



## CONTACTORS

When choosing switching contactors for capacitors used to compensate the reactive power present in the network, you should bear several aspects in mind:

- On being energized the capacitor is connected in parallel to the inductive network and the oscillating circuit produced by connecting the capacitor to the network will result in the passage of a high frequency current (from 3 to 15 kHz), which may be 160 times greater than the  $I_n$  current for 1 or 2 ms
- The presence of harmonic currents and the tolerance with respect to mains voltage determine the continuous passage, within the circuit, of a current whose value is around 1.3 times greater than the rated current  $I_n$  of the capacitor
- Because of the tolerances allowed by the manufacturer, the exact power of a capacitor may be 1.10 times greater than the rated power

The contactor employed must therefore be capable of working with:

- An elevated, albeit transient, peak current during the closing phase
- A closing current that may be 1.43 times greater than the rated current of the capacitor

The contactors offered by DUCATI Energia are specifically engineered to work in these conditions.

Select the type of contactor based on the working voltage and effective power (in kVAr) of the capacitor bank to be controlled.

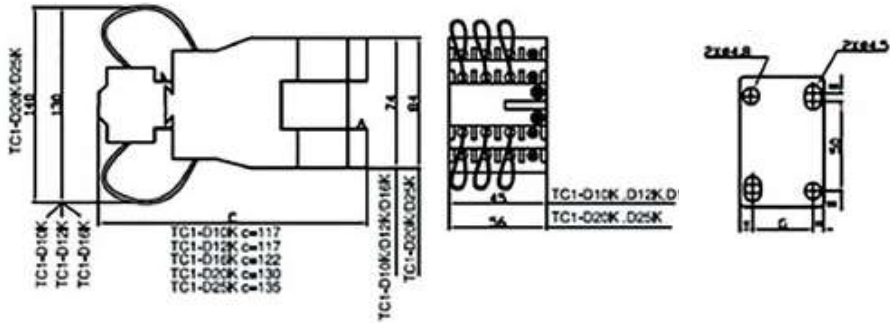
Part n. 315.99.	kVAr 50/60 Hz $\vartheta \leq 55^\circ\text{C}$ (*)		Auxiliary contacts		Maximum operating frequency  Switching per hour	Electric life with rated load  Switching
	200 V 240 V	400 V 440 V	NA	NC		
<b>1143</b>	6.7	12.5	1	1	240	200000
<b>1142</b>	10	20	1	1	240	100000
<b>1141</b>	15	25	1	1	240	100000
<b>1140</b>	20	40	1	2	100	100000
<b>1139</b>	40	60	1	2	100	100000

(\*) Average temperature over 24h as per standards IEC 70 and 851.

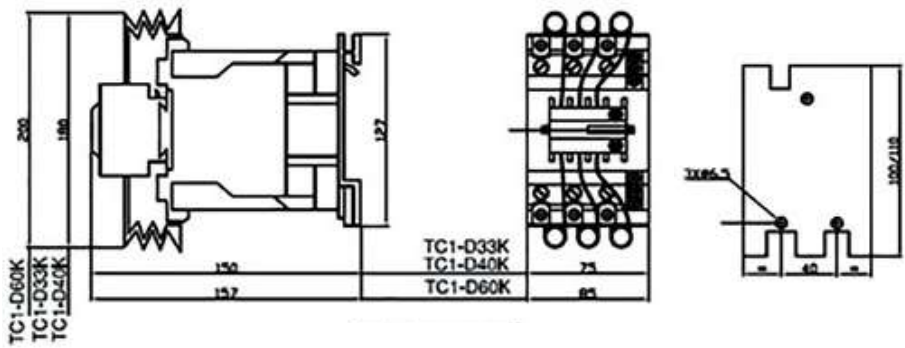
230 VAC 50/60 Hz coil for all sizes.

**WARNING:** The capacitors must be completely discharged before being energized by closing contacts (max voltage at terminals < 50 V).





TC-1	D10K	D12K	D16K	D20K	D25K
C	80	80	85	93	98
G	35	35	35	40	40



TC1	D33K	D40K	D60K
C	114	114	125