



INTACT BASE RCM-INB-3: Capacitors designed to be used in standard conditions when there aren't any significant non-linear loads.

NLL < 10%

INTACT PLUS (Heavy Duty) RCM-INP-3: Capacitors for working in difficult conditions, resistant to voltage overloads or when the limited quantity of non-linear loads are installed.

Particularity – largely increased current resistance.

NLL < 20%

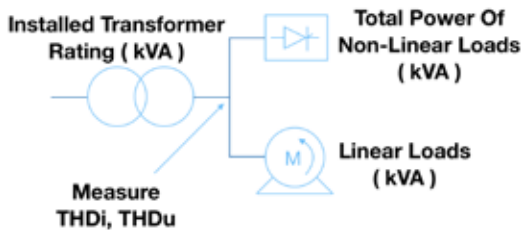
INTACT ALLPOWER (Extra Heavy Duty) RCM-INA-3: Highly reliable capacitors for operating in harsh environments or with a significant level of non-linear loads. Resistant to high overloads in current and voltage. Intact ALLPOWER is also resistant to high temperatures.

NLL < 25%

INTACT R-POWER RCM-INR-3: Capacitors to be used with detuned harmonic reactor. This is the optimal solution for reactive power compensation in networks where there is a significant quantity of non-linear loads, therefore the use of reactors is mandatory.

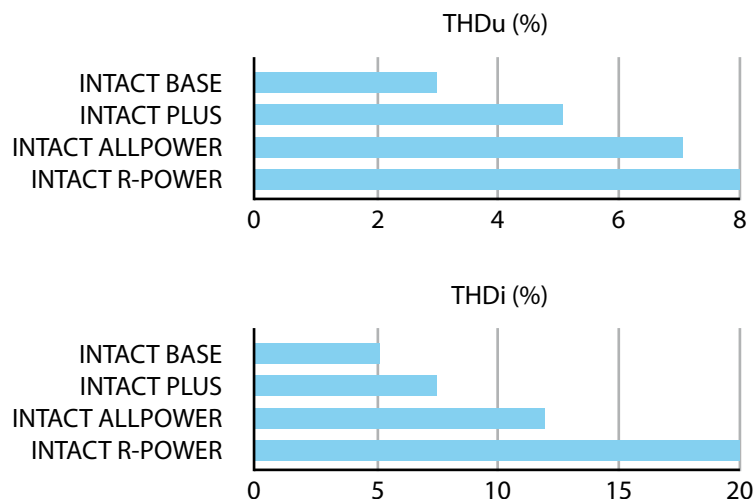
NLL < 30%

CAPACITORS SELECTION TAKING IN MIND LEVEL OF HARMONICS



As said before the percentage of non-linear loads NLL is a very important indicator of magnitude of harmonics but a more detailed estimation of the magnitude of harmonics can be made with measurements.

Significant indicators are current harmonic distortion THDi and voltage harmonic distortion THDu. Both values must be measured at the transformer secondary without connected capacitors. According to the measured distortion, different technologies of capacitors shall be selected.



Note:

The capacitor type should be selected according to the most restrictive measurement. For Example, a measurement is giving the following results:

- THDi = 14,0%
- THDu = 4,0%

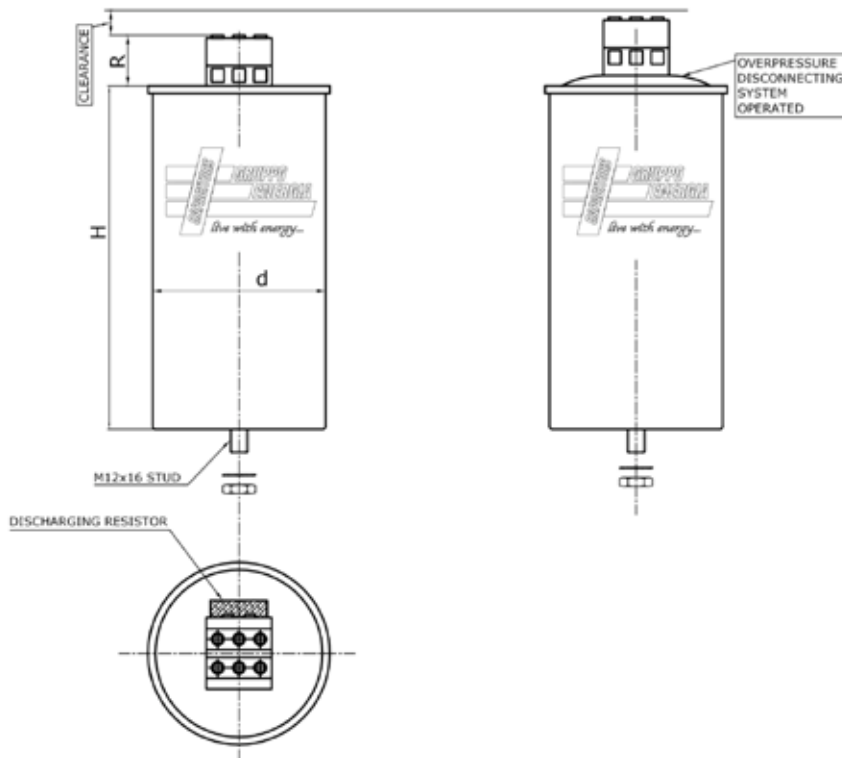
INTACT R-POWER with Detuned Reactor has to be selected.

Capacitor Family	Type	Applications	Max. Conditions
Intact Base RCM - INB - 3	Standard Capacitor	<ul style="list-style-type: none"> • Networks with non significant non-linear loads • Standard over-current • Standard operating temperature • Normal switching frequency • Standard life expectancy 	<ul style="list-style-type: none"> • NLL < 10% • 1,5 In • 55 °C • 5000 / year • Up to 100000 h*
Intact Plus RCM - INP - 3	Heavy Duty Capacitor	<ul style="list-style-type: none"> • Few non-linear loads • Significant over-current • High operating temperature • Significant switching frequency • Long life expectancy 	<ul style="list-style-type: none"> • NLL < 20% • 1,8 In • 60 °C • 7000 / year • Up to 160000 h*
Intact AllPower RCM - INA - 3	Extra Heavy Duty Capacitor	<ul style="list-style-type: none"> • Significant number of non-linear loads (up to 25%) • Significant over-current • Extreme temperature conditions • Frequent switching frequency • Extra long life expectancy 	<ul style="list-style-type: none"> • NLL < 25% • 2,5 In • 60 °C • 10000 / year • Up to 180000 h*
Intact R-Power + Detuned Harmonic Reactor RCM - INR - 3	Capacitor For Critical Applications	<ul style="list-style-type: none"> • High level of non-linear loads (up to 30%) • Significant over-current • Standard operating temperature • Significant switching frequency • Long life expectancy 	<ul style="list-style-type: none"> • NLL < 30% • 1,5 In • 55 °C • 7000 / year • Up to 160000 h*

Advise For You:

It is highly recommended to do harmonic study and detailed load study before selecting the capacitor family. For more informations don't hesitate to contact Gruppo Energia team.

CONSTRUCTION DIAGRAM



CASE

- Expansion: Maximum 12 mm.
- Clearance: Minimum 15 mm.

MOUNTING

- M12 threaded bolt
- Tightening torque: T= 10 Nm.
- Toothed washer: DIN 6789.
- Hexagonal nut: DIN 439.

TERMINALS

- Finger-proof terminal: Yes.
- **MT 16**
 - For 16 mmq cable.
 - M4 terminal screw.
 - Tightening torque: T= 1,3 Nm
 - R = 33 ±2
- **MT 25**
 - For 25 mmq cable.
 - M5 terminal screw.
 - Tightening torque: T= 2,5 Nm
 - R = 33 ±2
- **MT 35**
 - For 35 mmq cable.
 - M5 terminal screw.
 - Tightening torque: T= 3,0 Nm
 - R = 43 ±2

* The maximum life expectancy is given considering standard operating conditions as rated voltage (Un), rated current (In), 35 °C ambient temperature.

* Attention: The life expectancy will be reduced if capacitors are used at maximum working conditions.

TECHNICAL CHARACTERISTICS INTACT BASE RCM-INB

General

Standards:	IEC 60831-1:2014, UL810, VDE 0560-46:2014-11
Origin:	100% made in Italy
Voltage range:	220 V to 690 V
Frequency:	50 Hz / 60 Hz
Power range:	1 kVar to 62,5 kVar
Dielectric losses:	< 0,2 W/kVar
Total losses:	< 0,5 W/kVar
Capacitance tolerance:	± 5%
Voltage test between terminals:	2,15 Un, 50 Hz, 10 seconds (routine test)
Voltage test between terminals:	3,00 Un, 50 Hz, 60 seconds (type test)
Voltage test terminal / case:	≤ 525 V 3000 V, 50 Hz for 10 seconds or > 525 V 3660 V, 50 Hz for 10 seconds
Insulation level:	3 / 8 kV
External discharge resistor:	50 V in 1 min. 1 kVar - 30 kVar or 75 V in 3 min. 30,5 kVar - 62,5 kVar
Cooling:	Natural air or forced ventilation

Operating Conditions

Ambient temperature:	-25 °C / 55 °C
Humidity:	up to 95%
Altitude above sea level:	2000 m.
Overvoltage:	Un+10% for 8 hrs. daily Un+15% for 30 min. daily Un+20% for 5 min. daily Un+30% for 1 min. daily
Overcurrent:	up to 1,5 x In (Including Harmonics)
Inrush current:	up to 180 x In
Service life:	up to 100.000 hrs.
Harmonic presence:	NLL < 10%

Safety Features

Safety:	Overpressure disconnecter on 3 phase + Incorporated fuses + Self-healing + Discharge device
Protection degree:	IP20

Construction

Casing:	Aluminium can
Dielectric:	Polypropylene film with slope metallisation and wave-cut
Impregnation:	Polyurethane resin, Non-PCB

Installation

Mounting position:	Vertical preferable for better cooling
Fastening & Earthing:	Through 1 point, screw M12 at the bottom

RCM-INB CAPACITOR RATED VOLTAGE 400 V / 415 V - 3 PHASE - 50 Hz / 60 Hz

POWER AT SYSTEM VOLTAGE 50 Hz		POWER AT SYSTEM VOLTAGE 60 Hz		In 50 Hz CURRENT		In 60 Hz CURRENT		RATED CAPACITANCE	AVAILABLE DIMENSIONS*			TERMINAL TYPE	PCS/BOX	PCS/BOX	PCS/BOX
400 V kVar	415 V kVar	400 V kVar	415 V kVar	400 V A	415 V A	400 V A	415 V A	3 x μ F	ϕ x H (7)	ϕ x H (8)	ϕ x H (9)	mmq	ϕ 85	ϕ 100 ϕ 116	ϕ 136
2,5	2,7	3,0	3,2	3,6	3,7	4,3	4,5	16,6	85 x 130	85 x 185	-	MT 16	9	-	-
5	5,4	6,0	6,5	7	7,5	8,7	9,0	33,2	85 x 130	85 x 185	-	MT 16	9	-	-
6,25	6,72	7,5	8,1	9,02	9,34	10,8	11,2	41,4	85 x 130	85 x 185	-	MT 16	9	-	-
10	10,8	12,0	12,9	14	15,0	17,3	18,0	66,3	85 x 225	-	-	MT 16	9	-	-
12,5	13,4	15,0	16,1	18,0	18,7	21,6	22,5	82,9	85 x 225	-	-	MT 16	9	-	-
15	16,1	18,0	19,4	22	22,5	26,0	26,9	99,5	100 x 225	85 x 260	-	MT 25/16	9	5	-
20	21,5	24,0	25,8	29	29,9	34,6	35,9	132,6	116 x 225	100 x 260	85 x 285	MT 25	9	5	-
25	26,9	30,0	32,3	36	37,4	43,3	44,9	165,8	116 x 225	-	100 x 300	MT 25	-	5	-
30	32,3	36,0	38,7	43	44,9	51,9	53,9	198,9	136 x 225	116 x 260	116 x 285	MT 25	-	5	4
40	43,0	48,0	51,6	58	59,9	69,3	71,9	265,3	116 x 285	-	-	MT 25	-	5	-
50	53,8	60,0	64,6	72	74,8	86,6	89,8	331,6	136 x 300	-	-	MT 35	-	-	4
62,5	67,3	-	-	90,2	93,6	-	-	414,6	136 x 375	-	-	MT 35	-	-	2

RCM-INB CAPACITOR RATED VOLTAGE 440 V / 450 V - 3 PHASE - 50 Hz / 60 Hz

POWER AT SYSTEM VOLTAGE 50 Hz		POWER AT SYSTEM VOLTAGE 60 Hz		In 50 Hz CURRENT		In 60 Hz CURRENT		RATED CAPACITANCE	AVAILABLE DIMENSIONS*			TERMINAL TYPE	PCS/BOX	PCS/BOX	PCS/BOX
440 V kVar	450 V kVar	440 V kVar	450 V kVar	440 V A	450 V A	440 V A	450 V A	3 x μ F	ϕ x H (7)	ϕ x H (8)	ϕ x H (9)	mmq	ϕ 85	ϕ 100 ϕ 116	ϕ 136
2,5	2,6	3,0	3,1	3,3	3,4	3,9	4,0	13,7	85 x 130	85 x 185	-	MT 16	9	-	-
5	5,2	6,0	6,3	7	6,7	7,9	8,0	27,4	85 x 130	85 x 185	-	MT 16	9	-	-
6,25	6,5	7,5	7,9	8,20	8,4	9,8	10,1	34,3	85 x 130	85 x 185	-	MT 16	9	-	-
10	10,5	12,0	12,5	13	13,4	15,7	16,1	54,8	85 x 225	85 x 185	-	MT 16	9	-	-
12,5	13,1	15,0	15,7	16,4	16,8	19,7	20,1	68,5	85 x 225	-	-	MT 16	9	-	-
15	15,7	18,0	18,8	20	20,1	23,6	24,1	82,2	100 x 225	85 x 260	-	MT 25 / 16	9	5	-
20	20,9	24,0	25,1	26	26,8	31,5	32,2	109,6	116 x 225	100 x 260	85 x 285	MT 25	9	5	-
25	26,1	30,0	31,4	33	33,5	39,3	40,2	137	116 x 225	-	100 x 300	MT 25	-	5	-
30	31,4	36,0	37,6	39	40,2	47,2	48,3	164,4	136 x 225	116 x 260	100 x 300	MT 25	-	5	4
40	41,8	48,0	50,2	52	53,6	62,9	64,4	219,2	116 x 285	-	-	MT 25	-	5	-
50	52,3	60,0	62,7	66	67,1	78,7	80,5	274	136 x 300	-	-	MT 35	-	-	4
62,5	65,3	-	-	82,0	83,8	-	-	342,5	136 x 375	-	-	MT 35	-	-	2

RCM-INB CAPACITOR RATED VOLTAGE 525 V / 550 V - 3 PHASE - 50 Hz / 60 Hz

POWER AT SYSTEM VOLTAGE 50 Hz		POWER AT SYSTEM VOLTAGE 60 Hz		In 50 Hz CURRENT		In 60 Hz CURRENT		RATED CAPACITANCE	AVAILABLE DIMENSIONS*			TERMINAL TYPE	PCS/BOX	PCS/BOX	PCS/BOX
525 V kVar	550 V kVar	525 V kVar	550 V kVar	525 V A	550 V A	525 V A	550 V A	3 x μ F	ϕ x H (7)	ϕ x H (8)	ϕ x H (9)	mmq	ϕ 85	ϕ 100 ϕ 116	ϕ 136
2,5	2,7	3,0	3,3	2,7	2,9	3,3	3,4	9,6	85 x 130	85 x 185	-	MT 16	9	-	-
5	5,5	6,0	6,6	5	5,7	6,6	6,9	19,2	85 x 130	85 x 185	-	MT 16	9	-	-
6,25	6,9	7,5	8,2	6,87	7,2	8,3	8,7	24,1	85 x 225	85 x 185	-	MT 16	9	-	-
10	11,0	12,0	13,2	11	11,5	13,2	13,8	38,5	100 x 225	85 x 260	-	MT 25 / 16	9	5	-
12,5	13,7	15,0	16,4	13,7	14,4	16,5	17,3	48,1	100 x 225	100 x 260	85 x 285	MT 25 / 16	9	5	-
15	16,4	18,0	19,7	16	17,3	19,8	20,7	57,7	116 x 225	100 x 260	100 x 300	MT 25	-	5	-
20	21,9	24,0	26,3	22	23,0	26,4	27,6	77,0	136 x 225	116 x 260	100 x 300	MT 25	-	5	-
25	27,4	30,0	32,9	27	28,8	33,0	34,5	96,2	136 x 225	-	116 x 285	MT 25	-	5	4
30	32,9	36,0	39,5	33	34,5	39,6	41,5	115,5	136 x 300	-	-	MT 25	-	-	4
40	43,9	48,0	52,7	44	46,1	52,8	55,3	154,0	136 x 300	-	-	MT 25	-	-	4
50	54,9	60,0	65,8	55	57,6	66,0	69,1	192,5	136 x 375	-	-	MT 25	-	-	2

Up to 37,5 kVar 400 V or 50 kVar 525 V capacitors are also available in single-phase version.
Other capacitor powers and voltages are available on request. Contact us info@gruppenergia.it

*All dimensions are in "mm" and will be confirmed at the time of order.

TECHNICAL CHARACTERISTICS INTACT PLUS RCM-INP

General

Standards:	IEC 60831-1:2014, UL810, VDE 0560-46:2014-11
Origin:	100% made in Italy
Voltage range:	220 V to 550 V
Frequency:	50 Hz / 60 Hz
Power range:	2,5 kVar to 50 kVar
Dielectric losses:	< 0,2 W/kVar
Total losses:	< 0,5 W/kVar
Capacitance tolerance:	± 5%
Voltage test between terminals:	2,15 Un, 50 Hz, 10 seconds (routine test)
Voltage test between terminals:	3,00 Un, 50 Hz, 60 seconds (type test)
Voltage test terminal / case:	≤ 525 V 3000 V, 50 Hz for 10 seconds or > 525 V 3660 V, 50 Hz for 10 seconds
Insulation level:	3 / 8 kV
External discharge resistor:	50 V in 1 min. 1 kVar - 30 kVar or 75 V in 3 min. 30,5 kVar - 62,5 kVar
Cooling:	Natural air or forced ventilation

Operating Conditions

Ambient temperature:	-45 °C / 60 °C
Humidity:	up to 95%
Altitude above sea level:	2000 m.
Overvoltage:	Un+10% for 8 hrs. daily Un+15% for 30 min. daily Un+20% for 5 min. daily Un+30% for 1 min. daily
Overcurrent:	up to 1,8 x In (Including Harmonics)
Inrush current:	up to 250 x In
Service life:	up to 160.000 hrs.
Harmonic presence:	NLL < 20%

Safety Features

Safety:	Overpressure disconnecter on 3 phase + Incorporated fuses + Self-healing + Discharge device
Protection degree:	IP20

Construction

Casing:	Aluminium can
Dielectric:	Special polypropylene film with slope metallisation and wave-cut
Impregnation:	Special polyurethane resin, Non-PCB

Installation

Mounting position:	Vertical preferable for better cooling
Fastening & Earthing:	Through 1 point, screw M12 at the bottom

RCM-INP CAPACITOR RATED VOLTAGE 400 V / 415 V - 3 PHASE - 50 Hz / 60 Hz

POWER AT SYSTEM VOLTAGE 50 Hz		POWER AT SYSTEM VOLTAGE 60 Hz		In 50 Hz CURRENT		In 60 Hz CURRENT		RATED CAPACITANCE	AVAILABLE DIMENSIONS*			TERMINAL TYPE	PCS/BOX	PCS/BOX	PCS/BOX
400 V kVar	415 V kVar	400 V kVar	415 V kVar	400 V A	415 V A	400 V A	415 V A	3 x μ F	ϕ x H (7)	ϕ x H (8)	ϕ x H (9)	mmq	ϕ 85	ϕ 100 ϕ 116	ϕ 136
2,5	2,7	3,0	3,2	3,6	3,7	4,3	4,5	16,6	85 x 130	85 x 185	-	MT 16	9	-	-
5	5,4	6,0	6,5	7	7,5	8,7	9,0	33,2	85 x 130	85 x 185	-	MT 16	9	-	-
6,25	6,72	7,5	8,1	9,02	9,34	10,8	11,2	41,4	85 x 185	-	-	MT 16	9	-	-
10	10,8	12,0	12,9	14	15,0	17,3	18,0	66,3	85 x 225	-	-	MT 16	9	-	-
12,5	13,4	15,0	16,1	18,0	18,7	21,6	22,5	82,9	100 x 225	85 x 260	-	MT 25 / 16	9	5	-
15	16,1	18,0	19,4	22	22,5	26,0	26,9	99,5	100 x 225	-	85 x 285	MT 25 / 16	9	5	-
20	21,5	24,0	25,8	29	29,9	34,6	35,9	132,6	116 x 225	100 x 260	100 x 300	MT 25	9	5	-
25	26,9	30,0	32,3	36	37,4	43,3	44,9	165,8	136 x 225	116 x 260	100 x 300	MT 25	-	5	4
30	32,3	36,0	38,7	43	44,9	51,9	53,9	198,9	136 x 225	-	116 x 285	MT 25	-	5	4
40	43,0	48,0	51,6	58	59,9	69,3	71,9	265,3	136 x 300	-	-	MT 35	-	-	4
50	53,8	60,0	64,6	72	74,8	86,6	89,8	331,6	136 x 375	-	-	MT 35	-	-	2

RCM-INP CAPACITOR RATED VOLTAGE 440 V / 450 V - 3 PHASE - 50 Hz / 60 Hz

POWER AT SYSTEM VOLTAGE 50 Hz		POWER AT SYSTEM VOLTAGE 60 Hz		In 50 Hz CURRENT		In 60 Hz CURRENT		RATED CAPACITANCE	AVAILABLE DIMENSIONS*			TERMINAL TYPE	PCS/BOX	PCS/BOX	PCS/BOX
440 V kVar	450 V kVar	440 V kVar	450 V kVar	440 V A	450 V A	440 V A	450 V A	3 x μ F	ϕ x H (7)	ϕ x H (8)	ϕ x H (9)	mmq	ϕ 85	ϕ 100 ϕ 116	ϕ 136
2,5	2,6	3,0	3,1	3,3	3,4	3,9	4,0	13,7	85 x 130	85 x 185	-	MT 16	9	-	-
5	5,2	6,0	6,3	7	6,7	7,9	8,0	27,4	85 x 130	85 x 185	-	MT 16	9	-	-
6,25	6,5	7,5	7,9	8,20	8,4	9,8	10,1	34,3	85 x 185	-	-	MT 16	9	-	-
10	10,5	12,0	12,5	13	13,4	15,7	16,1	54,8	85 x 225	-	-	MT 16	9	-	-
12,5	13,1	15,0	15,7	16,4	16,8	19,7	20,1	68,5	100 x 225	85 x 260	-	MT 25 / 16	9	5	-
15	15,7	18,0	18,8	20	20,1	23,6	24,1	82,2	100 x 225	85 x 260	-	MT 25 / 16	9	5	-
20	20,9	24,0	25,1	26	26,8	31,5	32,2	109,6	116 x 225	100 x 260	-	MT 25	9	5	-
25	26,1	30,0	31,4	33	33,5	39,3	40,2	137	136 x 225	116 x 260	100 x 300	MT 25	-	5	4
30	31,4	36,0	37,6	39	40,2	47,2	48,3	164,4	136 x 225	-	116 x 285	MT 25	-	5	4
40	41,8	48,0	50,2	52	53,6	62,9	64,4	219,2	136 x 300	-	-	MT 35	-	-	4
50	52,3	60,0	62,7	66	67,1	78,7	80,5	274	136 x 375	-	-	MT 35	-	-	2

RCM-INP CAPACITOR RATED VOLTAGE 525 V / 550 V - 3 PHASE - 50 Hz / 60 Hz

POWER AT SYSTEM VOLTAGE 50 Hz		POWER AT SYSTEM VOLTAGE 60 Hz		In 50 Hz CURRENT		In 60 Hz CURRENT		RATED CAPACITANCE	AVAILABLE DIMENSIONS*			TERMINAL TYPE	PCS/BOX	PCS/BOX	PCS/BOX
525 V kVar	550 V kVar	525 V kVar	550 V kVar	525 V A	550 V A	525 V A	550 V A	3 x μ F	ϕ x H (7)	ϕ x H (8)	ϕ x H (9)	mmq	ϕ 85	ϕ 100 ϕ 116	ϕ 136
2,5	2,7	3,0	3,3	2,7	2,9	3,3	3,4	9,6	85 x 130	85 x 185	-	MT 16	9	-	-
5	5,5	6,0	6,6	5	5,7	6,6	6,9	19,2	85 x 130	85 x 185	-	MT 16	9	-	-
6,25	6,9	7,5	8,2	6,87	7,2	8,3	8,7	24,1	85 x 225	85 x 185	-	MT 16	9	-	-
10	11,0	12,0	13,2	11	11,5	13,2	13,8	38,5	100 x 225	85 x 260	-	MT 25 / 16	9	5	-
12,5	13,7	15,0	16,4	13,7	14,4	16,5	17,3	48,1	100 x 225	100 x 260	85 x 285	MT 25 / 16	9	5	-
15	16,4	18,0	19,7	16	17,3	19,8	20,7	57,7	116 x 225	100 x 260	100 x 300	MT 25	-	5	-
20	21,9	24,0	26,3	22	23,0	26,4	27,6	77,0	136 x 225	116 x 260	100 x 300	MT 25	-	5	-
25	27,4	30,0	32,9	27	28,8	33,0	34,5	96,2	136 x 225	-	116 x 285	MT 25	-	5	4
30	32,9	36,0	39,5	33	34,5	39,6	41,5	115,5	136 x 300	-	-	MT 25	-	-	4
40	43,9	48,0	52,7	44	46,1	52,8	55,3	154,0	136 x 300	-	-	MT 35	-	-	4
50	54,9	60,0	65,8	55	57,6	66,0	69,1	192,5	136 x 375	-	-	MT 35	-	-	2

Up to 37,5 kVar 400 V or 50 kVar 525 V capacitors are also available in single-phase version.
Other capacitor powers and voltages are available on request. Contact us info@gruppenergia.it

*All dimensions are in "mm" and will be confirmed at the time of order.

TECHNICAL CHARACTERISTICS INTACT ALLPOWER RCM-INA

General

Standards:	IEC 60831-1:2014, UL810, VDE 0560-46:2014-11
Origin:	100% made in Italy
Voltage range:	220 V to 550 V
Frequency:	50 Hz / 60 Hz
Power range:	2,5 kVar to 30 kVar
Dielectric losses:	< 0,2 W/kVar
Total losses:	< 0,5 W/kVar
Capacitance tolerance:	± 5%
Voltage test between terminals:	2,15 Un, 50 Hz, 10 seconds (routine test)
Voltage test between terminals:	3,00 Un, 50 Hz, 60 seconds (type test)
Voltage test terminal / case:	≤ 525 V 3000 V, 50 Hz for 10 seconds or > 525 V 3660 V, 50 Hz for 10 seconds
Insulation level:	3 / 8 kV
External discharge resistor:	50 V in 1 min. 1 kVar - 30 kVar or 75 V in 3 min. 30,5 kVar - 62,5 kVar
Cooling:	Natural air or forced ventilation

Operating Conditions

Ambient temperature:	- 45 °C / 60 °C
Humidity:	up to 95%
Altitude above sea level:	2000 m.
Overvoltage:	Un+10% continuous operation Un+15% for 30 min. daily Un+20% for 5 min. daily Un+30% for 1 min. daily
Overcurrent:	up to 2,5 x In (Including Harmonics)
Inrush current:	up to 280 x In
Service life:	up to 180.000 hrs.
Harmonic presence:	NLL < 25%

Safety Features

Safety:	Overpressure disconnecter on 3 phase + Incorporated fuses + Self-healing + Discharge device
Protection degree:	IP20

Construction

Casing:	Aluminium can
Dielectric:	Special polypropylene film with slope metallisation and wave-cut
Impregnation:	Special polyurethane resin, Non-PCB

Installation

Mounting position:	Vertical preferable for better cooling
Fastening & Earthing:	Through 1 point, screw M12 at the bottom

RCM-INA CAPACITOR RATED VOLTAGE 400 V / 415 V — 3 PHASE — 50 Hz / 60 Hz

POWER AT SYSTEM VOLTAGE 50 Hz		POWER AT SYSTEM VOLTAGE 60 Hz		In 50 Hz CURRENT		In 60 Hz CURRENT		RATED CAPACITANCE	AVAILABLE DIMENSIONS*			TERMINAL TYPE	PCS/BOX	PCS/BOX	PCS/BOX
400 V kVar	415 V kVar	400 V kVar	415 V kVar	400 V A	415 V A	400 V A	415 V A	3 x μ F	ϕ x H (7)	ϕ x H (8)	ϕ x H (9)	mmq	ϕ 85	ϕ 100 ϕ 116	ϕ 136
2,5	2,7	3,0	3,2	3,6	3,7	4,3	4,5	16,6	85 x 225	85 x 185	-	MT 16	9	-	-
5	5,4	6,0	6,5	7	7,5	8,7	9,0	33,2	85 x 225	85 x 185	-	MT 16	9	-	-
6,25	6,72	7,5	8,1	9,02	9,34	10,8	11,2	41,4	85 x 225	85 x 185	-	MT 16	9	-	-
10	10,8	12,0	12,9	14	15,0	17,3	18,0	66,3	85 x 225	-	-	MT 16	9	-	-
12,5	13,4	15,0	16,1	18,0	18,7	21,6	22,5	82,9	100 x 225	85 x 260	-	MT 25	-	5	-
15	16,1	18,0	19,4	22	22,5	26,0	26,9	99,5	100 x 225	-	85 x 285	MT 25	9	5	-
20	21,5	24,0	25,8	29	29,9	34,6	35,9	132,6	136 x 225	116 x 260	-	MT 35	-	5	4
25	26,9	30,0	32,3	36	37,4	43,3	44,9	165,8	136 x 225	-	116 x 285	MT 35	-	5	4
30	32,3	36,0	38,7	43	44,9	51,9	53,9	198,9	136 x 300	-	-	MT 35	-	-	4

RCM-INA CAPACITOR RATED VOLTAGE 440 V / 450 V — 3 PHASE — 50 Hz / 60 Hz

POWER AT SYSTEM VOLTAGE 50 Hz		POWER AT SYSTEM VOLTAGE 60 Hz		In 50 Hz CURRENT		In 60 Hz CURRENT		RATED CAPACITANCE	AVAILABLE DIMENSIONS*			TERMINAL TYPE	PCS/BOX	PCS/BOX	PCS/BOX
440 V kVar	450 V kVar	440 V kVar	450 V kVar	440 V A	450 V A	440 V A	450 V A	3 x μ F	ϕ x H (7)	ϕ x H (8)	ϕ x H (9)	mmq	ϕ 85	ϕ 100 ϕ 116	ϕ 136
2,5	2,6	3,0	3,1	3,3	3,4	3,9	4,0	13,7	85 x 225	85 x 185	-	MT 16	9	-	-
5	5,2	6,0	6,3	7	6,7	7,9	8,0	27,4	85 x 225	85 x 185	-	MT 16	9	-	-
6,25	6,5	7,5	7,9	8,20	8,4	9,8	10,1	34,3	85 x 225	85 x 185	-	MT 16	9	-	-
10	10,5	12,0	12,5	13	13,4	15,7	16,1	54,8	100 x 225	85 x 260	-	MT 25 / 16	9	5	-
12,5	13,1	15,0	15,7	16,4	16,8	19,7	20,1	68,5	100 x 225	-	85 x 285	MT 25	9	5	-
15	15,7	18,0	18,8	20	20,1	23,6	24,1	82,2	116 x 225	100 x 260	85 x 285	MT 25	9	5	-
20	20,9	24,0	25,1	26	26,8	31,5	32,2	109,6	136 x 225	116 x 260	-	MT 25	-	5	4
25	26,1	30,0	31,4	33	33,5	39,3	40,2	137	136 x 225	116 x 260	-	MT 35	-	5	4
30	31,4	36,0	37,6	39	40,2	47,2	48,3	164,4	136 x 225	-	116 x 285	MT 35	-	5	4

RCM-INA CAPACITOR RATED VOLTAGE 525 V / 550 V — 3 PHASE — 50 Hz / 60 Hz

POWER AT SYSTEM VOLTAGE 50 Hz		POWER AT SYSTEM VOLTAGE 60 Hz		In 50 Hz CURRENT		In 60 Hz CURRENT		RATED CAPACITANCE	AVAILABLE DIMENSIONS*			TERMINAL TYPE	PCS/BOX	PCS/BOX	PCS/BOX
525 V kVar	550 V kVar	525 V kVar	550 V kVar	525 V A	550 V A	525 V A	550 V A	3 x μ F	ϕ x H (7)	ϕ x H (8)	ϕ x H (9)	mmq	ϕ 85	ϕ 100 ϕ 116	ϕ 136
2,5	2,7	3,0	3,3	2,7	2,9	3,3	3,4	9,6	85 x 225	85 x 185	-	MT 16	9	-	-
5	5,5	6,0	6,6	5	5,7	6,6	6,9	19,2	85 x 225	-	-	MT 16	9	-	-
6,25	6,9	7,5	8,2	6,87	7,2	8,3	8,7	24,1	100 x 225	85 x 225	-	MT 25 / 16	9	5	-
10	11,0	12,0	13,2	11	11,5	13,2	13,8	38,5	116 x 225	-	85 x 285	MT 25 / 16	9	5	-
12,5	13,7	15,0	16,4	13,7	14,4	16,5	17,3	48,1	136 x 225	-	100 x 300	MT 25	-	5	4
15	16,4	18,0	19,7	16	17,3	19,8	20,7	57,7	136 x 225	-	116 x 285	MT 25	-	5	4
20	21,9	24,0	26,3	22	23,0	26,4	27,6	77,0	136 x 300	-	116 x 285	MT 25	-	5	4
25	27,4	30,0	32,9	27	28,8	33,0	34,5	96,2	136 x 300	-	-	MT 25	-	-	4
30	32,9	36,0	39,5	33	34,5	39,6	41,5	115,5	136 x 375	-	-	MT 35	-	-	2

Up to 30 kVar 400 V or 30 kVar 525 V capacitors are also available in single-phase version.
Other capacitor powers and voltages are available on request. Contact us info@gruppenergia.it

*All dimensions are in "mm" and will be confirmed at the time of order.

**TECHNICAL CHARACTERISTICS INTACT R-POWER + DETUNED HARMONIC REACTOR
RCM-INR**

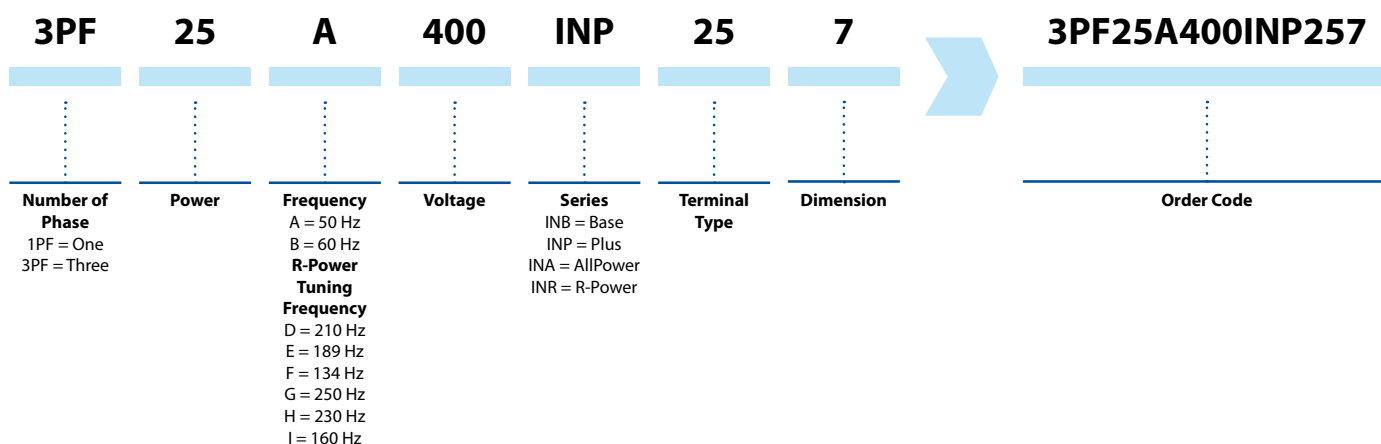
General	
Standards:	IEC 60831-1:2014, UL810, VDE 0560-46:2014-11
Origin:	100% made in Italy
Voltage range:	220 V to 550 V
Frequency:	50 Hz / 60 Hz
Power range:	2,5 kVar to 50 kVar
Dielectric losses:	< 0,2 W/kVar
Total losses:	< 0,5 W/kVar
Capacitance tolerance:	± 5%
Voltage test between terminals:	2,15 Un, 50 Hz, 10 seconds (routine test)
Voltage test between terminals:	3,00 Un, 50 Hz, 60 seconds (type test)
Voltage test terminal / case:	≤ 525 V 3000 V, 50 Hz for 10 seconds or > 525 V 3660 V, 50 Hz for 10 seconds
Insulation level:	3 / 8 kV
External discharge resistor:	50 V in 1 min. 1 kVar - 30 kVar or 75 V in 3 min. 30,5 kVar - 62,5 kVar
Cooling:	Forced ventilation
Operating Conditions	
Ambient temperature:	- 45 °C / 55 °C
Humidity:	up to 95%
Altitude above sea level:	2000 m.
Overvoltage:	Un+10% continuous operation Un+15% for 30 min. daily Un+20% for 5 min. daily Un+30% for 1 min. daily
Overcurrent:	up to 1,8 x In (Including Harmonics)
Inrush current:	up to 250 x In
Service life:	up to 160.000 hrs.
Harmonic presence:	NLL < 30%
Safety Features	
Safety:	Overpressure disconnecter on 3 phase + Incorporated fuses + Self-healing + Discharge device
Protection degree:	IP20
Construction	
Casing:	Aluminium can
Dielectric:	Special polypropylene film with slope metallisation and wave-cut
Impregnation:	Special polyurethane resin, Non-PCB
Installation	
Mounting position:	Vertical preferable for better cooling
Fastening & Earthing:	Through 1 point, screw M12 at the bottom

RCM-INR CAPACITOR RATED VOLTAGE 440 V / 525 V - 3 PHASE - 50 HZ
REACTOR RATED VOLTAGE 400 V - 189 HZ - P=7%

CAPACITOR POWER		POWER REACTOR	TOTAL POWER LC CAPACITOR + REACTOR	RATED CAPACITANCE	RATED INDUCTANCE	In CURRENT	AVAILABLE DIMENSIONS*		TERMINAL TYPE	PCS/BOX	PCS/BOX	PCS/BOX
440 V kVar	525 V kVar	400 V kVar	400 V kVar	3 x μ F	3 x mH	400 V	ϕ x H 440 V (7)	ϕ x H 525 V (8)	mmq	ϕ 85	ϕ 100 ϕ 116	ϕ 136
2,5	3,6	2,2	2,2	13,7	17,30	3,2	85 x 225	85 x 225	MT 16	9	-	-
2,8	4,0	2,5	2,5	15,4	15,33	3,6	85 x 225	85 x 225	MT 16	9	-	-
5	7,1	4,4	4,4	27,4	8,64	6,4	85 x 225	85 x 225	MT 16	9	-	-
5,6	8,0	5,0	5	30,8	7,66	7,2	85 x 225	85 x 225	MT 16	9	-	-
6,25	8,9	5,5	5,5	34,3	6,90	8,0	85 x 225	85 x 225	MT 16	9	-	-
7	10,0	6,25	6,25	38,6	6,13	9,0	85 x 225	85 x 225	MT 16	9	-	-
10	14,2	8,9	8,9	54,8	4,32	12,8	85 x 285	85 x 285	MT 16	9	-	-
11,3	16,0	10	10	61,7	3,83	14,4	85 x 285	85 x 285	MT 16	9	-	-
12,5	17,8	11,1	11,1	68,5	3,46	16,0	85 x 285	100 x 300	MT 16 / 25	9	5	-
14,1	20,0	12,5	12,5	77,1	3,07	18,0	85 x 285	100 x 300	MT 16 / 25	9	5	-
15	21,3	13,3	13,3	82,2	2,88	19,2	85 x 285	100 x 300	MT 16 / 25	9	5	-
16,9	24,0	15	15	92,6	2,50	21,7	100 x 300	100 x 300	MT 25	-	5	-
20	28,5	17,8	17,8	109,6	2,17	25,6	100 x 300	116 x 285	MT 25	-	5	-
22,5	32,0	20	20	123,4	1,90	28,9	116 x 285	116 x 285	MT 25	-	5	-
25	35,6	22,2	22,2	137,0	1,73	32,0	116 x 285	136 x 300	MT 25	-	5	4
28,1	40,0	25	25	154,0	1,53	36,0	116 x 285	136 x 300	MT 25	-	5	4
30	42,7	26,7	26,7	164,4	1,44	38,4	116 x 285	136 x 300	MT 25	-	5	4
33,8	48,1	30	30	185,1	1,30	43,3	136 x 300	136 x 300	MT 25	-	-	4
40	56,9	35,5	35,5	219,2	1,08	51,3	136 x 300	136 x 375	MT 25	-	-	4 / 2
45	64,1	40	40	246,8	0,96	57,7	136 x 300	136 x 375	MT 25	-	-	4 / 2
50	2 x 35,6	44,4	44,4	274,0	0,86	64,1	136 x 375	-	MT 35	-	-	2
56,3	2 x 40	50	50	308,5	0,77	72,1	136 x 375	-	MT 35	-	-	2
2 x 33,8	2 x 48,1	66	66	407,6	0,58	95,3	-	-	-	-	-	-
2 x 40	3 x 40	75	75	463,6	0,51	108,4	-	-	-	-	-	-
2 x 50	4 x 35,6	90	90	549,8	0,43	128,6	-	-	-	-	-	-
2 x 56,3	4 x 40	100	100	622,2	0,38	145,5	-	-	-	-	-	-

Other capacitor powers and voltages are available on request. Contact us info@gruppoenergia.it

HOW TO ORDER?



*All dimensions are in "mm" and will be confirmed at the time of order.