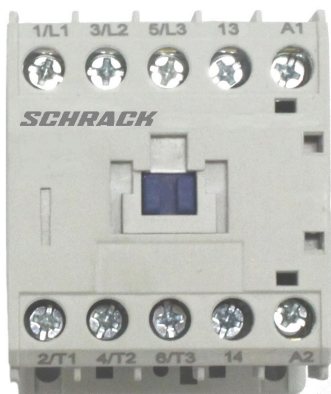


■ Datasheet: Contactors CUBICO Mini, 4kW, 9A



■ SCHRACK-INFO

- Contactor in compact size with 230VAC, 24VAC or 24VDC drive
- 3-pole with integrated auxiliary contact
- Optional auxiliary contact blocks available
- According IEC/EN 60947-3

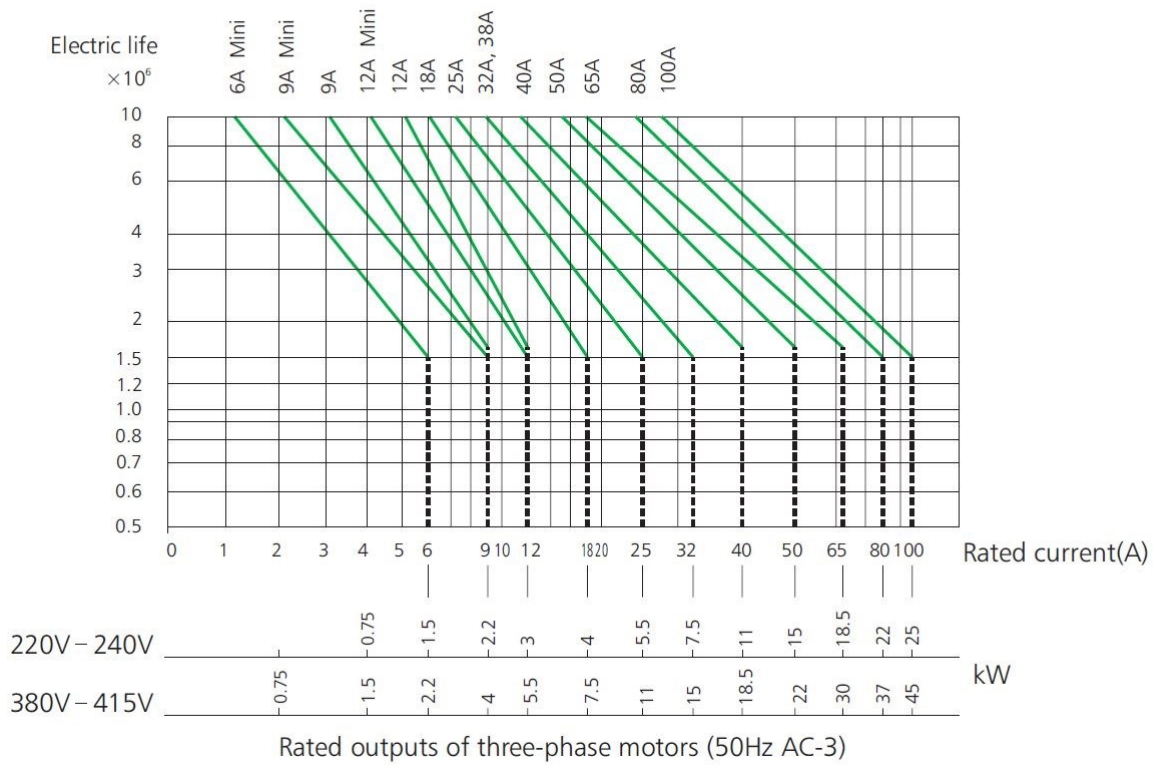
■ Technical datas

Standard		IEC/EN 60947-4-1
Rated insulation voltage		690V AC
Rated frequency		50/60Hz
Rated impulse withstand voltage		6kV
Overvoltage category		III
Rated current AC1		20A
Rated current AC3	230V	9A
	400V	9A
	415V	9A
	690V	4,9A
Rated current AC4	230V	9A
	400V	9A
	415V	9A
	690V	4,9A

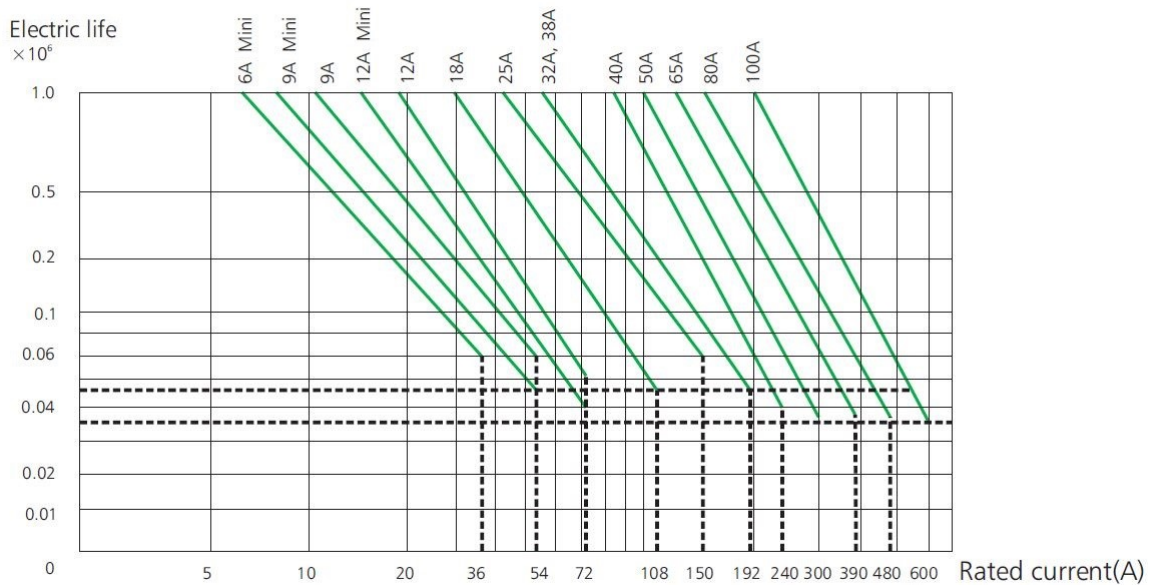
Rated making capacity		10 x I _e (AC3) / 12 x I _e (AC4)
Rated breaking capacity		8 x I _e (AC3) / 10 x I _e (AC4)
Short-time withstand current 10s		72A
Rated power AC3	230V	2,2kW
	400V	4kW
	415V	4kW
	690V	4kW
Operating frequency	AC3	1.200 operations/h
	AC4	300 operations/h
Electrical lifetime		1.200.000 operations
Mechanical lifetime		10.000.000 operations
Configuration of main contacts		
	3-pole	3NO
Protection degree		IP20
Ambient air temperature		- 5C up to + 40°C
Storage temperature		- 25C up to + 55°C
Correction coefficient	40°C	1
	50°C	0,875
	60°C	0,75
	70°C	0,625
Altitude		2000m
Atmosphere conditions		50% humidity at +40°C
Installation position		plane and vertical +/- 22,5°
Coil voltage		24VAC, 230VAC or 24VDC
Coil acting range	attraction	85% - 110% U _s
	release	AC: 20%-70% U _s
		DC: 10%-60% U _s
Coil average power	start	40VA
	holding	7VA
Heat wastage		4W
Main contact action time	close	10 - 18 ms
	disconnection	4 - 16 ms

Terminal capacity of main circuit		
flexible cable with ferrule		
	single cable	1 - 2,5mm ²
	dual cable	1 - 2,5mm ²
rigid cable		
	single cable	1 - 2,5mm ²
	dual cable	1 - 2,5mm ²
Screw siz		M3
Torque		0,8 Nm
Terminal capacity of control circuit		
flexible cable with ferrule		
	single cable	1 - 2,5mm ²
	dual cable	1 - 2,5mm ²
rigid cable		
	single cable	1 - 2,5mm ²
	dual cable	1 - 2,5mm ²
Screw size		M3
Torque		0,8 Nm
Terminal capacity of auxiliary contacts		
flexible cable with ferrule		
	single cable	1 - 2,5mm ²
	dual cable	1 - 2,5mm ²
rigid cable		
	single cable	1 - 2,5mm ²
	dual cable	1 - 2,5mm ²
Screw size		M3
Torque		0,8 Nm

Electrical life AC3



Electrical life AC4



Application in illumination circuit

Incandescent lamp			
W	A	μF	max. number of lamps per phase
60	0,27	-	35
75	0,34	-	28
100	0,45	-	21
150	0,68	-	14
200	0,71	-	10
300	1,4	-	6
500	2,3	-	4
750	3,4	-	2
1000	4,6	-	2

Single fluorescent lamp with starter, without compensation			
W	A	μF	max. number of lamps per phase
20	0,39	-	24
40	0,45	-	21
64	0,7	-	12
80	0,8	-	12
110	1,15	-	8

Single fluorescent lamp with starter, parallel compensation			
W	A	μF	max. number of lamps per phase
20	0,18	5	83
40	0,26	5	58
65	0,42	7	35
80	0,52	7	28
100	0,6	16	23
110	0,7	18	21

Fluorescent lamps in dual mounting with starter, without compensation			
W	A	μF	max. number of lamps per phase
2 x 20	2 x 0,22	-	21
2 x 40	2 x 0,41	-	11
2 x 65	2 x 0,67	-	7
2 x 80	2 x 0,82	-	5
2 x 110	2 x 1,10	-	4

Fluorescent lamps in dual mounting with starter, with compensation in series			
W	A	μF	max. number of lamps per phase
2 x 20	2 x 0,13	-	36
2 x 40	2 x 0,24	-	20
2 x 65	2 x 0,39	-	12
2 x 80	2 x 0,48	-	10
2 x 110	2 x 0,65	-	7

Single fluorescent lamp without starter, without compensation			
W	A	μF	max. number of lamps per phase
20	0,43	-	22
40	0,55	-	17
65	0,8	-	12
80	0,95	-	10
110	0,4	-	6

Single fluorescent lamp with starter, with parallel compensation			
W	A	μF	max. number of lamps per phase
20	0,19	5	50
40	0,29	5	33
65	0,46	7	20
80	0,57	7	16
110	0,79	16	-

Fluorescent lamp without starter, without compensation			
W	A	μF	max. number of lamps per phase
2 x 20	2 x 0,25	-	19
2 x 40	2 x 0,47	-	10
2 x 65	2 x 0,76	-	6
2 x 80	2 x 0,93	-	5
2 x 110	2 x 1,3	-	3

Fluorescent lamp in dual mounting without starter, with compensation in series			
W	A	μF	max. number of lamps per phase
2 x 20	2 x 0,15	-	34
2 x 40	2 x 0,26	-	18
2 x 65	2 x 0,43	-	11
2 x 80	2 x 0,53	-	9
2 x 110	2 x 0,72	-	6

Low press sodium vapor lamps with parallel compensation			
W	A	μF	max. number of lamps per phase
35	0,3	17	-
55	0,4	17	-
90	0,6	25	-
135	0,9	36	-
150	1	36	-
180	1,2	36	-
200	1,3	36	-

Low press sodium vapor lamps without compensation			
W	A	μF	max. number of lamps per phase
150	1,9	-	4
250	3,2	-	2
400	5	-	1
700	8,8	-	-
1000	12,4	-	-

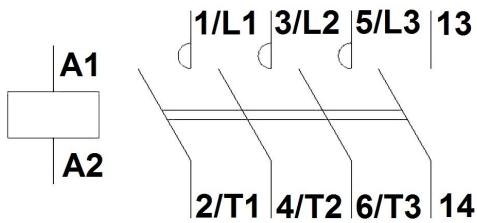
Low press sodium vapor lamps with parallel compensation			
W	A	μF	max. number of lamps per phase
150	0,84	20	-
250	1,4	32	-
400	2,2	48	-
700	3,6	96	-
1000	5,5	120	-

High press hydrargyrum lamps without compensation			
W	A	μF	max. number of lamps per phase
50	0,54	-	14
80	0,81	-	9
125	1,2	-	6
250	2,3	-	3
400	4,1	-	1
700	6,8	-	-
1000	9,9	-	-

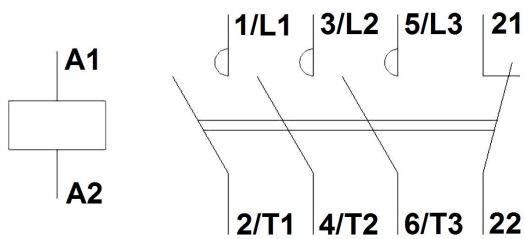
High press hydrargyrum lamps with parallel compensation			
W	A	μF	max. number of lamps per phase
50	0,3	10	-
80	0,45	10	-
125	0,67	10	-
250	1,3	18	-
400	2,3	25	-
700	3,8	40	-
1000	5,5	60	-

Wiring diagram

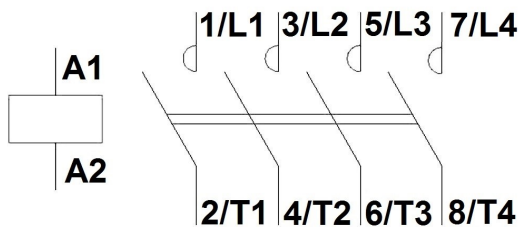
3-pole, 1NO



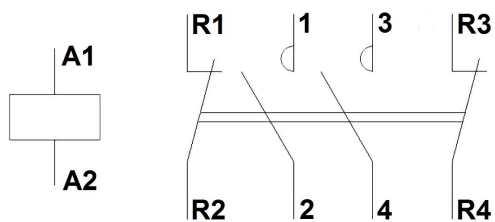
3-pole, 1NC



4-pole, 4NO

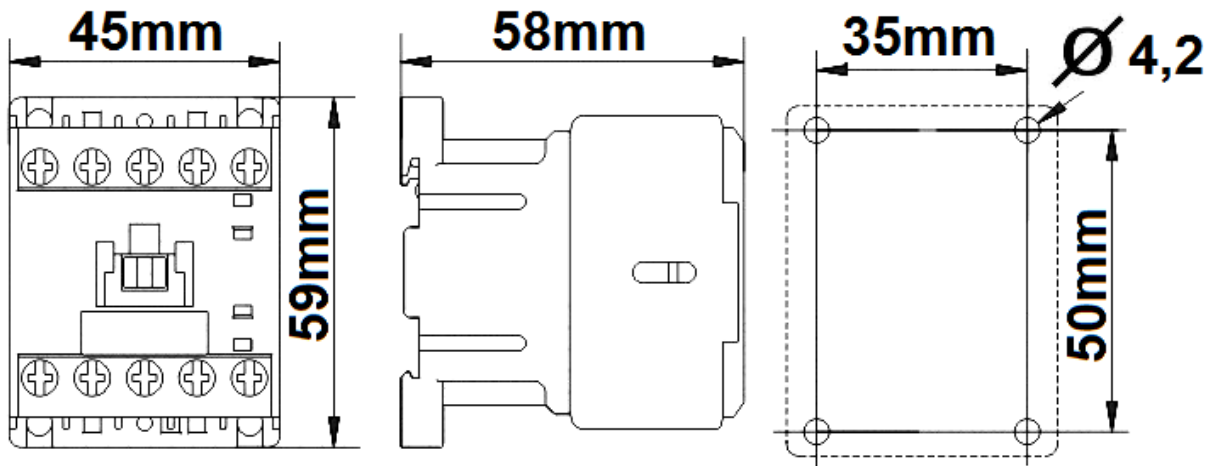


4-pole, 2NO + 2NC

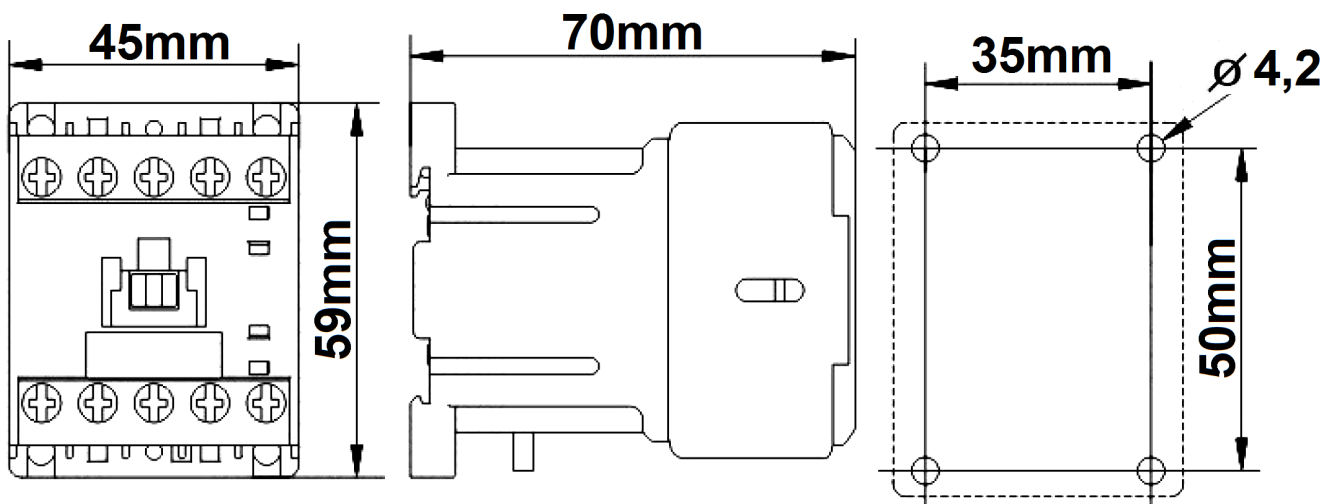


■ Dimensions

230VAC or 24VAC Coil



24VDC Coil



▀ Articles

Contactors 3-pole, CUBICO Mini, 4kW, 9A

Description	order no.
Contactors 3-pole, CUBICO Mini, 4kW, 9A, 1NO, 230VAC	LZDM0913--
Contactors 3-pole, CUBICO Mini, 4kW, 9A, 1NC, 230VAC	LZDM0923--
Contactors 3-pole, CUBICO Mini, 4kW, 9A, 1NO, 24VAC	LZDM0910--
Contactors 3-pole, CUBICO Mini, 4kW, 9A, 1NC, 24VAC	LZDM0920--
Contactors 3-pole, CUBICO Mini, 4kW, 9A, 1NO, 24VDC	LZDM0915--
Contactors 3-pole, CUBICO Mini, 4kW, 9A, 1NC, 24VDC	LZDM0925--