ALPICAN™

ESSENTIAL SOLUTIONS FOR REACTIVE ENERGY COMPENSATION

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THE **GLOBAL SPECIALIST**
IN ELECTRICAL AND DIGITAL BUILDING INFRASTRUCTURES

legrand®

ALPICAN™

Improve power quality to save energy and reduce environmental impact

The available power in an electrical supply system is composed of active power and reactive power. While active power results in the form of actual work output, the reactive power is used to maintain the magnetic field requirements. The power factor is an indicator of reactive power which is always an inherent part of the electrical system.
Lower is the power factor higher is the reactive power usage.

Hence, the challenge is to improve power factor which helps in reducing I2R losses, improves voltage stability and increase utilization of an electrical distribution system.

With Legrand's range of solutions for reactive energy compensation that include capacitors, detuned reactors, automatic power factor controllers and capacitor banks, you will have the power to contribute to energy savings.

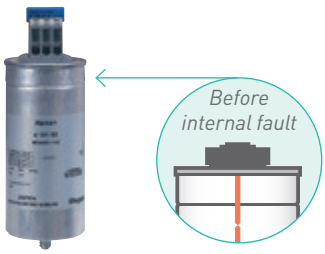
SAFE, RELIABLE & EASY TO INSTALL ALUMINIUM CAN CAPACITORS

I COMPACT DESIGN

Alpican is constructed with three single elements stacked and assembled to form a delta connection. The compact design offers high mechanical strength and stability. It ensures longer life to the system and an easy handling.

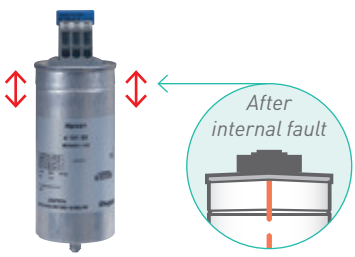
I EXPLOSION PROOF DESIGN

In the event of thermal or electrical overload, the particular design of the capacitor protects it from an explosion. Indeed, the capacitor is disconnected from the circuit and the flow of current is interrupted.



I SELF-HEALING TECHNOLOGY FOR A LONGER LIFE

In case of voltage breakdown the metal layer around the breakdown evaporates.
This insulation area allows the functioning of the capacitor during the entire process.



ENERGY SAVING

UNIQUE TERMINAL DESIGN

Unique design of IP 20 terminal block, with pre-mounted discharge resistor ensures proper termination of the cables. The cable connection is so firm that it doesn't allow the cable to lose.

EASE OF INSTALLATION

Compact cylindrical design of Alpican makes installation easy & faster. This saving time and costs makes a perfect combination for the installer. Mounting is done with a stud at the bottom of the capacitor.

LOW ENERGY LOSSES (ENERGY SAVING)

Alpican is designed and made for long life and low losses during the operation.
Thus making it one of the most energy efficient capacitors.

IMPREGNANT

Non-PCB semi-dry resin reduces the risks of leaking.

Alpican capacitors

4 151 80 4 151 83 4 151 84 4 151 86

Compact design in cylindrical aluminium can
Biodegradable soft resin impregnant
Dual safety with self healing and overpressure disconnector
Conforming to standard IEC 60831-1 and 2

Three-phase 400 V - 50 Hz

440 V max.

Pack	Cat.Nos	Nominal power (kVAr) 50 Hz	60 Hz
1	4 151 60	2.5	3
1	4 151 61	5	6
1	4 151 62	6.3	7.6
1	4 151 63	7.5	9
1	4 151 64	10	12
1	4 151 65	12.5	15
1	4 151 66	15	18
1	4 151 67	20	24
1	4 151 68	25	30

Three-phase 415 V - 50 Hz

456 V max.

Pack	Cat.Nos	Nominal power (kVAr) 50 Hz	60 Hz
1	4 151 69	2.5	3
1	4 151 70	5	6
1	4 151 71	6.3	7.6
1	4 151 72	7.5	9
1	4 151 73	10	12
1	4 151 74	12.5	15
1	4 151 75	15	18
1	4 151 76	20	24
1	4 151 77	25	30

Three-phase 440 V - 50 Hz

484 V max.

Pack	Cat.Nos	Nominal power (kVAr) 50 Hz	60 Hz
1	4 151 78	2.5	3
1	4 151 79	5	6
1	4 151 80	6.3	7.6
1	4 151 81	7.5	9
1	4 151 82	10	12
1	4 151 83	12.5	15
1	4 151 84	15	18
1	4 151 85	20	24
1	4 151 86	25	30
1	4 151 87	30	36

Three-phase 480 V - 50 Hz

528 V max.

Pack	Cat.Nos	Nominal power (kVAr) 50 Hz	60 Hz
1	4 151 88	5	6
1	4 151 89	10.4	12.5
1	4 151 90	12.5	15
1	4 151 91	15	18
1	4 151 92	20.8	25
1	4 151 93	25	30
1	4 151 94	30	36

Alpican capacitors

technical characteristics

Technical specifications

Discharge resistors:
Fitted inside, they discharge the unit in accordance with current standards (discharge time, 3 minutes)

Loss factor:
Alpican capacitors have a loss factor of less than 0.2 x 10-3
This value leads to a power consumption of less than 0.45 W per kVAr, excluding the discharge resistors

Rated frequency: 50/60 Hz

Capacitance: tolerance on the capacitance value: - 5 % / 10 %

Max. permissible voltage:
1.1 Un up to 8 hours daily (according to IEC 60831-1 and 2)

Max. permissible current:
Up to 1.5 Ir including combined effects of harmonics (according to IEC 60831-1 and 2)

Inrush current: up to 200 Ir

Insulation class: 3/15 kV

Standards:
Alpican capacitors comply with:
• International standard: IEC 60831-1 and 2

Temperature class:
Alpican capacitors are designed for a standard -25D temperature class
• Maximum temperature: 55 °C
• Average over 24 hours: 45 °C
• Annual average: 35 °C
• Lowest temperature class: - 25 °C

Cooling: natural or forced

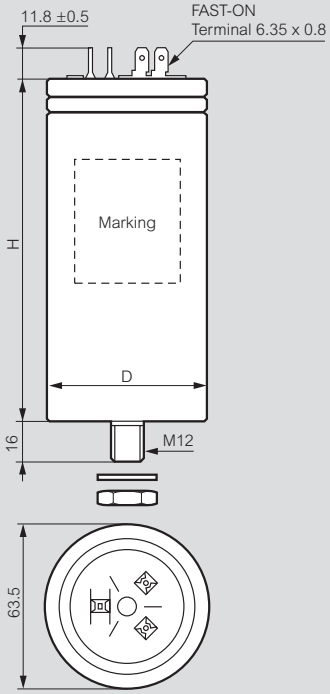
Humidity: max. 95 %

Altitude: max. 4000 m above the sea level

Mounting position: vertical

Dimensions

For capacitors from 2.5 to 5 kVAr - 400 V, 415 V and 440 V



Creepage distance:
• Ø63.5: 10.0 mm

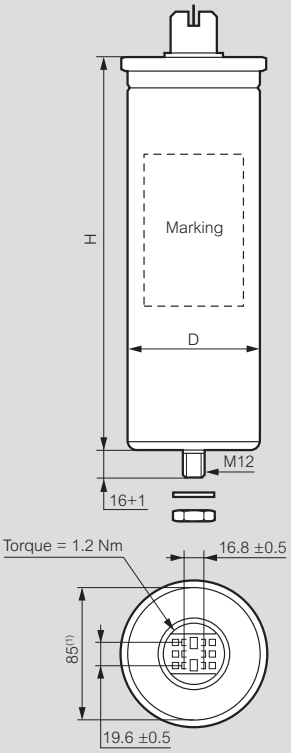
Clearance:
• Ø63.5: 16.5 mm

Mounting:
• Ø63.5:
M 12, torque 10 Nm
Totheed washer J 12.5 DIN 6797
Hex nut BM 12 DIN 439

Cat.No	Nominal power at 50 Hz (kVAr)	Dimensions (mm)			Weight (kg)
		D	H	max. A	
4 151 60	**2.5**	63.5	129	12	0.4
4 151 61	**5**	63.5	129	12	0.4
4 151 69	**2.5**	63.5	129	13	0.4
4 151 70	**5**	63.5	129	12	0.4
4 151 78	**2.5**	63.5	129	12	0.3
4 151 79	**5**	63.5	154	12	0.5

Dimensions (continued)

For capacitors from 6.3 to 30 kVAr - 400 V, 415 V, 440 V and full range of 480 V capacitors



(1) Seaming adds 4 mm in diameter

Creepage distance:
• Ø75 / Ø85: 9.6 mm

Clearance:
• Ø75 / Ø85: 12.7 mm

Mounting:
• Ø75 / Ø85:
M 12, torque 10 Nm
Totheed washer J 12.5 DIN 6797
Hex nut BM 12 DIN 439

Cat.No	Nominal power at 50 Hz (kVAr)	Dimensions (mm)			Weight (kg)
		D	H	max. A	
4 151 62	**6.3**	75	160	13	0.5
4 151 63	**7.5**	75	160	13	0.5
4 151 64	**10**	75	198	13	0.6
4 151 65	**12.5**	85	198	13	0.8
4 151 66	**15**	85	198	13	0.8
4 151 67	**20**	85	273	13	1.1
4 151 68	**25**	85	273	13	1.5
4 151 71	**6.3**	75	160	13	0.5
4 151 72	**7.5**	75	198	13	0.6
4 151 73	**10**	75	198	13	0.6
4 151 74	**12.5**	85	198	13	0.8
4 151 75	**15**	85	273	13	1.2
4 151 76	**20**	85	273	13	1.2
4 151 77	**25**	85	348	13	1.5
4 151 80	**6.3**	75	160	13	0.5
4 151 81	**7.5**	75	160	13	0.5
4 151 82	**10**	75	198	13	0.6
4 151 83	**12.5**	85	198	13	0.8
4 151 84	**15**	85	273	13	1.2
4 151 85	**20**	85	273	13	1.2
4 151 86	**25**	85	348	13	1.5
4 151 87	**30**	85	348	13	1.6
4 151 88	**5**	75	160	13	0.5
4 151 89	**10.4**	85	198	13	0.8
4 151 90	**12.5**	85	198	13	0.8
4 151 91	**15**	85	273	13	1.2
4 151 92	**20.8**	85	273	13	1.2
4 151 93	**25**	85	348	13	1.5
4 151 94	**30**	90	348	13	1.5

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