ENT Series Compensation Contactors

Long Lifespan

Compact and Robust Design

Integrated Auxiliary Contact Option

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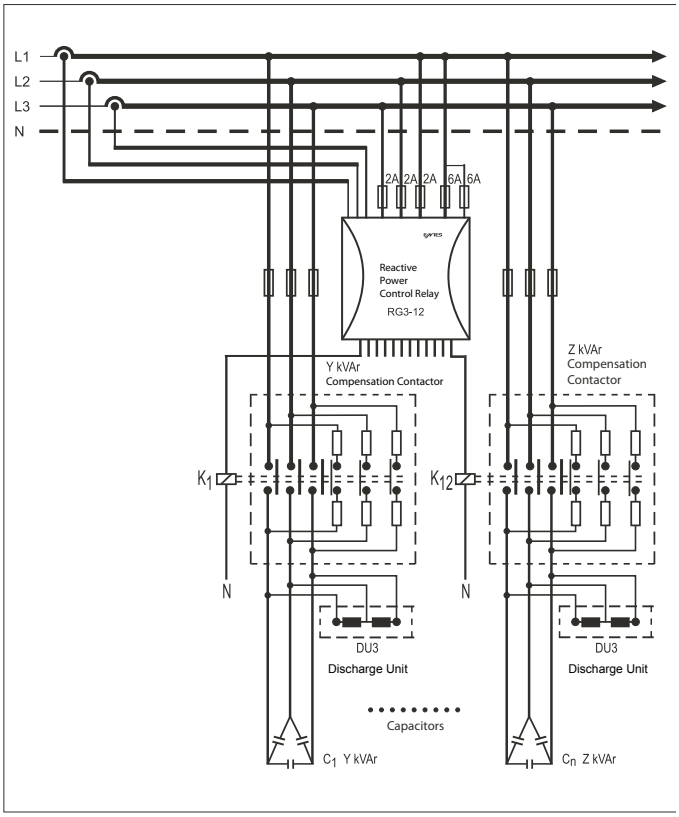
Why Use a Compensation Contactor?

At the moment of switching, a capacitor practically behaves like a short circuit.
The magnitude of the inrush (charging) current depends on the AC voltage level at the moment of switching, as well as the impedance of the supply cable and power transformers.

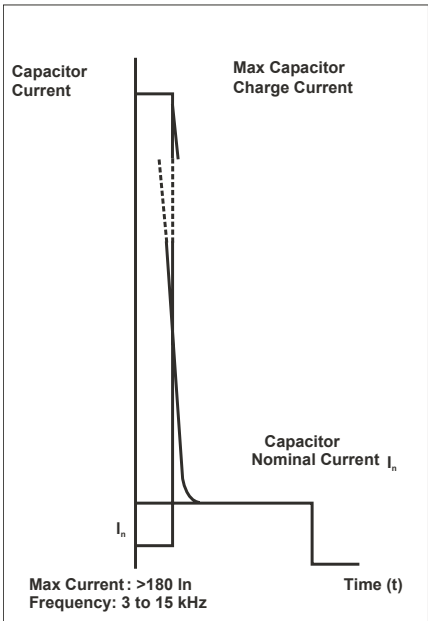
In single capacitor applications, the peak charging current can reach up to 30 times the capacitor's rated current. For multi-step capacitor banks, inrush currents may exceed 180 times the rated value.



This excessive inrush current may pass through the contactor due to the contribution from both the supply network and the previously connected capacitors. Such current levels can be sufficient to cause welding of the main contacts in standard contactors.

- To limit current fluctuations, add a series damping resistor for fast discharge.

- Make sure to use a specially designed capacitor contactor.



Working Princible

The ENT Series Capacitor Contactors are specially designed to meet capacitor application requirements. The contactors are equipped with three early-make auxiliary contact blocks and six series-connected resistors—two fast discharge damping resistors per phase. This design limits the inrush current to remain within the contactor's making capacity. The main contacts are designed to carry the normal rated capacitor current, and after closing, effectively short-circuit the resistors.

This design enables safe and reliable switching of capacitor loads with high efficiency.

Product Series

- The contactors are three-phase, rated for 415V AC, 50/60 Hz, with capacities ranging from 2.5 kVAr to 100 kVAr.
- They comply with IEC 60947-4-1 and IS/IEC 60947-4-1 standards for AC-6B utilization category.

Benefits:

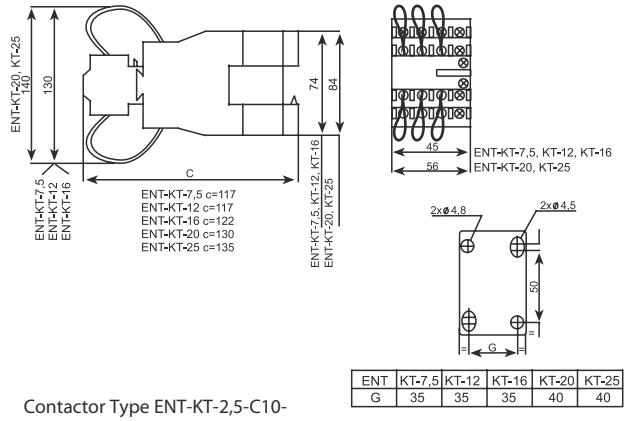
- Compliant with IS 13947-4-1 Standard for AC-6B Utilization Category
- Reduces costly spare part expenses.
- Ensures long electrical lifetime.
- Provides low power loss in the 'ON' position, contributing to energy savings.
- Offers high safety.
- Eliminates the risk of dangerous voltage.
- Enables parallel switching of capacitors without requiring power derating.
- Increases operational efficiency with less maintenance and downtime.

Technical Specifications

	"Operating Power (kVAr) 0<55 °C 50/60Hz"				Instantaneous Auxiliary Contacts		Maximum Operations per Hour	Switching Life
	220V-240V		400V-440V					
	Power (kVAr)	Akım @220V	Power (kVAr)	Akım @400V	NO	NC		Number of Uses
ENT-KT-2,5-C10	1,4	3,67	2,5	3,6	1	0	240	150.000
ENT-KT-5-C10	2,8	7,34	5	7,21	1	0	240	150.000
ENT-KT-7,5-C11	4	10,49	7,5	10,82	1	1	240	200.000
ENT-KT-12-C11	6,7	17,58	12,5	18,04	1	1	240	200.000
ENT-KT-16-C11	8,5	22,3	16,7	24,1	1	1	240	200.000
ENT-KT-20-C11	10	26,24	20	28,86	1	1	240	100.000
ENT-KT-25-C11	15	39,36	25	36,08	1	1	240	100.000
ENT-KT-33-C12	20	52,48	33,3	48,06	1	2	240	100.000
ENT-KT-40-C12	25	65,6	40	57,73	1	2	240	100.000
ENT-KT-50-C12	30	78,72	50	72,16	1	2	240	100.000
ENT-KT-60-C12	40	104,97	60	86,6	1	2	240	100.000
ENT-KT-75-C12	40	104,97	75	108,25	1	2	240	100.000
ENT-KT-100-C12	60	262,43	100	144,33	1	2	240	100.000

Technical Drawings

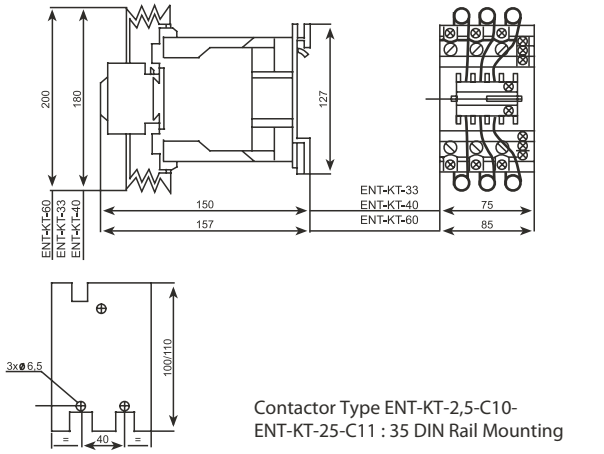
ENT-KT-7,5-C11, ENT-KT-12-C11, ENT-KT-16-C11, ENT-KT-20-C11, ENT-KT-25-C11



ENT	KT-7,5	KT-12	KT-16	KT-20	KT-25
G	35	35	35	40	40

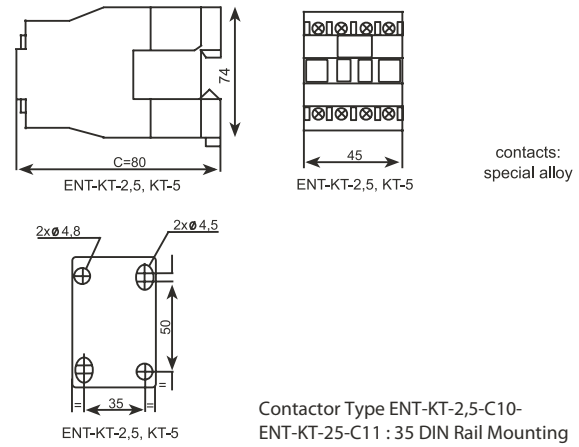
Contactor Type ENT-KT-2,5-C10-
ENT-KT-25-C11 : 35 DIN Rail Mounting

ENT-KT-33-C12, ENT-KT-40-C12, ENT-KT-75-C12, ENT-KT-50-C12 ENT-KT-60-C12



Contactor Type ENT-KT-2,5-C10-
ENT-KT-25-C11 : 35 DIN Rail Mounting

ENT-KT-2,5-C10, ENT-KT-5-C10



Contactor Type ENT-KT-2,5-C10-
ENT-KT-25-C11 : 35 DIN Rail Mounting

ENT-KT-100-C12