

Modular Contactors

Data according to IEC 947-4-1, IEC 947-5-1, VDE 0660, EN 60947-4-1, EN 60947-5-1

Type		R20..	R25..	R40..	R63..	K1R..	RH11
Main Contacts							
Rated insulation voltage U_i	V AC	440 ²⁾	440 ²⁾	440 ²⁾	440 ²⁾	690 ¹⁾	440 ²⁾
Rated operation voltage U_e	V AC	250	440	440	440	690	440
Frequency of operations zAC1, AC3	1/h	300	300	600	600	600	600
Mechanical life	S x 10 ⁶	1	1	1	1	5	1
Utilization category AC1							
Rated operational current I_e (=I _{th}) open	A at 60°C	20	25	40	63	20	-
Contact life	S x 10 ⁶	0,1	0,1	0,1	0,1	0,2	-
Minimum Switch Voltage	V/mA	24/100	24/100	24/100	24/100	24/100	17/5
Short time current 10s-current	A	72	72	216	240	96	-
Power loss per pole at I_e /AC1	W	2	2	3	7	1	0,5
Utilization category AC3							
Switching of three-phase motors							
Rated operational current I_e	A	-	9	27	30	12	-
Rated operational power of three-phase motors	220V kW	-	2,2	7,5	8	3	-
50-60Hz	230-240V kW	1,1 ⁴⁾	2,5	8	8,5	3	-
	380-415V kW	-	4	12,5	15	4	-
Contact life	S x 10 ⁶	-	0,15	0,15	0,15	0,9	-
Power consumption of coils							
AC operated	inrush VA	7 - 9	14 - 18	33 - 45	33 - 45	3 - 3,5	-
	sealed VA	2,2 - 4,2	4,4 - 8,4	7-10	7-10	3 - 3,5	-
	W	0,8 - 1,6	1,6 - 3,2	2,6-3	2,6-3	3 - 3,5	-
Operation range of coils							
in multiples of control voltage U_s (-40 to +40°C)		0,85 - 1,1	0,85 - 1,1	0,85 - 1,1	0,85 - 1,1	0,85 - 1,1	-
Short circuit protection							
Coordination-type "1" according to IEC 947-4-1							
max. fuse size	gL (gG) A	35	35	63	80	40	-
Cable cross-sections							
Main connector	solid or stranded mm ²	1,5 - 10	1,5 - 10	2,5 - 25	2,5 - 25	0,5 - 2,5 ³⁾	0,5 - 2,5 ³⁾
	flexible mm ²	1,5 - 6	1,5 - 6	2,5 - 16	2,5 - 16	0,5 - 2,5 ³⁾	0,5 - 2,5 ³⁾
	flexible with multicore cable end mm ²	1,5 - 6	1,5 - 6	2,5 - 16	2,5 - 16	0,5 - 1,5	0,5 - 1,5
Clamps per pole		1	1	1	1	2	2
Magnetic coil	solid or stranded mm ²	0,75 - 2,5	0,75 - 2,5	0,75 - 2,5	0,75 - 2,5	0,5 - 2,5 ³⁾	-
	flexible mm ²	0,5 - 2,5	0,5 - 2,5	0,5 - 2,5	0,5 - 2,5	0,5 - 2,5 ³⁾	-
	flexible with multicore cable end mm ²	0,5 - 1,5	0,5 - 1,5	0,5 - 1,5	0,5 - 1,5	0,5 - 1,5	-
Clamps per pole		1	1	1	1	2	-
Auxiliary Contacts							
Rated insulation voltage U_i ¹⁾	V AC	-	-	-	-	-	440 ²⁾
Thermal rated current I_{th}	40°C A	-	-	-	-	-	10
Ambient temperature	60°C A	-	-	-	-	-	6
Utilization category AC15							
Rated operational current I_e	220-240V A	-	-	-	-	-	3
	380-415V A	-	-	-	-	-	2
	440V A	-	-	-	-	-	1,6
Utilization category DC13							
Rated operational current I_e	24-60V A	-	-	-	-	-	2
	110V A	-	-	-	-	-	0,4
per pole	220V A	-	-	-	-	-	0,1
Short circuit protection							
short-circuit current 1kA, contact welding not accepted							
max. fuse size	gL (gG) A	-	-	-	-	-	10
Switching time at control voltage U_s ±10%							
	make time ms	7 - 16	9 - 15	11 - 15	11 - 15	15 - 19	
	release time ms	6 - 12	4 - 8	6 - 13	6 - 13	8 - 25	
	arc duration ms	10 - 15	10 - 15	10 - 15	10 - 15	10 - 15	

1) Suitable for: earthed-neutral systems, overvoltage category I to IV, pollution degree 3 (standard-industry): U_{imp} = 8kV.

2) Suitable for: earthed-neutral systems, overvoltage category I to III, pollution degree 3 (standard-industry): U_{imp} = 4kV.

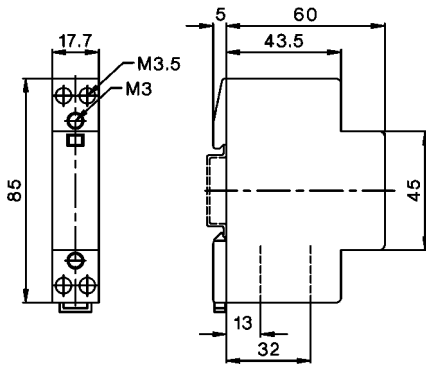
3) Maximum cable cross-section with prepared conductor

4) AC5b motor 2-pole 230V 1,1kW

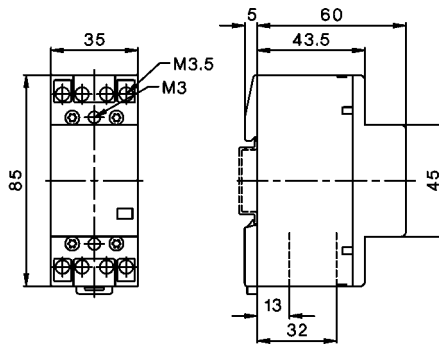
Modular Contactors

Dimensions

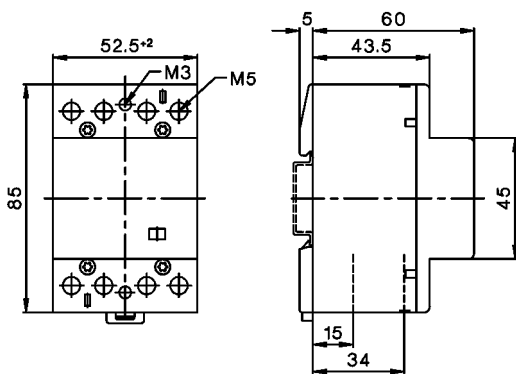
R20-..
RC-R 230



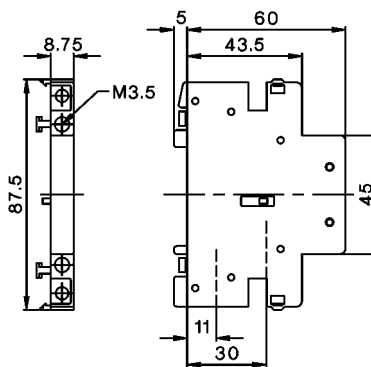
R25-..



R40-..
R63-..



Aux. contact block
RH11



K1R40
K1R31

