

# HEAVY DUTY CAPACITORS

L&T Heavy Duty Capacitors are metalized polypropylene capacitors available from 3-25 kVAr in cylindrical and from 5-50 kVAr in box type construction. These capacitors have an inrush current withstand of 300 In and an overload withstand capacity of 1.8 In. These capacitors have all the features of standard capacitors like over pressure disconnecter and self healing.

The cylindrical Capacitors are subjected to an extended period of drying after which the casing is filled with an inert gas to prevent corrosion of the winding elements and inner electrical contacts. Compact design ensures space saving. Heavy Duty capacitors have a long life of 150000 hours.

For Selection and Application details please refer page no. 46.

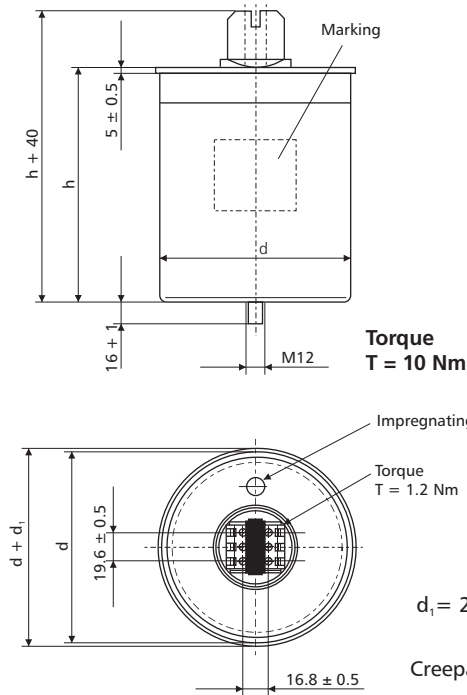


## TECHNICAL DETAILS

	Heavy Duty	
	Box	Cylindrical
<b>Series</b>	LTBCH	LTCCN
<b>Range</b>	5-50 kVAr	3-30 kVAr
<b>Standards</b>	IS 13340-1993, IS 13341-1992, IEC 60831-1+2	IS 13340-1993, IS 13341-1992, IEC 60831-1+2
<b>Rated Frequency</b>	50Hz	50Hz
<b>Rated Voltage</b>	415 / 440 / 480 / 525 V	415 / 440 / 480 / 525 / 690 V
<b>Over Voltage</b>	+10% (12h/24h), +15% (30m/24h), +20% (5m/24hrs), +30% (1m/24hrs)	+10% (12h/24h), +15% (30m/24h), +20% (5m/24hrs), +30% (1m/24hrs)
<b>Overcurrent</b>	1.8 x In	1.8 x In
<b>Peak Inrush Current</b>	300 x In	250 x In
<b>Operating Losses (Dielectric)</b>	< 0.2 W/kVAr	< 0.2 W/kVAr
<b>Operating Losses (Total)</b>	< 0.35 W/kVAr	< 0.35 W/kVAr
<b>Tolerance on Capacitance</b>	-5 / +10% as per IS	-5 / +10% as per IS
<b>Test Voltage (Terminal-Terminal)</b>	2.15 times rated voltage for 10 sec	2.15 times rated voltage for 10 sec
<b>Test Voltage (Terminal-Casing)</b>	3 kV (AC) for 1 minute	3 kV (AC) for 1 minute
<b>Degree of Protection</b>	IP20, indoor mounting (IP54 optional)	IP20, indoor mounting (optionally with terminal cap for IP54)
<b>Ambient Temperature</b>	-25 / D Max temperature = +55°C Max mean temperature (24 h) = +45°C Max mean temperature (1 year) = +35°C	-40 / D Max temperature = +55°C Max mean temperature (24 h) = +45°C Max mean temperature (1 year) = +35°C
<b>Cooling</b>	Natural or forced air cooling	Natural or forced air cooling
<b>Permissible Relative Humidity</b>	max 95%	max 95%
<b>Maximum Operating Altitude</b>	4000m above sea level	4000m above sea level
<b>Mounting</b>	upright	upright or horizontal
<b>Safety Features</b>	overpressure disconnecter, Self-healing	Dry type (gas filled), Overpressure disconnecter, Self-healing
<b>Impregnation</b>	Non PCB, biodegradable resin	Inert gas
<b>Casing</b>	MS Sheet metal	Aluminum extruded can
<b>Dielectric Composition</b>	Metalized polypropylene	Metalized polypropylene
<b>Terminals</b>	Ceramic Bushing	Finger-proof Clamprite
<b>Discharge Resistors / Time</b>	Discharge resistors fitted, Standard discharge time 60 seconds, Other discharge times on request	Discharge resistors fitted, Standard discharge time 60 seconds, Other discharge times on request
<b>Switching Operations (maximum)</b>	8000 switchings per year	8000 switchings per year

# HEAVY DUTY CAPACITORS - OVERALL DIMENSIONS

## Cylindrical Type



Sr. No.	Voltage	Power rating (kVA <sub>r</sub> )		Capacitance (uF)	Rated current (A)	Dimensions in (mm)		Cat. Nos.
		50 Hz	60 Hz			H	D	
1	440 V	3	4	49.32	3.94	130	64	LTCCN303B2
2	440 V	4	5	65.77	5.25	190	64	LTCCN304B2
3	440 V	5	6	82.21	6.56	190	64	LTCCN305B2
4	440 V	7.5	9	123.31	9.84	190	64	LTCCN307B2
5	440 V	8.33	10	136.96	10.93	190	64	LTCCN308B2
6	440 V	10	12	164.42	13.12	265	64	LTCCN310B2
7	440 V	12.5	15	205.52	16.40	265	64	LTCCN312B2
8	440 V	15	18	246.62	19.68	190	84.4	LTCCN315B2
9	440 V	20	24	328.83	26.24	265	84.4	LTCCN320B2
10	440 V	25	30	411.04	32.80	265	84.4	LTCCN325B2
11	480 V	5	6	69.08	6.01	190	64	LTCCN305C2
12	480 V	7.5	9	103.62	9.02	190	64	LTCCN307C2
13	480 V	8.33	10	115.08	10.02	190	64	LTCCN308C2
14	480 V	10	12	138.16	12.03	190	84	LTCCN310C2
15	480 V	12.5	15	172.69	15.04	190	84	LTCCN312C2
16	480 V	15	18	207.23	18.04	265	84	LTCCN315C2
17	480 V	20	24	276.31	24.06	265	84	LTCCN320C2
18	480 V	25	30	345.39	30.07	265	84	LTCCN325C2
19	480 V	30	36	414.47	36.09	230	116	LTCCN330C2
20	525 V	5	6	57.74	5.50	190	64	LTCCN305M2
21	525 V	7.5	9	86.61	8.25	190	64	LTCCN307M2
22	525 V	8.33	10	96.20	9.16	190	64	LTCCN308M2
23	525 V	10	12	115.49	11.00	265	65	LTCCN310M2
24	525 V	12.5	15	144.36	13.75	265	65	LTCCN312M2
25	525 V	15	18	173.23	16.50	265	65	LTCCN315M2
26	525 V	20	24	230.97	21.99	265	84	LTCCN320M2
27	525 V	25	30	288.72	27.49	265	84	LTCCN325M2
28	525 V	30	36	346.46	32.99	230	116	LTCCN330M2