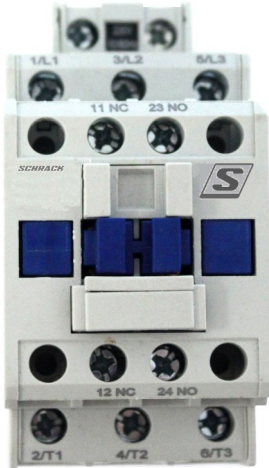


■ Datasheet: Contactors 3-pole, CUBICO Classic, 4kW, 9A



■ SCHRACK-INFO

- Contactor with 230VAC, 24VAC or 24VDC drive and integrated auxiliary contacts
- Optional auxiliary contact blocks available
- According IEC/EN 60947-3

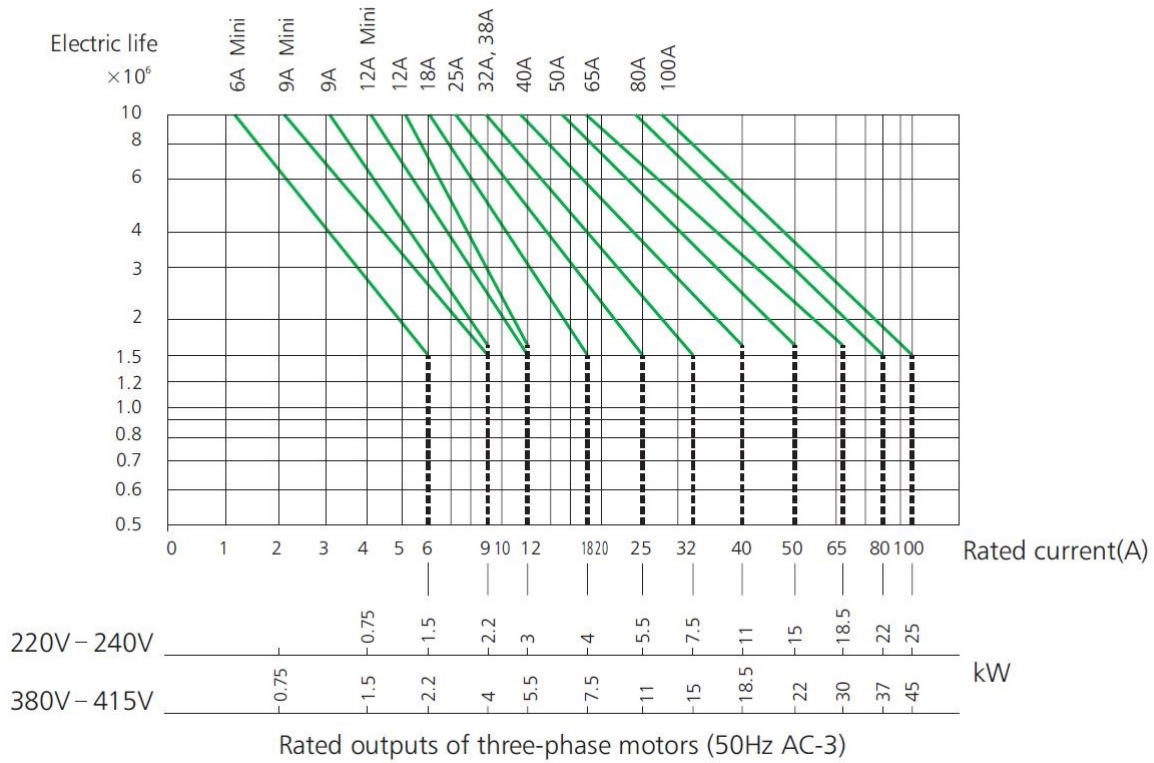
■ Technical datas

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	25A	
Rated current AC3	230V	9A
	400V	9A
	415V	9A
	690V	6,7A
Rated current AC4	230V	9A
	400V	9A
	415V	9A
	690V	6,7A

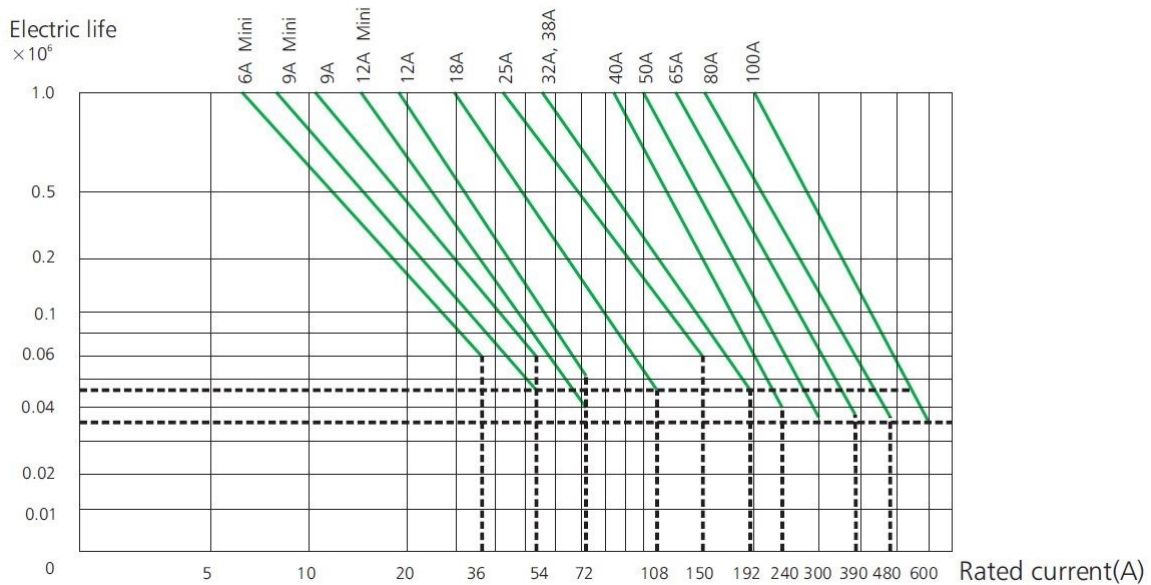
Rated making capacity		10 x I <sub>e</sub> (AC3) / 12 x I <sub>e</sub> (AC4)
Rated breaking capacity		8 x I <sub>e</sub> (AC3) / 10 x I <sub>e</sub> (AC4)
Short-time withstand current 10s		72A
Rated power AC3	230V	2,2kW
	400V	4kW
	415V	4kW
	690V	5,5kW
Operating frequency	AC3	1.200 operations/h
	AC4	300 operations/h
Electrical lifetime		1.200.000 operations
Mechanical lifetime		10.000.000 operations
Configuration of main contacts		
	3-pole	3NO
Configuration of auxiliary contacts		1NO and 1NC
Coil voltage		230VAC, 24VAC or 24VDC
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		230VAC or 24VAC
Coil acting range	attraction	85% - 110% U <sub>s</sub>
	release	AC: 20%-70% U <sub>s</sub>
Coil average power	start	70VA
	holding	10VA
Heat wastage		4W
Main contact action time	close	12 - 25 ms
	disconnection	5 - 20 ms

Terminal capacity of main circuit	flexible cable with ferrule	
	single cable	1 - 4mm <sup>2</sup>
	dual cable	1 - 2,5mm <sup>2</sup>
	rigid cable	
	single cable	1 - 4mm <sup>2</sup>
	dual cable	1 - 4mm <sup>2</sup>
	Screw siz	M3,5
	Torque	1,2Nm
Terminal capacity of control circuit	flexible cable with ferrule	
	single cable	1 - 4mm <sup>2</sup>
	dual cable	1 - 2,5mm <sup>2</sup>
	rigid cable	
	single cable	1 - 4mm <sup>2</sup>
	dual cable	1 - 4mm <sup>2</sup>
	Screw size	M3,5
	Torque	1,2Nm
Terminal capacity of auxiliary contacts	flexible cable with ferrule	
	single cable	1 - 4mm <sup>2</sup>
	dual cable	1 - 2,5mm <sup>2</sup>
	rigid cable	
	single cable	1 - 4mm <sup>2</sup>
	dual cable	1 - 4mm <sup>2</sup>
	Screw size	M3,5
	Torque	1,2Nm

Electrical life AC3



Electrical life AC4



Application in illumination circuit

Incandescent lamp			
W	A	$\mu\text{F}$	max. number of lamps per phase
60	0,27	-	59
75	0,34	-	47
100	0,45	-	35
150	0,68	-	23
200	0,71	-	17
300	1,4	-	11
500	2,3	-	7
750	3,4	-	4
1000	4,6	-	3

Single fluorescent lamp with starter, without compensation			
W	A	$\mu\text{F}$	max. number of lamps per phase
20	0,39	-	41
40	0,45	-	35
64	0,7	-	22
80	0,8	-	20
110	1,15	-	12

Single fluorescent lamp with starter, parallel compensation			
W	A	$\mu\text{F}$	max. number of lamps per phase
20	0,18	5	94
40	0,26	5	65
65	0,42	7	40
80	0,52	7	32
100	0,6	16	26
110	0,7	18	24

Fluorescent lamps in dual mounting with starter, without compensation			
W	A	$\mu\text{F}$	max. number of lamps per phase
2 x 20	2 x 0,22	-	36
2 x 40	2 x 0,41	-	18
2 x 65	2 x 0,67	-	10
2 x 80	2 x 0,82	-	8
2 x 110	2 x 1,10	-	6

Fluorescent lamps in dual mounting with starter, with compensation in series			
W	A	$\mu\text{F}$	max. number of lamps per phase
2 x 20	2 x 0,13	-	60
2 x 40	2 x 0,24	-	32
2 x 65	2 x 0,39	-	20
2 x 80	2 x 0,48	-	16
2 x 110	2 x 0,65	-	12

Single fluorescent lamp without starter, without compensation			
W	A	$\mu\text{F}$	max. number of lamps per phase
20	0,43	-	37
40	0,55	-	29
65	0,8	-	20
80	0,95	-	16
110	0,4	-	11

Single fluorescent lamp with starter, with parallel compensation			
W	A	$\mu\text{F}$	max. number of lamps per phase
20	0,19	5	84
40	0,29	5	55
65	0,46	7	34
80	0,57	7	28
110	0,79	16	20

Fluorescent lamp without starter, without compensation			
W	A	$\mu\text{F}$	max. number of lamps per phase
2 x 20	2 x 0,25	-	32
2 x 40	2 x 0,47	-	16
2 x 65	2 x 0,76	-	10
2 x 80	2 x 0,93	-	8
2 x 110	2 x 1,3	-	6

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	-	56
2 x 40	2 x 0,26	-	30
2 x 65	2 x 0,43	-	18
2 x 80	2 x 0,53	-	14
2 x 110	2 x 0,72	-	10

Low press sodium vapor lamps with parallel compensation			
W	A	μF	max. number of lamps per phase
35	0,3	17	40
55	0,4	17	30
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	-	6
250	3,2	-	3
400	5	-	2
700	8,8	-	-
1000	12,4	-	-

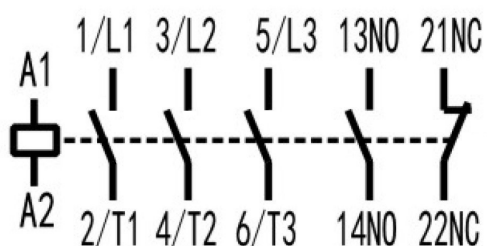
Low press sodium vapor lamps with parallel compensation			
W	A	μF	max. number of lamps per phase
150	0,84	20	-
250	1,4	32	-
400	2,2	48	-
700	3,6	96	-
1000	5,5	120	-

High press hydrargyrum lamps without compensation			
W	A	$\mu\text{F}$	max. number of lamps per phase
50	0,54	-	22
80	0,81	-	14
125	1,2	-	9
250	2,3	-	5
400	4,1	-	2
700	6,8	-	1
1000	9,9	-	1

High press hydrargyrum lamps with parallel compensation			
W	A	$\mu\text{F}$	max. number of lamps per phase
50	0,3	10	40
80	0,45	10	26
125	0,67	10	17
250	1,3	18	9
400	2,3	25	-
700	3,8	40	-
1000	5,5	60	-

**■** Wiring diagram

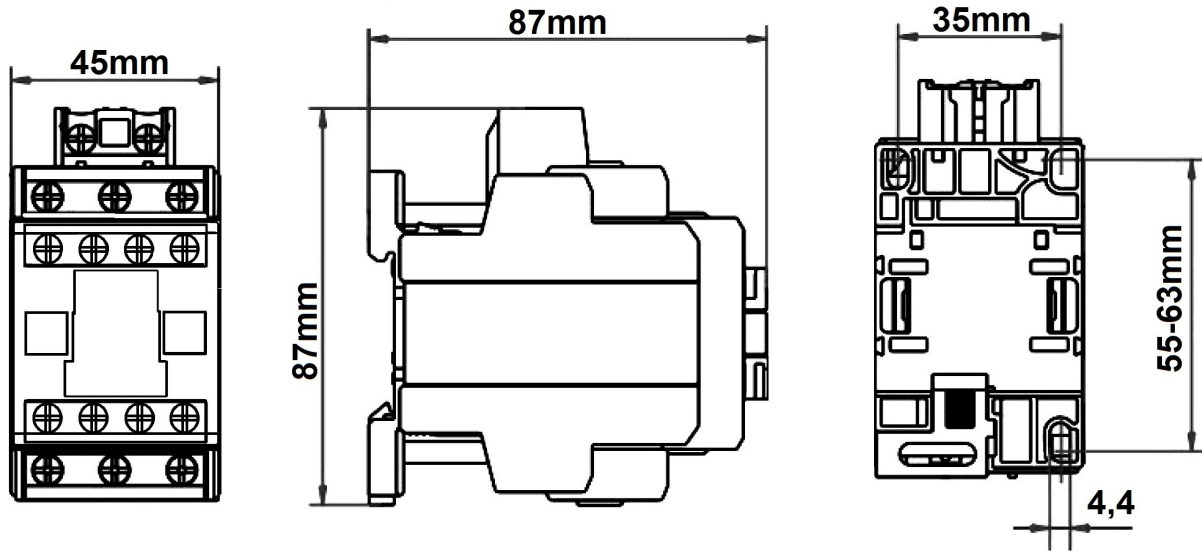
3-pole, 1NO + 1NC





▀ Dimensions

230VAC or 24VAC Coil



▀ Articles

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

Description	order no.
Contactors 3-pole, CUBICO Classic, 4kW, 9A, 1NO+1NC, 230VAC	LZDC09B3--
Contactors 3-pole, CUBICO Classic, 4kW, 9A, 1NO+1NC, 24VAC	LZDC09B0--
Contactors 3-pole, CUBICO Classic, 4kW, 9A, 1NO+1NC, 24VDC	LZDC09B5--