

■ Datasheet: Contactors 3-pole, CUBICO High, 18,5kW, 40A



■ SCHRACK-INFO

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

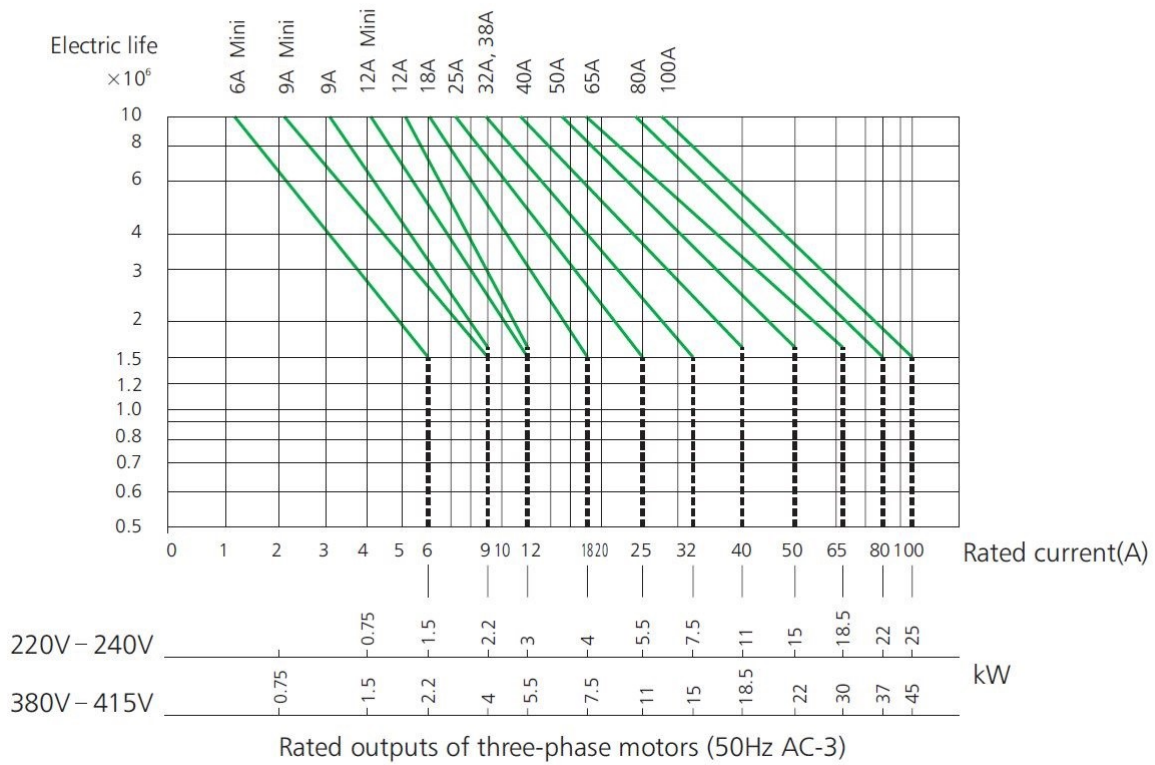
■ Technical datas

Standard	IEC/EN 60947-4-1	
Rated insulation voltage	690V AC	
Rated frequency	50/60Hz	
Rated impulse withstand voltage	8kV	
Overvoltage category	III	
Rated current AC1	60A	
Rated current AC3	230V	40A
	400V	40A
	415V	40A
	690V	34A
Rated current AC4	230V	40A
	400V	40A
	415V	40A
	690V	34A

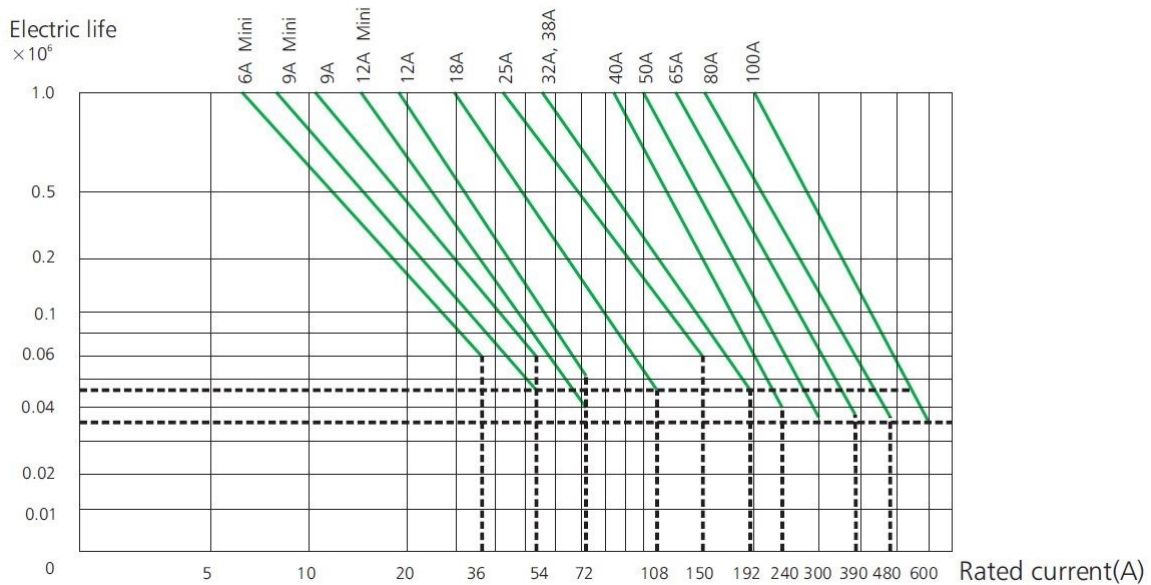
Rated making capacity		$10 \times I_e$ (AC3) / $12 \times I_e$ (AC4)
Rated breaking capacity		$8 \times I_e$ (AC3) / $10 \times I_e$ (AC4)
Short-time withstand current 10s		320A
Rated power AC3	230V	11kW
	400V	18,5kW
	415V	22kW
	690V	30kW
Operating frequency	AC3	1.200 operations/h
	AC4	120 operations/h
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
Protection degree		IP20
Ambient air temperature		- 5°C up to + 40°C
Storage temperature		- 25°C 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% $U_s$
	release	AC: 20%-70% $U_s$
Coil average power	start	210VA
	holding	25VA
Heat wastage		7W
Main contact action time	close	25ms
	disconnection	15ms

Terminal capacity of main circuit	flexible cable with ferrule	
	single cable	10 - 25mm <sup>2</sup>
	dual cable	4 - 16mm <sup>2</sup>
	Screw siz	M8
	Torque	6Nm
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	μF	max. number of lamps per phase
60	0,27	-	163
75	0,34	-	129
100	0,45	-	97
150	0,68	-	64
200	0,71	-	48
300	1,4	-	31
500	2,3	-	19
750	3,4	-	13
1000	4,6	-	9

Single fluorescent lamp with starter, without compensation			
W	A	μF	max. number of lamps per phase
20	0,39	-	112
40	0,45	-	97
64	0,7	-	62
80	0,8	-	55
110	1,15	-	35

Single fluorescent lamp with starter, parallel compensation			
W	A	μF	max. number of lamps per phase
20	0,18	5	233
40	0,26	5	160
65	0,42	7	100
80	0,52	7	80
100	0,6	16	64
110	0,7	18	59

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	-	100
2 x 40	2 x 0,41	-	52
2 x 65	2 x 0,67	-	32
2 x 80	2 x 0,82	-	26
2 x 110	2 x 1,10	-	18

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	-	168
2 x 40	2 x 0,24	-	90
2 x 65	2 x 0,39	-	56
2 x 80	2 x 0,48	-	44
2 x 110	2 x 0,65	-	32

Single fluorescent lamp without starter, without compensation			
W	A	$\mu\text{F}$	max. number of lamps per phase
20	0,43	-	102
40	0,55	-	80
65	0,8	-	55
80	0,95	-	46
110	0,4	-	31

Single fluorescent lamp with starter, with parallel compensation			
W	A	$\mu\text{F}$	max. number of lamps per phase
20	0,19	5	231
40	0,29	5	151
65	0,46	7	95
80	0,57	7	77
110	0,79	16	55

Fluorescent lamp without starter, without compensation			
W	A	$\mu\text{F}$	max. number of lamps per phase
2 x 20	2 x 0,25	-	88
2 x 40	2 x 0,47	-	46
2 x 65	2 x 0,76	-	28
2 x 80	2 x 0,93	-	22
2 x 110	2 x 1,3	-	16

Fluorescent lamp in dual mounting without starter, with compensation in series			
W	A	$\mu\text{F}$	max. number of lamps per phase
2 x 20	2 x 0,15	-	156
2 x 40	2 x 0,26	-	84
2 x 65	2 x 0,43	-	50
2 x 80	2 x 0,53	-	40
2 x 110	2 x 0,72	-	30

Low press sodium vapor lamps with parallel compensation			
W	A	$\mu\text{F}$	max. number of lamps per phase
35	0,3	17	110
55	0,4	17	82
90	0,6	25	55
135	0,9	36	36
150	1	36	33
180	1,2	36	27
200	1,3	36	25

Low press sodium vapor lamps without compensation			
W	A	$\mu\text{F}$	max. number of lamps per phase
150	1,9	-	17
250	3,2	-	10
400	5	-	6
700	8,8	-	3
1000	12,4	-	2

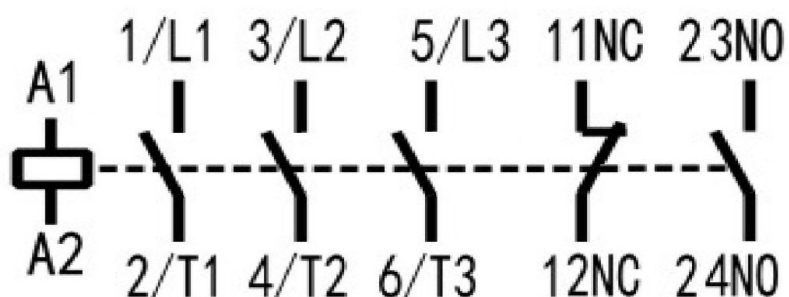
Low press sodium vapor lamps with parallel compensation			
W	A	$\mu\text{F}$	max. number of lamps per phase
150	0,84	20	39
250	1,4	32	23
400	2,2	48	15
700	3,6	96	8
1000	5,5	120	6

High press hydrargyrum lamps without compensation			
W	A	$\mu\text{F}$	max. number of lamps per phase
50	0,54	-	64
80	0,81	-	40
125	1,2	-	27
250	2,3	-	14
400	4,1	-	8
700	6,8	-	4
1000	9,9	-	3

High press hydrargyrum lamps with parallel compensation			
W	A	$\mu\text{F}$	max. number of lamps per phase
50	0,3	10	110
80	0,45	10	73
125	0,67	10	49
250	1,3	18	25
400	2,3	25	14
700	3,8	40	8
1000	5,5	60	8

**■** Wiring diagram

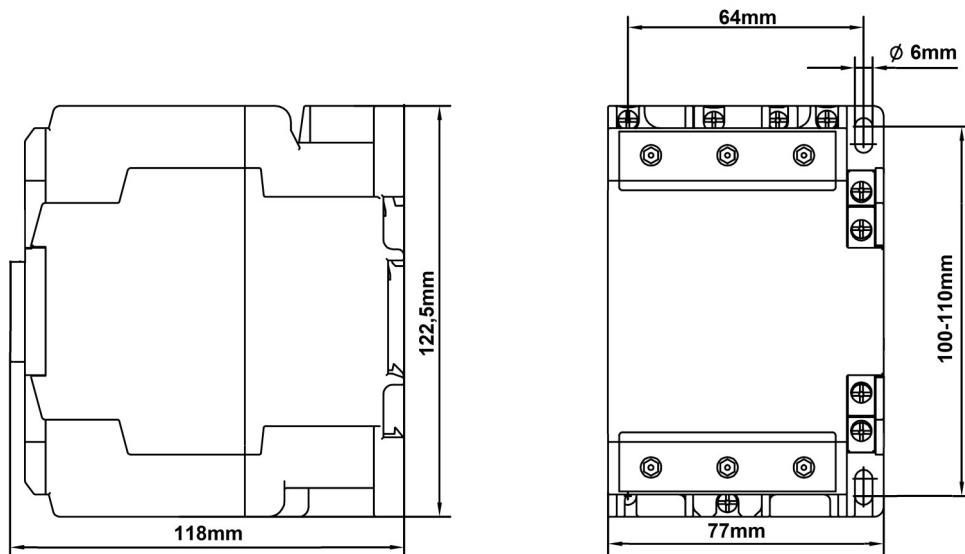
3-pole, 1NO + 1NC





**■** Dimensions

230VAC or 24VAC Coil



**■** Articles

Contactors 3-pole, CUBICO High, 18,5kW, 40A

Description	order no.
Contactors 3-pole, CUBICO High, 18,5kW, 40A, 1NO+1NC, 230VAC	LZDH40B3--
Contactors 3-pole, CUBICO High, 18,5kW, 40A, 1NO+1NC, 24VAC	LZDH40B0--