



moduLo

PAGE 9-2

TWO POLES

- Rated current Ith: 20A (AC1)
- Operating power: 1.3kW (AC3 230V)
- Ideal for domestic applications.



moduLo

PAGE 9-2

THREE AND FOUR POLES

- Rated current Ith: 25A, 40A and 63A (AC1)
- Operating power: 4kW, 11kW and 15kW (AC3 400V)
- Ideal for civil or industrial installations, such as office buildings, stores, hospitals, hotels, etc.

- ◆ Two, three and four-pole versions, 20A to 63A
- ◆ Very silent during operation or control phase
- ◆ Operation flag indicator
- ◆ Add-on auxiliary contacts.



PLANET - DIN

Modular contactors

Contactors	9-	2
Add-on blocks and accessories	9-	3

SEC. PAGE

CN contactors



CN20...



CN25...



CN40...



CN63...

Order code	Rated auxiliary supply voltage	Config. and n° of contacts	Qty per pkg	Wt
	[V] ①	∖NO ∓NC n°	n°	[kg]
One or two-pole.				
CN20 11 024②⑦	24VAC/DC	1 1④	10	0.125
CN20 11 220②⑦	220-230VAC⑥	1 1④	10	0.125
CN20 20 024②⑦	24VAC/DC	2 —	10	0.125
CN20 20 220②⑦	220-230VAC⑥	2 —	10	0.125

Order code	Rated auxiliary supply voltage	Config. and n° of contacts	Q.ty per pkg	Wt
	[V] ①	∖NO ∓NC n°	n°	[kg]
Three-pole or four-pole.				
CN25 10 024⑥	24VAC/DC	4④ —	5	0.280
CN25 10 220⑥	220-230VAC⑥	4④ —	5	0.280
CN25 01 024⑥	24VAC/DC	3 1④	5	0.280
CN25 01 220⑥	220-230VAC⑥	3 1④	5	0.280

Order code	Rated auxiliary supply voltage	Config. and n° of contacts	Q.ty per pkg	Wt
	[V] ①	∖NO ∓NC n°	n°	[kg]
Three-pole or four-pole.				
CN40 10 024⑥	24VAC/DC	4④ —	5	0.400
CN40 10 220⑥	220-230VAC⑥	4④ —	5	0.400
CN40 01 024⑥	24VAC/DC	3 1④	5	0.400
CN40 01 220⑥	220-230VAC⑥	3 1④	5	0.400

Order code	Rated auxiliary supply voltage	Config. and n° of contacts	Q.ty per pkg	Wt
	[V] ①	∖NO ∓NC n°	n°	[kg]
Three-pole or four-pole.				
CN63 10 024	24VAC/DC	4④ —	5	0.408
CN63 10 220	220-230VAC⑥	4④ —	5	0.408
CN63 01 024	24VAC/DC	3 1④	5	0.408
CN63 01 220	220-230VAC⑥	3 1④	5	0.408

- ① Other voltages on request. Consult our Customer Service (Tel. +39 035 4282422; email: service@LovatoElectric.com).
- ② 2NC version supplied on request.
- ③ The last (NC) pole has the same characteristics as the power pole. It can therefore be used indifferently as an auxiliary or as a NC power contact.
- ④ The fourth NO or NC pole has the same characteristics as the power poles; therefore it can be used indifferently as auxiliary or as power contact.
- ⑤ On request CN25 and CN40 contactors in the following versions can be supplied: 2NO + 2NC or 4NC power poles. Contact our Customer Service (Tel. +39 035 4282422; email: service@LovatoElectric.com).
- ⑥ Can also operate at 220VDC.
- ⑦ No auxiliary contacts can be mounted.

General characteristics

- DC powered magnetic core system assuring silent operation and noise damping during the control phase
- Overvoltage protection circuit and voltage peak limitation of the magnetic core
- Equipped with 2 or 4 closing contacts of equal capacity permitting use in power or auxiliary circuits
- Operation flag indicator
- Fast mounting.

Operational characteristics

Type	Conventional free-air thermal current AC1 (Ith)	Operating power AC3		Protection fuse gG
		230V	400V	
	[A]	[kW]	[kW]	[A]
CN20	20	1.3	—	20
CN25	25	2.2	4	35
CN40	40	5.5	11	63
CN63	63	8.5	15	80

- Degree of protection: IP20
- Mounting on 35mm DIN rail (IEC/EN 60175).

When contactors are mounted side by side and operate in continuous service (≥ 1 hour), spacing is needed between equipment to consent appropriate cooling. 9mm spacing is required; there is an accessory, called half-module spacer, order code CNX 80, for this specific type of mounting. The following table indicates details of the space needed between each.

Maximum number of contactors to be mounted side-by-side without spacing; the CNX 80 spacer is required when the number of pieces are more than indicated below:

	CN20	CN25	CN40	CN63
Ambient temperature $\leq 40^\circ\text{C}$	3	2	No limitation	3
Ambient temperature $> 40^\circ\text{C} \dots 55^\circ\text{C}$	2	2	No limitation	⑤

⑤ Not suitable for ambient temperature higher than 40°C .

Operational characteristics of contactor-incorporated auxiliary contacts

Type	Insulation voltage (Ui)	Rating per AC15 category	
		230V	400V
	[V]	[A]	[A]
CN20	440	6	6
CN25	440	6	4
CN40	500	6	4
CN63	500	6	4

Certifications and compliance

Certifications obtained: GOST.
Compliant with standards: IEC/EN 60947-1, IEC/EN 60947-4-1, IEC/EN 61095, IEC/EN 60947-5-1.

Utilisation

- Lighting systems
- Electric home heating
- Heat pumps
- Conditioning
- Ventilation
- Civil installations.

Lighting circuit switching

See page TC-34.

Add-on blocks and accessories



CNH...



CNP2

Order code	Characteristics	Max qty per contactor	Qty per pkg	Wt
		n°	n°	[kg]

Auxiliary contacts^❶.

CNH 11 ^❶	1NO + 1NC	1	1	0.045
CNH 20 ^❶	2NO	1	1	0.045

Set for terminal protection (also sealable).

CNP 0	For CN20	2	1 ^❷	0.001
CNP 1	For CN25	2	1 ^❷	0.002
CNP 2	For CN40 and CN63	2	1 ^❷	0.003

Spacer.

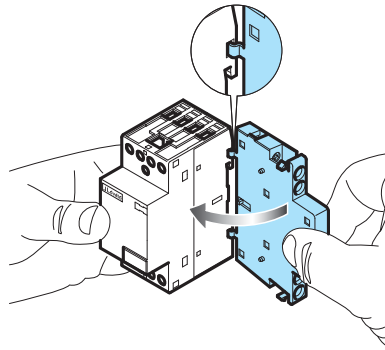
CNX 80	1/2 module wide	1	10	0.005
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^❶ Not suitable for CN20 modular contactors.

^❷ Set of 2 pieces.

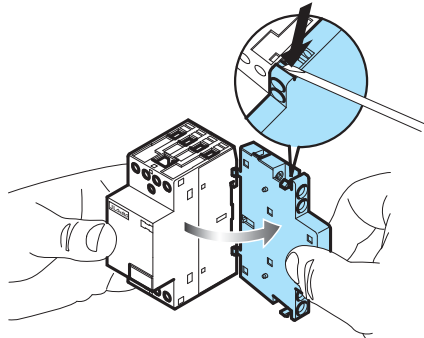
Mounting

Fasten the CNH... auxiliary contact by slightly pressing it in place.



Removal

Release the catch using a screwdriver.



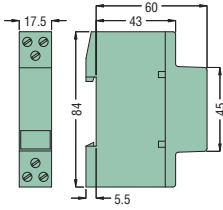
Operational characteristics for auxiliary contacts

- Rated insulation voltage: 440VAC
- Conventional free air thermal current I_{th}: 6A
- Minimum switching capacity: 5mA 12V
- Maximum tightening torque: 1Nm.

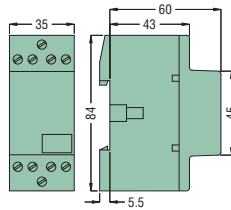
Certifications and compliance

Certifications obtained: GOST.
Compliant with standards: IEC/EN 60947-1, IEC/EN 60947-4-1, IEC/EN 60947-5-1, IEC/EN 61095.

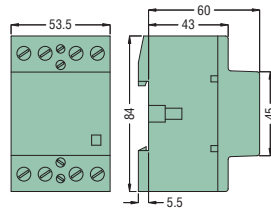
Contactors
CN20...



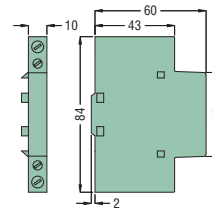
CN25...



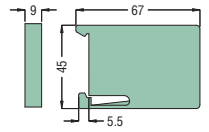
**CN40...
CN63...**



Contact blocks
CNH...

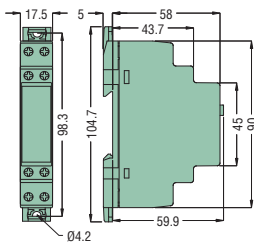


Spacer
CNX80

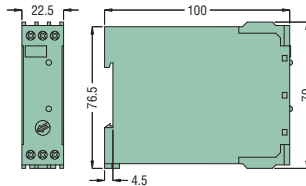


Time relays

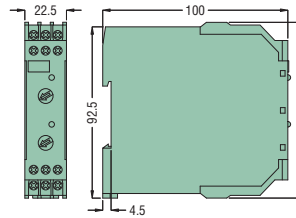
Time relays
TM...



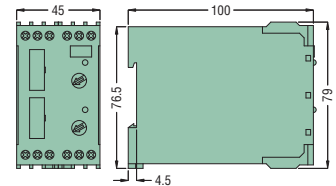
AT1P - AT1CP - ATD - AT1DP



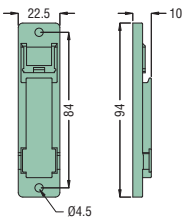
BTPM - BT2N



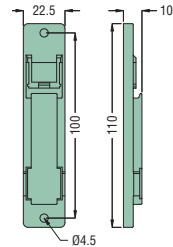
DRPL



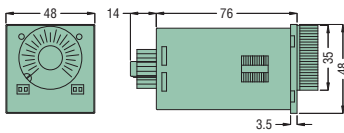
Adapters
CE106



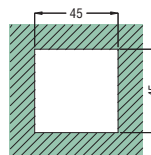
CE107



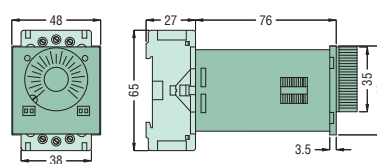
L48...



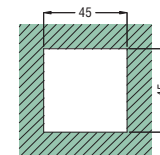
Cutout



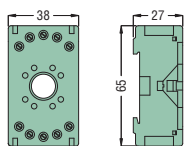
L48... with S8 - S11 sockets



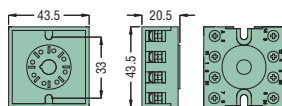
Cutout



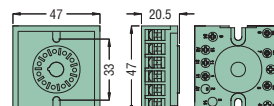
Accessories - Plug-in sockets
S8 - S11



L48 P8

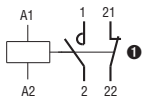


L48 P11

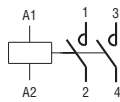


Two-pole modular contactors

CN20 11

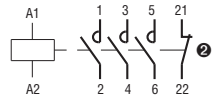


CN20 20

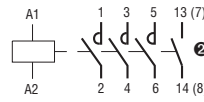


Three and four-pole modular contactors

CN25 01
CN40 01
CN63 01



CN25 10
CN40 10
CN63 10



Add-on auxiliary contacts

CNH11



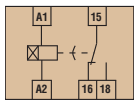
CNH20



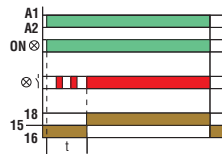
- ❶ The second NC contact has the same characteristics as the power pole contact. Therefore, it can be used indifferently as an auxiliary or as a NC power pole contact.
- ❷ The fourth pole NO or NC has the same characteristics as the power poles. Therefore, it can be used indifferently as auxiliary or as power pole contact.

Time relays

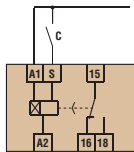
TM P



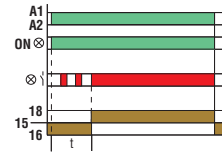
On delay. Delay on make, with start at relay energising.



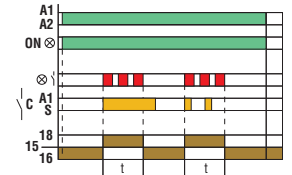
TM M1



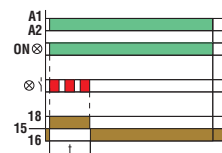
On delay. Delay on make, with start at relay energising



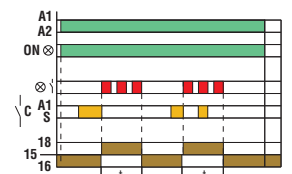
Pulse on relay energising with start at external contact closing



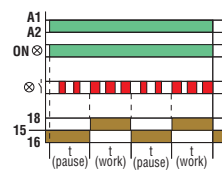
Pulse on relay energising with start on energising



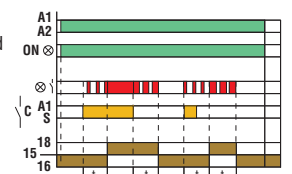
Pulse on relay energising with start at external contact opening



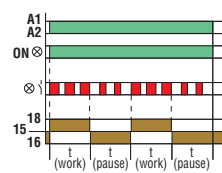
Flasher, starting with OFF (pause) interval. Equal timing recycle.



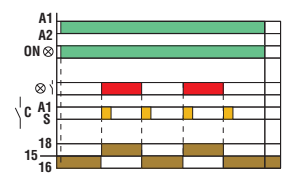
On-Off delay. Delay on make, with start at external contact closing, and delay at break, with start at external contact opening.



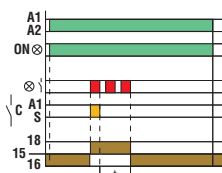
Flasher, starting with ON (work) interval. Equal timing recycle.



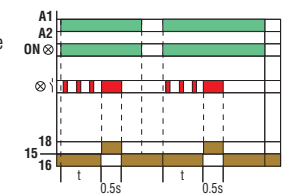
Internal trigger ON/OFF. Relay contact either closes or opens at each external contact closing.



Off delay. Relay energising at external contact closing with start on break



Pulse generator. Unequal timing recycle, starting with OFF pulse time and 0.5sec ON time.



Selection guide for lighting circuit switching 220/240 50/60Hz

MAXIMUM NUMBER OF LAMPS FOR EACH CONTACTOR POLE

Type of lamp	Power	CN20	CN24	CN40	CN63
Incandescent	60W	21	25	65	85
	100W	13	15	40	50
	200W	7	7	20	25
	500W	3	3	8	10
	1000W	1	1	4	5
Energy saving	7W	10	15	100	150
	11W	10	15	100	150
	15W	5	15	100	150
	20W	3	10	70	70
Metal halide	200W	—	5	15	20
	300W	—	3	10	13
	500W	—	2	6	8
	1000W	—	1	3	4
Low-pressure sodium vapour (not corrected)	35W	5	6	13	20
	55W	5	6	13	20
	90W	3	4	9	14
	135W	2	3	6	9
	180W	2	3	6	9
High-pressure sodium vapour (not corrected)	50W	12	12	24	38
	70W	10	10	20	30
	110W	8	7	16	25
	150W	6	5	10	16
	250W	3	3	6	10
	400W	2	2	4	6
	1000W	1	—	2	3
Low-pressure sodium vapour (corrected)	35W	1	1	10	16
	55W	1	1	10	16
	90W	—	1	8	12
	135W	—	—	4	7
	180W	—	—	4	7
High-pressure sodium vapour (corrected)	50W	3	3	22	33
	70W	2	3	18	27
	110W	2	2	18	27
	150W	1	1	10	16
	250W	—	1	6	9
	400W	—	—	4	7
	1000W	—	—	2	3
Standard fluorescent (not corrected)	18W	24	24	90	140
	36W	17	20	65	95
	58W	10	13	40	60
Standard fluorescent (corrected)	18W	6	8	45	70
	36W	6	8	45	70
	58W	4	5	25	43
Standard fluorescent (duo circuit lead-lag)	2 - 18W	22	48	100	150
	2 - 36W	17	24	65	95
	2 - 58W	10	15	40	60
Electronic ballast fluorescent (EVG) AC operation	1 - 18W	22	30	60	80
	1 - 36W	12	16	30	42
	1 - 58W	8	12	22	30
	2 - 18W	23	32	40	48
	2 - 36W	12	16	20	26
	2 - 58W	7	10	10	18