

Reliability for power factor correction

CLMD construction

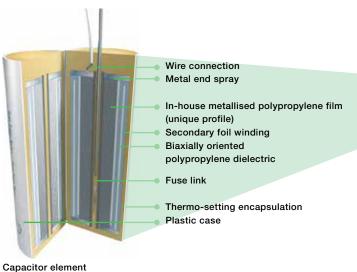
- The CLMD capacitor consists of a number of wound elements made with a dielectric of metallized polypropylene film. These dry windings are provided with a sequential disconnector ensuring that each element can be reliably and selectively disconnected from the circuit at the end of its life.
- The capacitor elements receive a treatment under vacuum in order to ensure perfect electrical characteristics. Each winding is placed in a plastic case and encapsulated in thermo-setting resin in order to obtain a perfectly sealed element.
- The elements are placed inside a sheet steel box and connected in such a way as to supply the single or three-phase power at the required voltage and frequency.

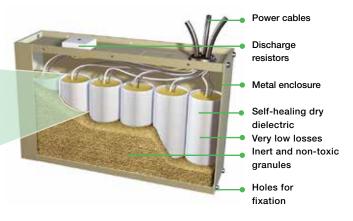
• The sheet steel box is filled with inorganic, inert and fire proof granules in order to absorb the energy produced or to extinguish any flames in case of a possible defect at the end of an element's life. The CLMD is also provided with thermal equalizers to ensure effective heat dissipation.

High performance in-house metallized film

ABB's completely integrated manufacturing process has resulted in the development of the special ABB high-performance film of which all ABB LV capacitors benefit:

- high breakdown strength
- excellent peak current handling capability
- high capacitance stability
- · optimal self healing design
- long life





CLMD 33S

Reliable and safe

Dry type design

The CLMD has a dry type dielectric and therefore cannot give any risk of leakage or pollution of the environment.

Very low losses

Dielectric losses are less than 0.2 Watt per kvar. Total losses, including discharge resistors, are less than 0.5 Watt per kvar

Long life - Self-healing

In the event of a fault developing in the dielectric of the capacitor, the metallized electrode adjacent to the fault is immediately vaporized, thus insolating the fault. The capacitor then continues normal operation.

Fire protection

All capacitor elements within the CLMD capacitor are surrounded by vermiculite which is an inorganic, inert, fire proof and non toxic granular material. In the event of any failure the vermiculite absorbs safely the energy produced within the capacitor box and extinguishes any possible flames.

Unique protection system

A unique Sequential Protection System ensures that each individual element can be disconnected from the circuit at the end of its life.

Easy to install - Light weight

The CLMD capacitor is very lightweight and therefore presents no handling difficulties during installation.

High reliability

The CLMD capacitor complies with the requirements of IEC 60831-1 & 2. The use of robust terminals removes the risk of damage during installation and reduces maintenance requirements.

Security

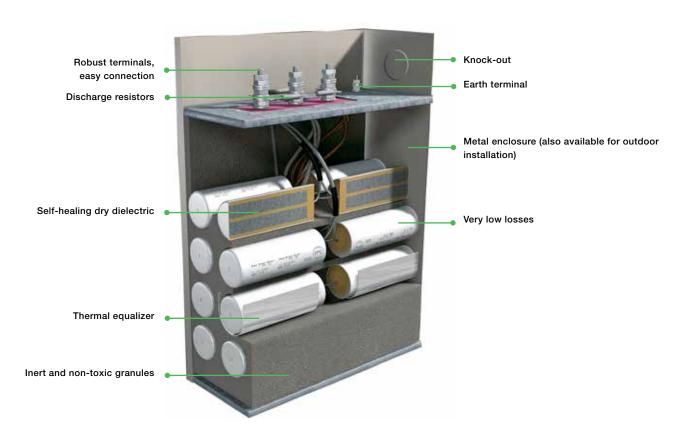
Thermal equalizers are fitted to surround each capacitor element and provide effective heat dissipation. The CLMD capacitor is equipped with discharge resistors.

ISO 9001

Our ISO 9001 Quality System registration provides the strongest assurance of our product quality.

ISO 14001

The CLMD capacitor has a dry type dielectric and is free from liquids or other impregnating agents. It has been designed for environmentally friendly manufacturing. Our ISO 14001 certification guarantees our commitment to the environment.



A comprehensive range

CLMD 43, 53, 63 & 83

The CLMD capacitor unit is designed in such a way to give the highest level of reliability, safety, performance and power all in a robust and compact fashion.



Modular - CLMD 13

The CLMD 13 is designed to make an easy parallel connection of capacitor units.

The CLMD 13 is the ideal basic unit for a modular system.



Compact - CLMD 33S

The CLMD 33S is intended for use in capacitor banks.

It offers high power density and small dimensions.



Technical specifications

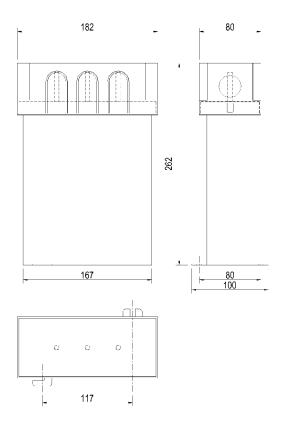
Voltage range	From 220 to 1000 V.
Frequency	50 and 60 Hz.
Connection	Three-phase as standard construction (single-phase on request).
Net output power	From 3.3 to 120 kvar.
Tolerance on capacitance	0 % + 10 %.
Losses (discharge resistors included) < 0.5 Watt/kvar for 380 V rated voltage and above.
Discharge resistors	Permanently connected built-in discharge resistors are sized to ensure safe discharge of the capacitor to less than
	50V in 1 minute after a switch off.
	Minimum time between disconnection and re-energization: 40 seconds.
Maximum permissible current	1.3 x In for continuous operation.
Tolerance on voltage	30% for maximum 1 minute (according to IEC 60831).
Case material	Zinc electroplated mild steel.
Color	Beige RAL 7032.
Fixing	CLMD13: with two slots, diameter 6.5 mm (suitable fixing for assembly in module).
	CLMD33S: with eight fixation holes, diameter 5.4 mm.
	CLMD43-53-63-83: with two slots 26 X 12 mm.
Weight	CLMD13: approximately 2.5 kg.
	CLMD33 and CLMD33S: approximately 3.5 kg.
	CLMD43: approximately 6 kg.
	CLMD53: approximately 11 kg.
	CLMD63: approximately 15 kg.
	CLMD83: approximately 23 kg.
Terminals	CLMD13: three M6 terminals.
	CLMD33S: three cable outputs (6, 10, 16 mm²), 50 cm long.
	CLMD43-53-63-83: with threaded rods M6, 8, 10 or 12 according to the power of the capacitor.
Minimum distance between units	CLMD13-33S: 20 mm (25 mm for units > 30 kvar).
	CLMD43-53-63-83: 50 mm.
Minimum distance between units	CLMD13-33 : 20 mm (25 mm for units > 30 kvar).
and wall	CLMD43-53-63-83: 50 mm.
Earth	CLMD13-33S: earth connection on the enclosure fixation.
	CLMD43-53-63-83: a M8 terminal is included under the cover.
Execution	Indoor (outdoor on request).
Maximum ambient temperature	Class "D" (+55°C) according to IEC 60831.
Minimum ambient temperature	Indoor type: -25°C.
The state of the s	Outdoor type: -40°C.
Altitude	Up to 1000 m
Protection	CLMD13-43-53-63-83: IP 42 (IP 54 on request).
	CLMD33S: IP40.
Cable input	By a knock out:
and input	CLMD13: 22.5 mm.
	CLMD43-53: 37 mm.
	CLMD63-83: 47 mm.
/oltage test	Between terminals: 2.15 Un for 10 seconds.
Tollago toot	Between terminals and earth: 3 kV for 10 seconds for UN < 500 V and 4 kV for 10 seconds for UN > 500 V.
Lightning impulse veltage test	CLMD13-43-53-63-83: 15kV.
Lightning impulse voltage test	
The acceptable everled to the first	CLMD33S: 8kV.
The acceptable overloads are those	Overvoltage tolerance: 10% max. at intervals.
specified in IEC 60831-1&2	Overcurrent tolerance: 30% permanently.
	Maximum overload: stable operation at 135% of the nominal rating (generated by overvoltages and harmonics).

Important: the installation of capacitors on networks disturbed by harmonics may require special precautions, especially when there is a risk of resonance.

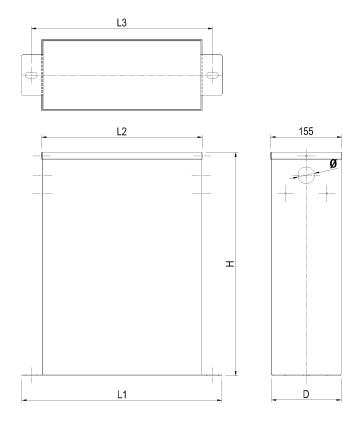
Dimensions

Туре	H (mm)	L1 (mm)	L2 (mm)	L3 (mm)	D	Δ (mm)
CLMD 43	275	266	180	226	152	37
CLMD 53	310	436	350	396	152	37
CLMD 63	485	436	350	396	152	47
CLMD 83	670	436	350	396	152	47

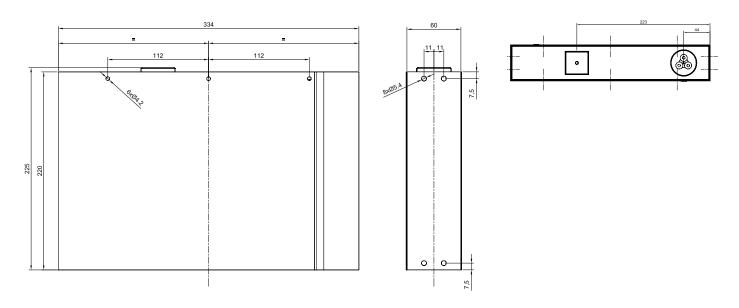
CLMD 13



CLMD 43, 53, 63 & 83



CLMD 33S



Range - 50 Hz

Network voltage	Туре	Detuning reactor (%) (1)	Power [kvar] (2)	Article number for ordering
230	CLMD33S	-	6.3	2GCA289064A0030
		-	10.0	2GCA289065A0030
		-	12.5	2GCA289066A0030
		-	16 (8+8)	2GCA289326A0030
 250	CLMD13	_	3.3	2GCA281318A0030
	CLMD13	_	6.5	2GCA281319A0030
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	CLMD13	-	9.5	2GCA281320A0030
	CLMD45 (3)	=	9.5	2GCA282449A0030
	CLMD43	-	13.0	2GCA281321A0030
	CLMD43	-	19.0	2GCA280953A0030
	CLMD53	-	28.0	2GCA280954A0030
	CLMD65 (3)	-	28.0	2GCA291550A0030
	CLMD53	-	38.0	2GCA280955A0030
	CLMD63	-	47.0	2GCA280956A0030
	CLMD63	-	57.0	2GCA280957A0030
	CLMD63	-	66.0	2GCA280958A0030
380	CLMD45 (3)	-	2.5	2GCA282091A0030
	CLMD45 (3)	-	5.0	2GCA282092A0030
	CLMD45 (3)	-	20.0	2GCA282193A0030
	CLMD45 (3)	-	30.0	2GCA282290A0030
400	CLMD33S	-	5.0	2GCA289067A0030
	CLMD33S	-	10.0	2GCA289068A0030
	CLMD33S	12.50	11.4	2GCA289068A0030
	CLMD33S	-	12.5	2GCA289069A0030
	CLMD33S	5.67	12.6	2GCA289078A0030
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	CLMD33S	7.00	12.7	2GCA289078A0030
	CLMD33S	12.50	12.5	2GCA289080A0030
	CLMD33S	-	15.0	2GCA289070A0030
	CLMD33S	-	20.0	2GCA289071A0030
	CLMD33S	-	25.0	2GCA289072A0030
	CLMD33S	-	25 (12.5+12.5)	2GCA291390A0030
	CLMD33S	12.50	22.9	2GCA289071A0030
	CLMD33S	5.67	25.0	2GCA289079A0030
	CLMD33S	7.00	25.4	2GCA289079A0030
	CLMD33S	12.50	24.7	2GCA289081A0030
	CLMD33S	5.67	26.4	2GCA289344A0030
	CLMD33S	7.00	26.8	2GCA289344A0030
	CLMD33S	12.50	28.5 (14.2+14.2)	2GCA289345A0030
	CLMD33S	-	33.3	2GCA289331A0030
	CLMD33S	-	33.3 (16.6+16.6)	÷
415 (4)	CLMD13		2.7	2GCA280554A0030
	CLMD45 (3)		2.7	2GCA281710A0030
	CLMD45 (3)		4.5	2GCA281710A0030
	†			÷·····
	CLMD45 (3)		5.5	2GCA281168A0030
	CLMD13		6.0	2GCA280555A0030
	CLMD45 (3)		6.0	2GCA282392A0030
	CLMD45 (3)		6.5	2GCA282538A0030
	CLMD13		7.2	2GCA281533A0030
	CLMD45 (3)		7.2	2GCA288144A0030

Network	Туре	Detuning reactor (%) (1)	Power [kvar] (2)	Article number for
voltage	OL MP000	reactor (%) (7	10.0	ordering
415 ⁽⁴⁾	CLMD33S		10.0	2GCA289073A0030
	CLMD45 (3)		10.0	2GCA285650A0030
	CLMD13		11.0	2GCA280556A0030
	CLMD33S	-	12.5	2GCA289074A0030
	CLMD45 (3)	-	12.5	2GCA280754A0030
	CLMD33S	5.67	11.4	2GCA289068A0030
	CLMD33S	7.00	11.5	2GCA289068A0030
	CLMD13	-	13.5	2GCA280557A0030
	CLMD45 (3)	-	13.5	2GCA281971A0030
	CLMD33S	5.67	12.5	2GCA289080A0030
	CLMD33S	7.00	12.7	2GCA289080A0030
	CLMD33S	12.50	13.5	2GCA289082A0030
	CLMD33S	-	15.0	2GCA289075A0030
	CLMD13	-	16.0	2GCA280558A0030
	CLMD45 (3)	_	16.0	2GCA281360A0030
	CLMD13	_	18.0	2GCA280559A0030
	CLMD45 (3)	_	18.0	2GCA282391A0030
	CLMD33S	_	20.0	2GCA289076A0030
	• } ••••••	- E 67		÷
	CLMD33S	5.67	17.5	2GCA289071A0030
	CLMD33S	7.00	17.7	2GCA289071A0030
	CLMD43	-	22.0	2GCA280960A0030
	CLMD33S	-	25.0	2GCA289077A0030
	CLMD43	-	27.0	2GCA280774A0030
	CLMD45 (3)	-	27.0	2GCA281355A0030
	CLMD33S	5.67	24.7	2GCA289081A0030
	CLMD33S	7.00	25.0	2GCA289081A0030
	CLMD43	-	32.0	2GCA280961A0030
	CLMD33S	7.00	28.8 (14.4+14.4)	2GCA289345A0030
	CLMD33S	-	33 (16.5+16.5)	2GCA289334A0030
	CLMD53	-	37.5	2GCA280730A0030
	CLMD65 (3)	-	37.5	2GCA288054A0030
	CLMD53	-	43.0	2GCA280776A0030
	CLMD53	_	50.0	2GCA280777A0030
	CLMD65 (3)	_	50.0	2GCA287889A0030
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	CLMD63	-	54.0	2GCA280729A0030
	CLMD65 (3)	=	54.0	2GCA281110A0030
	CLMD63	-	65.0	2GCA280982A0030
	CLMD65 (3)	-	65.0	2GCA281242A0030
	CLMD63	-	75.0	2GCA280780A0030
	CLMD65 (3)	-	75.0	2GCA281980A0030
	CLMD63	-	86.0	2GCA280781A0030
	CLMD65 (3)	-	86.0	2GCA281243A0030

⁽¹⁾ Detuning reactor (%): value of the reactor (if existing) connected in series with the capacitor. Reactors are not provided.

⁽²⁾ Power (kvar): net reactive power output in combination with the associated reactor (if existing).

⁽³⁾ Outdoor execution.

⁽⁴⁾ All capacitors for 415V network can be used at 400V providing that their power will be reduced by a factor 0.93 (i.e. (400/415)²).

Range - 50 Hz

Network voltage	Туре	Detuning reactor (%) (1)	Power [kvar] (2)	Article number for ordering
415	CLMD83	-	110.0	2GCA280731A0030
	CLMD85 (3)	-	110.0	2GCA281111A0030
	CLMD85 (3)	-	120.0	2GCA285652A0030
	CLMD83	-	130.0	2GCA281094A0030
	CLMD85 (3)	-	130.0	2GCA281496A0030
525 ⁽⁴⁾	CLMD13	-	10.0	2GCA280842A0030
020	CLMD33S	-	10.0	2GCA289084A0030
	CLMD45 (3)	-	10.0	2GCA281815A0030
	CLMD33S	_	12.5	2GCA289085A0030
	CLMD33S	5.67	12.5	2GCA289088A0030
	CLMD33S	7.00	12.5	2GCA289088A0030
	CLMD33S	7.00	15.0	2GCA289030A0030
		10.50	!	
	· ! ·····	12.50	16.5	2GCA289094A0030
	CLMD33S	12.50	12.5	2GCA289092A0030
	CLMD43	-	20.0	2GCA280852A0030
	CLMD33S	-	20.0	2GCA289086A0030
	CLMD45 (3)	-	20.0	2GCA281814A0030
	CLMD33S	-	25.0	2GCA289087A0030
	CLMD43	-	30.0	2GCA285296A0030
	CLMD45 (3)	-	30.0	2GCA285301A0030
	CLMD65 (3)	-	30.0	2GCA288084A0030
	CLMD33S	-	30 (15+15)	2GCA289341A0030
	CLMD53	-	40.0	2GCA280855A0030
	CLMD65 (3)	-	40.0	2GCA289367A0030
	CLMD53	-	50.0	2GCA285290A0030
	CLMD65 (3)	-	50.0	2GCA285219A0030
	CLMD63	-	60.0	2GCA280860A0030
	CLMD63	-	80.0	2GCA280864A0030
	CLMD65 (3)	-	80.0	2GCA283731A0030
	CLMD63	-	90.0	2GCA285299A0030
	CLMD65 (3)	-	90.0	2GCA285304A0030
	CLMD83	-	100.0	2GCA280865A0030
	CLMD85 (3)	-	100.0	2GCA282434A0030
	CLMD83	-	120.0	2GCA280866A0030
••••••	CLMD85 (3)	-	120.0	2GCA285401A0030
550	CLMD13	-	10.0	2GCA280566A0030
	CLMD43	-	21.0	2GCA280876A0030
	CLMD53	-	32.0	2GCA280877A0030
	CLMD53	-	42.0	2GCA280878A0030
	CLMD63	-	53.0	2GCA280879A0030
	CLMD63	_	74.0	2GCA280880A0030
	CLMD63	_	84.0	2GCA280881A0030
	CLMD83	_	95.0	2GCA280882A0030
	CLMD83	_		2GCA280882A0030
600	· · · · · · · · · · · · · · · · · · ·	_	105.0	
600	CLMD13	-	12.5	2GCA280884A0030
	CLMD43	-	25.0	2GCA280886A0030
	CLMD53	-	37.5	2GCA280887A0030
	CLMD53	-	50.0	2GCA280888A0030
	CLMD63	-	62.0	2GCA280889A0030

Network voltage	Туре	Detuning reactor (%) (1)	Power [kvar] (2)	Article number for ordering
600	CLMD63	-	75.0	2GCA280890A0030
	CLMD63	-	85.0	2GCA280891A0030
	CLMD83	-	100.0	2GCA280892A0030
	CLMD83	-	112.0	2GCA281220A0030
660	CLMD13	-	5.0	2GCA280567A0030
	CLMD13	-	10.0	2GCA280568A0030
	CLMD13	-	15.0	2GCA280569A0030
	CLMD43	-	21.0	2GCA280914A0030
	CLMD53	-	32.0	2GCA280915A0030
	CLMD53	-	42.0	2GCA280916A0030
	CLMD53	-	53.0	2GCA280917A0030
	CLMD83	-	74.0	2GCA280918A0030
	CLMD83	-	85.0	2GCA280919A0030
	CLMD85 (3)	-	85.0	2GCA281575A0030
	CLMD83	-	100.0	2GCA282712A0030
	CLMD83	-	105.0	2GCA280920A0030
	CLMD85 (3)	-	105.0	2GCA281576A0030
690	CLMD13	_	5.0	2GCA280570A0030
	CLMD13	-	10.0	2GCA280571A0030
	CLMD33S	-	10.0	2GCA289090A0030
	CLMD33S	_	12.5	2GCA289091A0030
	CLMD33S	5.67	12.5	2GCA289095A0030
	CLMD33S	7.00	12.5	2GCA289095A0030
	CLMD33S	12.50	12.5	2GCA289097A0030
	CLMD13	_	15.0	2GCA280572A0030
	CLMD33S		16.6	2GCA289312A0030
	CLMD33S	_	20.0	2GCA289093A0030
	CLMD33S	_	25.0	2GCA289093A0030
	·· ·	5.67	25.0	- †
	CLMD33S		÷	2GCA289096A0030
	CLMD33S CLMD33S	7.00 12.50	25.0 25.0	2GCA289096A0030 2GCA289098A0030
	·· ! ·····	12.00	}	+
	CLMD33S	- !	33 (16.5+16.5)	2GCA289342A0030
	CLMD53	-	35.0	2GCA281603A0030
	CLMD53	-	50.0	2GCA281603A0030
	CLMD63	-	75.0	2GCA283326A0030
	CLMD63	-	80.0	2GCA288925A0030
	CLMD83	-	100.0	2GCA282435A0030
	CLMD83	-	120.0	2GCA282159A0030

 $^{^{(1)}}$ Detuning reactor (%): value of the reactor (if existing) connected in series with the capacitor. Reactors are not provided.

⁽²⁾ Power (kvar): net reactive power output in combination with the associated reactor (if existing).

⁽³⁾ Outdoor execution.

⁽⁴⁾ All capacitors for 525V network can be used at 500V providing that their power will be reduced by a factor 0.91 (i.e. (500/525)²).

Range - 50 Hz - Single-phase

Network voltage	Туре	Detuning reactor (%) (1)	Power [kvar] (2)	Article number for ordering
400	CLMD13	-	8.0	2GCA293430A0030
	CLMD13	-	11.1	2GCA287000A0030
415	CLMD13	-	2.7	2GCA292770A0030
	CLMD13	-	16.0	2GCA282710A0030
	CLMD43	-	22.0	2GCA292830A0030
•••••	CLMD63	-	54.0	2GCA280706A0030
•••••	CLMD63	_	65.0	2GCA288105A0030
660	CLMD63	- -	58.0	2GCA280625A0030
••••••	CLMD63		63.0	2GCA283120A0030

⁽¹⁾ Detuning reactor (%): value of the reactor (if existing) connected in series with the capacitor. Reactors are not provided.

⁽²⁾ Power (kvar): net reactive power output in combination with the associated reactor (if existing).

Range - 60 Hz

Network voltage	Туре	Detuning reactor (%) (1)	Power [kvar] (2)	Article number for ordering
208	CLMD45 (3)	• • • • • • • • • • • • • • • • • • • •	9.8	2GCA283280A0030
220	CLMD33S	=	6.3	2GCA289103A0030
	CLMD33S	-	10.0	2GCA289105A0030
	CLMD33S	-	12.5	2GCA289106A0030
•••••	CLMD65 (3)	-	50.0	2GCA282030A0030
240	CLMD33S	-	6.3	2GCA289099A0030
	CLMD33S	-	10.0	2GCA289100A0030
	CLMD33S	-	12.5	2GCA289102A0030
	CLMD33S	-	18 (9+9)	2GCA289327A0030
	CLMD33S	-	21 (10.5+10.5)	2GCA289326A0030
	CLMD33S	6.00	6.3	2GCA289102A0030
	CLMD33S	6.00	12.5	2GCA289105A0030
	CLMD33S	6.00	16.7	2GCA289107A0030
	CLMD33S	7.00	6.3	2GCA289102A0030
	CLMD33S	7.00	12.5	2GCA289105A0030
	CLMD33S	7.00	16.7	2GCA289107A0030
	CLMD33S	12.50	6.3	2GCA289108A0030
	CLMD33S	12.50	12.5	2GCA289109A0030
260 (4)	CLMD13	-	3.5	2GCA281322A0030
200	CLMD13	_	5.0	2GCA281323A0030
	CLMD13	_	7.0	2GCA281324A0030
	CLMD13	_	12.0	2GCA281325A0030
	CLMD43	_	17.0	2GCA280964A0030
••••••	CLMD53	_	25.0	2GCA280965A0030
	CLMD53	_	29.0	2GCA281327A0030
	CLMD53	_	36.0	2GCA280966A0030
	CLMD63	_	50.0	2GCA280967A0030
	CLMD63	_	60.0	2GCA280968A0030
	CLMD63		74.0	2GCA280969A0030
380	CLMD45 (3)	_	5.0	2GCA281466A0030
	CLMD45 (3)	_	10.0	2GCA281468A0030
	CLMD33S	_		2GCA289073A0030
		-	10.0	÷
	CLMD33S	7.00	12.5	2GCA289074A0030
	÷	7.00	12.5	2GCA289110A0030
	CLMD33S	;	12.5	2GCA289110A0030
	CLMD33S	12.50	12.5	2GCA289082A0030
	CLMD33S	-	15.0	2GCA289075A0030
	CLMD45 (3)	-	15.0	2GCA281571A0030
	CLMD33S	-	20.0	2GCA289076A0030
	CLMD43	-	25.0	2GCA280972A0030
	CLMD45 (3)	-	25.0	2GCA281464A0030
	CLMD33S	-	25.0	2GCA289077A0030
	CLMD33S		25.0	2GCA289111A0030
	CLMD33S	ნ.00	25.0	2GCA289111A0030
	CLMD33S	-	30 (15+15)	2GCA289329A0030
	CLMD63	-	50.0	2GCA288794A0030
	CLMD85 (3)	-	70.0	2GCA283418A0030
	CLMD83		100.0	2GCA280978A0030
415 ⁽⁵⁾	CLMD13	-	4.5	2GCA281328A0030
	CLMD13	-	6.5	2GCA281329A0030

Network	Туре	Detuning	Power [kvar] (2)	Article number for	
voltage		reactor (%) (1)		ordering	
415 (5)	CLMD13		8.6	2GCA281330A0030	
***************************************	CLMD45 (3)		11.0	2GCA281472A0030	
***************************************	CLMD13	-	13.0	2GCA281331A0030	
•••••	CLMD13	-	16.0	2GCA281332A0030	
•••••	CLMD13	-	18.0	2GCA281333A0030	
***************************************	CLMD45 (3)		22.0	2GCA281473A0030	
•	CLMD33S	-	25.0	2GCA289689A0030	
•••••	CLMD43	-	26.0	2GCA281334A0030	
•••••	CLMD33		26.9	2GCA281669A0030	
•	CLMD53	-	32.0	2GCA281335A0030	
***************************************	CLMD45 (3)	•	32.0	2GCA281167A0030	
***************************************	CLMD33	•	32.5	2GCA282249A0030	
***************************************	CLMD53	-	37.5	2GCA281341A0030	
•	CLMD63	-	43.0	2GCA281342A0030	
	CLMD65 (3)		43.0	2GCA286610A0030	
	CLMD63	-	48.0	2GCA281343A0030	
•	CLMD63	-	54.0	2GCA281344A0030	
	CLMD65 (3)	-	54.0	2GCA292320A0030	
	CLMD63	-	65.0	2GCA281345A0030	
•	CLMD83	-	75.0	2GCA281346A0030	
***************************************	CLMD83	-	90.0	2GCA281347A0030	
••••••	CLMD83	-	105.0	2GCA281348A0030	
440	CLMD33S	-	8.4	2GCA289115A0030	
***************************************	CLMD33S	-	10.5	2GCA289116A0030	
***************************************	CLMD33S	-	12.5	2GCA289117A0030	
***************************************	CLMD33S	-	16.7	2GCA289118A0030	
***************************************	CLMD33S	-	25.0	2GCA289114A0030	
***************************************	CLMD33	-	25.0	2GCA281151A0030	
***************************************	CLMD33S	-	29 (14.5+14.5)	2GCA289335A0030	
460 (6)	CLMD13	-	9.0	2GCA281123A0030	
***************************************	CLMD13	-	14.0	2GCA281119A0030	
***************************************	CLMD43	-	18.0	2GCA280815A0030	
***************************************	CLMD43	-	27.5	2GCA280817A0030	
***************************************	CLMD53	-	32.0	2GCA280818A0030	
	CLMD53	-	40.0	2GCA280819A0030	
•	CLMD63	-	55.0	2GCA280820A0030	
•	CLMD83	-	70.0	2GCA280822A0030	
***************************************	CLMD83	-	80.0	2GCA280823A0030	
***************************************	CLMD83	-	95.0	2GCA280824A0030	
• • • • • • • • • • • • • • • • • • • •	CLMD83	-	110.0	2GCA280825A0030	
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Network	Туре	Detuning	Power [kvar] (2)	Article number for	
voltage		reactor (%) (1)		ordering	
480 (7)	CLMD45 (3)	[-	5.0	2GCA281462A0030	
	CLMD13	-	10.0	2GCA281118A0030	
	CLMD33S	-	10.0	2GCA289115A0030	
•••••	CLMD45 (3)	-	10.0	2GCA281461A0030	
•••••	CLMD33S	-	12.5	2GCA289116A0030	
•••••	CLMD33S	7.00	12.5	2GCA289088A0030	
•••••	CLMD33S	5.67	12.5	2GCA289088A0030	
•••••	CLMD33S	12.50	12.5	2GCA289120A0030	
	CLMD13	-	15.0	2GCA281120A0030	
•••••	CLMD33S	_	15.0	2GCA289117A0030	
	CLMD43	<u>.</u>	20.0	2GCA280826A0030	
	CLMD33S	<u> </u>	20.0	2GCA289118A0030	
•••••	CLMD45 (3)		20.0	2GCA281539A0030	
	· · · · · · · · · · · · · · · · · · ·	<u> </u>		÷	
	CLMD43	; - !	25.0	2GCA280827A0030	
•••••	CLMD45 (3)	-	25.0	2GCA281540A0030	
	CLMD53	-	30.0	2GCA280828A0030	
·····	CLMD33S	[- [30 (15+15)	2GCA289341A0030	
	CLMD53	-	35.0	2GCA280829A0030	
	CLMD63	-	40.0	2GCA280830A0030	
	CLMD63	-	45.0	2GCA280831A0030	
	CLMD63	-	50.0	2GCA281541A0030	
	CLMD65 (3)	- -	50.0	2GCA288965A0030	
••••	CLMD63	-	60.0	2GCA280833A0030	
	CLMD83	-	70.0	2GCA280834A0030	
	CLMD83	-	75.0	2GCA280835A0030	
	CLMD83	-	80.0	2GCA280836A0030	
	CLMD83	-	90.0	2GCA280837A0030	
•••••	CLMD83	-	100.0	2GCA280963A0030	
•••••	CLMD83	-	120.0	2GCA286053A0030	
525 ⁽⁸⁾	CLMD13	-	12.0	2GCA280867A0030	
•••••	CLMD13	- -	15.0	2GCA285284A0030	
•••••	CLMD43	<u> </u>	24.0	2GCA280868A0030	
	CLMD33S	-	30.0	2GCA289087A0030	
	CLMD53	-	36.0	2GCA280869A0030	
	CLMD53	-	48.0	2GCA280870A0030	
	CLMD63	_	60.0	2GCA280871A0030	
	CLMD63	_			
	•	 •	72.0	2GCA280872A0030	
	CLMD63	[=	84.0	2GCA285298A0030	
	CLMD83	-	96.0	2GCA280873A0030	
	CLMD83	; -	120.0	2GCA285400A0030	
600	CLMD13	-	10.0	2GCA280898A0030	
	CLMD33S	-	10.0	2GCA289122A0030	
	CLMD33S	-	12.5	2GCA289123A0030	
	CLMD33S	6.00	12.5	2GCA289126A0030	
	CLMD33S	7.00	12.5	2GCA289126A0030	
	CLMD33S	12.50	12.5	2GCA289128A0030	
	CLMD33S	-	20.0	2GCA289124A0030	
	CLMD33S	-	25.0	2GCA289125A0030	

Network voltage	Type	Detuning reactor (%) (1)	Power [kvar] (2)	Article number for ordering
600	CLMD33S	6.00	25.0	2GCA289127A0030
	CLMD33S	7.00	25.0	2GCA289127A0030
	CLMD33S	12.50	25.0	2GCA289295A0030
	CLMD13	-	15.0	2GCA280899A0030
	CLMD43	-	20.0	2GCA280900A0030
	CLMD43	-	25.0	2GCA280901A0030
•	CLMD45 (3)	-	5.4	2GCA280713A0030
•	CLMD53	-	30.0	2GCA280902A0030
	CLMD33S	-	30.0	2GCA289342A0030
•	CLMD33S	-	33.0	2GCA289311A0030
•	CLMD53	-	35.0	2GCA280903A0030
•	CLMD53	-	40.0	2GCA280904A0030
	CLMD53	-	50.0	2GCA280906A0030
•	CLMD63	-	60.0	2GCA280907A0030
•	CLMD83	-	70.0	2GCA280908A0030
•	CLMD83	-	80.0	2GCA280910A0030
•	CLMD85 (3)	-	80.0	2GCA281880A0030
•	CLMD83	-	90.0	2GCA280911A0030
•	CLMD83	-	100.0	2GCA280912A0030
660	CLMD13	-	12.5	2GCA280921A0030
	CLMD43	-	25.0	2GCA280922A0030
•••••	CLMD53	-	38.0	2GCA280923A0030
•••••	CLMD63	-	50.0	2GCA280924A0030
	CLMD63	-	63.0	2GCA280925A0030
•••••	CLMD83	-	75.0	2GCA280926A0030
•••••	CLMD83	-	88.0	2GCA280927A0030
	CLMD83	-	100.0	2GCA280928A0030

⁽¹⁾ Detuning reactor (%): value of the reactor (if existing) connected in series with the capacitor. Reactors are not provided.

⁽²⁾ Power (kvar): net reactive power output in combination with the associated reactor (if existing).

⁽³⁾ Outdoor execution.

⁽⁴⁾ All capacitors for 260V network can be used at 240V providing that their power will be reduced by a factor 0.85 (i.e. (260/240)²).

⁽⁵⁾ All capacitors for 415V network can be used at 400V providing that their power will be reduced by a factor 0.93 (i.e. (400/415)²).

⁽⁶⁾ All capacitors for 460V network can be used at 440V providing that their power will be reduced by a factor 0.91 (i.e. (440/460)²).

⁽⁷⁾ All capacitors for 480V network can be used at 440V providing that their power will be reduced by a factor 0.84 (i.e. (440/480)²).

 $^{^{(8)}}$ All capacitors for 525V network can be used at 500V providing that their power will be reduced by a factor 0.91 (i.e. (500/525)²).

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