuit breaker with 35 kA rupturing capacity

III PHASE DETUNED REACTORS

- ThdU ≤ 6%_ThdI > 10%_p = 7% (189 Hz)

MECHANICAL CHARACTERISTICS

- Metal cabinet IP31. RAL 7035
- Input wires from the top
- Mounting position : upright
- Natural cooling

ENVIRONMENTAL CONDITIONS

- Permissible humidity without condensing : 80%
- Mean temp. during 24 h. : -5°C / +35°C
- Max. Temperature during 24 h. : 40°C
- Max. Altitude mounting : 4000 m.a.s.l.

STANDARDS

IEC60831-1+2
2006/95/CE / 2004/108/CE
IEC 61921
IEC 61439-1/2



“GENERAL TERMS OF SALE”

GENERAL TERMS OF SALE

PRICES

- Prices will be negotiated with each specific Customer.
- Transport costs will be indicated on an invoice-proforma with the price of materials.
- Products are packed up for ground transport. Maritime or air packaging has to be consulted.
- CONDENSADORES INDUSTRIALES, S.L. reserves to himself the right to modify the characteristics of its products whenever it deems appropriate. All the modifications will be based on justifiable technical reasons.

PAYMENT FORM

- It has to be dealt with the Customer.
- Interests and bank charges, due to delays in payment, have to be paid by the Customer.

GUARANTEE

- Our products are guaranteed against manufacturing defects for two years since invoice date.
- The guarantee conditions and exclusions are described in technical manual. Use and maintenance tips are also describe there.
- CONDENSADORES INDUSTRIALES, S.L. does not take responsibility for personal or material damages arising from a misuse or an incorrect installation.
- If there is any incident during the transport or the unloading of the product, the Customer must report to CONDENSADORES INDUSTRIALES, S.L. the problems in writing within 24 hours after incident. It must be attached photographs in this report.

RETURNS POLICY

- Returns are not accepted without a prior communication and authorization to/from CONDENSADORES INDUSTRIALES, S.L.
- If there is any payment for the returned material it will be determined after being examined in our workshop.
- Special products cannot be returned.
- Shipping costs to CONDENSADORES INDUSTRIALES, S.L. will always be paid by the Customer.
- Any product return must be communicate within 15 days of the date of receipt. Returns are not accepted after this period.
- Any product returned have a demerit of 10% of the invoiced amount, regardless of their state of use.
- For defective materials, our liability is limited to the replacement or repair thereof in the established product warranty terms.

PROPERTY SECURE

- Materials submitted are property of CONDENSADORES INDUSTRIALES, S.L. until the Customer has paid the full amount of them.
- CONDENSADORES INDUSTRIALES, S.L. reserves to himself the right to recover the material in case of Customer's non-payment.
- Any conflict or divergence that might arise, shall be settled by the Courts of L'Hospitalet de Llobregat (Barcelona-Spain).



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POWER FACTOR CONTROLLERS

HARMONICS ANALYZERS (fixed and hand-held)

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