



LKT

Power Factor Correction Capacitors

- Power range from 1.0 to 40.0 kvar
- Voltage range from 208 V to 800 V, 50/60 Hz
- Dry type
- Triple safety features

// Recommended applications

FRAKO power capacitors are in use worldwide for correcting power factor. They are manufactured in four categories:

- Basic
- Standard
- Premium
- Heavy Duty

These categories differ in their current-carrying capacity, ambient temperature and service life specifications, making it possible to design and install power factor correction systems to meet individual requirements.

// Description

FRAKO power capacitors have been developed and manufactured for decades solely at the company's Teningen production site in Germany. This has resulted in a consistently high product quality being maintained, the basis for assured operational reliability and a long service life.

// Versions and Ratings

FRAKO power capacitors are manufactured as single- and 3-phase versions.

- Rated voltage: 208 V bis 800 V
- Rated frequency: 50 / 60 Hz
- Power rating: 1.0 to 40.0 kvar

Other power and voltage ratings on request.

// Construction

FRAKO power capacitors are enclosed in cylindrical aluminium casings provided with M12 mounting studs. Each contains up to three capacitor coils wound in a low-loss, self-healing dielectric material consisting of segmented, metallized polypropylene film. In addition to a PCB-free flame-resistant mineral filler material, the casings also contain an adhesive stabilizer. Permanently connected external discharge resistors guarantee that the residual voltage falls to below 50 V within one minute after the capacitor has been disconnected. The electrical connections are by means of flat push-on terminals (IP00) or a patented spring-clamp connector (IP20) available separately.

A high quality manufacturing process enables capacitance tolerances of +/- 5 % to be achieved in serial production.

The power losses are as follows:

- approx. 0.2 W/kvar dielectric losses in the capacitor coil
- approx. 0.5 W/kvar at the capacitor terminals

// Standards

- IEC 60831-1 and 2
- EN 60831-1 and 2
- UL 810
- CSA 22.2 No. 190

// Special Technical Features

The following parameters are especially important in the operation of power capacitors:

- Overvoltage capacity
- Current-carrying capacity
- Thermal endurance
- Service life
- Reliability when overloaded

Overvoltage Capacity

In compliance with the standards EN 60831-1 and 2 (and IEC 60831-1 and 2) for power capacitors, these **FRAKO** products are designed to withstand the following overvoltages:

Rated voltage [V] / 50 Hz	240	300	400	440	480	525	600	615	690	760	800
	Max. overvoltage [V]										
8 hours daily	264	330	440	484	528	578	660	677	759	836	880
30 min. daily	276	345	460	506	552	604	690	707	794	874	920
5 min.	288	360	480	528	576	630	720	738	828	912	960
1 min.	312	390	520	572	624	683	780	800	897	988	1040

Current-Carrying Capacity

The levels of harmonic distortion in power networks are constantly on the rise globally, making it essential to design capacitors to handle increased current loading.

The applicable standards call for a continuous current-carrying capacity of at least 1.3 times the rated current. At extreme levels of harmonics, however, even this value can be exceeded. For this reason **FRAKO** power capacitors are designed for a continuous current-carrying capacity of at least 1.5 times the rated current I_N .

Category	Basic	Standard	Premium	Heavy Duty
Max. overcurrent 50 Hz / 60 Hz (continuous)	1.5 x I_N 1.25 x I_N	1.8 x I_N 1.5 x I_N	2.2 x I_N 1.8 x I_N	2.7 x I_N 2.25 x I_N
Max. allowable inrush current peak 50 Hz / 60 Hz	200 x I_N 167 x I_N	250 x I_N 208 x I_N	300 x I_N 250 x I_N	450 x I_N 375 x I_N

Thermal Endurance

Excessive temperatures have a negative impact on the service life of a power capacitor. Storage or operation of capacitors above their permitted temperature limits results in a drastic shortening of their service life. Power capacitors are assigned to different temperature classes according to the permitted ambient temperature as follows:

Temperature class	Permitted ambient temperature		
	Maximum	Average over 24 h	Max. average over 365 days
B	45 °C	35 °C	25 °C
C	50 °C	40 °C	30 °C
D	55 °C	45 °C	35 °C

The stated temperatures refer to the direct environment of the capacitor. In an enclosure or a control cabinet the internal temperature can easily exceed the stated maximum or average levels. A typical example is the interior of a detuned power factor correction system. Power capacitors in the Standard, Premium and Heavy Duty categories are therefore designed for continuous ambient temperatures higher than those stated for the temperature classes. This is helped by the compact construction of the capacitors, which is conducive to optimum heat dissipation.

Category	Basic	Standard	Premium	Heavy Duty
Minimum temperature	-25 °C	-40 °C	-40 °C	-40 °C
Maximum temperature	+55 °C	+60 °C	+65 °C	+68 °C
Maximum temperature (continuous)	-	+60 °C	+65 °C	+68 °C
Temperature class	D	-	-	-

Service Life

The use of rigorously inspected materials and their careful processing guarantee high quality and a long product service life. **FRAKO** manufactures its capacitors to its own in-house specifications, which are far more demanding than the requirements of the applicable standards.

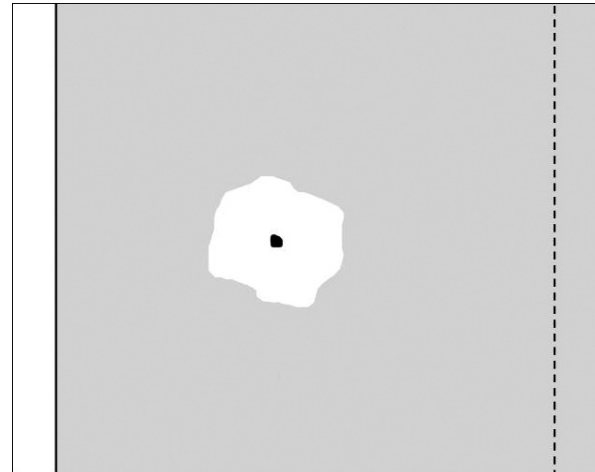
Quality control inspections after each individual manufacturing step ensure that the final product is of a high quality. These demanding quality standards, together with specially developed manufacturing technology, enable **FRAKO** power capacitors to achieve a longer-than-average service life. At the end of the manufacturing process each capacitor is inspected individually. The in-house requirements for this special inspection are considerably more stringent than those of the routine tests specified by the relevant standard.

Reliability under Overload Conditions

The reliability of the capacitors is of fundamental importance for the uninterrupted operation of power factor correction systems. For this reason **FRAKO** has developed its unique triple safety concept. This comprises:

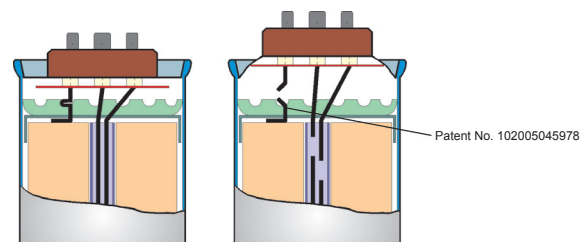
- Self-healing polypropylene film
- Overpressure disconnection system
- Segmented metallized film surfaces

The self-healing property of the dielectric material means that any puncture in the film is automatically isolated, since the heavy short-circuit current immediately vaporizes the very thin metal coating at the damaged location, so that only the insulating substrate film remains.



Self-healing effect

The overpressure disconnection system is designed to disconnect the capacitor from the network safely, without causing any further upset, if an excessive pressure develops inside the casing or at the end of the capacitor's working life. The lid of the capacitor is in the form of a diaphragm. Should puncturing of the dielectric occur on a large scale, this results in the substrate film melting and generating gas inside the casing, thus building up pressure. This causes the diaphragm lid to bulge outwards, thus displacing the terminals axially so that the internal leads to the coils act as mechanical fuses, breaking cleanly at defined locations. The relatively long travel of the terminals ensures reliable and safe disconnection, while the bulging of the lid increases the internal volume and therefore reduces the pressure inside the capacitor.



Principle of the overpressure disconnection system

The segmented film improves both these safety functions significantly. If puncturing occurs at several locations over a small area, it is possible that the relatively large amounts of energy involved will disrupt the effectiveness of the self-healing property. In this case, the segmented metallized surface offers ADDED safety, since an extremely overloaded segment will be completely isolated from the network, thus avoiding total disconnection by the overpressure function. This greatly extends the service life of the capacitor.

Segmented metallizing also has a positive impact on the reliability of the overpressure disconnection system. If extreme overloading occurs, the amount of energy released at the puncture location is reduced, hence minimizing the risk of the capacitor casing bursting before the overpressure disconnection system can act.

The combination of self-healing film, overpressure disconnection function and segmented metallizing therefore makes possible a high degree of operational dependability and reliable disconnection even if the capacitor is operated under conditions clearly deviating from its specifications.



Segmented self-healing capacitor film

FRAKO is the only manufacturer of power capacitors that combines these three protective functions in one capacitor.

// Accessories

All **FRAKO** power capacitors can be fitted with WAGO CAGE CLAMP® connectors. These use special patented spring clamps that ensure a quick, permanent and maintenance-free electrical contact with the capacitor. This connector meets IP20 requirements and therefore provides protection against objects such as fingers inadvertently touching live conductors.

For capacitors up to 70 mm in diameter we also offer an insulating cap to cover the capacitor terminals. In combination with the cable sleeve also available, the insulating cap then provides IP54 ingress protection.

Article-No.	Type	Description
31-08000	AKD 25/3	Connector for three-phase capacitors, Ø 60/70 mm
31-08002	AKD 25/2	Connector for single-phase capacitors, Ø 60/70 mm
31-08003	AKD 30/3	Connector for three-phase capacitors, Ø 85 mm
31-08004	AKD 30/2	Connector for single-phase capacitors, Ø 85 mm
31-08005	AKD-UL	Connector for UL range of capacitors
69-00352	LKK 60	Insulating cap for Ø 60 mm capacitors
69-00350	LKK 70	Insulating cap for Ø 70 mm capacitors
69-00353	LKK	Cable sleeve for insulating cap

Components

Power Factor Correction Capacitors and accessories

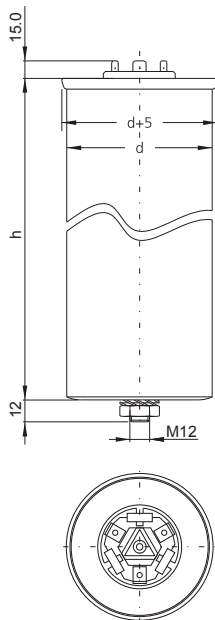
// Technical Data

Category	Basic Capacitor	Standard Capacitor	Premium Capacitor		Heavy Duty Capacitor
Mode of operation	Basic	Standard	Premium	Standard*	Heavy Duty
Type	LKT...-DB LKT...-DB60	LKT...-DP/EP LKT...-DP60	LKT...-DL LKT...-DL60	LKT...-DL LKT...-DL60	LKT...-HD LKT...-HD60
Rated reactive power	1.2...36 kvar	0.4...40 kvar	0.3...25 kvar	0.3...30.9 kvar	3.2...21.6 kvar
Rated voltage	208...525 V	208...800 V	208...525 V	208...615 V	208...525 V
Rated frequency	50/60 Hz				
Max. overvoltage	1.10 x V _N - 8 h. daily 1.15 x V _N - 30 min. daily 1.20 x V _N - 5 min. 1.30 x V _N - 1 min.				
Max. overcurrent capability at rated voltage (permanent)	1.5 x I _N / 50 Hz 1.25 x I _N / 60 Hz	1.8 x I _N / 50 Hz 1.5 x I _N / 60 Hz	2.2 x I _N / 50 Hz 1.8 x I _N / 60 Hz	2.0 x I _N / 50 Hz 1.65 x I _N / 60 Hz	2.7 x I _N / 50 Hz 2.25 x I _N / 60 Hz
Max. inrush current capability at rated voltage	200 x I _N / 50 Hz 167 x I _N / 60 Hz	250 x I _N / 50 Hz 208 x I _N / 60 Hz	300 x I _N / 50 Hz 250 x I _N / 60 Hz	300 x I _N / 50 Hz 250 x I _N / 60 Hz	450 x I _N / 50 Hz 375 x I _N / 60 Hz
Temperature class	-25 °C / D** (-13 °F / D**)	-40 °C / +60 °C (-40 °F / +140 °F)	-40 °C / +65 °C (-40 °F / +149 °F)	-40 °C / +60 °C (-40 °F / +140 °F)	-40 °C / +68 °C (-40 °F / +154 °F)
Min. / max. temperature (permanent)	-25 °C / +55 °C (-13 °F / +131 °F)	-40 °C / +60 °C (-40 °F / +140 °F)	-40 °C / +65 °C (-40 °F / +149 °F)	-40 °C / +60 °C (-40 °F / +140 °F)	-40 °C / +68 °C (-40 °F / +154 °F)
Maximum case temperature	70 °C (158 °F)	75 °C (167 °F)	78 °C (172.4 °F)	75 °C (167 °F)	78 °C (172.4 °F)
Dielectric power loss	0.2 W/kvar				
Power loss	0.5 W/kvar				
Test voltage terminal / terminal	2.15 x V _N for 2s 1.85 x V _N for 18s				
Test voltage terminal / case	3900 V for 2 s				
Isolation level	3/8 kV				
Mean life expectancy	100 000 h	130 000 h	170 000 h	130 000 h	200 000 h
Maximum humidity	95 %				
Maximum altitude	4000 m				
Number of annual switching operations	20 000	40 000	60 000	60 000	100 000
Discharging level in 60 s	≤ 50 V				
Tightening torque for aluminium mounting screw (approx.)	15 Nm				

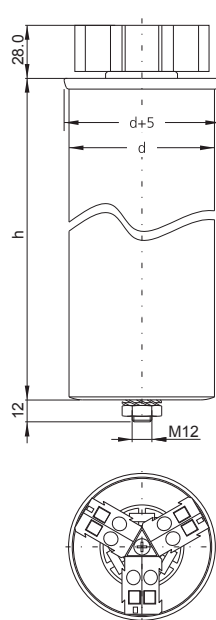
* Generally, "Premium" (DL-type) capacitors can also be operated at higher voltages with the "Standard" (DP-type) specification.

** see table "Temperature class" on page 10

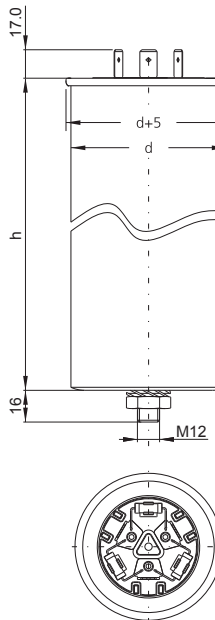
// Dimensions



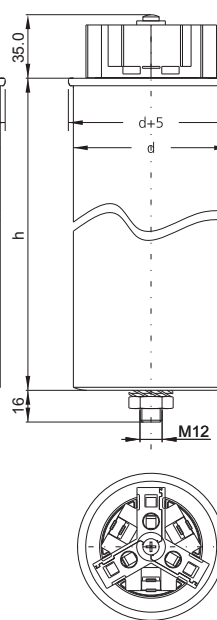
Three-phase capacitor with d = 60/70 mm
For connection with flat cable plug 6.3 × 0.8 mm



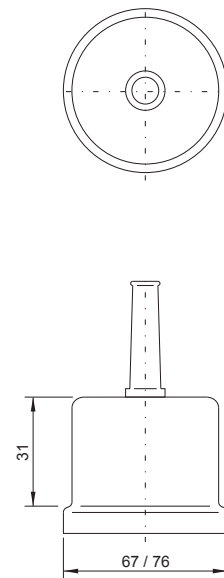
Three-phase capacitor with d = 60/70 mm
Spring tension terminal AKD 25/3 for 2 × 6 mm²
Art.-No. 31-08000



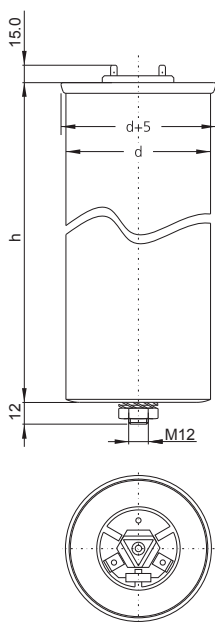
Three-phase capacitor with d = 85 mm
For connection with flat cable plug 9.5 × 1.2 mm



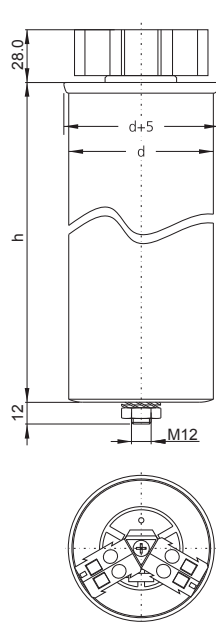
Three-phase capacitor with d = 85 mm
Spring tension terminal AKD 30/3 for 16 mm²
Art.-No. 31-08003



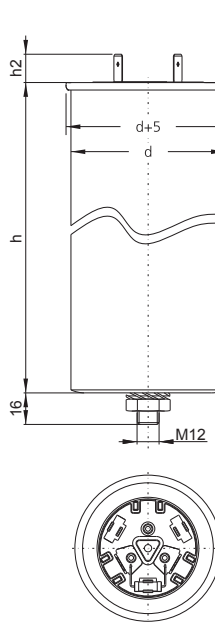
Plastic cap and rubber sleeve LKK 60/70 for capacitors with: d = 60 mm (Art.No. 69-00352) / d = 70 mm (Art.No. 69-00350) (not available for capacitors with d = 85 mm) Rubber sleeve for insulating cap Art.-No. 69-00353



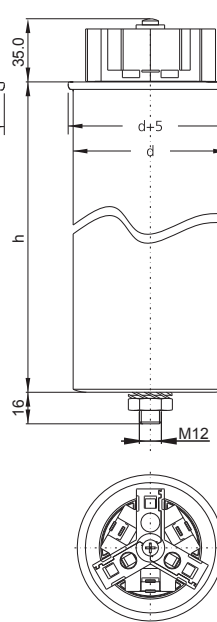
Single-phase capacitor with d = 60/70 mm
For connection with flat cable plug 6.3 × 0.8 mm



Single-phase capacitor with d = 60/70 mm
Spring tension terminal AKD 25/2 for 2 × 6 mm²
Art.-No. 31-08002



Single-phase capacitor with d = 85 mm
For connection with flat cable plug 9.5 × 1.2 mm



Single-phase capacitor with d = 85 mm
Spring tension terminal AKD 30/2 for 16 mm²
Art.-No. 31-08004

// Basic Capacitors (three-phase, V_N : 400 V...525 V)

Type LKT...-DB for 50 Hz / 60 Hz

Article-No.	Type	Capacitance [μ F]	Rated Reactive Power in kvar at Rated Voltage (V_N) 50 Hz / 60 Hz									Rated current at V_N 50 Hz / 60 Hz [A]	Dimensions (d x h) Weight (net) [mm] [kg]
			230V	250V	300V	400V	415V	440V	460V	480V	525V		
31-10414	LKT 5-400-DB	3 x 33.2	1.66 2.0	2.0 2.3	2.8 3.33	5.0 6.0						7.2 8.7	60 x 150 0.550
31-10400	LKT 6,25-400-DB	3 x 41.4	2.1 2.5	2.4 2.9	3.5 4.2	6.25 7.5						9.0 10.8	60 x 150 0.550
31-10415	LKT 7,5-400-DB	3 x 49.7	2.5 3.0	2.9 3.5	4.2 5.1	7.5 9.0						10.8 13.0	60 x 150 0.550
31-10416	LKT 10-400-DB	3 x 66.3	3.33 4.0	3.9 4.7	5.6 6.8	10.0 12.0						14.4 17.3	60 x 225 0.800
31-10401	LKT 12,5-400-DB	3 x 82.9	4.17 5.0	4.9 5.9	7.0 8.4	12.5 15.0						18.0 21.7	60 x 225 0.800
31-10417	LKT 15-400-DB	3 x 99.5	5.0 6.0	5.9 7.0	8.4 10.1	15.0 18.0						21.7 26.0	70 x 225 1.050
31-10418	LKT 20-400-DB	3 x 132.6	6.66 7.9	7.8 9.4	11.3 13.5	20.0 24.0						28.9 34.6	85 x 215 1.500
31-10402	LKT 25-400-DB	3 x 165.8	8.33 9.9	9.8 11.7	14.1 16.9	25.0 30.0						36.1 43.3	85 x 278 1.850
31-10403	LKT 30-400-DB	3 x 198.9	9.9 11.9	11.7 14.1	16.9 20.3	30.0 36.0						43.3 52.0	85 x 320 2.150
31-10404	LKT 6,25-440-DB	3 x 34.3	1.7 2.0	2.0 2.4	2.9 3.5	5.2 6.2	5.6 6.7	6.25 7.5				8.2 9.8	60 x 150 0.550
31-10412	LKT 10-440-DB	3 x 54.8	2.7 3.33	3.2 3.9	4.7 5.6	8.33 9.9	8.9 10.7	10.0 12.0				13.1 15.7	60 x 225 0.800
31-10379	LKT 12,5-440-DB	3 x 68.5	3.4 4.1	4.0 4.8	5.8 7.0	10.3 12.4	11.1 13.3	12.5 15.0				16.4 19.7	70 x 225 1.050
31-10406	LKT 15-440-DB	3 x 82.2	4.1 4.9	4.8 5.8	7.0 8.4	12.4 14.9	13.3 16.0	15.0 18.0				19.7 23.6	70 x 225 1.050
31-10413	LKT 20-440-DB	3 x 109.6	5.5 6.66	6.5 7.8	9.3 11.2	16.5 19.8	17.8 21.4	20.0 24.0				26.2 31.5	85 x 215 1.850
31-10407	LKT 25-440-DB	3 x 137.0	6.8 8.2	8.1 9.7	11.6 14.0	20.7 24.8	22.2 26.7	25.0 30.0				32.8 39.4	85 x 278 1.500
31-10408	LKT 30-440-DB	3 x 164.4	8.2 9.8	9.7 11.6	14.0 16.7	24.8 29.8	26.7 32.0	30.0 36.0				39.4 47.2	85 x 278 1.850
31-10409	LKT 6,25-525-DB	3 x 24.1	1.2 1.4	1.4 1.7	2.0 2.4	3.6 4.4	3.9 4.7	4.4 5.3	4.8 5.8	5.2 6.3	6.25 7.5	6.9 8.2	60 x 150 0.550
31-10435	LKT 10-525-DB	3 x 38.5	1.9 2.3	2.3 2.7	3.3 3.9	5.8 7.0	6.3 7.5	7.0 8.4	7.7 9.2	8.4 10.0	10.0 12.0	11.0 13.2	60 x 225 0.800
31-10410	LKT 12,5-525-DB	3 x 48.1	2.4 2.9	2.8 3.4	4.1 4.9	7.3 8.7	7.8 9.4	8.8 10.5	9.6 11.5	10.4 12.5	12.5 15.0	13.7 16.5	70 x 225 1.050
31-10419	LKT 15-525-DB	3 x 57.7	2.9 3.5	3.4 4.1	4.9 5.9	8.7 10.5	9.4 11.3	10.5 12.6	11.5 13.8	12.5 15.1	15.0 18.0	16.5 19.8	70 x 225 1.050
31-10434	LKT 17,2-525-DB	3 x 66.2	3.3 4.0	3.9 4.7	5.6 6.7	10.0 12.0	10.8 12.9	12.1 14.5	13.2 15.9	14.4 17.3	17.2 20.6	18.9 22.7	70 x 225 1.050
31-10420	LKT 20-525-DB	3 x 77.0	3.8 4.6	4.5 5.4	6.5 7.8	11.6 13.9	12.5 15.0	14.1 16.9	15.4 18.4	16.7 20.1	20.0 24.0	22.0 26.4	70 x 265 1.200
31-10411	LKT 25-525-DB	3 x 96.2	4.8 5.8	5.7 6.8	8.2 9.8	14.5 17.4	15.6 18.8	17.6 21.1	19.2 23.0	20.9 25.1	25.0 30.0	27.5 33.0	85 x 278 1.850

// Standard Capacitors (three-phase, V_N : 300 V...480 V)

Type LKT...-DP for 50 Hz / 60 Hz

Article-No.	Type	Capacitance [μ F]	Rated Reactive Power in kvar at Rated Voltage (V_N) 50 Hz / 60 Hz										Rated current at V_N 50 Hz / 60 Hz [A]	Dimensions (d x h) Weight (net) [mm] [kg]
			230 V	250 V	300 V	400 V	415 V	440 V	460 V	480 V	525 V			
31-10523	LKT 7,1-300-DP	3 x 83.7	4.17 5.0	4.9 5.9	7.1 8.5								13.7 16.4	60 x 225 0.800
31-10524	LKT 14,2-300-DP	3 x 167.1	8.33 10.0	9.9 11.8	14.2 17.0								27.3 32.7	85 x 215 1.500
31-10525	LKT 21,3-300-DP	3 x 251.1	12.5 15.0	14.8 17.7	21.3 25.5								41.0 49.2	85 x 278 1.850
31-10500	LKT 5-400-DP	3 x 33.2	1.66 2.0	2.0 2.3	2.8 3.33	5.0 6.0							7.2 8.7	60 x 150 0.550
31-10380	LKT 10-400-DP	3 x 66.3	3.33 4.0	3.9 4.7	5.6 6.8	10.0 12.0							14.4 17.3	70 x 225 1.050
31-10502	LKT 12,5-400-DP	3 x 82.9	4.17 5.0	4.9 5.9	7.0 8.4	12.5 15.0							18.0 21.7	70 x 225 1.050
31-10503	LKT 15-400-DP	3 x 99.5	5.0 6.0	5.9 7.0	8.4 10.1	15.0 18.0							21.7 26.0	70 x 265 1.200
31-10504	LKT 20-400-DP	3 x 132.6	6.66 8.0	7.8 9.4	11.3 13.5	20.0 24.0							28.9 34.6	85 x 278 1.850
31-10505	LKT 25-400-DP	3 x 165.8	8.33 9.9	9.8 11.7	14.1 16.9	25.0 30.0							36.1 43.3	85 x 278 1.850
31-10534	LKT 3,8-440-DP	3 x 20.8	1.0 1.25	1.22 1.5	1.8 2.1	3.1 3.8	3.4 4.1	3.8 4.6					5.0 6.0	60 x 150 0.550
31-10508	LKT 10-440-DP	3 x 54.8	2.7 3.33	3.2 3.9	4.7 5.6	8.33 9.9	8.9 10.7	10.0 12.0					13.1 15.7	60 x 225 0.800
31-10507	LKT 12,5-440-DP	3 x 68.5	3.4 4.1	4.0 4.8	5.8 7.0	10.3 12.4	11.1 13.3	12.5 15.0					16.4 19.1	70 x 225 1.050
31-10381	LKT 15-440-DP	3 x 82.2	4.1 4.9	4.8 5.8	7.0 8.33	12.4 14.9	13.3 16.0	15.0 18.0					19.7 23.6	70 x 265 1.200
31-10512	LKT 20-440-DP	3 x 109.6	5.5 6.66	6.5 7.8	9.3 11.2	16.5 19.8	17.8 21.4	20.0 24.0					26.2 31.5	85 x 278 1.850
31-10510	LKT 25-440-DP	3 x 137.0	6.8 8.2	8.1 9.7	11.6 14.0	20.7 24.8	22.2 26.7	25.0 30.0					32.8 39.4	85 x 278 1.850
31-10535	LKT 28,2-440-DP	3 x 154.6	7.7 9.2	9.1 10.9	13.1 15.7	23.3 27.9	25.0 30.0	28.2 33.8					37.0 44.4	85 x 320 2.150
31-10509	LKT 30-440-DP	3 x 164.4	8.2 9.8	9.7 11.6	14.0 16.7	24.8 29.8	26.7 32.0	30.0 36.0					39.4 47.2	85 x 320 2.150
31-10390	LKT 12,5-480-DP	3 x 57.6	2.9 3.4	3.4 4.1	4.9 5.9	8.7 10.4	9.3 11.2	10.5 12.6	11.5 13.8	12.5 15.0			15.0 18.0	70 x 225 1.050
31-10382	LKT 15,5-480-DP	3 x 71.4	3.6 4.3	4.3 5.1	6.1 7.3	10.8 13.0	11.6 13.9	13.1 15.7	14.2 17.1	15.5 18.6			18.6 22.4	70 x 265 1.200
31-10522	LKT 18-480-DP	3 x 82.9	4.17 5.0	4.9 5.9	7.0 8.4	12.5 15.0	13.5 16.2	15.1 18.2	16.5 19.8	18.0 21.6			21.7 26.0	70 x 265 1.200
31-10559	LKT 31-480-DP	3 x 142.8	7.1 8.5	8.4 10.1	12.1 14.5	21.5 25.8	23.2 27.8	26.1 31.3	28.5 34.2	31.0 37.2			37.3 44.7	85 x 320 2.150
31-10558	LKT 33,3-480-DP	3 x 153.4	7.7 9.2	9.0 10.8	13.0 15.6	23.1 27.8	24.9 29.9	28.0 33.6	30.6 36.7	33.3 40.0			40.1 48.1	85 x 320 2.150

Components

Power Factor Correction Capacitors and accessories

// Standard Capacitors (three-phase, $V_N = 525\text{ V}$)

Type LKT...-DP for 50 Hz / 60 Hz

Article-No.	Type	Capacitance [μF]	Rated Reactive Power in kvar at Rated Voltage (V_N) 50 Hz / 60 Hz										Rated current at V_N 50 Hz / 60 Hz [A]	Dimensions (d x h) Weight (net) [mm] [kg]
			230V	250V	300V	400V	415V	440V	460V	480V	525V			
31-10517	LKT 10-525-DP	3 x 38.5	1.9 2.3	2.3 2.7	3.3 3.9	5.8 7.0	6.3 7.5	7.0 8.33	7.7 9.2	8.33 10.0	10.0 12.0	11.0 13.2	70 x 225 1.050	
31-10516	LKT 12,5-525-DP	3 x 48.1	2.4 2.9	2.8 3.4	4.1 4.9	7.3 8.7	7.8 9.4	8.8 10.5	9.6 11.5	10.4 12.5	12.5 15.0	13.7 16.5	70 x 225 1.050	
31-10520	LKT 15-525-DP	3 x 57.7	2.9 3.5	3.4 4.1	4.9 5.9	8.7 10.4	9.4 11.3	10.5 12.6	11.5 13.8	12.5 15.0	15.0 18.0	16.5 19.8	70 x 265 1.200	
31-10521	LKT 20-525-DP	3 x 77.0	3.8 4.6	4.5 5.4	6.5 7.8	11.6 13.9	12.5 15.0	14.1 16.9	15.4 18.4	16.7 20.1	20.0 24.0	22.0 26.4	85 x 278 1.850	
31-10519	LKT 25-525-DP	3 x 96.2	4.8 5.8	5.7 6.8	8.2 9.8	14.5 17.4	15.6 18.8	17.6 21.1	19.2 23.0	20.9 25.1	25.0 30.0	27.5 33.0	85 x 278 1.850	

// Standard Capacitors (three-phase, $V_N: 690\text{ V} \dots 800\text{ V}$)

Type LKT...-DP for 50 Hz / 60 Hz

Article-No.	Type	Capacitance [μF]	Rated Reactive Power in kvar at Rated Voltage (V_N) 50 Hz / 60 Hz										Rated current at V_N 50 Hz / 60 Hz [A]	Dimensions (d x h) Weight (net) [mm] [kg]
			525V	570V	600V	615V	690V	750V	760V	800V				
31-10560	LKT 5-690-DP	3 x 11.1	2.9 3.5	3.4 4.1	3.8 4.5	4.0 4.8	5.0 6.0					4.2 5.0	60 x 225 0.800	
31-10561	LKT 10-690-DP	3 x 22.3	5.8 7.0	6.8 8.2	7.6 9.1	7.9 9.5	10.0 12.0					8.4 10.0	70 x 225 1.050	
31-10562	LKT 12,5-690-DP	3 x 27.9	7.2 8.7	8.5 10.2	9.5 11.3	9.9 11.9	12.5 15.0					10.5 12.6	70 x 265 1.200	
31-10563	LKT 15-690-DP	3 x 33.4	8.7 10.4	10.2 12.3	11.3 13.6	11.9 14.3	15.0 18.0					12.6 15.1	70 x 265 1.200	
31-10564	LKT 20-690-DP	3 x 44.6	11.6 13.9	13.7 16.4	15.1 18.2	15.9 19.1	20.0 24.0					16.7 20.1	85 x 278 1.850	
31-10565	LKT 25-690-DP	3 x 55.7	14.5 17.4	17.1 20.5	18.9 22.7	19.9 23.8	25.0 30.0					20.9 25.1	85 x 278 1.850	
31-10569	LKT 28,2-760-DP	3 x 51.8	13.5 16.1	15.9 19.0	17.6 21.1	18.5 22.2	23.2 27.9	27.5 33.0	28.2 33.8			21.4 25.7	85 x 320 2.150	
31-10570	LKT 6,7-800-DP	3 x 11.1	2.9 3.5	3.4 4.1	3.8 4.5	4.0 4.8	5.0 6.0	5.9 7.1	6.0 7.3	6.7 8.0		4.8 5.8	60 x 225 0.800	
31-10571	LKT 10,5-800-DP	3 x 17.4	4.5 5.4	5.3 6.4	5.9 7.1	6.2 7.5	7.8 9.4	9.2 11.1	9.5 11.4	10.5 12.6		7.6 9.1	70 x 225 1.050	
31-10572	LKT 13,3-800-DP	3 x 22.0	5.7 6.9	6.8 8.1	7.5 9.0	7.9 9.4	9.9 11.9	11.7 14.0	12.0 14.4	13.3 16.0		9.6 11.5	85 x 215 1.500	
31-10573	LKT 21-800-DP	3 x 34.8	9.0 10.9	10.7 12.8	11.8 14.2	12.4 14.9	15.6 18.8	18.5 22.2	19.0 22.7	21.0 25.2		15.2 18.2	85 x 278 1.850	
31-10574	LKT 26,7-800-DP	3 x 44.3	11.5 13.8	13.6 16.3	15.0 18.0	15.8 18.9	19.9 23.8	23.5 28.2	24.1 28.9	26.7 32.0		19.3 23.1	85 x 320 2.150	

// Standard Capacitors (single-phase, V_N : 280 V...525 V)

Type LKT...-EP for 50 Hz / 60 Hz

Article-No.	Type	Capacitance [μ F]	Rated Reactive Power in kvar at Rated Voltage (V_N) 50 Hz / 60 Hz										Rated current at V_N 50 Hz / 60 Hz [A]	Dimensions (d x h) Weight (net) [mm] [kg]
			230 V	250 V	300 V	400 V	415 V	440 V	460 V	480 V	525 V			
31-10547	LKT 5-280-EP	1 x 203.7	3.4 4.1	4.0 4.8	5.0 6.0								17.9 21.5	60 x 138 0.500
31-10548	LKT 10-280-EP	1 x 407.4	6.8 8.1	8.0 9.6	10.0 12.0								35.8 43.0	85 x 131 1.150
31-10526	LKT 3,33-440-EP	1 x 54.8	0.9 1.1	1.1 1.3	1.5 1.9	2.8 3.3	3.0 3.6	3.33 4.0					7.6 9.1	60 x 90 0.325
31-10527	LKT 4,17-440-EP	1 x 68.6	1.1 1.4	1.3 1.6	1.9 2.3	3.4 4.1	3.7 4.5	4.17 5.0					9.5 11.4	60 x 138 0.500
31-10528	LKT 5-440-EP	1 x 82.2	1.4 1.6	1.6 1.9	2.3 2.8	4.1 5.0	4.4 5.33	5.0 6.0					11.4 13.6	60 x 138 0.500
31-10384	LKT 9,4-440-EP	1 x 154.6	2.6 3.1	3.0 3.6	4.4 5.2	7.8 9.3	8.4 10.0	9.4 11.3					21.4 25.6	70 x 153 0.650
31-10529	LKT 2,4-480-EP	1 x 33.2	0.6 0.7	0.7 0.8	0.9 1.1	1.7 2.0	1.8 2.15	2.0 2.4	2.2 2.6	2.4 2.9			5.0 6.0	60 x 90 0.325
31-10530	LKT 3,33-480-EP	1 x 46.0	0.8 0.9	0.9 1.1	1.3 1.6	2.3 2.8	2.5 3.0	2.8 3.4	3.1 3.7	3.33 4.0			6.9 8.3	60 x 90 0.325
31-10531	LKT 3,6-480-EP	1 x 49.7	0.8 1.0	1.0 1.2	1.4 1.7	2.5 3.0	2.7 3.2	3.0 3.6	3.3 4.0	3.6 4.3			7.5 9.0	60 x 138 0.500
31-10515	LKT 4,8-480-EP	1 x 66.3	1.1 1.3	1.3 1.6	1.9 2.3	3.33 4.0	3.6 4.3	4.0 4.8	4.4 5.3	4.8 5.8			10.0 12.0	60 x 138 0.500
31-10514	LKT 6-480-EP	1 x 82.9	1.4 1.7	1.6 2.0	2.3 2.8	4.17 5.0	4.5 5.4	5.0 6.0	5.5 6.6	6.0 7.2			12.5 15.0	60 x 138 0.500
31-10532	LKT 2,8-525-EP	1 x 32.3	0.5 0.6	0.6 0.8	0.9 1.1	1.6 1.9	1.7 2.1	2.0 2.4	2.1 2.6	2.3 2.8	2.8 3.4		5.3 6.4	60 x 90 0.325
31-10533	LKT 3,33-525-EP	1 x 38.5	0.6 0.8	0.8 0.9	1.1 1.3	1.9 2.3	2.1 2.5	2.3 2.8	2.6 3.1	2.8 3.3	3.33 4.0		6.3 7.6	60 x 138 0.500
31-10385	LKT 8,33-525-EP	1 x 96.2	1.6 1.9	1.9 2.3	2.7 3.3	4.8 5.8	5.2 6.3	5.9 7.0	6.4 7.7	7.0 8.33	8.33 10.0		15.9 19.0	70 x 153 0.650

// Premium Capacitors (three-phase, V_N : 400 V...480 V)

Type LKT...-DL for 50 Hz / 60 Hz

Article-No.	Type	Capacitance [μ F]	Rated Reactive Power in kvar at Rated Voltage (V_N) 50 Hz / 60 Hz									Rated current at V_N 50 Hz / 60 Hz [A]	Dimensions (d x h) Weight (net) [mm] [kg]
			230V	400V	415V	440V	460V	480V	525V	570V	615V		
31-10598	LKT 1-400-DL	3 x 6.6	0.3 0.4	1.0 1.2	1.1* 1.3*	1.2* 1.5*						1.4 1.7	60 x 150 0.550
31-10599	LKT 1,5-400-DL	3 x 9.9	0.5 0.6	1.5 1.8	1.6* 1.9*	1.8* 2.2*						2.2 2.6	60 x 150 0.550
31-10600	LKT 5-400-DL	3 x 33.2	1.66 2.0	5.0 6.0	5.4* 6.5*	6.1* 7.3*						7.2 8.7	60 x 225 0.800
31-10601	LKT 6,25-400-DL	3 x 41.4	2.1 2.5	6.25 7.5	6.7* 8.1*	7.6* 9.1*						9.0 10.8	60 x 225 0.800
31-10602	LKT 9,3-400-DL	3 x 61.7	3.0 3.7	9.3 11.1	10.0* 12.0*	11.3* 13.5*						13.4 16.1	70 x 225 1.050
31-10603	LKT 10-400-DL	3 x 66.3	3.33 4.0	10.0 12.0	10.8* 12.9*	12.1* 14.5*						14.4 17.3	70 x 225 1.050
31-10604	LKT 11,7-400-DL	3 x 77.6	3.9 4.6	11.7 14.0	12.6* 15.1*	14.2* 17.0*						16.9 20.3	70 x 225 1.050
31-10386	LKT 12,5-400-DL	3 x 82.9	4.17 5.0	12.5 15.0	13.5* 16.2*	15.1* 18.2*						18.0 21.7	70 x 265 1.200
31-10606	LKT 20-400-DL	3 x 132.6	6.6 7.9	20.0 24.0	21.5* 25.8*	24.2* 29.0*						28.9 34.6	85 x 278 1.850
31-10607	LKT 5,0-440-DL	3 x 27.4	1.4 1.66	4.17 5.0	4.5 5.4	5.0 6.0	5.5* 6.6*	6.0* 7.1*				6.6 7.9	60 x 225 0.800
31-10608	LKT 7,6-440-DL	3 x 41.7	2.1 2.5	6.25 7.5	6.8 8.1	7.6 9.1	8.33* 10.0*	9.0* 10.9*				10.0 12.0	60 x 225 0.800
31-10387	LKT 9,1-440-DL	3 x 49.9	2.5 3.0	7.5 9.0	8.1 9.7	9.1 10.9	10.0* 11.9*	10.8* 13.0*				11.9 14.3	70 x 225 1.050
31-10610	LKT 12,1-440-DL	3 x 66.3	3.33 4.0	10.0 12.0	10.8 12.9	12.1 14.5	13.2* 15.9*	14.4* 17.3*				15.9 19.1	70 x 225 1.050
31-10612	LKT 17,6-440-DL	3 x 96.5	4.8 5.8	14.5 17.4	15.6 18.8	17.6 21.1	19.2* 23.1*	21.0* 25.1*				23.1 27.7	85 x 278 1.850
31-10613	LKT 3,6-480-DL	3 x 16.6	0.8 1.0	2.5 3.0	2.7 3.2	3.0 3.6	3.33 4.0	3.6 4.3	4.3* 5.2*			4.3 5.2	60 x 150 0.550
31-10388	LKT 4,5-480-DL	3 x 20.7	1.0 1.2	3.1 3.8	3.4 4.0	3.8 4.6	4.1 5.0	4.5 5.4	5.4* 6.5*			5.4 6.5	60 x 225 0.800
31-10615	LKT 7,2-480-DL	3 x 33.2	1.7 2.0	5.0 6.0	5.4 6.5	6.0 7.2	6.66 7.9	7.2 8.6	8.6* 10.3*			8.7 10.4	60 x 225 0.800
31-10616	LKT 7,8-480-DL	3 x 35.9	1.8 2.1	5.4 6.5	5.8 7.0	6.5 7.9	7.2 8.6	7.8 9.3	9.3* 11.2*			9.4 11.3	60 x 225 0.800
31-10617	LKT 10,4-480-DL	3 x 47.9	2.4 2.9	7.3 8.7	7.8 9.3	8.8 10.5	9.6 11.5	10.4 12.5	12.4* 14.9*			12.5 15.0	70 x 225 1.050
31-10618	LKT 12,5-480-DL	3 x 57.6	2.9 3.4	8.7 10.4	9.4 11.2	10.5 12.6	11.5 13.8	12.5 15.0	15.0* 17.9*			15.0 18.0	70 x 265 1.200
31-10389	LKT 15,5-480-DL	3 x 71.4	3.6 4.3	10.8 12.9	11.6 13.9	13.0 15.6	14.2 17.1	15.5 18.6	18.5* 22.3*			18.6 22.4	85 x 278 1.850

Generally, "Premium" (DL-type) capacitors can also be operated at higher voltages with the "Standard" (DP-type) specification.

Please note that the DP values in the chart are marked with *.

// Premium Capacitors (three-phase, $V_N = 525 \text{ V}$)

Type LKT...-DL for 50 Hz / 60 Hz

Article-No.	Type	Capacitance [μF]	Rated Reactive Power in kvar at Rated Voltage (V_N) 50 Hz / 60 Hz										Rated current at V_N 50 Hz / 60 Hz [A]	Dimensions (d x h) Weight (net) [mm] [kg]
			230V	400V	415V	440V	460V	480V	525V	570V	615V			
31-10619	LKT 4,17-525-DL	3x 16.1	0.8 1.0	2.4 2.9	2.6 3.1	2.9 3.5	3.2 3.8	3.5 4.2	4.17 5.0	4.9* 5.9*	5.7* 6.9*	4.6 5.5	60 x 225 0.800	
31-10620	LKT 5,9-525-DL	3x 22.7	1.1 1.4	3.4 4.1	3.7 4.4	4.17 4.97	4.5 5.5	5.0 5.9	5.9 7.1	7.0* 8.4*	8.1* 9.7*	6.5 7.8	60 x 225 0.800	
31-10621	LKT 7,7-525-DL	3x 29.6	1.5 1.8	4.5 5.4	4.8 5.8	5.4 6.5	5.91 7.1	6.5 7.8	7.7 9.3	9.1* 10.9*	10.6* 12.7*	8.5 10.2	70 x 225 1.050	
31-10622	LKT 8,33-525-DL	3x 32.1	1.6 1.9	4.8 5.8	5.2 6.2	5.8 7.0	6.4 7.6	7.0 8.33	8.33 10.0	9.8* 11.8*	11.4* 13.7*	9.2 11.0	70 x 225 1.050	

Generally, "Premium" (DL-type) capacitors can also be operated at higher voltages with the "Standard" (DP-type) specification. Please note that the DP values in the chart are marked with *.

// Heavy Duty Capacitors (three-phase, $V_N: 480 \text{ V} \dots 525 \text{ V}$)

Type LKT...-HD for 50 Hz / 60 Hz

Article-No.	Type	Capacitance [μF]	Rated Reactive Power in kvar at Rated Voltage (V_N) 50 Hz / 60 Hz										Rated current at V_N 50 Hz / 60 Hz [A]	Dimensions (d x h) Weight (net) [mm] [kg]
			230V	300V	400V	415V	440V	460V	480V	500V	525V			
31-10580	LKT 16,8-480-HD	3 x 77.4	3.9 4.6	6.6 7.9	11.7 14.0	12.6 15.1	14.1 16.9	15.4 18.5	16.8 20.2			20.2 24.2	85 x 215 1.500	
31-10581	LKT 18,0-480-HD	3 x 82.9	4.1 5.0	7.0 8.4	12.5 15.0	13.5 16.2	15.1 18.2	16.5 19.8	18.0 21.6			21.7 26.0	85 x 215 1.500	
31-10582	LKT 15,6-500-HD	3 x 66.2	3.3 4.0	5.6 6.7	10.0 12.0	10.8 12.9	12.1 14.5	13.2 15.8	14.4 17.3	15.6 18.7		18.0 21.6	85 x 215 1.500	
31-10583	LKT 16,1-500-HD	3 x 68.3	3.4 4.1	5.8 7.0	10.3 12.4	11.1 13.3	12.5 15.0	13.6 16.4	14.8 17.8	16.1 19.3		18.6 22.3	85 x 215 1.500	
31-10584	LKT 16,8-500-HD	3 x 71.3	3.6 4.3	6.1 7.3	10.8 12.9	11.6 13.9	13.0 15.6	14.2 17.1	15.5 18.6	16.8 20.2		19.4 23.3	85 x 215 1.500	
31-10585	LKT 18,0-525-HD	3 x 69.3	3.5 4.1	5.9 7.1	10.5 12.5	11.3 13.5	12.6 15.2	13.8 16.6	15.1 18.1	16.3 19.6	18.0 21.6	19.8 23.8	85 x 215 1.500	

// Basic Capacitors (three-phase, V_N : 400 V...525 V) - UL/CSA certified

Type LKT...-DB60 for 50 Hz / 60 Hz

Article-No.	Type	Capacitance [μ F]	Rated Reactive Power in kvar at Rated Voltage (V_N) 50 Hz / 60 Hz										Rated current at V_N 50 Hz / 60 Hz [A]	Dimensions (d x h) Weight (net) [mm] [kg]
			208V	230V	240V	300V	400V	415V	440V	480V	525V			
31-10664	LKT 12-400-DB60	3 x 66.3	2.7 3.2	3.3 4.0	3.6 4.3	5.6 6.8	10.0 12.0						14.4 17.3	85 x 163 1.150
31-10665	LKT 15-400-DB60	3 x 82.9	3.4 4.1	4.1 5.0	4.5 5.4	7.0 8.4	12.5 15.0						18.0 21.7	85 x 163 1.150
31-10666	LKT 24-400-DB60	3 x 132.6	5.4 6.5	6.6 7.9	7.2 8.6	11.3 13.5	20.0 24.0						28.9 34.6	85 x 215 1.500
31-10667	LKT 30-400-DB60	3 x 165.8	6.8 8.1	8.3 9.9	9.0 10.8	14.1 16.9	25.0 30.0						36.1 43.3	85 x 278 1.850
31-10668	LKT 12-440-DB60	3 x 54.8	2.2 2.7	2.7 3.3	3.0 3.6	4.6 5.6	8.3 9.9	8.9 10.7	10.0 12.0				13.1 15.7	85 x 163 1.150
31-10669	LKT 15-440-DB60	3 x 68.5	2.8 3.4	3.4 4.1	3.7 4.5	5.8 7.0	10.3 12.4	11.1 13.3	12.5 15.0				16.4 19.7	85 x 163 1.150
31-10670	LKT 24-440-DB60	3 x 109.6	4.5 5.4	5.5 6.6	6.0 7.1	9.3 11.2	16.5 19.8	17.8 21.4	20.0 24.0				26.2 31.5	85 x 215 1.500
31-10671	LKT 30-440-DB60	3 x 137.0	5.6 6.7	6.8 8.2	7.4 8.9	11.6 13.9	20.7 24.8	22.2 26.7	25.0 30.0				32.8 39.4	85 x 278 1.850
31-10672	LKT 10-480-DB60	3 x 38.4	1.6 1.9	1.9 2.3	2.1 2.5	3.3 3.9	5.8 6.9	6.2 7.5	7.0 8.4	8.3 10.0			10.0 12.0	85 x 163 1.150
31-10673	LKT 12,5-480-DB60	3 x 48.0	2.0 2.3	2.4 2.9	2.6 3.1	4.1 4.9	7.2 8.7	7.8 9.3	8.8 10.5	10.4 12.5			12.5 15.0	85 x 163 1.150
31-10674	LKT 20-480-DB60	3 x 76.8	3.1 3.8	3.8 4.6	4.2 5.0	6.5 7.8	11.6 13.9	12.5 15.0	14.0 16.8	16.7 20.0			20.0 24.1	85 x 215 1.500
31-10675	LKT 25-480-DB60	3 x 95.9	3.9 4.7	4.8 5.7	5.2 6.3	8.1 9.8	14.5 17.4	15.6 18.7	17.5 21.0	20.8 25.0			25.1 30.1	85 x 215 1.500
31-10676	LKT 11,25-525-DB60	3 x 36.1	1.5 1.8	1.8 2.2	2.0 2.4	3.1 3.7	5.4 6.5	5.9 7.0	6.6 7.9	7.8 9.4	9.4 11.25		10.3 12.4	85 x 163 1.150
31-10677	LKT 14-525-DB60	3 x 44.9	1.8 2.2	2.2 2.7	2.4 2.9	3.8 4.6	6.8 8.1	7.3 8.8	8.2 9.8	9.8 11.7	11.7 14.0		12.8 15.4	85 x 163 1.150
31-10678	LKT 22,5-525-DB60	3 x 72.2	2.9 3.5	3.6 4.3	3.9 4.7	6.1 7.3	10.9 13.1	11.7 14.1	13.2 15.8	15.7 18.8	18.8 22.5		20.6 24.7	85 x 215 1.500
31-10679	LKT 28-525-DB60	3 x 89.8	3.7 4.4	4.5 5.4	4.9 5.9	7.6 9.1	13.5 16.3	14.6 17.5	16.4 19.7	19.5 23.4	23.3 28.0		25.7 30.8	85 x 278 1.850

// Standard Capacitors (three-phase, V_N : 240 V...440 V) - UL/CSA certified

Type LKT...-DP60 for 50 Hz / 60 Hz

Article-No.	Type	Capacitance [μ F]	Rated Reactive Power in kvar at Rated Voltage (V_N) 50 Hz / 60 Hz										Rated current at V_N 50 Hz / 60 Hz [A]	Dimensions (d x h) Weight (net) [mm] [kg]
			208 V	230 V	240 V	300 V	400 V	415 V	440 V	460 V	480 V			
31-10800	LKT 1-240-DP60	3 x 15.4	0.6 0.8	0.8 0.9	0.8 1.0								2.0 2.4	85 x 163 1.150
31-10801	LKT 1,5-240-DP60	3 x 23.0	0.9 1.1	1.2 1.4	1.3 1.5								3.0 3.6	85 x 163 1.150
31-10802	LKT 2-240-DP60	3 x 30.7	1.3 1.5	1.5 1.8	1.7 2.0								4.0 4.8	85 x 163 1.150
31-10803	LKT 2,5-240-DP60	3 x 38.4	1.6 1.9	1.9 2.3	2.1 2.5								5.0 6.0	85 x 163 1.150
31-10804	LKT 3-240-DP60	3 x 46.1	1.9 2.3	2.3 2.8	2.5 3.0								6.0 7.2	85 x 163 1.150
31-10805	LKT 4-240-DP60	3 x 61.4	2.5 3.0	3.1 3.7	3.3 4.0								8.0 9.6	85 x 163 1.150
31-10806	LKT 5-240-DP60	3 x 76.8	3.1 3.8	3.8 4.6	4.2 5.0								10.0 12.0	85 x 163 1.150
31-10807	LKT 6-240-DP60	3 x 92.1	3.8 4.5	4.6 5.5	5.0 6.0								12.0 14.4	85 x 163 1.150
31-10808	LKT 7,5-240-DP60	3 x 115.1	4.7 5.6	5.7 6.9	6.3 7.5								15.0 18.0	85 x 163 1.150
31-10629	LKT 10-240-DP60	3 x 153.5	6.3 7.5	7.7 9.2	8.33 10.0								20.0 24.1	85 x 163 1.150
31-10630	LKT 12,5-240-DP60	3 x 191.9	7.8 9.4	9.6 11.5	10.4 12.5								25.1 30.1	85 x 215 1.500
31-10809	LKT 15-240-DP60	3 x 230.3	9.4 11.3	11.5 13.8	12.5 15.0								30.1 36.1	85 x 215 1.500
31-10810	LKT 17,5-240-DP60	3 x 268.6	11.0 13.1	13.4 16.1	14.6 17.5								35.1 42.1	85 x 215 1.500
31-10631	LKT 20-240-DP60	3 x 307.0	12.5 15.0	15.3 18.4	16.7 20.0								40.1 48.1	85 x 278 1.850
31-10632	LKT 15-300-DP60	3 x 147.4	6.0 7.2	7.4 8.8	8.0 9.6	12.5 15.0							24.1 28.9	85 x 163 1.150
31-10633	LKT 18-300-DP60	3 x 176.8	7.2 8.7	8.8 10.6	9.6 11.5	15.0 18.0							28.9 34.6	85 x 215 1.500
31-10652	LKT 12-400-DP60	3 x 66.3	2.7 3.2	3.3 4.0	3.6 4.3	5.6 6.8	10.0 12.0						14.4 17.3	85 x 163 1.150
31-10653	LKT 15-400-DP60	3 x 82.9	3.4 4.1	4.1 5.0	4.5 5.4	7.0 8.4	12.5 15.0						18.0 21.7	85 x 215 1.500
31-10654	LKT 24-400-DP60	3 x 132.6	5.4 6.5	6.6 7.9	7.2 8.6	11.3 13.5	20.0 24.0						28.9 34.6	85 x 278 1.850
31-10655	LKT 30-400-DP60	3 x 165.8	6.8 8.1	8.3 9.9	9.0 10.8	14.1 16.9	25.0 30.0						36.1 43.3	85 x 278 1.850
31-10656	LKT 12-440-DP60	3 x 54.8	2.2 2.7	2.7 3.3	3.0 3.6	4.6 5.6	8.3 9.9	8.9 10.7	10.0 12.0				13.1 15.7	85 x 163 1.150
31-10657	LKT 15-440-DP60	3 x 68.5	2.8 3.4	3.4 4.1	3.7 4.5	5.8 7.0	10.3 12.4	11.1 13.3	12.5 15.0				16.4 19.7	85 x 215 1.500
31-10658	LKT 24-440-DP60	3 x 109.6	4.5 5.4	5.5 6.6	6.0 7.1	9.3 11.2	16.5 19.8	17.8 21.4	20.0 24.0				26.2 31.5	85 x 278 1.850
31-10659	LKT 30-440-DP60	3 x 137.0	5.6 6.7	6.8 8.2	7.4 8.9	11.6 13.9	20.7 24.8	22.2 26.7	25.0 30.0				32.8 39.4	85 x 278 1.850

Components

Power Factor Correction Capacitors and accessories

// Standard Capacitors (three-phase, V_N : 480 V...525 V) - UL/CSA certified

Type LKT...-DP60 for 50 Hz / 60 Hz

Article-No.	Type	Capacitance [μ F]	Rated Reactive Power in kvar at Rated Voltage (V_N) 50 Hz / 60 Hz										Rated current at V_N 50 Hz / 60 Hz [A]	Dimensions (d x h) Weight (net) [mm] [kg]
			208 V	230 V	240 V	300 V	400 V	415 V	440 V	480 V	525 V			
31-10811	LKT 1-480-DP60	3 x 3.8	0.2 0.2	0.2 0.2	0.2 0.3	0.3 0.4	0.6 0.7	0.6 0.8	0.7 0.8	0.8 1.0		1.0 1.2	85 x 163 1.150	
31-10812	LKT 1,5-480-DP60	3 x 5.8	0.2 0.3	0.3 0.3	0.3 0.4	0.5 0.6	0.9 1.0	0.9 1.1	1.1 1.3	1.3 1.5		1.5 1.8	85 x 163 1.150	
31-10813	LKT 2-480-DP60	3 x 7.7	0.3 0.4	0.4 0.5	0.4 0.5	0.7 0.8	1.2 1.4	1.3 1.5	1.4 1.7	1.7 2.0		2.0 2.4	85 x 163 1.150	
31-10814	LKT 2,5-480-DP60	3 x 9.6	0.4 0.5	0.5 0.6	0.5 0.6	0.8 1.0	1.5 1.7	1.6 1.9	1.8 2.1	2.1 2.5		2.5 3.0	85 x 163 1.150	
31-10815	LKT 3-480-DP60	3 x 11.5	0.5 0.6	0.6 0.7	0.6 0.8	1.0 1.2	1.7 2.1	1.9 2.2	2.1 2.5	2.5 3.0		3.0 3.6	85 x 163 1.150	
31-10816	LKT 4-480-DP60	3 x 15.4	0.6 0.8	0.8 0.9	0.8 1.0	1.3 1.6	2.3 2.8	2.5 3.0	2.8 3.4	3.3 4.0		4.0 4.8	85 x 163 1.150	
31-10817	LKT 5-480-DP60	3 x 19.2	0.8 0.9	1.0 1.1	1.0 1.3	1.6 2.0	2.9 3.5	3.1 3.7	3.5 4.2	4.2 5.0		5.0 6.0	85 x 163 1.150	
31-10818	LKT 6-480-DP60	3 x 23.0	0.9 1.1	1.1 1.4	1.3 1.5	2.0 2.3	3.5 4.2	3.7 4.5	4.2 5.0	5.0 6.0		6.0 7.2	85 x 163 1.150	
31-10819	LKT 7,5-480-DP60	3 x 28.8	1.2 1.4	1.4 1.7	1.6 1.9	2.4 2.9	4.3 5.2	4.7 5.6	5.3 6.3	6.3 7.5		7.5 9.0	85 x 163 1.150	
31-10634	LKT 10-480-DP60	3 x 38.4	1.6 1.9	1.9 2.3	2.1 2.5	3.3 3.9	5.8 6.9	6.2 7.5	7.0 8.4	8.3 10.0		10.0 12.0	85 x 163 1.150	
31-10635	LKT 12,5-480-DP60	3 x 48.0	2.0 2.3	2.4 2.9	2.6 3.1	4.1 4.9	7.2 8.7	7.8 9.3	8.8 10.5	10.4 12.5		12.5 15.0	85 x 163 1.150	
31-10820	LKT 15-480-DP60	3 x 57.6	2.3 2.8	2.9 3.4	3.1 3.8	4.9 5.9	8.7 10.4	9.3 11.2	10.6 12.5	12.5 15.0		15.0 18.0	85 x 215 1.500	
31-10821	LKT 17,5-480-DP60	3 x 67.2	2.7 3.3	3.3 4.0	3.6 4.4	5.7 6.8	10.1 12.2	10.9 13.1	12.3 14.7	14.6 17.5		17.5 21.0	85 x 215 1.500	
31-10636	LKT 20-480-DP60	3 x 76.8	3.1 3.8	3.8 4.6	4.2 5.0	6.5 7.8	11.6 13.9	12.5 15.0	14.0 16.8	16.7 20.0		20.0 24.1	85 x 215 1.500	
31-10822	LKT 22,5-480-DP60	3 x 86.3	3.5 4.2	4.3 5.2	4.7 5.6	7.3 8.8	13.0 15.6	14.0 16.8	15.8 18.9	18.8 22.5		22.6 27.1	85 x 215 1.500	
31-10637	LKT 25-480-DP60	3 x 95.9	3.9 4.7	4.8 5.7	5.2 6.3	8.1 9.8	14.5 17.4	15.6 18.7	17.5 21.0	20.8 25.0		25.1 30.1	85 x 278 1.850	
31-10638	LKT 11,25-525-DP60	3 x 36.1	1.5 1.8	1.8 2.2	2.0 2.4	3.1 3.7	5.4 6.5	5.9 7.0	6.6 7.9	7.8 9.4	9.4 11.25	10.3 12.4	85 x 163 1.150	
31-10639	LKT 14-525-DP60	3 x 44.9	1.8 2.2	2.2 2.7	2.4 2.9	3.8 4.6	6.8 8.1	7.3 8.8	8.2 9.8	9.8 11.7	11.7 14.0	12.8 15.4	85 x 215 1.500	
31-10640	LKT 22,5-525-DP60	3 x 72.2	2.9 3.5	3.6 4.3	3.9 4.7	6.1 7.3	10.9 13.1	11.7 14.1	13.2 15.8	15.7 18.8	18.8 22.5	20.6 24.7	85 x 278 1.850	
31-10641	LKT 28-525-DP60	3 x 89.8	3.7 4.4	4.5 5.4	4.9 5.9	7.6 9.1	13.5 16.3	14.6 17.5	16.4 19.7	19.5 23.4	23.3 28.0	25.7 30.8	85 x 278 1.850	

// Standard Capacitors (three-phase, V_N : 600 V...800 V) - UL/CSA certified

Type LKT...-DP60 for 50 Hz / 60 Hz

Article-No.	Type	Capacitance [μ F]	Rated Reactive Power in kvar at Rated Voltage (V_N) 50 Hz / 60 Hz										Rated current at V_N 50 Hz / 60 Hz [A]	Dimensions (d x h) Weight (net) [mm] [kg]
			208 V	240 V	400 V	440 V	480 V	525 V	600 V	690 V	800 V			
31-10823	LKT 1-600-DP60	3 x 2.5	0.1 0.1	0.1 0.2	0.4 0.4	0.4 0.5	0.5 0.6	0.6 0.8	0.8 1.0			0.8 1.0	85 x 215 1.500	
31-10824	LKT 1,5-600-DP60	3 x 3.7	0.2 0.2	0.2 0.2	0.6 0.7	0.7 0.8	0.8 1.0	1.0 1.2	1.3 1.5			1.2 1.4	85 x 215 1.500	
31-10825	LKT 2-600-DP60	3 x 4.9	0.2 0.2	0.3 0.3	0.7 0.9	0.9 1.1	1.1 1.3	1.3 1.5	1.7 2.0			1.6 1.9	85 x 215 1.500	
31-10826	LKT 2,5-600-DP60	3 x 6.1	0.3 0.3	0.3 0.4	0.9 1.1	1.1 1.3	1.3 1.6	1.6 1.9	2.1 2.5			2.0 2.4	85 x 215 1.500	
31-10827	LKT 3-600-DP60	3 x 7.4	0.3 0.4	0.4 0.5	1.1 1.3	1.3 1.6	1.9 1.9	2.1 2.3	2.4 3.0			2.4 2.9	85 x 215 1.500	
31-10828	LKT 4-600-DP60	3 x 9.8	0.4 0.5	0.5 0.6	1.5 1.8	1.8 2.2	2.1 2.6	2.6 3.1	3.3 4.0			3.2 3.8	85 x 215 1.500	
31-10829	LKT 5-600-DP60	3 x 12.3	0.5 0.6	0.7 0.8	1.9 2.2	2.2 2.7	2.7 3.2	3.2 3.8	4.2 5.0			4.0 4.8	85 x 215 1.500	
31-10830	LKT 6-600-DP60	3 x 14.7	0.6 0.7	0.8 1.0	2.2 2.7	2.7 3.2	3.2 3.8	3.8 4.6	5.0 6.0			4.8 5.8	85 x 215 1.500	
31-10831	LKT 7,5-600-DP60	3 x 18.4	0.8 0.9	1.0 1.2	2.8 3.3	3.4 4.0	4.0 4.8	4.8 5.7	6.3 7.5			6.0 7.2	85 x 215 1.500	
31-10642	LKT 10-600-DP60	3 x 24.6	1.0 1.2	1.3 1.6	3.7 4.4	4.5 5.4	5.3 6.4	6.4 7.7	8.3 10.0			8.0 9.6	85 x 215 1.500	
31-10643	LKT 12,5-600-DP60	3 x 30.7	1.3 1.5	1.7 2.0	4.6 5.6	5.6 6.7	6.7 8.0	8.0 9.6	10.4 12.5			10.0 12.0	85 x 215 1.500	
31-10832	LKT 15-600-DP60	3 x 36.8	1.5 1.8	2.0 2.4	5.6 6.7	6.7 8.1	8.0 9.6	9.6 11.5	12.5 15.0			12.0 14.4	85 x 215 1.500	
31-10833	LKT 17,5-600-DP60	3 x 43.0	1.8 2.1	2.3 2.8	6.5 7.8	7.8 9.4	9.3 11.2	11.2 13.4	14.6 17.5			14.0 16.8	85 x 215 1.500	
31-10644	LKT 20-600-DP60	3 x 49.1	2.0 2.4	2.7 3.2	7.4 8.9	9.0 10.8	10.7 12.8	12.8 15.3	16.7 20.0			16.0 19.2	85 x 278 1.850	
31-10834	LKT 22,5-600-DP60	3 x 55.3	2.3 2.7	3.0 3.6	8.3 10.0	10.1 12.1	12.0 14.4	14.4 17.2	18.8 22.5			18.0 21.7	85 x 278 1.850	
31-10645	LKT 25-600-DP60	3 x 61.4	2.5 3.0	3.3 4.0	9.3 11.1	11.2 13.4	13.3 16.0	16.0 19.1	20.8 25.0			20.0 24.1	85 x 320 2.150	
31-10646	LKT 12,5-690-DP60	3 x 23.2	0.9 1.1	1.3 1.5	3.5 4.2	4.2 5.1	5.0 6.0	6.0 7.2	7.9 9.5	10.4 12.5		8.7 10.5	85 x 215 1.500	
31-10647	LKT 15-690-DP60	3 x 27.9	1.1 1.4	1.5 1.8	4.2 5.0	5.1 6.1	6.0 7.3	7.2 8.7	9.5 11.3	12.5 15.0		10.5 12.6	85 x 215 1.500	
31-10648	LKT 20-690-DP60	3 x 37.1	1.5 1.8	2.0 2.4	5.6 6.7	6.8 8.1	8.1 9.7	9.7 11.6	12.6 15.1	16.7 20.0		13.9 16.7	85 x 215 1.500	
31-10836	LKT 22,1-690-DP60	3 x 41.0	1.7 2.0	2.2 2.7	6.2 7.4	7.5 9.0	8.9 10.7	10.7 12.8	13.9 16.7	18.4 22.1		15.4 18.5	85 x 278 1.850	
31-10649	LKT 25-690-DP60	3 x 46.4	1.9 2.3	2.5 3.0	7.0 8.4	8.5 10.2	10.1 12.1	12.1 14.5	15.8 18.9	20.8 25.0		17.4 20.9	85 x 278 1.850	
31-10650	LKT 30-690-DP60	3 x 55.7	2.3 2.7	3.0 3.6	8.4 10.1	10.2 12.2	12.1 14.5	14.5 17.4	18.9 22.7	25.0 30.0		20.9 25.1	85 x 320 2.150	
31-10661	LKT 12,6-800-DP60	3 x 17.4	0.7 0.9	0.9 1.1	2.6 3.2	3.2 3.8	3.8 4.5	4.5 5.4	5.9 7.1	7.8 9.4	10.5 12.6	7.6 9.1	85 x 215 1.500	
31-10662	LKT 16-800-DP60	3 x 22.1	0.9 1.1	1.2 1.4	3.3 4.0	4.0 4.8	4.8 5.8	5.7 6.9	7.5 9.0	9.9 11.9	13.3 16.0	9.6 11.5	85 x 215 1.500	
31-10663	LKT 25,2-800-DP60	3 x 34.8	1.4 1.7	1.9 2.3	5.3 6.3	6.4 7.6	7.6 9.1	9.0 10.9	11.8 14.2	15.6 18.8	21.0 25.2	15.2 18.2	85 x 278 1.850	

Components

Power Factor Correction Capacitors and accessories

// Premium Capacitors (three-phase, V_N : 400 V...525 V) - UL/CSA certified

Type LKT...-DL60 for 50 Hz / 60 Hz

Article-No.	Type	Capacitance [μ F]	Rated Reactive Power in kvar at Rated Voltage (V_N) 50 Hz / 60 Hz									Rated current at V_N 50 Hz / 60 Hz [A]	Dimensions (d x h) Weight (net) [mm] [kg]
			208V	240V	400V	440V	480V	525V	570V	600V	615V		
31-10680	LKT 12-400-DL60	3 x 66.3	2.7 3.2	3.6 4.3	10.0 12.0	12.1* 14.5*						14.4 17.3	85 x 215 1.500
31-10681	LKT 15-400-DL60	3 x 82.9	3.4 4.1	4.5 5.4	12.5 15.0	15.1* 18.2*						18.0 21.7	85 x 215 1.500
31-10682	LKT 24-400-DL60	3 x 132.6	5.4 6.5	7.2 8.6	20.0 24.0	24.2* 29.0*						28.9 34.6	85 x 278 1.850
31-10683	LKT 12-440-DL60	3 x 54.8	2.2 2.7	3.0 3.6	8.3 9.9	10.0 12.0	11.9* 14.3*					13.1 15.7	85 x 163 1.150
31-10684	LKT 15-440-DL60	3 x 68.5	2.8 3.4	3.7 4.5	10.3 12.4	12.5 15.0	14.9* 17.9*					16.4 19.7	85 x 215 1.500
31-10685	LKT 24-440-DL60	3 x 109.6	4.5 5.4	6.0 7.1	16.5 19.8	20.0 24.0	23.8* 28.6*					26.2 31.5	85 x 278 1.850
31-10686	LKT 10-480-DL60	3 x 38.4	1.6 1.9	2.1 2.5	5.8 6.9	7.0 8.4	8.3 10.0	10.0* 12.0*				10.0 12.0	85 x 163 1.150
31-10687	LKT 12,5-480-DL60	3 x 48.0	2.0 2.3	2.6 3.1	7.2 8.7	8.8 10.5	10.4 12.5	12.5* 15.0*				12.5 15.0	85 x 215 1.500
31-10688	LKT 20-480-DL60	3 x 76.8	3.1 3.8	4.2 5.0	11.6 13.9	14.0 16.8	16.7 20.0	19.9* 23.9*				20.0 24.1	85 x 278 1.850
31-10689	LKT 25-480-DL60	3 x 95.9	3.9 4.7	5.2 6.3	14.5 17.4	17.5 21.0	20.8 25.0	24.9 29.9				25.1 30.1	85 x 278 1.850
31-10690	LKT 11,25-525-DL60	3 x 36.1	1.5 1.8	2.0 2.4	5.4 6.5	6.6 7.9	7.8 9.4	9.4 11.25	11.1* 13.3*	12.2* 14.7*	12.9* 15.4*	10.3 12.4	85 x 215 1.500
31-10691	LKT 14-525-DL60	3 x 44.9	1.8 2.2	2.4 2.9	6.8 8.1	8.2 9.8	9.8 11.7	11.7 14.0	13.8* 16.5*	15.2* 18.3*	16.0* 19.2*	12.8 15.4	85 x 215 1.500
31-10692	LKT 22,5-525-DL60	3 x 72.2	2.9 3.5	3.9 4.7	10.9 13.1	13.2 15.8	15.7 18.8	18.8 22.5	22.1* 26.5*	24.5* 29.4*	25.7* 30.9*	20.6 24.7	85 x 320 2.150

Generally, "Premium" (DL-type) capacitors can also be operated at higher voltages with the "Standard" (DP-type) specification.

Please note that the DP values in the chart are marked with *.

// Heavy Duty Capacitors (three-phase, V_N : 480 V...525 V) - UL/CSA certified

Type LKT...-HD60 for 50 Hz / 60 Hz

Article-No.	Type	Capacitance [μ F]	Rated Reactive Power in kvar at Rated Voltage (V_N) 50 Hz / 60 Hz									Rated current at V_N 50 Hz / 60 Hz [A]	Dimensions (d x h) Weight (net) [mm] [kg]
			208V	240V	300V	400V	415V	440V	480V	500V	525V		
31-10835	LKT 16,7-480-HD60	3 x 64.1	2.6 3.1	3.5 4.2	5.4 6.5	9.7 11.6	10.4 12.5	11.7 14.0	13.9 16.7			16.7 20.1	85 x 215 1.500
31-10693	LKT 20,1-480-HD60	3 x 77.1	3.1 3.8	4.2 5.0	6.5 7.9	11.6 14.0	12.5 15.0	14.1 16.9	16.8 20.1			20.2 24.2	85 x 215 1.500
31-10694	LKT 21,6-480-HD60	3 x 82.9	3.4 4.1	4.5 5.4	7.0 8.4	12.5 15.0	13.5 16.2	15.1 18.2	18.0 21.6			21.7 26.0	85 x 215 1.500
31-10695	LKT 18,7-500-HD60	3 x 66.1	2.7 3.2	3.6 4.3	5.6 6.7	10.0 12.0	10.7 12.9	12.1 14.5	14.4 17.2	15.6 18.7		18.0 21.6	85 x 215 1.500
31-10696	LKT 19,3-500-HD60	3 x 68.3	2.8 3.3	3.7 4.4	5.8 6.9	10.3 12.4	11.1 13.3	12.5 15.0	14.8 17.8	16.1 19.3		18.6 22.3	85 x 215 1.500
31-10697	LKT 20,2-500-HD60	3 x 71.4	2.9 3.5	3.9 4.7	6.1 7.3	10.7 12.9	11.6 13.9	13.0 15.6	15.5 18.6	16.8 20.2		19.4 23.3	85 x 215 1.500
31-10698	LKT 21,6-525-HD60	3 x 69.3	2.8 3.4	3.8 4.5	5.9 7.1	10.5 12.5	11.3 13.5	12.6 15.2	15.1 18.1	16.3 19.6	18.0 21.6	18.0 23.8	85 x 215 1.500