

■ Datasheet: Contactors 3-pole, CUBICO High, 37kW, 80A



■ SCHRACK-INFO

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

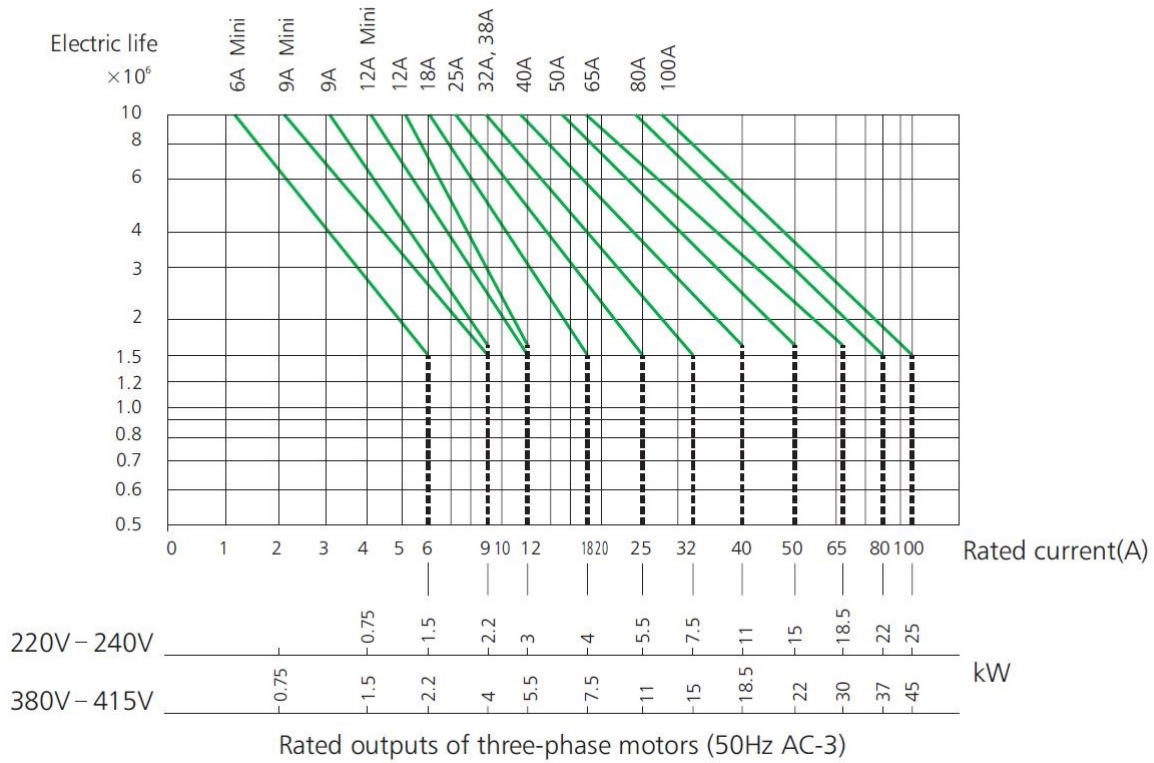
■ Technical datas

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	125A	
Rated current AC3	230V	80A
	400V	80A
	415V	80A
	690V	49A
Rated current AC4	230V	80A
	400V	80A
	415V	80A
	690V	49A

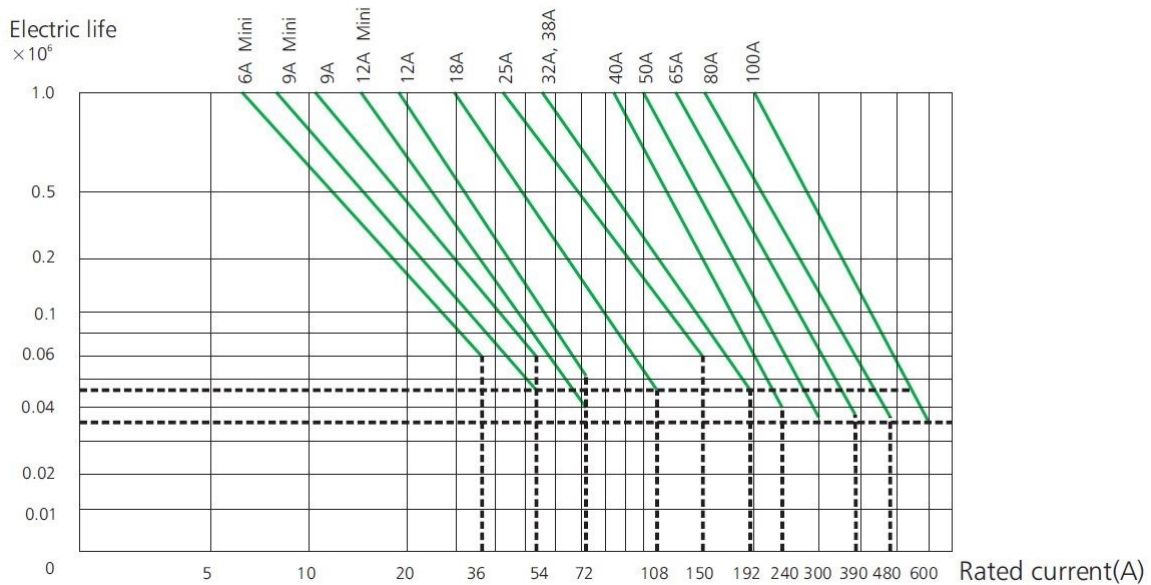
Rated making capacity		10 x I _e (AC3) / 12 x I _e (AC4)
Rated breaking capacity		8 x I _e (AC3) / 10 x I _e (AC4)
Short-time withstand current 10s		640A
Rated power AC3	230V	22kW
	400V	37kW
	415V	45kW
	690V	45kW
Operating frequency	AC3	1.200 operations/h
	AC4	120 operations/h
Electrical lifetime		1.200.000 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	250VA
	holding	30VA
Heat wastage		8W
Main contact action time	close	30ms
	disconnection	17ms

Terminal capacity of main circuit		
	flexible cable with ferrule	
	single cable	16 - 50mm ²
	dual cable	10 - 35mm 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	-	296
75	0,34	-	235
100	0,45	-	177
150	0,68	-	117
200	0,71	-	88
300	1,4	-	57
500	2,3	-	34
750	3,4	-	23
1000	4,6	-	17

Single fluorescent lamp with starter, without compensation			
W	A	µF	max. number of lamps per phase
20	0,39	-	205
40	0,45	-	177
64	0,7	-	114
80	0,8	-	100
110	1,15	-	66

Single fluorescent lamp with starter, parallel compensation			
W	A	µF	max. number of lamps per phase
20	0,18	5	530
40	0,26	5	365
65	0,42	7	225
80	0,52	7	180
100	0,6	16	145
110	0,7	18	135

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	-	180
2 x 40	2 x 0,41	-	96
2 x 65	2 x 0,67	-	58
2 x 80	2 x 0,82	-	48
2 x 110	2 x 1,10	-	36

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	-	306
2 x 40	2 x 0,24	-	166
2 x 65	2 x 0,39	-	102
2 x 80	2 x 0,48	-	82
2 x 110	2 x 0,65	-	60

Single fluorescent lamp without starter, without compensation			
W	A	μF	max. number of lamps per phase
20	0,43	-	186
40	0,55	-	145
65	0,8	-	100
80	0,95	-	84
110	0,4	-	57

Single fluorescent lamp with starter, with parallel compensation			
W	A	μF	max. number of lamps per phase
20	0,19	5	421
40	0,29	5	275
65	0,46	7	173
80	0,57	7	140
110	0,79	16	101

Fluorescent lamp without starter, without compensation			
W	A	μF	max. number of lamps per phase
2 x 20	2 x 0,25	-	160
2 x 40	2 x 0,47	-	84
2 x 65	2 x 0,76	-	52
2 x 80	2 x 0,93	-	42
2 x 110	2 x 1,3	-	30

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	-	234
2 x 40	2 x 0,26	-	152
2 x 65	2 x 0,43	-	92
2 x 80	2 x 0,53	-	74
2 x 110	2 x 0,72	-	54

Low press sodium vapor lamps with parallel compensation			
W	A	μF	max. number of lamps per phase
35	0,3	17	200
55	0,4	17	150
90	0,6	25	100
135	0,9	36	66
150	1	36	60
180	1,2	36	50
200	1,3	36	46

Low press sodium vapor lamps without compensation			
W	A	μF	max. number of lamps per phase
150	1,9	-	31
250	3,2	-	18
400	5	-	12
700	8,8	-	6
1000	12,4	-	4

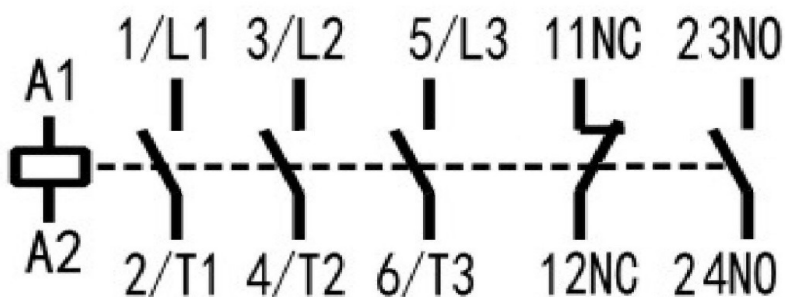
Low press sodium vapor lamps with parallel compensation			
W	A	μF	max. number of lamps per phase
150	0,84	20	71
250	1,4	32	42
400	2,2	48	27
700	3,6	96	15
1000	5,5	120	10

High press hydrargyrum lamps without compensation			
W	A	μF	max. number of lamps per phase
50	0,54	-	111
80	0,81	-	74
125	1,2	-	49
250	2,3	-	26
400	4,1	-	14
700	6,8	-	8
1000	9,9	-	6

High press hydrargyrum lamps with parallel compensation			
W	A	μF	max. number of lamps per phase
50	0,3	10	120
80	0,45	10	120
125	0,67	10	89
250	1,3	18	46
400	2,3	25	26
700	3,8	40	15
1000	5,5	60	10

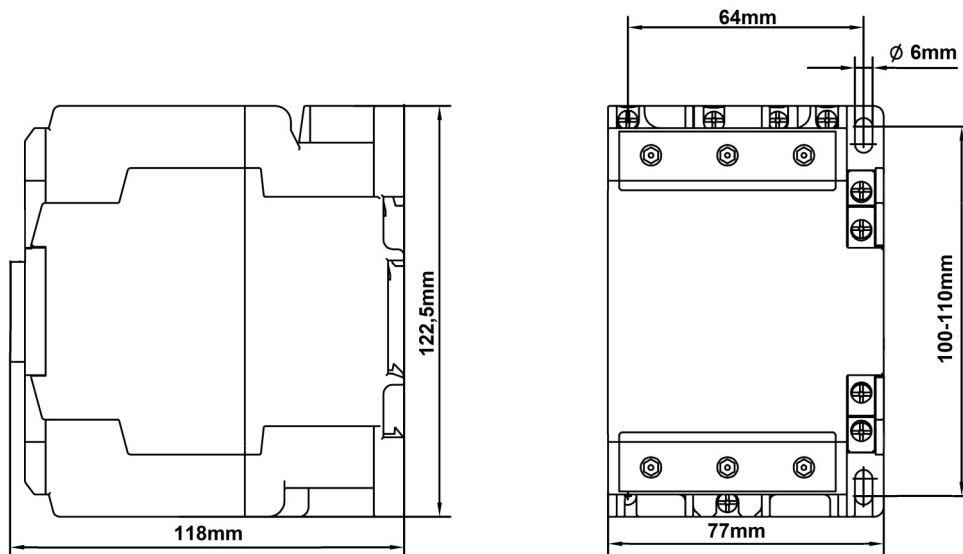
■ Wiring diagram

3-pole, 1NO + 1NC



Dimensions

230VAC or 24VAC Coil



Articles

Contactors 3-pole, CUBICO High, 37kW, 80A

Description	order no.
Contactor 3-pole, CUBICO High, 37kW, 80A, 1NO+1NC, 230VAC	LZDH80B3--
Contactor 3-pole, CUBICO High, 37kW, 80A, 1NO+1NC, 24VAC	LZDH80B0--