

■ Datasheet: Contactors 3-pole, CUBICO High, 22kW, 50A



■ SCHRACK-INFO

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

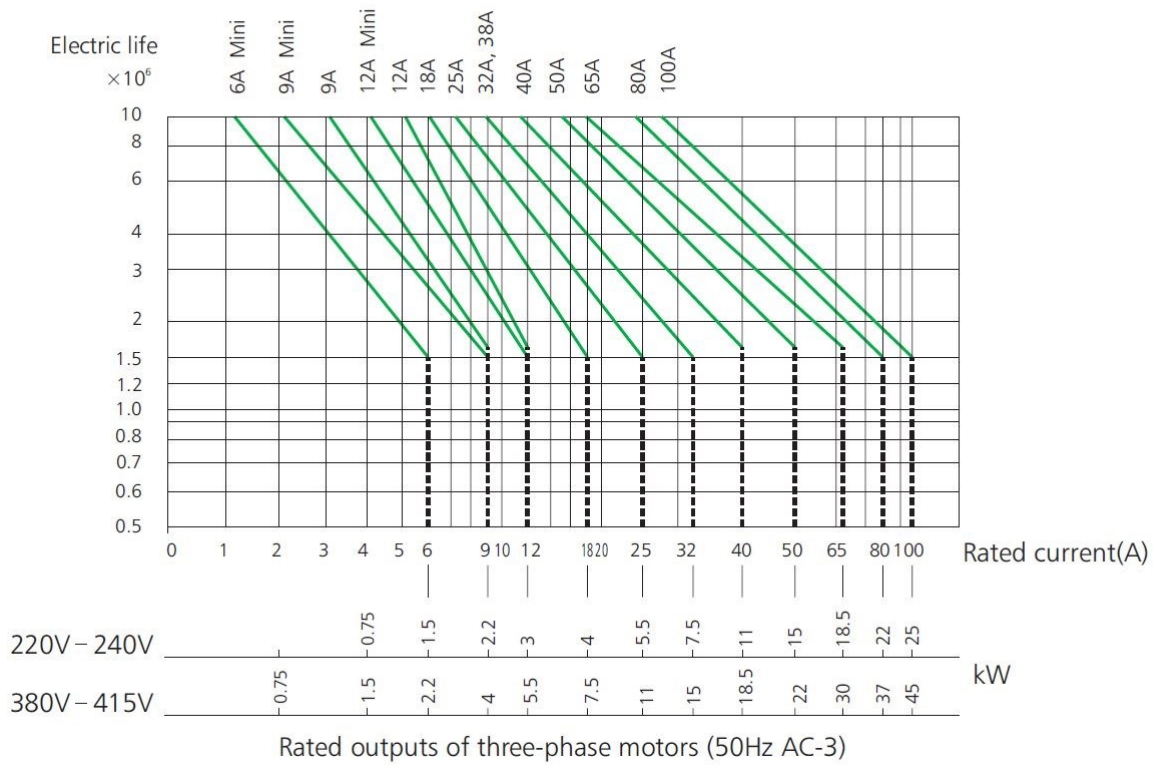
■ Technical datas

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		80A
Rated current AC3	230V	50A
	400V	50A
	415V	50A
	690V	39A
Rated current AC4	230V	50A
	400V	50A
	415V	50A
	690V	39A

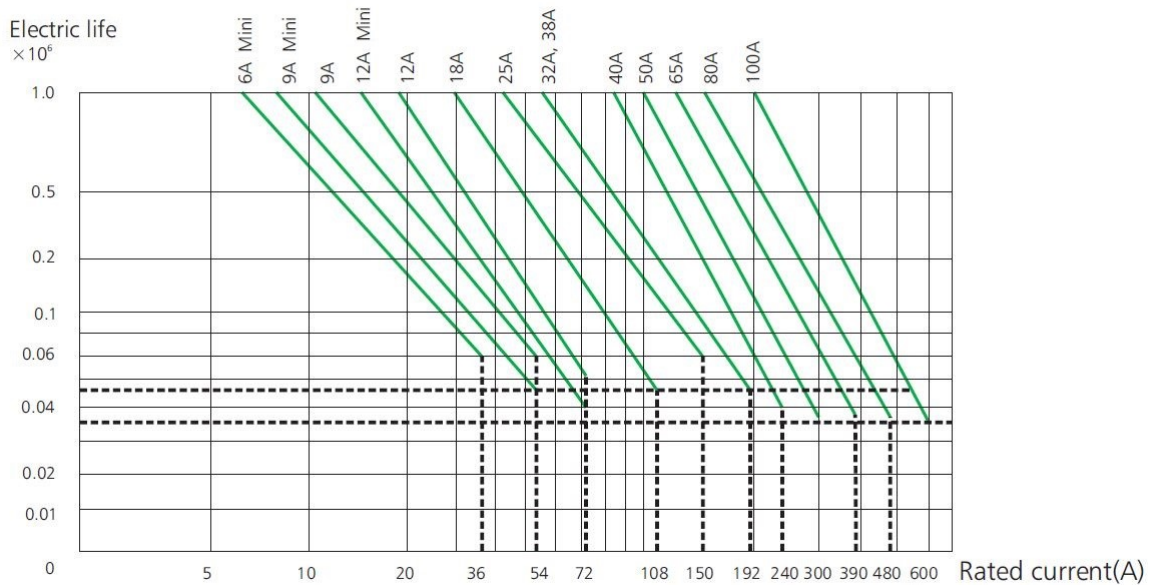
Rated making capacity		$10 \times I_e$ (AC3) / $12 \times I_e$ (AC4)
Rated breaking capacity		$8 \times I_e$ (AC3) / $10 \times I_e$ (AC4)
Short-time withstand current 10s		400A
Rated power AC3	230V	15kW
	400V	22kW
	415V	25kW
	690V	33kW
Operating frequency	AC3	1.200 operations/h
	AC4	120 operations/h
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		- 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_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 ²
	dual cable	4 - 16mm ²
	Screw siz	M8
	Torque	6Nm
Terminal capacity of control circuit	flexible cable with ferrule	
	single cable	1 - 4mm ²
	dual cable	1 - 2,5mm ²
	rigid cable	
	single cable	1 - 4mm ²
	dual cable	1 - 4mm ²
	Screw size	M3,5
	Torque	1,2Nm
	Terminal capacity of auxiliary contacts	flexible cable with ferrule
single cable		1 - 4mm ²
dual cable		1 - 2,5mm ²
rigid cable		
single cable		1 - 4mm ²
dual cable		1 - 4mm ²
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	-	207
75	0,34	-	164
100	0,45	-	124
150	0,68	-	82
200	0,71	-	62
300	1,4	-	40
500	2,3	-	24
750	3,4	-	16
1000	4,6	-	12

Single fluorescent lamp with starter, without compensation			
W	A	μF	max. number of lamps per phase
20	0,39	-	143
40	0,45	-	124
64	0,7	-	80
80	0,8	-	70
110	1,15	-	46

Single fluorescent lamp with starter, parallel compensation			
W	A	μF	max. number of lamps per phase
20	0,18	5	335
40	0,26	5	230
65	0,42	7	142
80	0,52	7	115
100	0,6	16	92
110	0,7	18	85

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	-	126
2 x 40	2 x 0,41	-	68
2 x 65	2 x 0,67	-	40
2 x 80	2 x 0,82	-	34
2 x 110	2 x 1,10	-	23

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	-	214
2 x 40	2 x 0,24	-	116
2 x 65	2 x 0,39	-	70
2 x 80	2 x 0,48	-	56
2 x 110	2 x 0,65	-	42

Single fluorescent lamp without starter, without compensation			
W	A	μF	max. number of lamps per phase
20	0,43	-	130
40	0,55	-	101
65	0,8	-	70
80	0,95	-	58
110	0,4	-	40

Single fluorescent lamp with starter, with parallel compensation			
W	A	μF	max. number of lamps per phase
20	0,19	5	294
40	0,29	5	193
65	0,46	7	121
80	0,57	7	98
110	0,79	16	70

Fluorescent lamp without starter, without compensation			
W	A	μF	max. number of lamps per phase
2 x 20	2 x 0,25	-	112
2 x 40	2 x 0,47	-	158
2 x 65	2 x 0,76	-	36
2 x 80	2 x 0,93	-	30
2 x 110	2 x 1,3	-	20

Fluorescent lamp in dual mounting without starter, with compensation in series			
W	A	μ F	max. number of lamps per phase
2 x 20	2 x 0,15	-	200
2 x 40	2 x 0,26	-	106
2 x 65	2 x 0,43	-	64
2 x 80	2 x 0,53	-	32
2 x 110	2 x 0,72	-	32

Low press sodium vapor lamps with parallel compensation			
W	A	μ F	max. number of lamps per phase
35	0,3	17	140
55	0,4	17	105
90	0,6	25	70
135	0,9	36	46
150	1	36	42
180	1,2	36	35
200	1,3	36	32

Low press sodium vapor lamps without compensation			
W	A	μ F	max. number of lamps per phase
150	1,9	-	22
250	3,2	-	13
400	5	-	8
700	8,8	-	4
1000	12,4	-	3

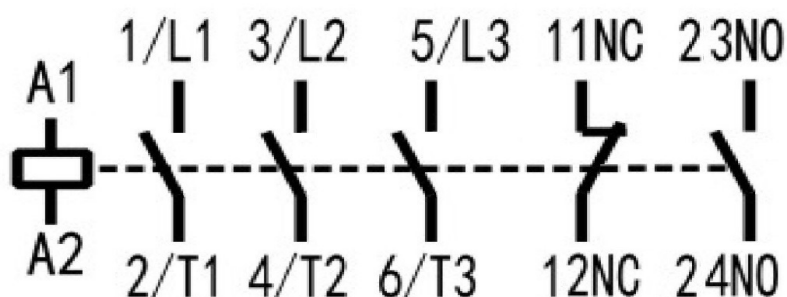
Low press sodium vapor lamps with parallel compensation			
W	A	μ F	max. number of lamps per phase
150	0,84	20	50
250	1,4	32	30
400	2,2	48	19
700	3,6	96	10
1000	5,5	120	7

High press hydrargyrum lamps without compensation			
W	A	μF	max. number of lamps per phase
50	0,54	-	77
80	0,81	-	51
125	1,2	-	34
250	2,3	-	17
400	4,1	-	10
700	6,8	-	6
1000	9,9	-	4

High press hydrargyrum lamps with parallel compensation			
W	A	μF	max. number of lamps per phase
50	0,3	10	140
80	0,45	10	93
125	0,67	10	62
250	1,3	18	32
400	2,3	25	18
700	3,8	40	11
1000	5,5	60	7

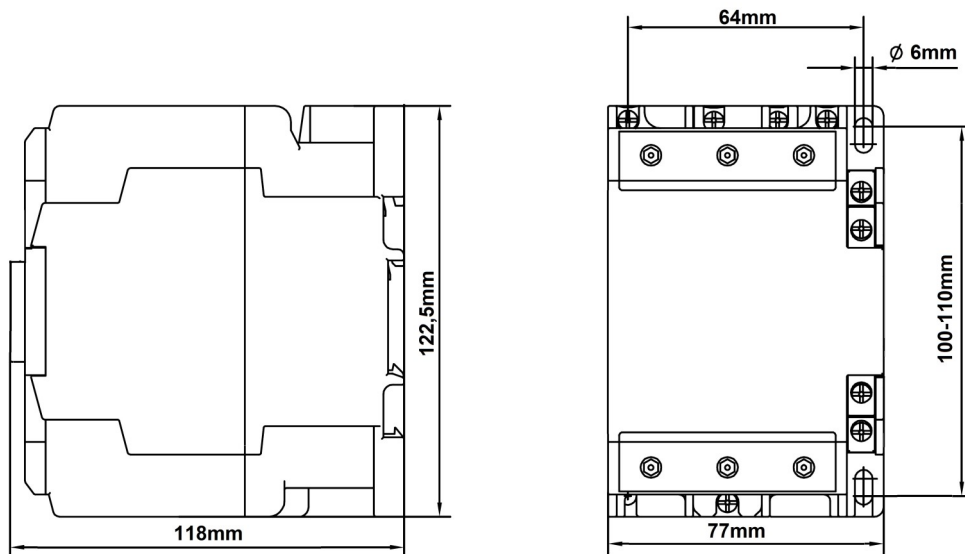
■ Wiring diagram

3-pole, 1NO + 1NC



Dimensions

230VAC or 24VAC Coil



Articles

Contactors 3-pole, CUBICO High, 22kW, 50A

Description	order no.
Contactors 3-pole, CUBICO High, 22kW, 50A, 1NO+1NC, 230VAC	LZDH50B3--
Contactors 3-pole, CUBICO High, 22kW, 50A, 1NO+1NC, 24VAC	LZDH50B0--