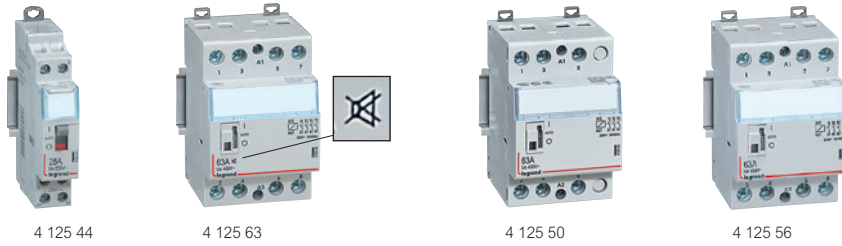


Power contactors with handle CX³

from 16 A to 63 A



Dimensions **see e-catalogue**
 Technical characteristics **p. 80**

Conform to IEC/EN 61095
 Space for power supply busbar on top (up to 25 A)

Pack	Cat.Nos	Power contactors with 24 V~ coil and handle			
		Manual override for test and repair function, carried out via the handle Permanent "ON" or "OFF" without automatic reset			
		2-pole - 250 V~			
1	4 125 14	I max 25 A		Type of contact 2 N/O	Number of modules 1
1	4 125 15 ¹	40 A		2 N/O	2
1	4 125 16 ¹	63 A		2 N/O	2
		4-pole - 400 V~			
1	4 125 17	25 A		4 N/O	2
1	4 125 18 ¹	40 A		4 N/O	3
1	4 125 19 ¹	63 A		4 N/O	3
		Low noise power contactors with 230 V~ coil and handle			
		2-pole - 250 V~			
1	4 125 58	I max 25 A		Type of contact 2 N/O	Number of modules 1
1	4 125 59 ¹	40 A		2 N/O	2
1	4 125 60 ¹	63 A		2 N/O	2
		4-pole - 400 V~			
1	4 125 61	25 A		4 N/O	1
1	4 125 62 ¹	40 A		4 N/O	2
1	4 125 63 ¹	63 A		4 N/O	2

Pack	Cat.Nos	Power contactors with 230 V~ coil and handle			
		Manual override for test and repair function, carried out via the handle Permanent "ON" or "OFF" without automatic closing of the contactor			
		2-pole - 250 V~			
4	4 125 44	I max 25 A		Type of contact 2 N/O	Number of modules 1
1	4 125 45 ¹	40 A		2 N/O	2
1	4 125 47 ¹	63 A		2 N/O	2
1	4 125 48 ¹	63 A		2 N/C	2
		3-pole - 400 V~			
1	4 125 49 ¹	40 A		3 N/O	3
1	4 125 50 ¹	63 A		3 N/O	3
		4-pole - 400 V~			
2	4 125 51	25 A		4 N/O	2
1	4 125 53 ¹	40 A		4 N/O	3
1	4 125 56 ¹	63 A		4 N/O	3
1	4 125 57 ¹	63 A		4 N/C	3

1: Handle can be accessed after removing blanking plate

Technical characteristics

- Rated impulse withstand voltage (Uimp): 4 kV
- Mechanical endurance (no. of operating cycles): 10⁶ cycles
- Operating temperatures: - 25 °C to + 40 °C
- Storage temperatures: - 40 °C to + 70 °C

Contactor protection against short circuits according to standard EN 61095, conditional short-circuit current:

- I_q = 6 kA for 16 to 25 A contactors
- I_q = 3 kA for 40 to 63 A contactors

Circuit breaker or gG fuse rated:

- ≤ 16 A for 16 A rating • ≤ 40 A for 40 A rating
- ≤ 25 A for 25 A rating • ≤ 63 A for 63 A rating

Consumption of a contactor control coil

16 A and 25 A power contactors					
Coil voltage	24 V \sim		230 V \sim low noise	230 V \sim	
Current	16 A and 25 A	25 A	25 A	16 A and 25 A	16 A and 25 A
Type of contact	NC + NO 2 NO	4 NO	2 NO	NC + NO 2 NO 2 NC	2 NC + 2 NO 4 NO 4 NC
Dimensions	1 mod.	2 mod.	1 mod.	1 mod.	2 mod.
Holding current	200 mA	300 mA	12 mA	20 mA	20 mA
Inrush current	970 mA	2500 mA	60 mA	90 mA	200 mA

40 A and 63 A power contactors				
Coil voltage	24 V \sim		230 V \sim	
Current	40 A and 63 A	40 A and 63 A	40 A and 63 A	40 A and 63 A
Type of contact	2 NO	4 NO	2 NO 2 NC	3 NO 4 NO 4 NC
Dimensions	2 mod.	3 mod.	2 mod.	3 mod.
Holding current	250 mA	270 mA	15 mA	30 mA
Inrush current	1750 mA	1500 mA	150 mA	200 mA

Recommendations

Insert a spacing module (Cat.No 4 063 07 p. 61):
 - every two contactors when the ambient temperature is below 40 °C
 - every contactor when the ambient temperature is between 40 and 60 °C

Contactor rating	40 °C	50 °C	60 °C
I _e = 16 A	16 A	14 A	12 A
I _e = 25 A	25 A	22 A	20 A
I _e = 40 A	40 A	36 A	32 A
I _e = 63 A	63 A	57 A	50 A

Max. connection cross-section in mm²

Conductor type	Ratings ≤ 25 A	Ratings 40 & 63 A
Rigid	6 ² or 2 x 2.5 ²	25 ² or 2 x 10 ²
Flexible	6 ² or 2 x 2.5 ²	25 ² or 2 x 10 ²
Flexible with single end cap	6 ²	16 ²
Flexible with double end cap	2 x 4 ²	2 x 16 ²

Contactor selection charts (number of lamps per contactor)

Incandescent lamps

Tungsten and halogen filaments 230 V \sim								
Nominal wattage	40 W	60 W	75 W	100 W	150 W	200 W	500 W	1000 W
16 A	45	30	24	19	13	10	4	2
25 A	60	48	38	30	20	15	6	3
40 A	96	77	61	48	32	24	10	5
63 A	154	123	97	77	51	38	15	8

ELV halogen bulbs with ferromagnetic ballast						ELV halogen bulbs with electronic ballast						
Nominal wattage	20 W	35 W	50 W	75 W	100 W	150 W	20 W	35 W	50 W	75 W	100 W	150 W
16 A	32	20	15	12	9	6	60	40	28	18	14	9
25 A	52	30	24	16	12	8	80	50	40	26	20	13
40 A	68	39	31	21	16	10	112	70	56	36	28	18
63 A	88	51	41	27	20	14	157	98	78	51	39	25

Contactor selection charts (number of lamps per contactor)(continued)

LED lamps

Nominal wattage	Non-dimmable LED lamps (without driver)									
	2 W	5 W	7 W	9 W	12 W	18 W	22 W	30 W	40 W	50 W
16A	16	16	16	16	16	15	14	12	10	9
25A	30	30	30	30	30	27	25	22	18	15
40A	90	90	85	85	85	80	75	65	50	37
63A	150	150	140	140	140	115	100	80	70	55

Nominal wattage	Dimmable LED lamps (equipped with driver)									
	2 W	5 W	7 W	9 W	12 W	18 W	22 W	30 W	40 W	50 W
16A	40	40	40	35	35	33	30	27	23	20
25A	65	65	65	60	60	56	51	45	33	30
40A	170	170	170	162	162	129	113	95	77	65
63A	265	265	265	260	260	214	176	139	121	105

Fluorescent tubes with electronic ballast

Nominal wattage	Single fluorescent				Double fluorescent		
	18 W	30 W	36 W	58 W	2 x 18 W	2 x 36 W	2 x 58 W
16 A	72	42	36	22	36	20	12
25 A	110	68	58	36	56	30	19
40 A	165	102	87	54	84	45	29
63 A	248	153	131	81	126	68	43

Nominal wattage	Triple fluorescent (series compensated)		Quadruple fluorescent (series compensated)	
	3 x 14 W	3 x 18 W	4 x 14 W	4 x 18 W
16 A	34	26	26	20
25 A	46	38	37	28
40 A	62	51	52	39
63 A	84	69	73	55

Nominal wattage	Compact fluorescent with built-in electronic power supply				
	7 W	11 W	15 W	20 W	23 W
16 A	120	80	64	50	43
25 A	200	125	90	70	60
40 A	280	175	126	98	84
63 A	392	245	176	137	118

Discharge lamps with compensation

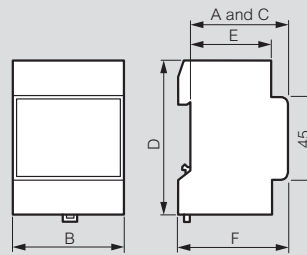
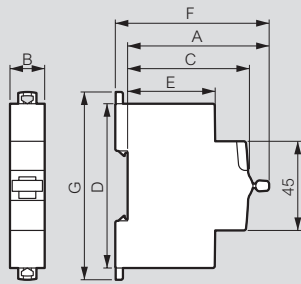
Nominal wattage	Metal halogenide						Low pressure sodium vapour					
	35 W	70 W	100 W	150 W	250 W	400 W	18 W	35 W	55 W	90 W	135 W	180 W
16 A	10	6	5	3	2	1	12	6	5	3	2	2
25 A	15	9	7	5	3	2	20	10	7	5	3	3
40 A	23	14	11	8	5	3	30	15	11	8	5	5
63 A	34	20	16	11	7	5	45	23	16	11	7	7

Nominal wattage	High pressure sodium vapour					High pressure mercury vapour				
	70 W	150 W	250 W	400 W	1000 W	50 W	80 W	125 W	250 W	400 W
16 A	8	7	5	3	1	11	8	6	3	2
25 A	10	9	6	4	2	15	10	8	4	3
40 A	15	14	9	6	3	21	14	11	6	4
63 A	23	20	14	9	5	29	20	16	8	6

Nominal wattage	High pressure mixed			
	100 W	160 W	250 W	400 W
16 A	9	6	4	2
25 A	11	7	5	3
40 A	14	9	7	4
63 A	19	12	8	5

Fluorescent lamps with ferromagnetic ballast, **please consult us**

Dimensions of din-rail equipment

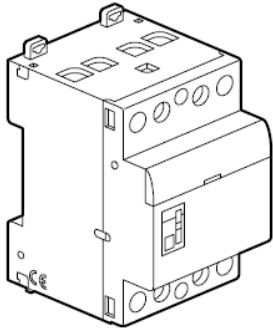


Product	A		B				C	D	E	F	G
	1P	1P+ N	2P	3P	4P						
RX³ MCBs	71.7	17.7	35.4	35.4	53.1	70.8	61	83	44	77.8	88.9
RX³ RCCBs	71.7			35.6		71.2	61	83	44	77.8	88.9
TX³ MCBs	71.7	17.7	35.4	35.4	53.1	70.8	61	83	44	77.8	88.9
TX³ RCCBs	71.7			35.6		71.2	61	83	44	77.8	88.9
Isolating switches DX³	71.7	17.8		17.8/ 35.4	35.6/ 53.1	70.8	61	83	44	77.8	94.8
Remote trip head isolating switches DX³ up to 63A - 1 mod/pole	71.7			35.4	53.1	70.8	61	83	44	77.9	94.8
Remote trip head isolating switches DX³ 100/125A - 1.5 mod/pole	73				80.1	106.8	61	96	47	79	104.3
DX³ RCCBs	71.7			35.6		71.2	61	83	44	77.8	94.8
1P DX³ RCBOs (up to 45A)	68	17.7					60	115	48	74	126.8
1P+N DX³ RCBOs (up to 40A) & 4P (up to 32A)	71.7		35.6			71.2	61	83	44	77.8	94.8
2P & 4P DX³ RCBOs (40A to 63A)	72			71.2		124.6	61	96	44	78.2	107.8
1P+N DX³ MCBs 1 mod	71.7		17.8				61	83	44	77.8	94.8
DX³ MCBs - 1 mod/pole	71.7	17.7	35.4	35.4	53.1	70.8	61	83	44	77.8	94.8
DX³ MCBs - 1,5 mod/pole	73.1	26.7		53.4	80.1	106.8	61	100	47	79	104.3
DX³ add-on modules up to 63A - 1 mod/pole	72			35.6	53.4	53.4	61	96	44	78.2	107.8
DX³ add-on modules up to 63A - 1.5 mod/pole	72			35.6	53.4	53.4	61	96	47	78.2	116.7
DX³ add-on modules 80 to 125A - 1.5 mod/pole	72			71.2	106.8	106.8	61	114	47	78.2	129
DX³ auxiliaries	71.5			8.8 / 17.7			61	83	44	77.7	84.5
DX³ remote control	74.3			17.7 / 35.4			61	83	44	80.5	98.8
DX³ Stop&Go automatic resetting	74.3			35.4			61	83	44	80.5	113.7
Change-over switches	68	17.7		35.6			60	83	44	74	94
CX³ latching relays	64	17.8		17.8	35.6	35.6	61	84.5	44	70.2	94.8
CX³ contactors up to 25A	66.3/ 61	17.8		17.8	35.6	35.6	61	84.5	44	72.6/ 67.3	94.8
CX³ contactors 40A & 63A	62			35.6	53.4	53.4	60	83	44	68	94
Auxiliaries for CX³ contactors and latching relays	61			9/17.8			61	84.5	44	67	84.5
Push-buttons / control switches	68			17.7			60	83	44	74	94
Indicators	68			17.7			60	83	44	69	94
Bells and buzzers	60			17.7			60	76	44	66	85
Light sensitive switches											
Cat.Nos 0 037 21, 4 126 23	60			35.6			60	85	37.5	66	70
Socket outlets	60			44.5			60	83	44	66	92
Time delay relays	60			17.7			60	83	44	66	94
Remote control dimmers											
Cat.No 0 036 58	60			36			60	83	44	66	94
Cat.No 0 036 60	60			72			60	83	44	66	94
Cat.No 0 036 71	60			108			60	83	44	66	94

Description	A	B	C	D	E	F
Programmable time switches						
0 037 05	60	17.8	60	83	44	66
4 127 80/90/94	60	17.8	60	83	44	66
4 127 95, 4 128 12/13	60	53	60	83	44	66
4 126 31/33/41	60	35.6	60	83	44	66
4 126 54/57	60	35.6	60	83	44	66
0 047 70	60	90	60	83	44	66
Transformers and power supplies						
0 042 10/30/31	60	72	60	83	44	66
4 130 91	60	35.8	60	83.5	44	66
4 130 92/93/96	60	71.5	60	83.5	44	66
4 130 98	60	89	60	94	44	66
0 047 91/92	60	105	60	95	44	66
4 131 05/06/07/08	60	89	60	95	44	66
0 047 93	60	70	60	95	44	66
Residual current relay						
0 260 88	60	35.5	60	89	44	66

Power contactors 40 A and 63 A with or without handle

Cat. N°(s) : 412 506, 507, 511, 512, 515, 516, 518,
519, 525 to 528, 530, 531, 537 to 542, 545 to 550,
552 to 557, 559, 560, 562, 563



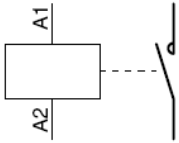
SOMMAIRE

PAGES

1. Description, use.....	1
2. Range	1
3. Overall dimensions	1
4. Preparation - Connection.....	2
5. General characteristics	3
6. Conformities and approvals	7
7. Auxiliaries	7

1. DESCRIPTION - USE

Symbol :



Technology :

. Electromagnetic contactor

Use :

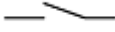
. remote control of a load by the mean of a switch


2. RANGE

Rated thermal current :

. I_{th} = 40 and 63 A

Types of contacts :

. « NO », normally open contact 

. « NC », normally closed contact 

Poles :

. Double pole in 2 module (2 x 17,8 mm = 35,6 mm)

- « 2NO »

- « 2NC »

. Four pole in 3 modules (3 x 17,8 mm = 53,4 mm)

- « 3NO »

- « 4NO »

- « 4NC »

- « 3NO + 1NC »

Rated voltage (power contacts) :

. U_n = 250 V / 400 V ~

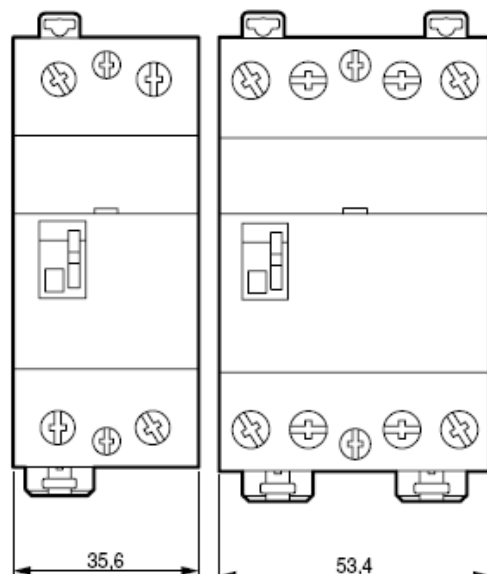
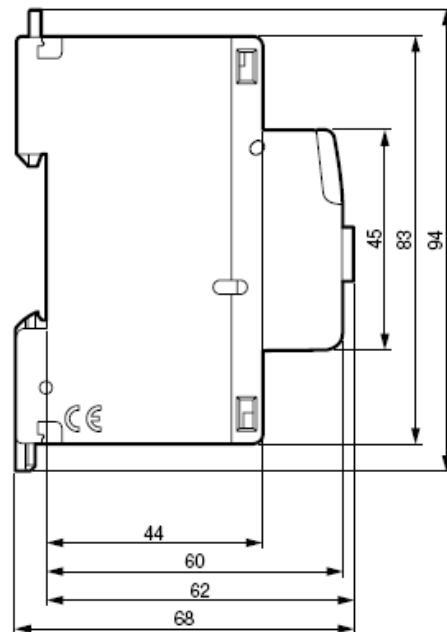
Rated control voltage :

. 24 V and 230 V ~

Rated frequency, power and control :

. 50 / 60 Hz

3. OVERALL DIMENSIONS



Power contactors 40 A and 63 A with or without handle

Cat. N°(s) : 412 506, 507, 511, 512, 515, 516, 518,
519, 525 to 528, 530, 531, 537 to 542, 545 to 550,
552 to 557, 559, 560, 562, 563

4. PREPARATION - CONNECTION

Installation software :

. XL PRO

Operational positions :

. Vertical, horizontal, upside down, on the side

Fixing :

. On symmetrical rail EN 50-055 or DIN 35 by the mean of two plastic clamps.

Recommended tools :

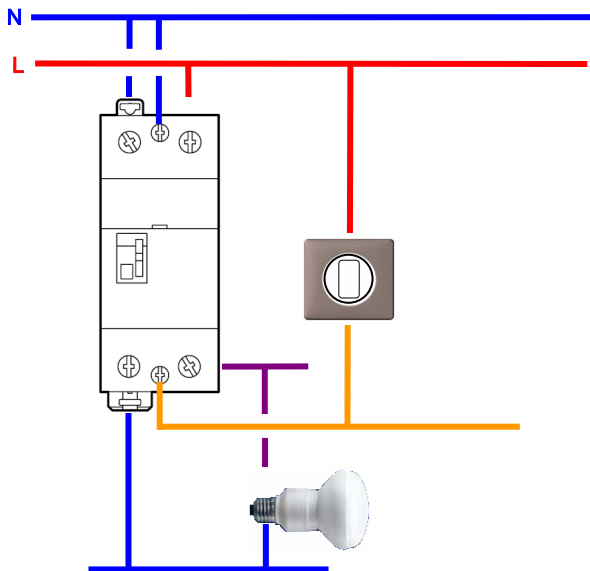
. For control terminal screws : screwdriver, insulated or not, Pozidriv n°1 or plate (4mm wide).

. For power terminal screws : screwdriver, insulated or not, Pozidriv n°2 or plate (6.5mm wide).

. For fixing : Pozidriv n°1 or plate (5.5 mm max) screwdriver

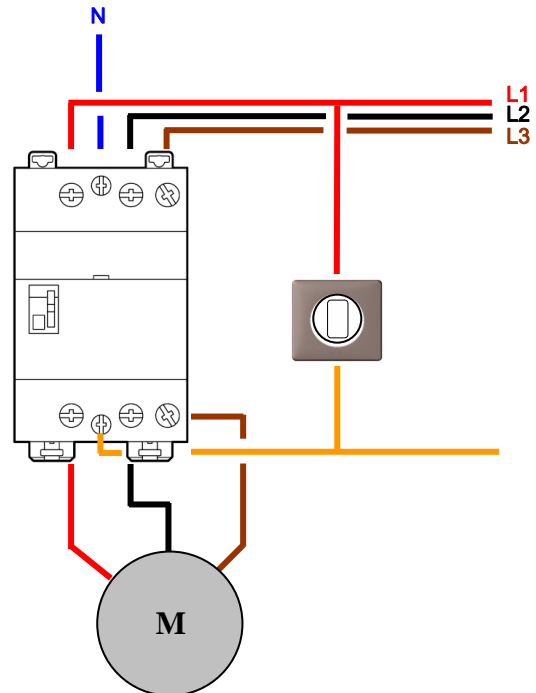
Examples of wiring diagrams :

. Contactor « 2 NO »

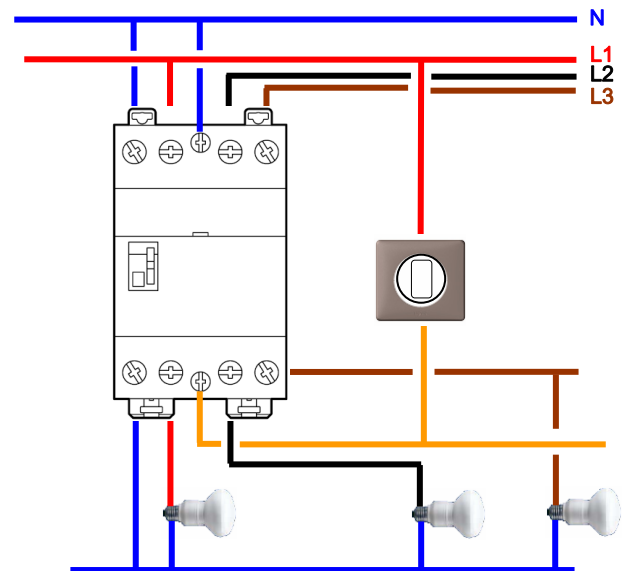


4. PREPARATION - CONNECTION *(continued)*

. Contactor « 3 NO »



. Contactor « 4 NO »



Power contactors 40 A and 63 A with or without handle

Cat. N°(s) : 412 506, 507, 511, 512, 515, 516, 518, 519,
525 to 528, 530, 531, 537 to 542, 545 to 550, 552 to 557,
559, 560, 562, 563

4. PREPARATION - CONNECTION *(continued)*

Connection :

- Control screw terminals :
 - Type of terminal : cage terminals
 - Terminal depth : 12 mm
 - Terminal capacity (h x w) : 4.7 x 4.7 mm
 - Copper cables
- Rigid : 1 x (0.75 to 6 mm²) or 2 x (0.75 to 2.5 mm²)
Flexible without ferrule : 1 x (0.75 to 6 mm²) or 2 x (0.75 to 2.5 mm²)
Flexible with single ferrule : 1 x (0.75 to 6 mm²)
Flexible with double ferrule : 1 x (0.75 to 4 mm²)
- Screw head type: mixed, Posidriv n° 1 and slotted 4 mm
 - Type of screw : M3
 - Tightening torque : mini = 0.5 Nm / max = 1.2 Nm / recommended = 0.8 Nm
- Power screw terminals :
 - Type of terminal : cage terminals
 - Terminal depth : 14 mm
 - Copper cables
- Rigid : 1 x (0.75 to 25 mm²) or 2 x (0.75 to 10 mm²)
Flexible without ferrule : 1 x (0.75 to 25 mm²) or 2 x (0.75 to 10 mm²)
Flexible with single ferrule : 1 x (0.75 to 16 mm²)
Flexible with double ferrule : 1 x (0.75 to 16 mm²)
- Screw head type: mixed, Posidriv n° 2 and slotted 6.5 mm
 - Type of screw : M5
 - Tightening torque : mini = 1.3 Nm / max = 3.5 Nm / recommended = 2.5 Nm

Length of control lines :

- 24 V contactor : 100 m with 1.5 mm² copper wire
- 230 V contactor : 300 m whatever the wire cross-section.

Protection degree :

- Terminal ingress protection : IP2x (device connected)
- Front face ingress protection : IP3XD
- Classe II, front face behind a cabinet faceplate
- Protection against mechanical shocks : IK04

Shaking resistance :

- No change of contact state during shaking test in accordance with EN 60898 standard

actuation :

- By electric remote control (switch)
- By ergonomic 3 position (I, auto, O) handle when contactor is equipped with

Display of contacts state :

- By orange indicator when manual or electric control is on
- When contactor is fitted with a handle,
 - Position « I » : permanent control ON
 - Position « O » : permanent control OFF
 - Position « auto » : electric control by switch

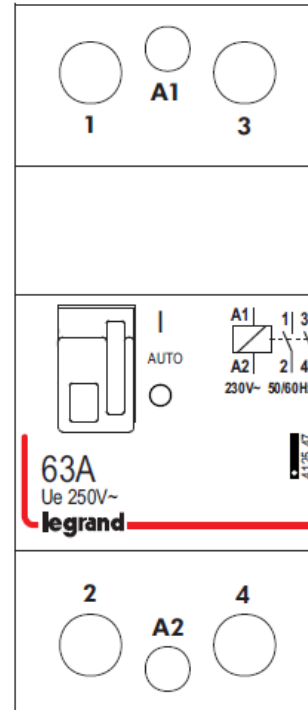
Labelling :

- Circuit may be labelled by the mean of the label holder on the front face of the latching relay

5. GENERAL CHARACTERISTICS

Marking :

By permanent ink pad printing :



Isolation :

- > 3 mm in compliance with EN 61095 standard

Isolation rated voltage (Ui) :

- Double pole : 250 V~
- Triple pole / Four pole : 400 V~

Pollution degree :

- 2 according to EN 61095 standard

Isolation voltage between control and load :

- 4 000 V.

Rated impulse withstand voltage (Uimp) :

- 4 kV

Distance de sectionnement :

- Supérieure à 3 mm selon norme EN 61095

Tension assignée d'isolement (Ui) :

- Bipolaire : 250 V~
- Tri / Tétrapolaire : 400 V~

Degré de pollution :

- 2 selon EN 61095

Tension d'isolement entre le circuit de commande et le circuit de puissance :

- 4 kV

Power contactors 40 A and 63 A with or without handle

Cat. N°(s) : 412 506, 507, 511, 512, 515, 516, 518, 519,
525 to 528, 530, 531, 537 to 542, 545 to 550, 552 to 557,
559, 560, 562, 563

5. GENERAL CHARACTERISTICS (continued)

Withstand to electromagnetic disturbances (EMC) :

. Schock wave 1,2 / 50 μ s : class 4 (2 kV between lines, 4 kV between line and earth)

Influence of altitude :

. no effect up to 2 000 m

Rated frequency :

. 50 / 60 Hz

Rated current for each category of use (Ie) :

Type of contact	AC1 / AC7a heating		AC3 / AC7b motors	
	Ie	P	Ie	P
2NO / 2NC	40 A	9 kW	22 A	5.5 kW
3NO / 4NO / 3NO+1NC / 4 NC	40 A	26 kW	22 A	11 kW
2NO / 2NC	63 A	14 kW	30 A	8 kW
3NO / 4NO / 3NO+1NC / 4 NC	63 A	40 kW	30 A	15 kW

Operation rated voltage (Ue) :

. Ue = 250 V ~ for double pole
. Ue = 400 V ~ for triple pole and four pole

Protection against short-circuits :

. Conditionnal short-circuit current Iq = 3 000 A according to EN 61095 standard
. Maximum thermal stress : 18 000 A²s
. To protect 40 A and 63 A contactors against short-circuits in accordance with conditionnal current Iq = 3 000 A (EN 61095 standard), we recommend to use a \leq 40 A rated current M.C.B. or gG fuse for a 40 A contactor and a \leq 63 A rated current M.C.B. or gG fuse for a 63A contactor

Control voltage (Uc) :

. Uc = 230 V~ or 24 V~

Operating control voltage :

. from 0.85 to 1.1 Uc

Release control voltage :

. from 0.2 to 0.75 Uc

Control impulse time :

. 100 ms mini

Rated duty :

. Intermittent duty : 600 operating cycles per hour according to EN 61095 standard (class 600)

Force by handle operation :

. 500 g for closing and opening operation

Operation under 400 Hz :

. not possible

5. GENERAL CHARACTERISTICS (continued)

Endurance :

In number of operating cycles (ON + OFF)

. Control by handle : 1000 operating cycles

. Electrical control :

- 1 000 000 operating cycles with no load
- 100 000 operating cycles at Ie AC-7a in accordance with EN 61095 (same at Ie AC1)
- 30 000 operating cycles at Ie AC-7b in accordance with EN 61095 (same at Ie AC3)

Use with Direct Current (DC) :

. Control : do not operate with DC

. Power circuit : NO and NC contacts may be used to control loads supplied with DC in accordance with the table of max current below for 63 A contactors

Ue	DC 1 (resistiv load)			DC 3 (motors)		
	number of poles in series			number of poles in series		
	1 p	2 p	3 p	1 p	2 p	3 p
8 V=	63 A	63 A	63 A	54 A	63 A	63 A
12 V=	63 A	63 A	63 A	50 A	63 A	63 A
24 V=	63 A	63 A	63 A	40 A	63 A	63 A
48 V=	53 A	63 A	63 A	20 A	45 A	63 A
110 V=	18 A	40 A	63 A	4 A	16 A	40 A

Control consumption :

Type of contact	Control voltage	Current in mA (at Un)	
		sustain	inrush
2NO	24 V~	250	1750
4NO		270	1500
2NO	230 V~	130	150
2NC		130	150
3NO+1NC		30	200
3NO / 4NO / 4NC		30	200

Type of contact	Control voltage	Power in W (at Un)
		sustain
2NO	24 V~	1.8
4NO		1.9
2NO	230 V~	0.9
2NC		0.9
3NO+1NC		2.1
3NO / 4NO / 4NC		2.1

Power contactors 40 A and 63 A with or without handle

Cat. N°(s) : 412 506, 507, 511, 512, 515, 516, 518, 519,
525 to 528, 530, 531, 537 to 542, 545 to 550, 552 to 557,
559, 560, 562, 563

5. GENERAL CHARACTERISTICS (continued)

Average dissipated power per contact at 230V :

- . 1.8 W per contact of 40 A contactor
- . 3.5 W per contact of 63 A contactor

Annual energy consumption of contactors :

- . Loads supplied in 230/400V 50Hz network
- . Global energy consumption, control + power contacts, with an « average » use.

Type of contact	Control voltage	in kWh (at Un)
2NO	24 V~	3.1
4NO		4.8
2NO	230 V~	2.4
2NC		2.4
3NO		4.1
3NO+1NC		5
4NC		5
4NO		5

Noise (holding) :

- . Standard contactor ≤ 50 dB at 1 cm and ≤ 30 dB at 1 m
- . Noiseless contactor ≤ 32 dB at 1 cm and ≤ 20 dB at 1 m

Operating temperatures :

- . A standard contactor is set to operate at its rated current (40 A or 63 A) in an ambient temperature of + 30°C
- . In order to limitate overheating, we recommend to use a spacing element (cat. n° 044 40)
 - Every 2 contactors if the ambient temperature $\leq 40^\circ\text{C}$
 - Every contactors if the ambient temperature $> 40^\circ\text{C}$
- . Depending on ambient temperature, deratings below must be used :

- from - 25°C to + 40°C, no derating
- from + 40°C to + 60°C derating as in table below

Contacteur rated current	40°C	50°C	60°C
le = 40 A	40 A	36 A	32 A
le = 63 A	63 A	57 A	50 A

Storage temperature :

- . from - 40°C up to + 70°C

Moulded case material :

- . Polyamid

Characteristics of the plastic material :

- . Resistance to glow wire test during 30 s according to IEC 695-2-1:
 - Handle : 650°C
 - Other components : 850°C

Weight :

- . 0.240 kg per double pole device
- . 0.330 kg per triple pole / four pole device

Packaged volume :

- . 0.4 dm³ for double pole individually packaged units
- . 0.6 dm³ for triple pole and four pole individually packaged units

5. GENERAL CHARACTERISTICS (continued)

Contactors choice table :

For a life time of 10 years with 200 days of annual use

. Heating

Maximum power according to the number of operations per day (kW)						
Number of operations per day		≤ 50	75	100	250	500
230 V~ single phase heating	40 A	9	7.5	6	4	2.5
	63 A	14	12	9.5	6	4.5
400 V~ three phase heating	40 A	26	22	17	8	6
	63 A	41	35	26	13	9
Floor heating	40 A	2.5				
	63 A	4				

. Motors (AC-7b)

Maximum power (kW)		
230 V~ single phase motor	40 A	2.5
	63 A	4
400 V~ three phase motor	40 A	7.5
	63 A	15

. Lighting

Maximum number of lamps per contact of the contactor in 230 V~ single phase network and 400 V~ three phase and neutral network.

- . In 230 V~ three phase network with no neutral, values of the table must be divided by $\sqrt{3}$.

- Incandescent lamps

Tungsten filament 230 V~ and low voltage halogen				
Unit power	40 W	60 W	75 W	100 W
40 A	96	77	61	48
63 A	154	123	97	77

Tungsten filament 230 V~ and low voltage halogen (continued)				
Unit power	150 W	200 W	500 W	1000 W
40 A	32	24	10	5
63 A	51	38	15	8

Very Low Voltage halogen lamps with ferromagnetic ballast						
Unit power	20 W	35 W	50 W	75 W	100 W	150 W
40 A	68	39	31	21	16	10
63 A	88	51	41	27	20	14

Very Low Voltage halogen lamps with electronic ballast						
Unit power	20 W	35 W	50 W	75 W	100 W	150 W
40 A	112	70	56	36	28	18
63 A	157	98	78	51	39	25

Power contactors 40 A and 63 A with or without handle

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559, 560, 562, 563

5. GENERAL CHARACTERISTICS (continued)

- Fluorescent lamps with ferromagnetic ballast

Single parallel compensated					
Unit power	18 W	20 W	36 W	58 W	115 W
40 A	43	39	33	22	12
63 A	56	51	42	29	15

Twin serial compensated					
Unit power	2 x 20 W	2 x 36 W	2 x 40 W	2 x 58 W	2 x 140
40 A	68	57	53	36	15
63 A	101	86	79	54	23

Four serial compensated	
Unit power	4 x 18 W
40 A	36
63 A	54

Compact with integrated starter				
Unit power	7 W	10 W	18 W	26 W
40 A	78	65	55	36
63 A	101	85	71	47

- Fluorescent lamps with electronic ballast

Single				
Unit power	18 W	30 W	36 W	58 W
40 A	165	102	87	54
63 A	248	153	131	81

Twin			
Unit power	2 x 18 W	2 x 36 W	2 x 58 W
40 A	84	45	29
63 A	126	68	43

Triple serial compensated		
Unit power	3 x 14 W	3 x 18 W
40 A	62	51
63 A	84	69

Four serial compensated		
Unit power	4 x 14 W	4 x 18 W
40 A	52	39
63 A	73	55

With integrated electronic supply					
Unit power	7 W	11 W	15 W	20 W	23 W
40 A	280	175	126	98	84
63 A	392	245	176	137	118

5. GENERAL CHARACTERISTICS (continued)

- Discharge lamps with compensator

Metal halide						
Unit power	35 W	70 W	100 W	150 W	250 W	400 W
40 A	23	14	11	8	5	3
63 A	34	20	16	11	7	5

Low pressure sodium						
Unit power	18 W	35 W	55 W	90 W	135 W	180 W
40 A	30	15	11	8	5	5
63 A	45	23	16	11	7	7

High pressure sodium					
Unit power	70 W	150 W	250 W	400 W	1000 W
40 A	15	14	9	6	3
63 A	23	20	14	9	5

High pressure mercury					
Unit power	50 W	80 W	125 W	250 W	400 W
40 A	21	14	11	6	4
63 A	29	20	16	8	6

Mixed high pressure				
Unit power	100 W	160 W	250 W	400 W
40 A	14	9	7	4
63 A	19	12	8	5

- Led lamps

Led lamps number without driver or not dimmable										
In (A)	2W	5W	7W	9W	12 W	18 W	22 W	30 W	40 W	50 W
40A	90	90	85	85	85	80	75	62	50	37
63A	150	150	140	140	140	115	100	80	70	55

Led lamps number with driver or dimmable										
In (A)	2W	5W	7W	9W	12 W	18 W	22 W	30 W	40 W	50 W
40A	170	170	170	162	162	129	113	95	77	65
63A	265	265	265	260	260	214	176	139	121	105

Power contactors 40 A and 63 A with or without handle

Cat. N°(s) : 412 506, 507, 511, 512, 515, 516, 518, 519,
525 to 528, 530, 531, 537 to 542, 545 to 550, 552 to 557,
559, 560, 562, 563

6. CONFORMITIES AND APPROVALS

Compliance :

. EN 61095 / NFC 61-480 – IEC 61095

Certificates :

- . NF (France)
- . VDE (Germany)
- . GOST (Russia)

Tropicalization :

. execution 2 (all climates) according to U.T.E. C 63-100 guide

Environment :

- . complying with RoHS
- . without halogen

7. AUXILIARIES

Auxiliaries :

- . Signalling change-over switch NO+NC auxiliary cat. n° 412431.
- . Used to indicate the position status of the contacts of the product with which it is associated.

Association of the auxiliaries :

- . Auxiliaries are fitted on left hand side of contactor
- . Maximum of 1 change-over switch auxiliary per contactor