



## INTACT - Power Factor Correction Capacitors

New, excellent quality PFC capacitors.

The **INTACT** series capacitors approved\* by VDE Testing and Certification Institute and designed according to the latest standards DIN EN 60831-1 (VDE 0560-46):2014-11; EN 60831-1:2014.

### Type Test Specifications:

- |   |  |
|---|--|
| <input checked="" type="checkbox"/> Capacitance and tan $\delta$ measurement.                 | <input checked="" type="checkbox"/> Discharge test.    |
| <input checked="" type="checkbox"/> Thermal stability test.                                   | <input checked="" type="checkbox"/> Ageing test.       |
| <input checked="" type="checkbox"/> Voltage test between terminals.                           | <input checked="" type="checkbox"/> Self-healing test. |
| <input checked="" type="checkbox"/> Lightning impulse voltage test between terminal and case. | <input checked="" type="checkbox"/> Destruction test.  |

**INTACT** capacitors are safe, reliable, high-performance and flexible solution for power factor correction in stringent operating conditions to maximise your savings.

Rated Voltage and frequency: from 230 V up to 1000 V\* @50/60Hz.

Power Range: from 5 kVar up to 62,5 kVar\*.

### Some Highlights

- High operating temperature up to 55 °C.
- Power ratings up to 62,5 kVar in single can and compactness across the range to reduce your cubicle space up to 40%.
- Flexibility in Vertical and horizontal mounting.
- Security with combined safety concept of a self-healing effect and all-phase internal overpressure disconnecter.
- Metallized polypropylene film with wave cut and heavy edge technology to handle over current conditions in harsh environments.
- Slope metallization profile for higher thermal efficiency, lower temperature rise and enhanced life expectancy.
- Specially formulated gel resin to increase the mechanical stability of capacitor elements, ensure better cooling and extended life.
- Designed for high performance in harsh environment to ensure 30% extended life compared to standard capacitors.
- Over current handling (including harmonics) up to 2.0 x In.
- Life expectancy 200000 h.\*\* under normal conditions.
- Including compact discharge resistor.
- Fingerproof Terminal.

\*VDE approved: from 7,5 kVAR up to 30kVAR – 440V-50Hz  
from 9 kVAR up to 36 kVAR – 440V-60Hz  
For more informations check next page.


\*\*max. ambient temperature: 55°C.  
highest average over 24 hours: 45°C.  
highest average over 1 year: 35°C  
The maximum life expectancy may vary depending on the application and temperature class the capacitors used in.


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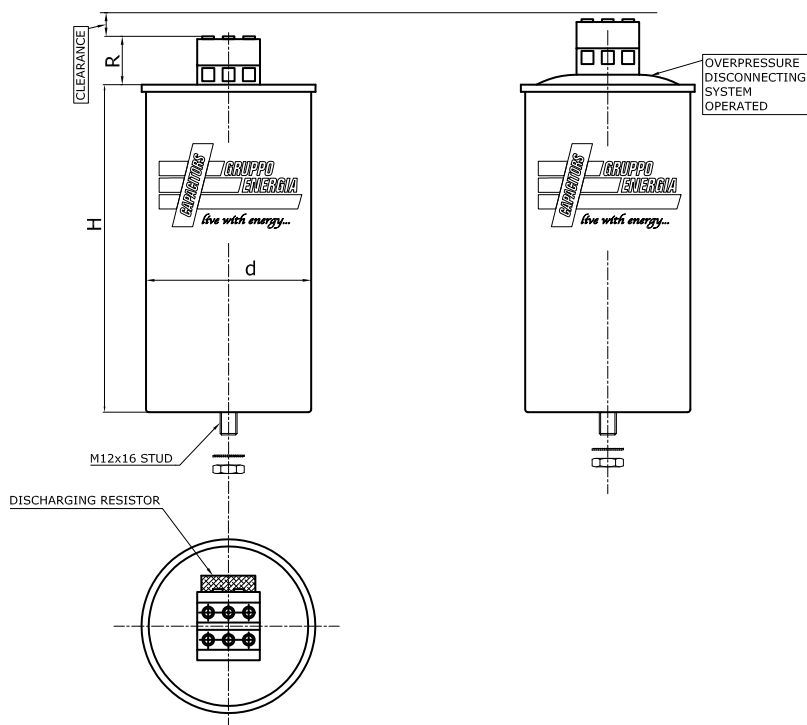


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 REG.-Nr F165 ORDERING CODE	Nominal Power @50 HZ	Nominal Voltage	Nominal Current	Power At Different System Voltage						Rated Capacitance	Dimensions
	kVar	V	A	220 V	240 V	280 V	380 V	400 V	415 V	3 x $\mu$ F	d x H
				kVar	kVar	kVar	kVar	kVar	kVar		mm.
3PF7,5.440INA167	7,5	440	9,8	1,9	2,2	3,0	5,6	6,2	6,7	41,1	$\varnothing$ 85 x 185
3PF8,3.440INA167	8,3	440	10,9	2,1	2,5	3,4	6,2	6,9	7,4	45,5	$\varnothing$ 75 x 225
3PF9.440INA167	9,0	440	11,8	2,2	2,7	3,6	6,7	7,4	8,0	49,3	$\varnothing$ 75 x 225
3PF10.440INA167	10,0	440	13,1	2,5	3,0	4,0	7,5	8,3	8,9	54,8	$\varnothing$ 85 x 225
3PF12,5.440INA257	12,5	440	16,4	3,1	3,7	5,1	9,3	10,3	11,1	68,5	$\varnothing$ 100 x 225
3PF14,2.440INA257	14,2	440	18,6	3,5	4,2	5,7	10,6	11,7	12,6	77,8	$\varnothing$ 100 x 225
3PF15.440INA257	15,0	440	19,7	3,7	4,5	6,1	11,2	12,4	13,3	82,2	$\varnothing$ 116 x 225
3PF18,2.440INA257	18,2	440	23,9	4,5	5,4	7,4	13,6	15,0	16,2	99,7	$\varnothing$ 116 x 225
3PF20.440INA257	20,0	440	26,2	5,0	5,9	8,1	14,9	16,5	17,8	109,6	$\varnothing$ 116 x 225
3PF23,8.440INA257	23,8	440	31,2	5,9	7,1	9,6	17,7	19,7	21,2	130,4	$\varnothing$ 136 x 225
3PF25.440INA257	25,0	440	32,8	6,2	7,4	10,1	18,6	20,6	22,2	137,0	$\varnothing$ 136 x 225
3PF28,1.440INA257	28,1	440	36,9	7,0	8,4	11,4	20,9	23,2	25,0	154,0	$\varnothing$ 136 x 225
3PF30.440INA257	30,0	440	39,3	7,5	8,9	12,1	22,4	24,8	26,7	164,4	$\varnothing$ 136 x 225

 REG.-Nr F165 ORDERING CODE	Nominal Power @60 HZ	Nominal Voltage	Nominal Current	Power At Different System Voltage						Rated Capacitance	Dimensions
	kVar	V	A	220 V	240 V	280 V	380 V	400 V	415 V	3 x $\mu$ F	d x H
				kVar	kVar	kVar	kVar	kVar	kVar		mm.
3PF9.440INB167	9,0	440	11,8	2,2	2,7	3,6	6,7	7,4	8,0	41,1	$\varnothing$ 85 x 185
3PF10.440INB167	10,0	440	13,1	2,5	3,0	4,0	7,4	8,2	8,9	45,5	$\varnothing$ 75 x 225
3PF10,8.440INB167	10,8	440	14,2	2,7	3,2	4,4	8,1	8,9	9,6	49,3	$\varnothing$ 75 x 225
3PF12.440INB167	12,0	440	15,7	3,0	3,6	4,9	8,9	9,9	10,7	54,8	$\varnothing$ 85 x 225
3PF15.440INB257	15,0	440	19,7	3,7	4,5	6,1	11,2	12,4	13,3	68,5	$\varnothing$ 100 x 225
3PF17.440INB257	17,0	440	22,3	4,3	5,1	6,9	12,7	14,1	15,2	77,8	$\varnothing$ 100 x 225
3PF18.440INB257	18,0	440	23,6	4,5	5,4	7,3	13,4	14,9	16,0	82,2	$\varnothing$ 116 x 225
3PF21,8.440INB257	21,8	440	28,6	5,5	6,5	8,8	16,3	18,0	19,4	99,7	$\varnothing$ 116 x 225
3PF24.440INB257	24,0	440	31,5	6,0	7,1	9,7	17,9	19,8	21,3	109,6	$\varnothing$ 116 x 225
3PF28,5.440INB257	28,5	440	37,5	7,1	8,5	11,6	21,3	23,6	25,4	130,4	$\varnothing$ 136 x 225
3PF30.440INB257	30,0	440	39,3	7,5	8,9	12,1	22,4	24,8	26,7	137,0	$\varnothing$ 136 x 225
3PF33,7.440INB257	33,7	440	44,2	8,4	10,0	13,6	25,1	27,9	30,0	154,0	$\varnothing$ 136 x 225
3PF36.440INB257	36,0	440	47,2	9,0	10,7	14,6	26,8	29,7	32,0	164,4	$\varnothing$ 136 x 225



## Mechanical characteristics

### Case

- Expansion: maximum 12 mm.
- Clearance: minimum 13 mm.

### Mounting

- M12 threaded bolts
- Tightening torque:  $T = 10 \text{ Nm}$
- Thoothed washer: DIN 6798
- Hexagonal nut: M12 DIN 936

### Terminal

- Fingerproof terminal: YES.
- $d \varnothing 100/\varnothing 116/\varnothing 136$  (25 mm<sup>2</sup>)
  - M5 terminal screw.
  - Tightening torque  $T = 2,5 \text{ Nm}$ .
  - $R = 33 \pm 2 \text{ mm}$ .
- $d \varnothing 75/\varnothing 85$  (16 mm<sup>2</sup>)
  - M4 terminal screw.
  - Tightening torque  $T = 1,3 \text{ Nm}$ .
  - $R = 33 \pm 2 \text{ mm}$ .