Module contactors KM

KM type module contactors are intended for use in AC networks of 400 V (50 Hz) and serve for commutating low inductance loads with rated currents up to 63 V.
They are applied for automation and control of various technological processes including that of lighting, ventilation and conditioning systems.

Advantages

- Wide range of contactors with 2 or 4 normally open contacts.
- Size compatibility with modular series devices .
- Independent control coil supply – AC or DC (excluding KM20).
- Visual main contacts state indication.
- Lowered electromagnetic hum due to using a DC magnetic system.
- High mechanical and electrical wear resistance.
- Energy saving, holding current is 5 times less than operating current.
- Fast response (turning on – 20 ms, shutdown – 30 ms).
- Bridge contacts provide double break at main contacts trip.
- Low noise level.
- Correspondence to EN 61095
- Warranty period – 5 years.

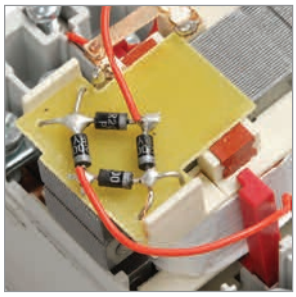
Design Features

Visual main contacts state indication.

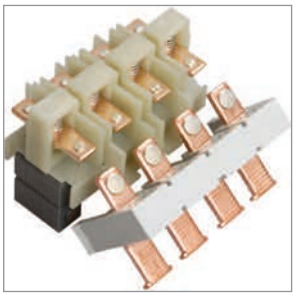
Connection terminals provide for connecting wires from 1 to 25 mm² in cross-section.

Size compatibility allows installing the contactor into a conventional board with any modular series devices.

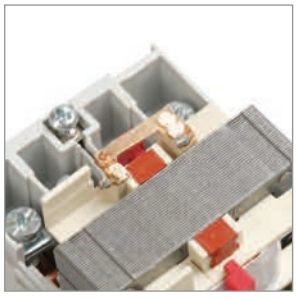
Bridge contact ensures high electric insulation characteristics.



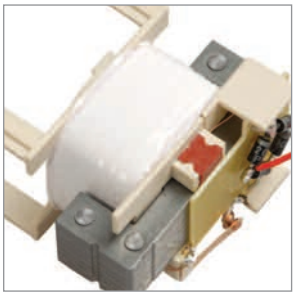
Rectifier bridge in the control coil circuit provides for controlling the contactor from 220 V AC networks.



Contacts made of silver-containing composite allow boosting their wear-resistance, service life and lowering losses and transient resistance.



Additional normally closed contact installed in the control coil circuit of KM25-40, KM40-40 and KM63-40 permits 5 times lowering of the holding current as compared to the operating one.



Increased reliability due to use of the polyconductor for the coil block connection.

Range

	Name	Rated operating current, V	Cables max. size, mm^2	Package amount, pcs multiple	transport	Product ID
	KM20-11	230	10	8	120	MKK10-20-11
	KM20-20	230	10	8	120	MKK10-20-20
	KM40-11	230	25	4	60	MKK10-40-11
	KM40-20	230	25	4	60	MKK10-40-20
	KM63-11	230	25	4	60	MKK10-63-11
	KM63-20	230	25	4	60	MKK10-63-20
	KM20-22	400	10	4	60	MKK20-20-22
	KM20-40	400	10	4	60	MKK20-20-40
	KM25-22	400	10	4	60	MKK20-25-22
	KM25-40	400	25	4	60	MKK20-25-40
	KM40-40	400	25	4	60	MKK20-40-40
	KM63-40	400	25	4	60	MKK20-63-40

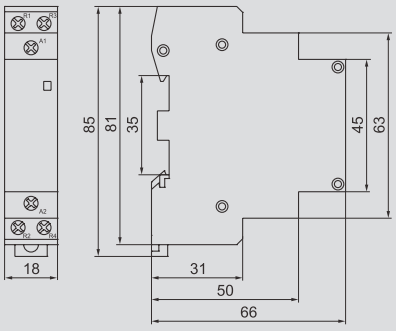
Technical Features

Parameter		KM20-20	KM20-11	KM40-11	KM40-20	KM63-11	KM63-20	KM20-22	KM20-40	KM25-22	KM25-40	KM40-40	KM63-40
Usage category		AC-1, AC-7a, AC -7b	AC-1, AC-7a, AC -7b	AC-1, AC-7a									
Number of poles		2						4					
Rated operating voltage U_e, V		230						400					
Rated frequency, Hz		50											
Rated insulation voltage U_i, V		500											
Rated operating current I_e, A	AC-1	20		40		63		20		25		40	63
	AC-7a	20		40		63		20		25		40	63
	AC-7b	9		–		–		–		–		–	
Rated thermal current I_{th}, A		20		40		63		20		25		40	63
Power dissipation, W/pole		1		3		6		1		1,2		3	6
Rated control coil voltage U_c, V~		230											
Power consumption of control coil in pull-in mode, not more		14		37						37	88	88	
Power consumption of control coil in hold mode, not more		4,5		5						5	3,5	3,5	
Control voltage ranges	closure	195…253											
	opening	46…172											
Rated conditional short-circuit current, A		3000											
Maximum cross-section of connected single-core wires, mm^2		10		25				10		10	25	25	
Mechanical endurance, switching cycles		10^6											
Electrical endurance, switching cycles		$0{,}15 \cdot 10^6$											
Degree of protection		IP20											
Installation type		35 mm wide DIN-rail											

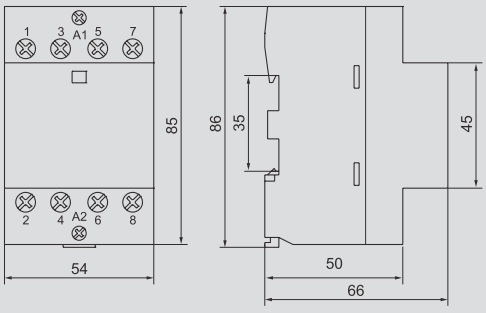
(1) – A rectifying bridge is installed in the control coil that enables use of the contactors in 220 VDC circuits.

Overall Dimensions

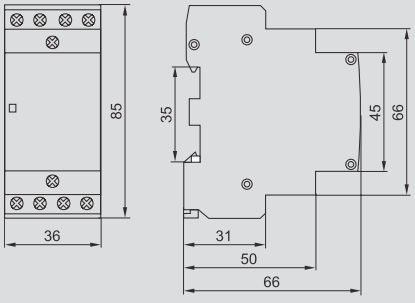
KM20-11, KM20-20



KM25-40, KM40-40, KM63-40



KM20-22, KM25-22, KM20-40



KM63-20, KM63-11, KM40-20, KM40-11