



CATALOGUE

2007-2008

PRODUCTS AND SYSTEMS
FOR ELECTRICAL INSTALLATIONS
AND INFORMATION NETWORKS





Lexic Din-rail equipment

Protection: - LR - DX - DX-H - DX-D - DX-L	P. 120 Presentation of LR MCBs	P. 121 LR 6000 MCBs from 6 to 63 A and RCD	P. 122 Presentation of Lexic	P. 124 DX-E 6000 6 kA MCBs from 6 to 63 A	P. 125 DX-IS isolating switches	
	P. 126 DX RCD	P. 128 DX 6000 10 kA MCBs from 0.5 to 63 A	P. 129 DX 6000 10 kA RCBO	P. 130 DX-H 10000 25 kA MCBs from 2 to 125 A	P. 131 DX 6000 15 kA MCBs from 1 to 125 A	
	P. 132 DX add-on modules	P. 133 DX-L 50 kA MCBs from 10 to 63 A	P. 133 DX auxiliaries, remote control	P. 134 Technical characteristics	P. 137 MPCBs	
Voltage surge protectors, fuse carriers and fuses	P. 138 Voltage surge protectors	P. 139 Voltage surge protectors for telephone lines	P. 140 Technical characteristics	P. 144 Domestic fuse carriers, domestic cartridge fuses	P. 145 Isolating fuse carriers	
	Switches and remote control	P. 145 Changeover switches	P. 146 Push-buttons, control switches, indicators	P. 146 Pulse operated latching relays	P. 148 Power contactors	P. 150 Time-lag switches, time delay relays
P. 152 Time switches with analogue dial		P. 153 Time switches with digital display	P. 154 Light sensitive switches			
Power supply, heating and dimmers		P. 155 Transformers, buzzers/bells, socket outlets, special supports	P. 156 Dimmers	P. 158 Power supplies		

New in 2007



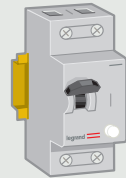
LR: MCBs and RCDs

The LR range provides a simple solution for the protection requirements of people and property on the domestic market. It is easy to incorporate in NX distribution cabinets: an efficient, high-performance system

The range

RCDs

- AC and A type
- Ratings: 25, 40 and 63 A
- Sensitivity: 30, 100 and 300 mA
- 2P and 4P
- Surface mounted cylindrical test button



MCBs

- B and C curves
- Ratings: 2 to 63 A
- 1P, 1P+N, 2P, 3P, 3P+N, 4P
- Breaking capacity:
IEC 60947-2
10 000 A on 127/220 V~
6 000 A on 230/400 V~



NX flush mounting distribution cabinets

- From 4 to 36 modules
- White and transparent plastic door



LEGRAND ADVANTAGES

- 1 Complete, short range
- 2 Special marking on front panel
- 3 Clamps at the bottom for fixing on rail



See the on-line catalogue: instructions, technical data sheets, etc.

MCBs and RCDs LR™ 6000

thermal magnetic MCBs from 6 A to 63 A - B and C curves
RCDs AC and A types



6048 96



6048 50



6021 93



6021 53

Dimensions (p. 159)

- MCBs: Conform to IEC 60898
- Breaking capacity: 6000 - IEC 60898 - 230/400 V \sim / 6 kA - IEC 60947-2 - 230/400 V \sim
- 10000 - IEC 60898 - 127/220 V \sim / 10 kA - IEC 60947-2 - 127/220 V \sim
- Do not accept auxiliaries, and add-on modules
- RCDs: Conform to IEC 61008-1
- Do not accept auxiliaries

Pack	Cat.Nos		MCBs	
			Single pole - 230/400 V\sim	
	B curve	C curve	In	Number of modules
10	6049 02	6048 02	6 A	1
10	6049 03	6048 03	10 A	1
10	6049 04	6048 04	13 A	1
10	6049 05	6048 05	16 A	1
10	6049 06	6048 06	20 A	1
10	6049 07	6048 07	25 A	1
10	6049 08	6048 08	32 A	1
10	6049 09	6048 09	40 A	1
10	6049 10	6048 10	50 A	1
10	6049 11	6048 11	63 A	1
			Single pole + neutral⁽¹⁾ - 230 V\sim	
	C curve		In	Number of modules
5	6048 90		6 A	2
5	6048 91		10 A	2
5	6048 92		13 A	2
5	6048 93		16 A	2
5	6047 90		20 A	2
5	6047 91		25 A	2
5	6047 92		32 A	2
	B curve	C curve	In	Number of modules
5	6049 17	6048 17	6 A	2
5	6049 18	6048 18	10 A	2
5	6049 19	6048 19	13 A	2
5	6049 20	6048 20	16 A	2
5	6049 21	6048 21	20 A	2
5	6049 22	6048 22	25 A	2
5	6049 23	6048 23	32 A	2
5	6049 24	6048 24	40 A	2
5	6049 25	6048 25	50 A	2
5	6049 26	6048 26	63 A	2
			2-pole - 400 V\sim	
	B curve	C curve	In	Number of modules
1	6049 32	6048 32	6 A	3
1	6049 33	6048 33	10 A	3
1	6048 34		13 A	3
1	6049 35	6048 35	16 A	3
1	6049 36	6048 36	20 A	3
1	6049 37	6048 37	25 A	3
1	6049 38	6048 38	32 A	3
1	6049 39	6048 39	40 A	3
1	6049 40	6048 40	50 A	3
1	6049 41	6048 41	63 A	3
			3-pole - 400 V\sim	
	C curve		In	Number of modules
1	6047 96		6 A	4
1	6048 94		10 A	4
1	6048 95		13 A	4
1	6048 96		16 A	4
1	6048 97		20 A	4
1	6048 98		25 A	4
1	6048 99		32 A	4
1	6047 97		40 A	4
1	6047 98		50 A	4
1	6047 99		63 A	4

Pack	Cat.Nos	MCBs (continued)	
			4-pole - 400 V\sim
	C curve	In	Number of modules
1	6048 47	6 A	4
1	6048 48	10 A	4
1	6048 50	16 A	4
1	6048 51	20 A	4
1	6048 52	25 A	4
1	6048 53	32 A	4
1	6048 54	40 A	4
1	6048 55	50 A	4
1	6048 56	63 A	4

Pack	AC type	A type	RCDs	
			2-pole - 230 V\sim - 30 mA	
			Nominal rating (A)	Number of modules
1	6021 36	6021 93	25	2
1	6021 37		40	2
1	6021 38		63	2
			2-pole - 230 V\sim - 100 mA	
1	6021 39		25	2
1	6021 40		40	2
			2-pole - 230 V\sim - 300 mA	
1	6021 42		25	2
1	6021 43		40	2
1	6021 44		63	2
			4-pole⁽¹⁾ - 400 V\sim - 30 mA	
1	6021 46	6021 94 6021 95	25	4
1	6021 47		40	4
1			63	4
			4-pole⁽¹⁾ - 400 V\sim - 100 mA	
1	6021 49		25	4
1	6021 50		40	4
			4-pole⁽¹⁾ - 400 V\sim - 300 mA	
1	6021 52		25	4
1	6021 53		40	4

(1) Neutral on right-hand side

Lexic modular din-rail equipment

Lexic, Legrand's modular wiring accessories for rails DIN , give you the freedom to organise your distribution board as you please, and give you a complete and innovative choice of functions

Choice

 MCB	 isolating switch	 RCD	 RCBO	 add-on module
 signalling and command auxiliaries	 motor MCB	 voltage surge protector	 fuse carrier	 push-button, control switch
 indicators	 pulse operated latching relay	 power contactor	 time-lag switch	 time delay relay
 light sensitive switch	 programmable time switch	 transformer	 buzzer, bell	 socket outlet
 power supply	 dimmer, remote dimmer	 analogue energy metering device (p.96)	 digital energy metering device (p.96)	 measuring central unit (p.96)

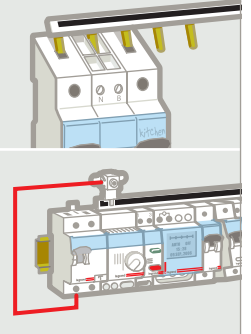


>>> distribution cabinets (p. 162)

- Agent export
- Consult the E-Catalogue: Instructions, technical data sheets, etc.
- Come and be trained at Innoval (p. 409)

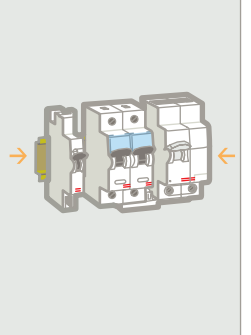
FREEDOM OF INSTALLATION

- Busbar attachment
- Organisation of rows
- Distribution via busbar
- Alignment quality of rows
- Labelling using integrated label-holder on the device.

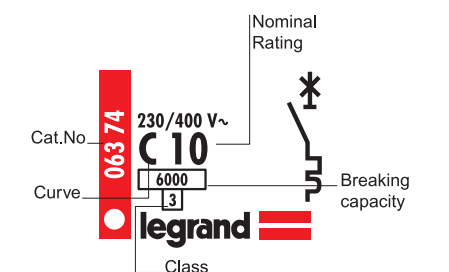


SIMPLICITY OF INSTALLATION

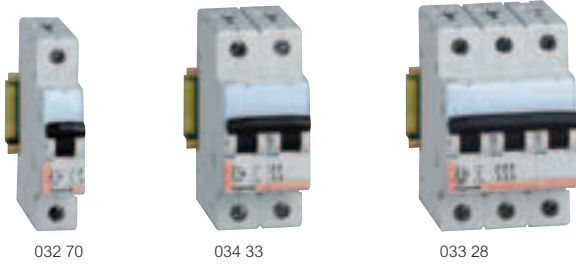
- The auxiliaries common to MCBs, isolating switches and RCDs, are mounted to the left of the devices
- Add-on modules are mounted to the right of MCBs
- Each device can be removed independently, without unscrewing.



STANDARDISED INFORMATION



MCBs DX-E 6 000 - 6 kA
thermal magnetic MCBs from 6 to 63 A
B and C curves



Dimensions (p. 159)
Technical characteristics (p. 134)

Breaking capacity
6 000 - IEC 60898 - 400 V
6 kA - IEC 60947-2 - 400 V
Do not accept add-on modules

Pack	Cat.Nos		Single pole - 230/400 V~	
	B curve	C curve	Nominal rating (A)	Number of modules
10	032 66	033 82	6	1
10	032 68	033 84	10	1
10	032 69	033 85	13	1
10	032 70	033 86	16	1
10	032 71	033 87	20	1
10	032 72	033 88	25	1
10	032 73	033 89	32	1
10	032 74	033 90	40	1
10	032 75	033 91	50	1
10	032 76	033 92	63	1

	B curve	C curve	Nominal rating (A)	Number of modules
5	033 08	034 29	6	2
5	033 10	034 31	10	2
5	033 11	034 32	13	2
5	033 12	034 33	16	2
5	033 13	034 34	20	2
5	033 14	034 35	25	2
5	033 15	034 36	32	2
5	033 16	034 37	40	2
5	033 17	034 38	50	2
5	033 18	034 39	63	2

	B curve	C curve	Nominal rating (A)	Number of modules
1	033 22	034 47	6	3
1	033 24	034 49	10	3
1	033 25	034 50	13	3
1	033 26	034 51	16	3
1	033 27	034 52	20	3
1	033 28	034 53	25	3
1	033 29	034 54	32	3
1	033 30	034 55	40	3
1	033 31	034 56	50	3
1	033 32	034 57	63	3

	B curve	C curve	Nominal rating (A)	Number of modules
1	033 68	034 89	6	4
1	033 70	034 91	10	4
1	033 71	034 92	13	4
1	033 72	034 93	16	4
1	033 73	034 94	20	4
1	033 74	034 95	25	4
1	033 75	034 96	32	4
1	033 76	034 97	40	4
1	033 77	034 98	50	4
1	033 78	034 99	63	4

Auxiliaries and accessories for MCBs (p. 133)

Supply busbars (p. 231)

XL PRO²



The software for distribution panel designers

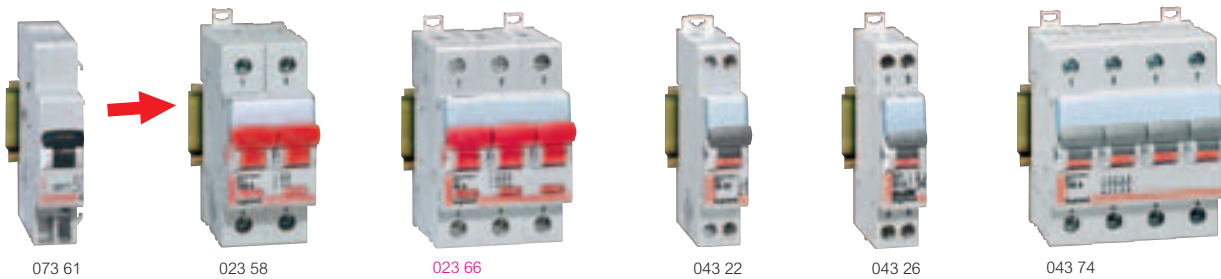
Designed as a veritable digital workshop, XL PRO² software significantly boosts distribution panel administration



- > Select the required products
- > Calculate the corresponding types of enclosures
- > View the layout of the products in the enclosures
- > Automatically generate the wiring diagram for your installation
- > Work out the cost

isolating switches DX™ - IS

16 to 125 A



073 61 023 58 023 66 043 22 043 26 043 74

Dimensions (p. 159)
 Technical characteristics (p. 127)

Mounting on rail EN 60715
 Breaking capacity AC 22 A according to IEC 60947 - 3
 Double break contacts

Pack	Cat.Nos	Remote trip head isolating switches	
		Visible load break Visual indication of the actual state of the contacts: • Closed position or fault (red Light I-ON) • Open position (green Light O-OFF) on handle In the event of a fault on opening, the red position indicator signals the faulty pole, the handle in the central position Red handle (incoming device) Common auxiliaries to DX (p. 133)	
		2P - 400 V~	
		Nominal rating (A)	Number of modules
2	023 56	40	2
2	023 57	63	2
2	023 58	100	2
2	023 59	125	2
		3P - 400 V~	
1	023 66	40	3
1	023 67	63	3
1	023 68	100	3
1	023 69	125	3
		4P - 400 V~	
1	023 76	40	4
1	023 77	63	4
1	023 78	100	4
1	023 79	125	4

Pack	Cat.Nos	Isolating switches	
		1P - 250 V~	
		Nominal rating (A)	Number of modules
10	043 01	16	1
10	043 02	20	1
10	043 05	32	1
10	043 07	40	1
10	043 10	63	1
10	043 14	100	1
		1P with indicator - 250 V~ Supplied with lamp	
10	043 03	20	1
		2P - 400 V~	
10	043 21	16	1
10	043 22	20	1
10	043 25	32	1
5	043 27	40	2
5	043 30	63	2
5	043 34	100	2
5	043 38	125	2
		2P with indicator - 250 V~ Supplied with lamp	
10	043 23	20	1
10	043 26	32	1

Pack	Cat.Nos	Isolating switches (continued)	
		3P - 400 V~	
		Nominal rating (A)	Number of modules
5	043 42	20	2
5	043 45	32	2
3	043 47	40	3
3	043 50	63	3
3	043 54	100	3
3	043 58	125	3
		4P - 400 V~	
5	043 62	20	2
5	043 65	32	2
2	043 67	40	4
2	043 70	63	4
2	043 74	100	4
2	043 78	125	4

Pack	Cat.Nos	Command auxiliaries	
		Mounting on left-hand side of remote trip head isolating switches	
		Shunt releases	
			Number of modules
1	073 60	12 to 48 V~/~	1
1	073 61	110 to 415 V~/~ 110 to 125 V~/~	1
		Undervoltage releases	
1	073 68	Time delay adjustable from 0 to 300 ms 230 V~	1

Pack	Cat.Nos	Signalling auxiliaries	
		Mounting on all isolating switches DX-IS	
		Auxiliary changeover switch	
1	073 50	6 A - 250 V~	0.5
1	073 54	Auxiliary changeover switch 6 A - 250 V~ + fault signalling switch	1
		Can be modified to 2 auxiliary changeover switches	

Pack	Cat.Nos	Accessories	
2	044 42	Support for Ø5 mm and Ø6 mm padlock	 Screw cover
1/3	044 43	Padlock Ø5 mm	
1	227 97	Padlock Ø6 mm	
2	044 44	Sealable screw cover (4 separate poles)	 Insulating shield
6	044 47	Insulating shield	



For three-phase version, please consult us

Bold pack quantities: Minimum quantities to be ordered
 Red catalogue numbers: New products

RCDs - DX™

residual current devices AC, A and Hpi types



6027 10



090 53



090 74



091 47

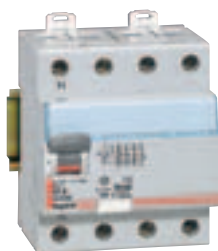
Dimensions (p. 159)
 Technical characteristics (p. 127, 134)

- AC type: detect AC component faults
 - A type: detect AC and DC component faults
 - Hpi type (High immunity): detect AC and DC component faults
- Enhanced immunity to unwanted tripping in disturbed environments
Conform to IEC 61008 - 1

Pack	Cat.Nos	2-pole - 230 V~	
		AC type	10 mA
1	089 06	Nominal rating (A) 16	Number of modules 2
		AC type	30 mA
1	089 09	25	2
1	089 10	40	2
1	089 11	63	2
1	089 12	80	2
1	6027 10	100	2
		AC type	100 mA
1	089 15	25	2
1	089 16	40	2
1	089 17	63	2
1	089 18	80	2
		AC type	300 mA
1	089 27	25	2
1	089 28	40	2
1	089 29	63	2
1	089 30	80	2
1	6027 12	100	2
		A type	10 mA
1	090 53	16	2
		A type	30 mA
1	090 56	25	2
1	090 57	40	2
1	090 58	63	2
1	090 59	80	2
		A type	300 mA
1	090 74	25	2
1	090 75	40	2
1	090 76	63	2
1	090 77	80	2
		Hpi type	30 mA
1	088 22	25	2
1	088 23	40	2
1	088 24	63	2

Pack	Cat.Nos	4-pole - 400 V~ - Neutral on right-hand side	
		AC type	30 mA
1	089 93	Nominal rating (A) 25	Number of modules 4
1	089 94	40	4
1	089 95	63	4
1	089 96	80	4
		AC type	100 mA
1	089 99	25	4
1	090 00	40	4
1	090 01	63	4
1	090 02	80	4
		AC type	300 mA
1	090 11	25	4
1	090 12	40	4
1	090 13	63	4
1	090 14	80	4
		AC type	300 mA (s)
1	090 18	40	4
1	090 19	63	4
		AC type	500 mA
1	090 23	25	4
1	090 24	40	4
1	090 25	63	4
1	090 26	80	4
		A type	30 mA
1	091 40	25	4
1	091 41	40	4
1	091 42	63	4
1	091 43	80	4
1	091 44	100	4
		A type	100 mA
1	091 46	25	4
1	091 47	40	4
1	091 48	63	4
1	091 49	80	4
1	091 50	100	4
		A type	300 mA
1	091 58	25	4
1	091 59	40	4
1	091 60	63	4
1	091 61	80	4
1	091 62	100	4

RCDs - DX™ residual current devices AC, A and Hpi types (continued)



086 95

Dimensions (p. 159)
Technical characteristics (p. 127, 134)

- AC type: detect AC component faults
 - A type: detect AC and DC component faults
 - Hpi type (High immunity): detect AC and DC component faults
- Enhanced immunity to unwanted tripping in disturbed environments
Conform to IEC 61008 - 1

Pack	Cat.Nos	4-pole - 400 V\sim - Neutral on right-hand side (continued)	
		A type	300 mA (s)
		Nominal rating (A)	Number of modules
1	091 65	40	4
1	091 66	63	4
		A type	500 mA
1	091 71	40	4
1	091 72	63	4
1	091 73	80	4
1	091 74	100	4
		Hpi type	30 mA
1	6021 08	25	4
1	6021 09	40	4
1	6021 10	63	4

Pack	Cat.Nos	4-pole - 400 V\sim - Neutral on left-hand side	
		AC type	30 mA
		Nominal rating (A)	Number of modules
1	086 93	25	4
1	086 94	40	4
1	086 95	63	4
		A type	30 mA
1	090 98	25	4
1	090 99	40	4
1	091 00	63	4

DX™- IS isolating switches and DX-RCDs performance of circuit breakers

■ DX - IS isolating switches

Approvals: USE, VDE (except 63 A in process), BBJ and KEMA (in process)

Electrical characteristics

Thermal rating (Hh)	16 - 32 A	40 - 63 A	100 - 125 A
Connection	flexible	1.5 to 16 mm ²	1.5 to 25 mm ²
	rigid		1.5 to 35 mm ²
Isolating voltage (Hi)	250 - 400 V \sim	250 - 400 V \sim	250 - 400 V \sim
Impulse withstand voltage (Uimp)	4 kV	4 kV	4 kV
Category of use ⁽¹⁾	AC 22 A	AC 22 A	AC 22 A
	AC 23 A	AC 23 A	AC 23 A
Permissible nominal current (Icn)	750 A	1700 A	2500 A
Breaking capacity in short-circuit (Icm)	1500 A	3000 A	3700 A
No. of electrical operations	> 30 000	> 30 000	> 30 000
Protection index	IP 2X wired	IP 2X wired	IP 2X (> 25 mm ²)

(1) test conditions according to IEC 60947-3
AC 22 A: combined motor/resistor breaking
AC 23 A: inductive motor breaking

■ DX - RCDs (residual circuit devices)

Connection cross-section

RCDs	Cable (mm ²)	
	rigid	flexible
Connection at top and bottom	50	35

■ AC type - Standard applications

AC type RCDs detect AC residual currents
In the majority of cases (standard applications), they are used for AC current detection at 50/60 Hz

■ A type - Specific applications: dedicated lines

In addition to the characteristics of AC type RCDs, A type RCDs also detect DC residual currents
They are used whenever fault currents are not sinusoidal
They are particularly suitable for the following specific applications (dedicated lines) or materials may produce DC fault currents, speed drives with frequency inverters, etc.

■ Hpi type - Special applications

Type Hpi RCDs are devices which offer additional immunity to unwanted tripping which significantly exceeds the level required by the standard
They are also able to detect AC and DC residual currents (A type)
Operation between - 25 °C and + 40 °C
They are used in special applications where:

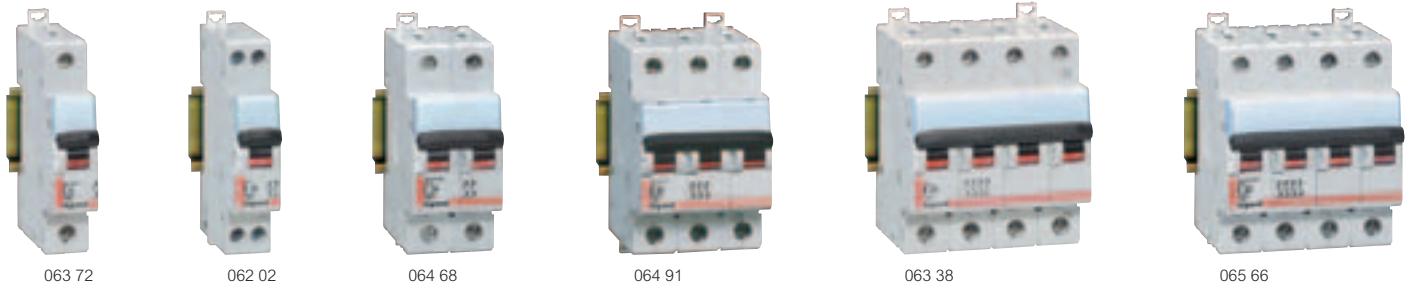
- Loss of information is potentially damaging, e.g. power supply lines for computer equipment (banks, equipment on military bases, flight reservation centres, etc.)
- Loss of operation is potentially damaging (automated machinery, medical equipment, freezer cable, etc.)

They are also used:

- On sites where there is an increased risk of lightning strikes (see p. 141)
- On sites where cables are subject to high levels of interference (use of fluorescents, etc.)
- On sites where very long cables are used

MCBs DX™ 6000 - 10 kA

thermal magnetic MCBs from 0.5 to 63 A
B and C curves



063 72

062 02

064 68

064 91

063 38

065 66

Dimensions (p. 159)
Technical characteristics (p. 134)

Breaking capacity
6000 - IEC 60898 - 400 V (230 V for single pole + neutral)
10 kA - IEC 60947-2 - 400 V (230 V for single pole + neutral)

Pack	Cat.Nos		Single pole - 230/400 V~		
	B curve	C curve	Nominal rating (A)	Number of modules	Breaking capacity IEC 60947-2 (kA) 230 V~
1	061 52	063 68	1	1	10
1	061 53	063 69	2	1	10
1	061 54	063 70	3	1	10
1	061 55	063 71	4	1	10
1	061 56	063 72	6	1	10
10	061 58	063 74	10	1	10
10	061 60	063 76	16	1	10
1	061 61	063 77	20	1	10
1	061 62	063 78	25	1	10
10 1	061 63	063 79	32	1	10
1	061 64	063 80	40	1	10
1	061 65	063 81	50	1	10
1	061 66	063 82	63	1	10

Pack	Cat.Nos		3-pole - 400 V~				
	B curve	C curve	Nominal rating (A)	Number of modules	Breaking capacity IEC 60947-2 (kA)		
1	062 77	064 80	1	3	10	25	
1	062 78	064 81	2	3	10	25	
1	062 79	064 82	3	3	10	25	
1	062 80	064 83	4	3	10	25	
1	062 81	064 84	6	3	10	25	
1	062 83	064 86	10	3	10	25	
1	062 85	064 88	16	3	10	25	
1	062 86	064 89	20	3	10	25	
1	062 87	064 90	25	3	10	25	
1	062 88	064 91	32	3	10	25	
1	062 89	064 92	40	3	10	25	
1	062 90	064 93	50	3	10	25	
1	062 91	064 94	63	3	10	25	

Pack	Cat.Nos		Single pole + neutral - 230 V~		
	B curve	C curve	Nominal rating (A)	Number of modules	Breaking capacity IEC 60947-2 (kA) 230 V~
1	061 89	064 01	0.5	1	10
1	061 95	064 03	1	1	10
1	061 96	064 04	2	1	10
1	061 97	064 05	3	1	10
1	061 98	064 06	4	1	10
1	061 98	064 07	6	1	10
10	062 00	064 09	10	1	10
10	062 02	064 12	16	1	10
1	062 03	064 13	20	1	10
1	062 04	064 14	25	1	10
1	062 05	064 15	32	1	10
1	062 06	064 16	40	1	10

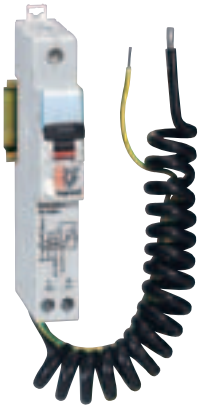
Pack	Cat.Nos		3-pole + neutral - 400 V~				
	B curve	C curve	Nominal rating (A)	Number of modules	Breaking capacity IEC 60947-2 (kA)		
1	063 31	065 39	6	4	10	25	
1	063 34	065 41	10	4	10	25	
1	063 36	065 43	16	4	10	25	
1	063 37	065 44	20	4	10	25	
1	063 38	065 45	25	4	10	25	
1	063 39	065 46	32	4	10	25	
1	063 40	065 47	40	4	10	25	
1	063 41	065 48	50	4	10	25	
1	063 42	065 49	63	4	10	25	

Pack	Cat.Nos		2-pole - 230/400 V~				
	B curve	C curve	Nominal rating (A)	Number of modules	Breaking capacity IEC 60947-2 (kA)		
1	062 57	064 60	1	2	10	25	
1	062 58	064 61	2	2	10	25	
1	062 59	064 62	3	2	10	25	
1	062 60	064 63	4	2	10	25	
1	062 61	064 64	6	2	10	25	
5	062 63	064 66	10	2	10	25	
5	062 65	064 68	16	2	10	25	
1	062 66	064 69	20	2	10	25	
1	062 67	064 70	25	2	10	25	
1	062 68	064 71	32	2	10	25	
1	062 69	064 72	40	2	10	25	
1	062 70	064 73	50	2	10	25	
1	062 71	064 74	63	2	10	25	

Pack	Cat.Nos		4-pole - 400 V~				
	C curve	Nominal rating (A)	Number of modules	Breaking capacity IEC 60947-2 (kA)			
1	065 55	1	4	10	25		
1	065 56	2	4	10	25		
1	065 57	3	4	10	25		
1	065 58	4	4	10	25		
1	065 59	6	4	10	25		
1	065 61	10	4	10	25		
1	065 63	16	4	10	25		
1	065 64	20	4	10	25		
1	065 65	25	4	10	25		
1	065 66	32	4	10	25		
1	065 67	40	4	10	25		
1	065 68	50	4	10	25		
1	065 69	63	4	10	25		

RCBO DX™ 6 000 - 10 kA and DX™ 10 000

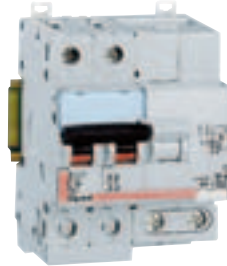
AC and A types



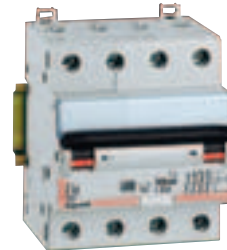
6064 00



078 86



079 19



079 80



Dimensions (p. 159)

Technical characteristics (p. 134)

Breaking capacity:

6 000 - IEC 61009-1 - 10 kA / IEC 60947-2 for 2 and 4 pole

6 000 - IEC 61009-1 - 6 kA / IEC 60947-2 for single pole + neutral

10 000 - IEC 61009-1 - for single pole

• AC type: detect AC component faults

• A type: detect AC and DC component faults

Pack	Cat.Nos	Single pole - 230 V~	
		AC type 30 mA	
		Nominal rating (A)	Number of modules
1	6064 00	10	1
1	6064 01	16	1
1	6064 02	20	1
1	6064 03	25	1
1	6064 04	32	1
1	6064 05	45	1

Pack	Cat.Nos	Single pole + neutral - 230 V~	
		Neutral on right-hand side	
		AC type 10 mA	
		Nominal rating (A)	Number of modules
1	078 79	16	2
		AC type 30 mA	
		Nominal rating (A)	Number of modules
1	078 81	3	2
1	078 83	6	2
1	078 84	10	2
1	078 86	16	2
1	078 87	20	2
1	078 88	25	2
1	078 89	32	2
1	078 90	40	2
		AC type 300 mA	
		Nominal rating (A)	Number of modules
1	078 94	6	2
1	078 95	10	2
1	078 97	16	2
1	078 98	20	2
1	078 99	25	2
1	079 00	32	2
1	079 01	40	2
		A type 10 mA	
		Nominal rating (A)	Number of modules
1	085 75	3	2
		A type 30 mA	
		Nominal rating (A)	Number of modules
1	085 79	6	2
1	085 85	10	2
1	085 87	16	2
1	085 88	20	2
1	085 89	25	2
1	085 90	32	2
1	085 91	40	2

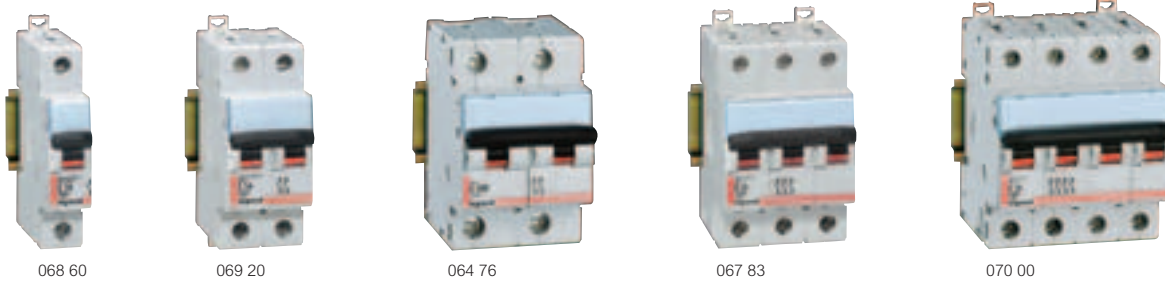
Pack	Cat.Nos	2-pole - 230/400 V~	
		AC type 10 mA	
		Nominal rating (A)	Number of modules
1	077 45	10	4
1	077 46	16	4
1	077 47	20	4

Pack	Cat.Nos	2-pole - 230/400 V~ (continued)	
		AC type 30 mA	
		Nominal rating (A)	Number of modules
1	079 11	10	4
1	079 19	16	4
1	079 20	20	4
1	079 21	25	4
1	079 22	32	4
1	079 29	40	4
1	079 30	50	4
1	079 31	63	4
		AC type 300 mA	
		Nominal rating (A)	Number of modules
1	079 44	10	4
1	079 46	16	4
1	079 47	20	4
1	079 48	25	4
1	079 49	32	4
1	079 50	40	4
1	079 51	50	4
1	079 52	63	4

Pack	Cat.Nos	4-pole - 400 V~	
		AC type 30 mA	
		Nominal rating (A)	Number of modules
1	079 62	10	4
1	079 64	16	4
1	079 65	20	4
1	079 66	25	4
1	079 67	32	4
1	080 13	40	7
1	080 14	50	7
1	080 15	63	7
		AC type 300 mA	
		Nominal rating (A)	Number of modules
1	079 75	10	4
1	079 77	16	4
1	079 78	20	4
1	079 79	25	4
1	079 80	32	4
1	080 31	40	7
1	080 32	50	7
1	080 33	63	7
		A type 30 mA	
		Nominal rating (A)	Number of modules
1	080 75	10	4
1	080 76	16	4
1	080 77	20	4
1	080 78	25	4
1	080 79	32	4
		A type 300 mA	
		Nominal rating (A)	Number of modules
1	080 84	10	4
1	080 85	16	4
1	080 86	20	4
1	080 87	25	4
1	080 88	32	4

MCBs DX-H 10000 - 25 kA

thermal magnetic high breaking capacity MCBs from 2 to 125 A
B and C curves



Dimensions (p. 159)
Technical characteristics (p. 134)

Conform to IEC 60898
Breaking capacity
10000 IEC 60898 - 400 V
25 kA to 12.5 kA - IEC 60947-2 - 400 V

Pack	Cat.Nos		Nominal rating (A)	Number of modules	Breaking capacity (kA)	
	B curve	C curve			IEC 60947-2 230 V/400 V~	IEC 60947-2 230 V~
1	066 92	068 53	2	1	25	25
1	066 93	068 54	3	1	25	25
1	066 95	068 56	6	1	25	25
1	066 97	068 58	10	1	25	25
1	066 98	068 59	13	1	25	25
1	067 00	068 60	16	1	25	25
1	067 01	068 61	20	1	25	25
1	067 02	068 62	25	1	20	20
1	067 03	068 63	32	1	15	15
1	067 04	068 64	40	1	12.5	12.5
1	067 05	068 65	50	1	12.5	12.5
1	067 06	068 66	63	1	12.5	12.5
1		063 83	80	1.5	12.5	12.5
1		063 84	100	1.5	12.5	12.5
1		063 85	125	1.5	12.5	12.5

Pack	Cat.Nos		Nominal rating (A)	Number of modules	Breaking capacity (kA)	
	B curve	C curve			400 V~	230 V~
1	067 73	069 33	2	3	25	50
1	067 74	069 34	3	3	25	50
1	067 76	069 36	6	3	25	50
1	067 78	069 38	10	3	25	50
1	067 79	069 39	13	3	25	50
1	067 80	069 40	16	3	25	50
1	067 81	069 41	20	3	25	50
1	067 82	069 42	25	3	20	50
1	067 83	069 43	32	3	15	50
1	067 84	069 44	40	3	15	50
1	067 85	069 45	50	3	12.5	25
1	067 86	069 46	63	3	12.5	25
1	067 87	064 95	80	4.5	12.5	16
1	067 88	064 96	100	4.5	12.5	16
1		064 97	125	4.5	12.5	16

Pack	Cat.Nos		Nominal rating (A)	Number of modules	Breaking capacity (kA)	
	B curve	C curve			IEC 60947-2 230 V~	IEC 60947-2 230 V~
1	067 36	068 96	6	2	25	25
5 1	067 38	068 98	10	2	25	25
1	067 39	068 99	13	2	25	25
5 1	067 40	069 00	16	2	25	25
1	067 41	069 01	20	2	25	25
1	067 42	069 02	25	2	20	20
1	067 43	069 03	32	2	15	15
1	067 44	069 04	40	2	15	15
1	067 45	069 05	50	2	12.5	12.5
1	067 46	069 06	63	2	12.5	12.5

Pack	Cat.Nos		Nominal rating (A)	Number of modules	Breaking capacity (kA)	
	B curve	C curve			400 V~	230 V~
1	068 16	069 76	6	4	25	50
1	068 18	069 78	10	4	25	50
1	068 19	069 79	13	4	25	50
1	068 20	069 80	16	4	25	50
1	068 21	069 81	20	4	25	50
1	068 22	069 82	25	4	20	50
1	068 23	069 83	32	4	15	50
1	068 24	069 84	40	4	15	50
1	068 25	069 85	50	4	12.5	25
1	068 26	069 86	63	4	12.5	25

Pack	C curve	Nominal rating (A)	Number of modules	Breaking capacity (kA)	
				400 V~	230 V~
1	069 13	2	2	30	50
1	069 14	3	2	30	50
1	069 16	6	2	30	50
1	069 18	10	2	30	50
1	069 19	13	2	30	50
1	069 20	16	2	30	50
1	069 21	20	2	30	50
1	069 22	25	2	25	50
1	069 23	32	2	20	50
1	069 24	40	2	20	50
1	069 25	50	2	15	25
1	069 26	63	2	15	25
1	064 75	80	3	16	25
1	064 76	100	3	16	25
1	064 77	125	3	16	25

Pack	C curve	Nominal rating (A)	Number of modules	Breaking capacity (kA)	
				400 V~	230 V~
1	069 93	2	4	25	50
1	069 94	3	4	25	50
1	069 96	6	4	25	50
1	069 98	10	4	25	50
1	069 99	13	4	25	50
1	070 00	16	4	25	50
1	070 01	20	4	25	50
1	070 02	25	4	20	50
1	070 03	32	4	15	50
1	070 04	40	4	15	50
1	070 05	50	4	12.5	25
1	070 06	63	4	12.5	25
1	065 70	80	6	12.5	16
1	065 71	100	6	12.5	16
1	065 72	125	6	12.5	16

Auxiliaries and accessories (p. 133)

Add-on modules (p. 132)

Supply busbars (p. 231)



Z curve, please consult us

MCBs DX™ 6000 - 15 kA

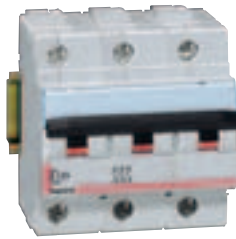
thermal magnetic MCBs from 1 to 125 A
D curve



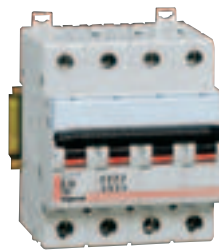
065 89



066 36



066 62



066 71

Dimensions (p. 159)
Technical characteristics (p. 134)

Breaking capacity

6000 - IEC 60898 up to 63 A - 400 V

10000 - IEC 60898 80 A to 125 A

15 kA - IEC 60947-2 up to 32 A - 400 V

10 kA - IEC 60947-2 40 A to 125 A - 400 V

Magnetic adjusted between 10 and 14 In

Pack	Cat.Nos	Single pole - 230/400 V~		
	D curve	Nominal rating (A)	Number of modules	Breaking capacity (kA) IEC 60947-2 230 - 400 V~
1	065 75	1	1	15
1	065 76	2	1	15
1	065 77	3	1	15
1	065 79	6	1	15
1	065 81	10	1	15
1	065 82	13	1	15
1	065 83	16	1	15
1	065 84	20	1	15
1	065 85	25	1	15
1	065 86	32	1	10
1	065 87	40	1	10
1	065 88	50	1	10
1	065 89	63	1	10

Pack	Cat.Nos	2-pole - 400 V~			
	D curve	Nominal rating (A)	Number of modules	Breaking capacity (kA) IEC 60947-2 400 V~ 230 V~	
1	066 25	1	2	15	25
1	066 26	2	2	15	25
1	066 27	3	2	15	25
1	066 29	6	2	15	25
1	066 31	10	2	15	25
1	066 32	13	2	15	25
1	066 33	16	2	15	25
1	066 34	20	2	15	25
1	066 35	25	2	15	25
1	066 36	32	2	15	25
1	066 37	40	2	10	20
1	066 38	50	2	10	20
1	066 39	63	2	10	20
1	066 40	80	3	10	16
1	066 41	100	3	10	16
1	066 42	125	3	10	16

Pack	Cat.Nos	3-pole - 400 V~			
	D curve	Nominal rating (A)	Number of modules	Breaking capacity (kA) IEC 60947-2 400 V~ 230 V~	
1	066 45	1	3	15	25
1	066 46	2	3	15	25
1	066 47	3	3	15	25
1	066 49	6	3	15	25
1	066 51	10	3	15	25
1	066 52	13	3	15	25
1	066 53	16	3	15	25
1	066 54	20	3	15	25
1	066 55	25	3	15	25
1	066 56	32	3	15	25
1	066 57	40	3	10	20
1	066 58	50	3	10	20
1	066 59	63	3	10	20
1	066 60	80	4.5	10	16
1	066 61	100	4.5	10	16
1	066 62	125	4.5	10	16

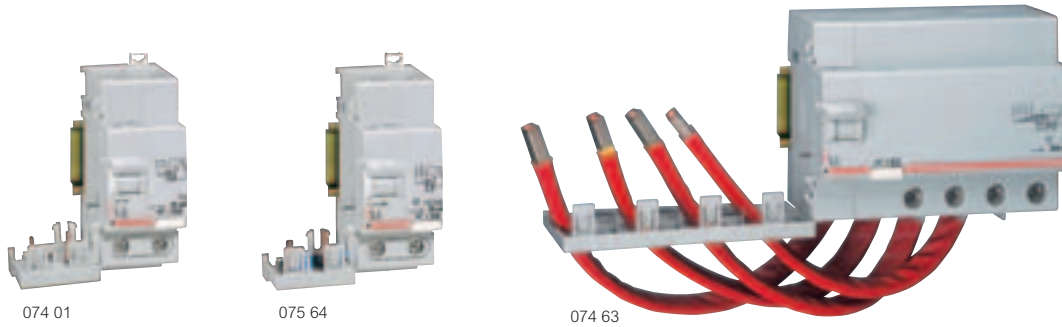
Pack	Cat.Nos	4-pole - 400 V~			
	D curve	Nominal rating (A)	Number of modules	Breaking capacity (kA) IEC 60947-2 400 V~ 230 V~	
1	066 65	1	4	15	25
1	066 66	2	4	15	25
1	066 67	3	4	15	25
1	066 68	4	4	15	25
1	066 69	6	4	15	25
1	066 71	10	4	15	25
1	066 73	16	4	15	25
1	066 74	20	4	15	25
1	066 75	25	4	15	25
1	066 76	32	4	15	25
1	066 77	40	4	10	20
1	066 78	50	4	10	20
1	066 79	63	4	10	20
1	066 80	80	6	10	16
1	066 81	100	6	10	16
1	066 82	125	6	10	16

**For DX-MA:
magnetic tripping only version**

please consult us

add-on modules DX™

for DX, DX-H and DX D curve



Dimensions (p. 159)
 Technical characteristics (p. 134)

Conform to EN 61009-1. Mounted on the right-hand side of the MCBs

- AC type: detect AC component faults
- A type: detect AC and DC component faults
- Hpi type: detect AC and DC component faults A type, enhanced immunity to unwanted tripping in disturbed environments

Pack Cat.Nos 2-pole 230/400 V~

Pack	Cat.Nos	Maximum rating (A)	Number of modules
1	074 01	32	2
	074 02	63	2
	074 03	80 to 125	4
1	074 07	32	2
	074 08	63	2
	074 09	80 to 125	4
1	074 11	63	2
1	074 23	63	2
1	074 83	32	2
	074 84	63	2
	074 85	80 to 125	4
1	074 89	32	2
1	074 90	63	2
1	074 91	80 to 125	4
1	074 93	63	2
1	075 64	63	2

Pack Cat.Nos 4-pole 400 V~

Pack	Cat.Nos	Maximum rating (A)	Number of modules
1	074 55	32	3
	074 56	63	3
	074 57	80 to 125	6
1	074 61	32	3
	074 62	63	3
	074 63	80 to 125	6
1	074 65	63	3
1	074 66	80 to 125	6
1	074 77	63	3
1	074 78	80 to 125	6
1	075 37	32	3
1	075 38	63	3
1	075 39	80 à 125	6
1	075 43	32	3
1	075 44	63	3
1	075 45	80 à 125	6
1	075 47	63	3
1	075 74	63	3

3-pole 400 V~

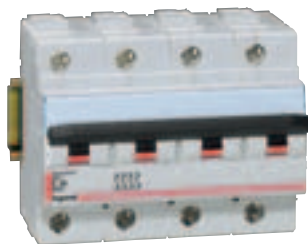
Pack	Cat.Nos	Maximum rating (A)	Number of modules
1	074 28	32	3
	074 29	63	3
1	074 34	32	3
	074 35	63	3
	074 36	80 to 125	6
1	074 38	63	3
1	075 11	63	3
1	075 17	63	3
1	075 18	80 to 125	6
1	075 20	63	3
1	075 68	63	3
1	075 69	80 to 125	6

MCBs and add-on modules DX-L 50 kA

thermal magnetic MCBs high breaking capacity from 10 to 63 A



071 14



071 44

Dimensions (p. 159)
Technical characteristics (p. 134)

Breaking capacity
50 kA - IEC 60947-2

Pack	Cat.Nos	MCBs			
		2-pole - 400 V~			
		Nominal rating (A)	Number of modules	Breaking capacity (kA) IEC 60947-2	
				400 V~	230 V~
		C curve			
1	071 12	10	3	50	70
1	071 14	16	3	50	70
1	071 15	20	3	50	70
1	071 16	25	3	50	70
1	071 17	32	3	50	70
1	071 18	40	3	50	70
1	071 19	50	3	50	70
1	071 20	63	3	50	70
		4-pole - 400 V~			
1	071 42	10	6	50	70
1	071 44	16	6	50	70
1	071 45	20	6	50	70
1	071 46	25	6	50	70
1	071 47	32	6	50	70
1	071 48	40	6	50	70
1	071 49	50	6	50	70
1	071 50	63	6	50	70

Add on modules Hpi type (High immunity)

Conform to standard IEC 61009-1
Mounted on the right-hand side of the MCBs DX-L
Enhanced immunity to unwanted tripping in disturbed environments
Detect DC component faults (A type)

		2-pole - 230/400 V~	
		Sensitivity	Number of modules
1	075 76	30 mA	2
1	075 77	300 mA	2
1	075 78	300 mA (s)	2
1	075 79	1 A (s)	2
		4-pole - 400 V~	
1	075 84	30 mA	3
1	075 85	300 mA	3
1	075 86	300 mA (s)	3
1	075 87	1 A (s)	3

auxiliaries DX™

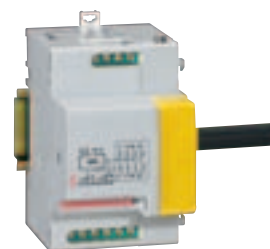
for MCBs, RCDs and RCBOs



073 50



073 68



073 73

Pack	Cat.Nos	Auxiliaries	
		Clip on the left-hand side (maximum 3) ⁽¹⁾ Allow insertion of the supply busbar Auxiliaries common to: - DX, DX-H, DX-L and RCDs - DX-IS	
		Signalling auxiliaries	
1	073 50	Auxiliary changeover switch 6 A - 250 V~ 3 auxiliaries max	Number of modules 0.5
1	073 51	Fault signalling changeover switch 6 A - 250 V~	0.5
1	073 54	Auxiliary changeover switch 6 A - 250 V + fault signalling switch Can be modified to 2 auxiliary changeover switches	1
		Shunt releases	
1	073 60	12 to 48 V~/~	1
1	073 61	110 to 415 V~ 110 to 125 V~	1
		Undervoltage release	
1	073 68	Time delay adjustable from 0 to 300 ms 230 V~	1
		Remote control⁽²⁾	
		Clip on the left-hand side of the MCBs Equipped with: auxiliary changeover switch and fault signalling switch 2 A - 230 V~ Can be padlocked in open position (Ø5 mm)	
		Motor-driven control modules	
		Can be used to open and close DX, DX-H, and DX D curve, (2, 3 and 4-pole ≤ 63 A) MCBs and RCBOs remotely	
1	073 73	230 V~	Number of modules 3
		Automatic resetting	
		Gives automatically an order of resetting Can be connected to motor-driven control modules For use in installations which are not monitored or staffed (transmission relays, pump stations etc.) in order to meet service/operational continuity requirements	
1	073 83	230 V~	Number of modules 2
		Accessories	
		Padlocking	
2	044 42	Support for Ø5 mm or Ø6 mm padlock	
1/3	044 43	Padlock Ø5 mm	
1	227 97	Padlock Ø6 mm	
		Connection accessories	
2	044 44	Sealable screw cover (4 separable poles)	
6	044 47	Insulating shields	
5	044 41	Spacing unit 1 module	

(1) 1 auxiliary control device max. and 2 auxiliary signalling devices max. with only one 1/2 module auxiliary
Auxiliary signalling devices are installed between the MCB and the auxiliary control device

(2) Controlled by a volt-free contact or push button (not illuminated)
Not compatible with MCBs with 1.5 modules per pole (DX-H 80 to 125, DX-L), MCBs single pole (DX), 2 modules phase / neutral RCBOs (DX), single pole RCBOs and RCDs (RCCBs)

performance of MCBs and auxiliaries

Breaking capacity in IT neutral earthing system

1-pole (alone) breaking capacity of MCB at 400 V according to IEC 60947-2

DX single pole + neutral ⁽¹⁾ B and C curves	1.5 kA			
DX ⁽²⁾ B and C curves	≤ 63 A	3 kA		
DX-H B and C curves	≤ 20 A	6 kA		
	25 A	5 kA		
	32 and 40 A	4 kA		
	50 and 63 A	3 kA		
	80 and 125 A	4 kA		
DX-L C curve	10 to 63 A	6 kA		
DX D curve	≤ 32 A	4 kA		
	40 to 125 A	3 kA		

(1) Subject to meeting the requirements of section 431-2.2 of NFC 15-100, i.e.:
- either the neutral conductor(s) in question are considered to be effectively protected against short-circuits by a protective device placed upstream
- or the circuit(s) in question are protected by a residual current device
In this case, the conductors must be the same cross-section and protected by MCBs with the same rated current and same trip characteristic (type B, C or D)
(2) Single, double, triple + neutral or four-pole

Breaking capacity in the event of a short-circuit to earth and insulation voltage

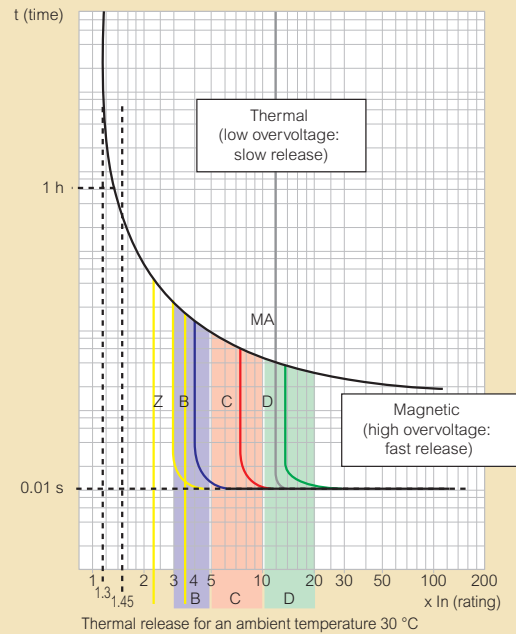
	DX Single pole + Neutral	DX B and C curves D curve < 63 A	DX-H B and C curves DX D curve 80 to 125 A	DX-L C curve
Icn 1	4500 A	6 kA	10 kA	25 kA
Ui	250 V	500 V	500 V	500 V

Icn 1: Breaking capacity on 1 pole for multi-pole MCBs in the event of a short-circuit to earth
Ui: rated insulation voltage

Connection cross-section for screw terminals (in mm²)

	Copper cable rigid	flexible
• DX single pole + neutral with or without add-on modules	16	10
• DX, DX D curve add-on modules ≤ 63 A DX-L add-on modules	35	25
• DX-H, add-on modules 80, 100, 125 A, DX-L	70	50
• Auxiliaries	2.5	2.5

Release curves of MCBs



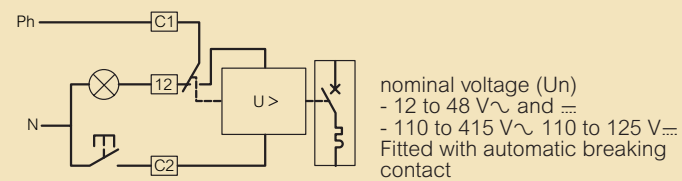
Curves	Magnetic threshold setting
Z ⁽¹⁾	2.4 to 3.6 I _n
B	3 to 5 I _n
C	5 to 10 I _n
D	10 to 14 I _n (10 to 20 depending on standard)
MA ⁽¹⁾	12 to 14 I _n

(1) Please consult us

Technical characteristics of DX auxiliaries

- Max. connection cross-section: 2.5 mm²
- Operating temperature: - 5 to + 50 °C

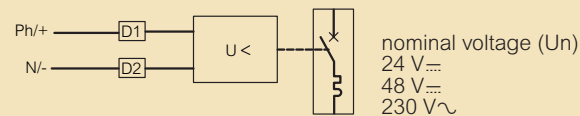
Current shunt releases



Min. and max. voltage: from 0.7 to 1.1 V
Tripping time: < to 20 ms
Power consumption: at 1.1 x 48 V = 121 VA
at 1.1 x 415 V = 127 VA
Impedance : 12 to 48 V = 23 Ω
110 to 415 V = 1640 Ω

Undervoltage releases

Consumption	U min.	U max.
12 to 48 V	522 mA	2610 mA
110 to 415 V	69 mA	259 mA



Pull-in voltage: ≥ 0.55 Un
Tripping time: from 100 to 400 ms ± 10% (adjustable)
Power consumption: 24 V~: 0.1 VA
48 V~: 0.2 VA
230 V~: 1 VA

Protection of DC circuits

Lexic DX and DX-H MCBs (1P/2P/3P/4P - I_n ≤ 63 A) designed for use in 230/400 V~ supplies, can also be used in DC circuits
In this case, the following deratings and precautions must be taken into account

1 - Protection against short-circuits

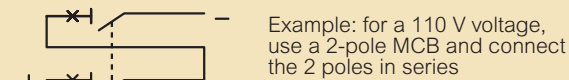
Max. magnetic tripping threshold: multiplied by 1.4
Example: For a C curve MCB for which the AC tripping threshold is between 5 and 10 I_n, the DC tripping threshold will be between 7 and 14 I_n

2 - Protection against overloads

The time/current thermal tripping curve is the same as for AC

3 - Operating voltage

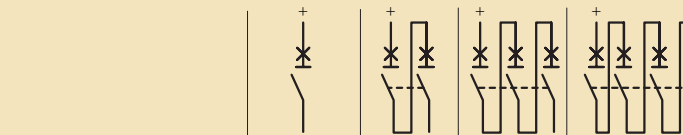
Max. operating voltage: 80 V per pole (60 V for single-pole + N MCBs)
For voltages higher than this value, several poles must be wired in series



4 - Breaking capacity

4000 A for a single pole MCB at max. voltage (80 V~ per pole)

At other voltages, the breaking capacities are as follows:



DX	voltage	single-pole	2P	3P	4P
Acc. to IEC 60947.2	≤ 48 V	6 kA	6 kA		
	110 V		6 kA	6 kA	
	230 V				10 kA
Ics ⁽¹⁾	≤ 48 V	100 %	100 %		
	110 V		100 %	100 %	
	230 V				100 %

DX-H	voltage	single-pole	2P	3P	4P
Acc. to IEC 60947.2	≤ 48 V	10 kA	10 kA		
	110 V		10 kA	10 kA	
	230 V				15 kA
Ics ⁽¹⁾	≤ 48 V	100 %	100 %		
	110 V		100 %	100 %	
	230 V				100 %

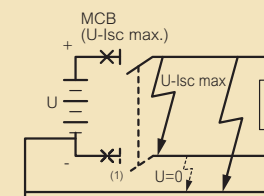
(1) As a % of I_{cu}

5 - Distribution of breaking poles

To choose the MCB and determine the pole distribution necessary for breaking on each of the polarities, it is necessary to know how the installation is earthed

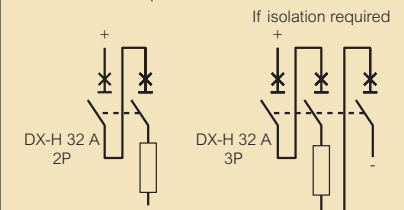
• Supply with one polarity earthed:

Place all the poles necessary for breaking on the other polarity
If isolation is required, an additional pole must be added on the earthed polarity



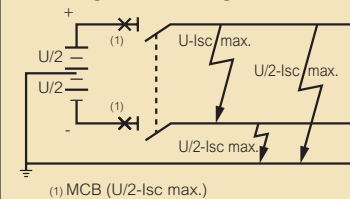
Example: circuit earthed via the negative polarity / U = 110 V~ / I_{sc} = 10 kA / I_n = 32 A
Protect the positive polarity using an MCB capable of breaking 10 kA at 110 V (DX-H 2P 32 A with 2 poles on the positive polarity)
For isolation, use a DX-H 3P 32 A with 2 poles on the positive polarity and one pole on the negative polarity

DX-H LEXIC	voltage	single-pole	2P	3P	4P
Acc. to IEC 60947.2	≤ 48 V	10 kA	10 kA		
	110 V		10 kA	10 kA	
	230 V				15 kA



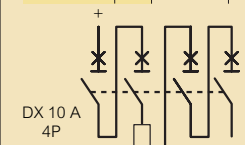
• Network earthed via a middle point:

Place on each polarity the number of poles necessary for max. I_{sc} breaking at half voltage



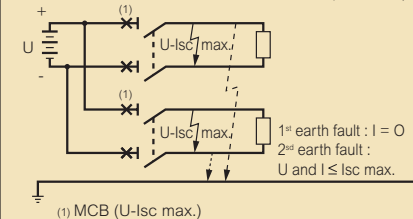
Example: circuit earthed via a middle point / U = 230 V~ / I_{sc} = 6 kA / I_n = 10 A
Protect each polarity using an MCB capable of breaking 6 kA at half voltage, i.e. 115 V (DX 4P 10 A with 2 poles on each polarity)

DX LEXIC	voltage	single-pole	2P	3P	4P
Acc. to IEC 60947.2	≤ 48 V	6 kA	6 kA		
	110 V		6 kA	6 kA	
	230 V				10 kA



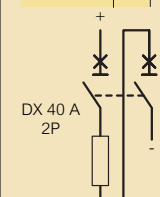
• Isolated earth supply:

Distribute the poles necessary for breaking over the 2 polarities to provide protection in the event of a double earth fault (particularly if there are a number of circuits in parallel)



Example: isolated earth circuit / U = 48 V~ / I_{sc} = 4.5 kA / I_n = 40 A
Protect the installation with an MCB capable of breaking 4.5 kA at 48 V and protect each polarity (DX MCB 2P 40 A with one pole on each polarity)

DX LEXIC	voltage	single-pole	2P	3P	4P
Acc. to IEC 60947.2	≤ 48 V	6 kA	6 kA		
	110 V		6 kA	6 kA	
	230 V				10 kA

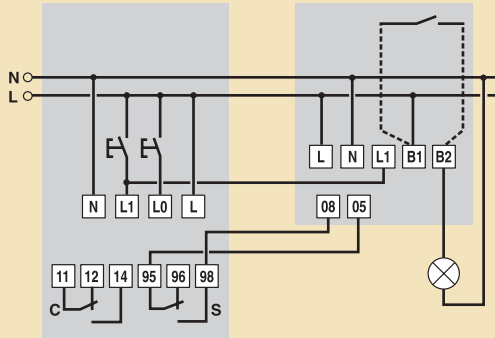


performance of MCBs and auxiliaries (continued)

Specific case of continuity of service

In certain locations, where there are no personnel, in which particular care is required to ensure continuity of service, false tripping of MCBs is not permissible (isolated telephone/TV/radio relay stations, pumping stations, etc.)

The combination of an Hpi type RCBO with motor-driven control and a recloser provides optimum continuity of service (p. 133)

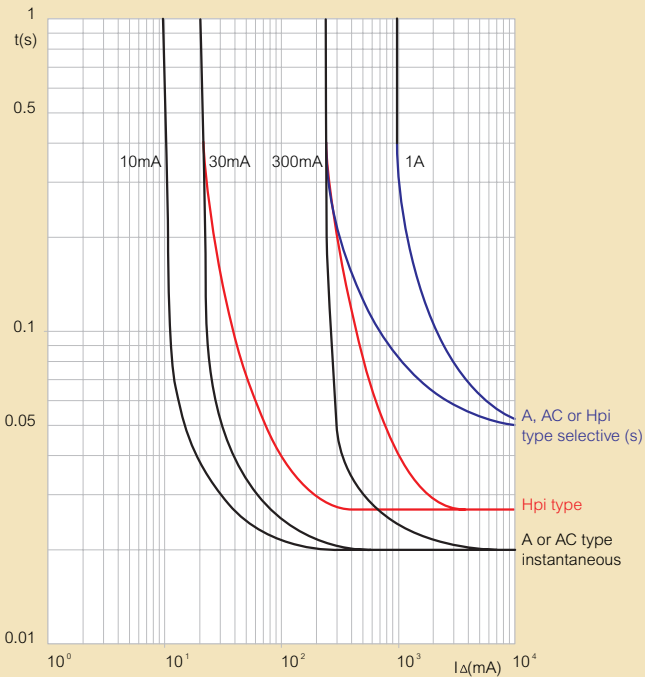


Motor-driven control
Cat.No 073 73

Automatic reclosing control
device Cat.No 073 83

RCD tripping curves

- Average RCD operating curves



Withstand to short-circuits: MCBs and DX - RCDs and fuse cartridges and DX - RCDs (in kA)

Caution: it is advisable to provide overload protection for the RCD

	gG	≤ 40 A	63 A	80 A	100 A	DX (B/C) 1P+N	2,3,4P	DX-H (B/C) ≤ 63 A	80 < 125 A	DX-L	DPX 125
2P/ 4P	16 A	100 kA	50 kA	15 kA	10 kA	6 kA	10 kA	20 kA	20 kA	50 kA	25 kA
	25 A	100 kA	50 kA	15 kA	10 kA	1,5 kA	10 kA	20 kA	20 kA	50 kA	25 kA
	40 A	100 kA	50 kA	15 kA	10 kA	1,5 kA	10 kA	15 kA	20 kA	50 kA	25 kA
	63 A	100 kA	50 kA	15 kA	10 kA		10 kA	12,5 kA	12,5 kA	50 kA	25 kA
	80 A	100 kA	50 kA	15 kA	10 kA			12,5 kA	12,5 kA		25 kA
	100 A	100 kA	50 kA	15 kA	10 kA			12,5 kA	12,5 kA		25 kA

2P - 230 V~
4P - 400 V~

Residual current breaking capacity of DX RCBOs

IΔm according to EN 61009-1

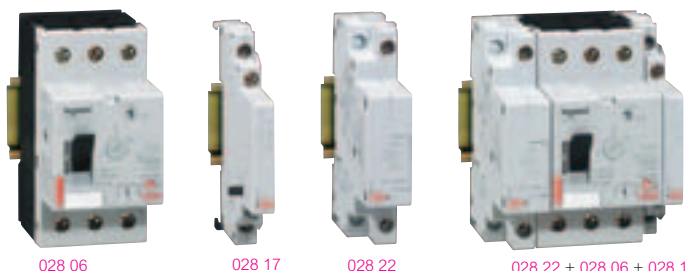
Add-on modules	
- DX (6000), DX-H, DX D curve	6 000 A
- DX-L	30 000 A
RCBOs	
- P + N	3 000 A
- 2P (4 modules)	6 000 A
- 4P 10 to 32 A (4 modules)	4 500 A
- 4P 40 to 63 A (7 modules)	6 000 A



For more information on the basic rules of protection, come and be trained at Innoval www.legrandelectric.com

MPCBs

NEW



Dimensions (p. 159)

Conform to EN/IEC 60947-1, EN/IEC 60947-2, EN/IEC 60947-4-1

Pack	Cat.Nos	Triple pole MCBs		
		Depth: 82.5 mm		
		Enable control and protection of motors up to 15 kW (400 V)		
		Nominal rating (A)	Thermal adjustment range (A)	Numbers of modules
1	028 00	0.16	0.1 - 0.16	2.5
1	028 01	0.25	0.16 - 0.25	2.5
1	028 02	0.4	0.25 - 0.4	2.5
1	028 03	0.63	0.4 - 0.63	2.5
1	028 04	1	0.63 - 1	2.5
1	028 05	1.6	1 - 1.6	2.5
1	028 06	2.5	1.6 - 2.5	2.5
1	028 07	4	2.5 - 4	2.5
1	028 08	6.5	4 - 6.5	2.5
1	028 09	10	6.3 - 10	2.5
1	028 10	14	9 - 14	2.5
1	028 11	18	13 - 18	2.5
1	028 12	23	17 - 23	2.5
1	028 13	25	20 - 25	2.5
1	028 14	32	24 - 32	2.5

Auxiliaries			
Failure contact			
	Contact	Capacity	Numbers of modules
1	028 16	N/C + N/O 6 A/690 V	0.5
Signal contacts			
	N/C + N/O	6 A/690 V	0.5
1	028 17	N/C + N/O	6 A/690 V
1	028 18	2 N/C	6 A/690 V
Undervoltage trips			
	Coil voltage	Consumption trip/hold	Numbers of modules
1	028 22	230 V~ 12/3.5 VA	1
1	028 23	400 V~ 12/3.5 VA	1
Shunt trips			
	Coil voltage	Consumption	Numbers of modules
1	028 25	230 V~ 3.5 VA	1
1	028 26	400 V~ 3.5 VA	1

Accessories			
1	028 29	IP 65 box For motor MCB with auxiliary contact (Cat.Nos 028 16/17/18) and/or a trip (Cat.Nos 028 22/ 23/25/26) With knock out entries for PG 16 cable glands ⁽¹⁾ 4 modules	
1	028 30	Emergency stop button Fits on IP 65 box for replacement of etancheity membrane Ensures IP 65 protection	
Pilot lights Fixing in front of box Cat.No 028 29			
		Voltage	Color
1	028 31	230 V~	Colourless
1	028 32	400 V~	Colourless
Padlock Padlock in "off" position 3 padlocks max Ø4.5			
1	028 34		

(1) use cable gland Cat.No 980 24 with locking nut Cat.No 980 34

Red catalogue numbers : New products

MPCBs

The motor MCB has a signalling system for magnetic tripping that prevents all dangerous shutdown following a short-circuit previously isolated by the device

Takes 3 auxiliaries mounted simultaneously by clipping on

- on the left: 1 undervoltage / shunt trip
- on the right: 1 fault signal + 1 signalling contact

Electrical characteristics

Rated insulating voltage U_i : 690 V
 Impulse withstand voltage: 6 kV
 Rated frequency: 50/60 Hz
 Dissipated power per phase: 0.57-1.46 W
 Magnetic tripping: 12 max.
 Mechanical lifespan: 100 000 cycles
 Electrical lifespan: 32 A (AC3): 100 000 cycles
 Operating temperature: -20°C to + 70°C
 Use class: A

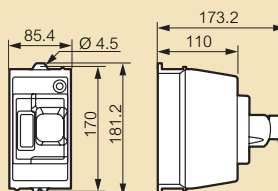
Protection index: IP 20

Connection cable cross-section (1 or 2 conductors): flexible wire 1-6 mm² or AWG 16-10

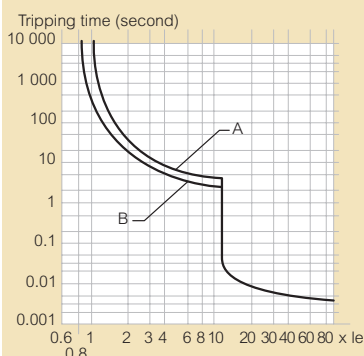
Breaking capacity

Cat. Nos	Rating (A)	Short circuit rated breaking capacity (kA)							
		230 V		400 V		500 V		690 V	
		Icu	Ics	Icu	Ics	Icu	Ics	Icu	Ics
028 00	0.16	100	100	100	100	100	100	100	100
028 01	0.25	100	100	100	100	100	100	100	100
028 02	0.4	100	100	100	100	100	100	100	100
028 03	0.63	100	100	100	100	100	100	100	100
028 04	1	100	100	100	100	100	100	100	100
028 05	1.6	100	100	100	100	100	100	100	100
028 06	2.5	100	100	100	100	100	100	8	8
028 07	4	100	100	100	100	100	100	8	8
028 08	6.5	100	100	100	100	100	100	8	8
028 09	10	100	100	100	100	42	21	8	8
028 10	14	100	100	25	12.5	10	5	2	2
028 11	18	100	100	25	12.5	4	2	2	2
028 12	23	100	100	25	12.5	4	2	2	2
028 13	25	100	100	25	12.5	4	2	2	2
028 14	32	100	100	25	12.5	4	2	2	2

IP 65 box 028 29 equipped with stop button 028 30



Thermal-magnetic tripping curve



Approximate cold tripping time. To obtain the hot tripping time, multiply the graph value by 0.75
 A = Balanced operation over 3 phases
 B = Operation over 2 phases (phase absence)

Electrical diagrams

