DX-series miniature circuit breakers

Designation	DX-E 6000 /6kA				DX 6000 /6kA		
Number of poles	1P	2P	3P	4P	1P	2P	
Rated current in at 30° C (A) Ratings	1/2/3/6/10/13/ 16/20/25/32 40/50/63	1/2/3/6/10/13/ 16/20/25/32 40/50/63	1/2/3/6/10/13/ 16/20/25/32 40/50/63	1/2/3/6/10/13/ 16/20/25/32 40/50/63	1/2/3/6/10 16/20/25/32 40/50/63	1/2/3/6/10 16/20/25/32 40/50/63	
Type of curve	B or C	B or C	B or C	B or C	B or C	B or C	
Nominal voltage (with standard tolerance)	230/400 V	400 V	400 V	400 V	230/400 V	400 V	
Nominal frequency	50/60 Hz	50/60 Hz	50/60 Hz	50/60 Hz	50/60 Hz	50/60 Hz	
Operating voltage (50/60 Hz) +/- 10%	240/415 V	415 V	415 V	415 V	240/415 V	415 V	
Breaking capacity with 127/230 V supply Icn 50/60 Hz	6000 A	6000 A	6000 A	6000 A	6 000 A	6 000 A	
acc. to AS/NZ560898.1 with 240/415 V supply	6000 A	6000 A	6000 A	6000 A	6 000 A	6 000 A	
Breaking capacity Icu 50/60 Hz with 127/230 V supply	6 kA	6 kA	6 kA	6 kA	10 kA	Curve B: 25 kA Curve C: In ≤ 32 A: 25 kA In > 32 A: 20 kA	
acc. to AS 60947-2 with 240/415 V supply	6 kA	6 kA	6 kA	6 kA	10 kA	10 kA	
Standard breaking capacity Ics acc. to AS 60947-2	100%	100%	100%	100%	100%	100%	
Rated insulation voltage Ui (degree of pollution 2)	500 V	500 V	500 V	500 V	500 V	500 V	
Rated impulse withstand current Uimp (kV)	6 kV	6 kV	6 kV	6 kV	6 kV	6 kV	
Endurance (operating cycles) mechanical	20 000	20 000	20 000	20 000	20 000	20 000	
electrical	10 000	10 000	10 000	10 000	10 000	10 000	
Dieletric strength between 0 and 2000 m	2 500 V	2 500 V	2 500 V	2 500 V	2 500 V	2 500 V	
Remote control	-	-	-	-	yes	yes	
Add-on module	-	-	-	-	-	yes	
Operating temperature	-25° C to + 70° C	-25° C to + 70° C	-25° C to + 70° C	-25° C to + 70° C	-25° C to + 70° C	-25° C to + 70° C	

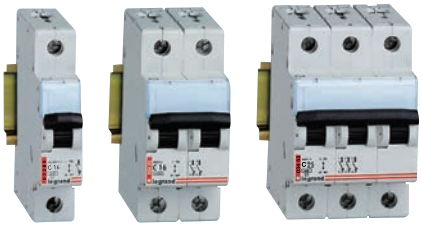
Some items sold separately
For pack quantity, please refer to numerical index pages
For trade price, please see your local HPM Legrand representative for the current price list

	DX 6000 /6kA	DX-H 10000 /10kA			DX-D 6000 - 10KA		
	3P and 4P	1P	2P	3P, 4P	1P	2P	3P and 4P
	1/2/3/6/10 16/20/25/32 40/50/63	1/2/3/6/10 13/16/20/25 32/40/50/63 80/100/125	1/2/3/6/10 13/16/20/25 32/40/50/63 80/100/125	1/2/3/6/10 13/16/20/25 32/40/50/63 80/100/125	1/2/3/6/10/ 13/16/20/25 32/40/50/63	1/2/3/6/10 16/20/25/32 40/50/63 80/100/125	1/2/3/6/10 16/20/25 32/40/50/63 80/100/125
	B or C	B or C	C	B or C	D	D	D
	50/60 Hz	50/60 Hz	50/60 Hz	50/60 Hz	50/60 Hz	50/60 Hz	50/60 Hz
	415 V	240/415 V	415 V	415 V	240/415 V	415 V	415 V
	6 000 A	10 000 A	10 000 A	10 000 A	6 000 A	6 000 A	6 000 A
	6 000 A	10 000 A	10 000 A	10 000 A	6 000 A	6 000 A	6 000 A
	Curve B: 25 kA Curve C: In ≤ 32 A: 25 kA In > 32 A: 20 kA	25 kA	In ≤ 40 A: 50 kA In > 40 A: 25 kA	In ≤ 40 A: 50 kA In 50/63 A: 25 kA In > 63 A: 16 kA	In ≤ 32 A: 25 kA In ≤ 63 A: 20 kA In > 63 A: 16 kA	In ≤ 32 A: 25 kA In ≤ 63 A: 20 kA In > 63 A: 16 kA	In ≤ 32 A: 25 kA In ≤ 63 A: 20 kA In > 63 A: 16 kA
	10 kA	In ≤ 20 A: 25 kA In 25 A: 20 kA In 32 A: 15 kA In > 32 A: 12,5 kA	In ≤ 20 A: 30 kA In 25 A: 25 kA In 32/40 A: 20 kA In > 40 A: 15 kA	In ≤ 20 A: 25 kA In 25 A: 20 kA In 32/40 A: 15 kA In > 40 A: 12,5 kA	In ≤ 32 A: 15 kA In > 32 A: 10 kA	In ≤ 32 A: 15 kA In > 32 A: 10 kA	In ≤ 32 A: 15 kA In > 32 A: 10 kA
	100%	75%	75%	75%	75%	80%	75%
	500 V	500 V	500 V	500 V	500 V	500 V	500 V
	6 kV	6 kV	6 kV	6 kV	6 kV	6 kV	6 kV
	20 000	20 000	20 000	20 000	20 000	20 000	20 000
	10 000	10 000	10 000	10 000	10 000	10 000	10 000
	2 500 V	2 500 V	2 500 V	2 500 V	2 500 V	2 500 V	2 500 V
	yes	yes	yes	yes	yes	≤ 63 A: yes	≤ 63 A: yes
	yes	-	yes	yes		yes	yes
	-25° C to + 70° C	-25° C to + 70° C	-25° C to + 70° C	-25° C to + 70° C	-25° C to + 70° C	-25° C to + 70° C	-25° C to + 70° C

MCBs DX-E™ 6 000 - 6kA

Thermal magnetic MCBs from 6 to 63A
C curve

Approval No: N19929



033 86 034 33 034 53

Breaking capacity according to AS/NZS 60898-1
Icn (o-co cycle): 6000A

Do not accept add-on modules.

Technical characteristics (p. 79 - 81)

Single pole - 230/400 V~

Pack	Cat. No. C curve	Nominal rating (A)	Number of 17.5 mm modules
10	033 82	6	1
10	033 84	10	1
10	033 86	16	1
10	033 87	20	1
10	033 88	25	1
10	033 89	32	1
10	033 90	40	1
10	033 91	50	1
10	033 92	63	1

Double pole - 230/400 V~

Pack	Cat. No. C curve	Nominal rating (A)	Number of 17.5 mm modules
5	034 29	6	2
5	034 31	10	2
5	034 33	16	2
5	034 34	20	2
5	034 35	25	2
5	034 36	32	2
5	034 37	40	2
5	034 38	50	2
5	034 39	63	2

3 pole - 400 V~

Pack	Cat. No. C curve	Nominal rating (A)	Number of 17.5 mm modules
1	034 47	6	3
1	034 49	10	3
1	034 51	16	3
1	034 52	20	3
1	034 53	25	3
1	034 54	32	3
1	034 55	40	3
1	034 56	50	3
1	034 57	63	3

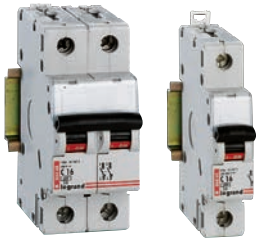
4 pole - 400 V~

Pack	Cat. No. C curve	Nominal rating (A)	Number of 17.5 mm modules
1	034 89	6	4
1	034 91	10	4
1	034 93	16	4
1	034 94	20	4
1	034 95	25	4
1	034 96	32	4
1	034 97	40	4
1	034 98	50	4
1	034 99	63	4

MCBs DX™ 6 000

Thermal magnetic MCBs from 1 to 63A
C curve

Approval No: N19929



064 68 063 76

Breaking capacity according to AS/NZS 60898-1
Icn (o-co cycle): 6000A

Technical characteristics (p. 79 - 81)

Single pole - 230/400 V~

Pack	Cat. No. C curve	Nominal rating (A)	Number of 17.5 mm modules
1	063 68	1	1
1	063 69	2	1
1	063 70	3	1
1	063 72	6	1
10	063 74	10	1
10	063 76	16	1
1	063 77	20	1
1	063 78	25	1
1	063 79	32	1
1	063 80	40	1
1	063 81	50	1
1	063 82	63	1

Double pole - 230/400 V~

Pack	Cat. No. C curve	Nominal rating (A)	Number of 17.5 mm modules
1	064 60	1	2
1	064 61	2	2
1	064 62	3	2
1	064 64	6	2
5	064 66	10	2
5	064 68	16	2
1	064 69	20	2
1	064 70	25	2
1	064 71	32	2
1	064 72	40	2
1	064 73	50	2
1	064 74	63	2

3-pole - 400 V~

Pack	Cat. No. C curve	Nominal rating (A)	Number of 17.5 mm modules
1	064 80	1	3
1	064 81	2	3
1	064 82	3	3
1	064 84	6	3
1	064 86	10	3
1	064 88	16	3
1	064 89	20	3
1	064 90	25	3
1	064 91	32	3
1	064 92	40	3
1	064 93	50	3
1	064 94	63	3

4-pole - 400 V~

Pack	Cat. No. C curve	Nominal rating (A)	Number of 17.5 mm modules
1	065 55	1	4
1	065 56	2	4
1	065 57	3	4
1	065 59	6	4
1	065 61	10	4
1	065 63	16	4
1	065 64	20	4
1	065 65	25	4
1	065 66	32	4
1	065 67	40	4
1	065 68	50	4
1	065 69	63	4

Some items sold separately
For pack quantity, please refer to numerical index pages
For trade price, please see your local HPM Legrand representative for the current price list

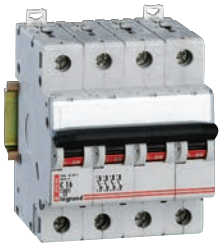
MCBs DX-H 10 000

Thermal magnetic MCBs
high breaking capacity from 1 to 63A
C curve

Approval No: N19929


068 60


069 20


070 00


069 46

Technical characteristics (p. 79 - 81)

Breaking capacity according
to AS/NZS 60898-1
Icn (o-co cycle): 10KA

Single pole - 230/400 V~

Pack	Cat. No. C curve	Nominal rating (A)	Number of 17.5 mm modules
1	068 52	1	1
1	068 53	2	1
1	068 54	3	1
1	068 56	6	1
1	068 58	10	1
1	068 60	16	1
1	068 61	20	1
1	068 62	25	1
1	068 63	32	1
1	068 64	40	1
1	068 65	50	1
1	068 66	63	1
1	063 83	80	1,5
1	063 84	100	1,5
1	063 85	125	1,5

Double pole - 230/400 V~

Pack	Cat. No. C curve	Nominal rating (A)	Number of 17.5 mm modules
1	069 12	1	2
1	069 13	2	2
1	069 14	3	2
1	069 16	6	2
1	069 18	10	2
1	069 20	16	2
1	069 21	20	2
1	069 22	25	2
1	069 23	32	2
1	069 24	40	2
1	069 25	50	2
1	069 26	63	2

3-pole - 400 V~

Pack	Cat. No. C curve	Nominal rating (A)	Number of 17.5 mm modules
1	069 32	1	3
1	069 33	2	3
1	069 34	3	3
1	069 36	6	3
1	069 38	10	3
1	069 40	16	3
1	069 41	20	3
1	069 42	25	3
1	069 43	32	3
1	069 44	40	3
1	069 45	50	3
1	069 46	63	3
1	064 95	80	4,5
1	064 96	100	4,5
1	064 97	125	4,5

4-pole - 400 V~

Pack	Cat. No. C curve	Nominal rating (A)	Number of 17.5 mm modules
1	069 92	1	4
1	069 93	2	4
1	069 94	3	4
1	069 96	6	4
1	069 98	10	4
1	070 00	16	4
1	070 01	20	4
1	070 02	25	4
1	070 03	32	4
1	070 04	40	4
1	070 05	50	4
1	070 06	63	4

Auxiliaries/accessories (p. 78)

MCBs DX-D 6 000 - 10kA

Thermal magnetic MCBs up to 63 A
D curve

Approval No: N19929

066 36

066 71

Breaking capacity according
to AS/NZS 60898-1
Icn (o-co cycle): 10KA

Technical characteristics (p. 79 - 81)

Single pole - 230/400 V~

Pack	Cat. No. D curve	Nominal rating (A)	Number 17.5 mm modules
1	065 79	6	1
1	065 81	10	1
1	065 83	16	1
1	065 84	20	1
1	065 85	25	1
1	065 86	32	1
1	065 87	40	1
1	065 88	50	1
1	065 89	63	1

Double pole - 230/400 V~

	D curve	Nominal rating (A)	Number 17.5 mm modules
1	066 29	6	2
1	066 31	10	2
1	066 33	16	2
1	066 34	20	2
1	066 35	25	2
1	066 36	32	2
1	066 37	40	2
1	066 38	50	2
1	066 39	63	2

3-pole - 400 V~

	D curve	Nominal rating (A)	Number 17.5 mm modules
1	066 49	6	3
1	066 51	10	3
1	066 53	16	3
1	066 54	20	3
1	066 55	25	3
1	066 56	32	3
1	066 57	40	3
1	066 58	50	3
1	066 59	63	3
1	066 60	80	4.5
1	066 61	100	4.5
1	066 62	125	4.5

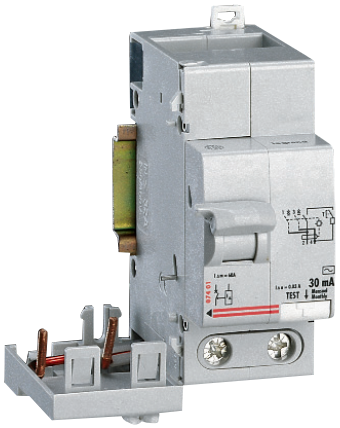
4-pole - 400 V~

	D curve	Nominal rating (A)	Number 17.5 mm modules
1	066 69	6	4
1	066 71	10	4
1	066 73	16	4
1	066 74	20	4
1	066 75	25	4
1	066 76	32	4
1	066 77	40	4
1	066 78	50	4
1	066 79	63	4

Add on Modules DX™

MCBs up to 125A

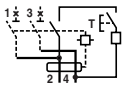
Approval No: 19930



074 02

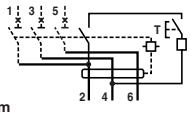
Conform to AS/NZS 61009-1
RCD add-on module type AC
Mounted on the right-hand side
of the MCBs DX, DX-H and DX-D 6 kA

Type AC
Double pole - 230/400 V~



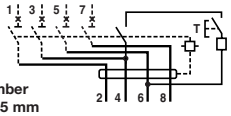
Pack	Cat. No.	Sensitivity	Maximum rating (A)	Number of 17.5 mm modules
1	074 02	30mA	63	2

3-pole - 400 V~



Pack	Cat. No.	Sensitivity	Maximum rating (A)	Number of 17.5 mm modules
1	074 29	30mA	63	3

4-pole - 400 V~



Pack	Cat. No.	Sensitivity	Maximum rating (A)	Number of 17.5 mm modules
1	074 55	30mA	32	3
1	074 56	30mA	63	3

Above 63A
Please consult us

Some items sold separately
For pack quantity, please refer to numerical index pages
For trade price, please see your local HPM Legrand representative for the current price list

RCBO DX™ 6 000

RCBO up to 45 A - type AC
Residual current devices - type AC

Approval No: 19931

078 86

6064 12

6027 86

Dimensions (p. 100)

Pack	Cat. No.	Type AC Single pole + neutral - 230V~ Neutral on right hand side Breaking capacity 6000A AS/NZS61009-1		
		Sensitivity	Nominal rating (A)	Number of modules
1	078 79	10mA	16	2
1	078 84	30mA	10	2
1	078 86	30mA	16	2
1	078 87	30mA	20	2
1	078 88	30mA	25	2
1	078 89	30mA	32	2
1	078 90	30mA	40	2

	Type AC Single pole + neutral - 230V~ (1) Breaking capacity 10000 A - AS/NZS61009-1			
	Black neutral leads	Blue neutral leads	AC type ⎓ 30 mA Nominal rating (A)	Number of modules
1	6064 00	6064 10	10	1
1	6064 01	6064 11	16	1
1	6064 02	6064 12	20	1
1	6064 03	6064 13	25	1
1	6064 04	6064 14	32	1
1	6064 05	6064 15	45	1

(1) Single pole with solid unswitched neutral
"A" type of RCD/RCBO See HPM Catalogue section 1

		Type A Single module RCBO Breaking capacity 6kA AS/NZS 61009		
		Sensitivity	Nominal rating (A)	Number of modules
1	602780	30mA	6	1
1	602782	30mA	10	1
1	602783	30mA	16	1
1	602784	30mA	20	1
1	602785	30mA	25	1
1	602786	30mA	30	1

RCDs DX™

Residual current devices
Type AC

Approval No: 19931

089 28

090 12

Conform to AS/NZS61008-1

Pack	Cat. No.	Type AC 2 - pole - 230V~		
		Sensitivity	Nominal rating (A)	Number of modules
1	089 09	30mA	25	2
1	089 10	30mA	40	2
1	089 11	30mA	63	2
1	089 16	100mA	40	2
1	089 17	100mA	63	2
1	089 28	300mA	40	2

		4 - pole - 400V~ Neutral on right-hand side		
		Sensitivity	Nominal rating (A)	Number of modules
1	089 93	30mA	25	4
1	089 94	30mA	40	4
1	089 95	30mA	63	4
1	089 96	30mA	80	4
1	090 00	100mA	40	4
1	090 12	300mA	40	4
1	090 13	300mA	63	4
1	090 14	300mA	80	4

Auxiliaries and accessories DX™
For MCBs, RCDs, RCBOs and isolating switches

Auxiliaries and accessories DX™
For MCBs, RCDs, RCBOs and isolating switches


073 50


073 54


073 61


073 68

Pack	Cat. No.	Auxiliaries for MCBs, RCBOs	Number of 17.5 mm modules
		Up to 125 A and Residual current devices	
		Clip on the left-hand side of the MCB (maximum 3) *	
		Signalling auxiliaries	
1	073 50	Auxiliary changeover switch. 6 A - 250 V~ Indicates the position of the switches	0.5
1	073 51	Fault signalling changeover switch. 6 A - 250 V~ Indicates tripping of the MCB at a fault	
1	073 53	Auxiliary changeover 6 A - 250 V switch which can be modified to a fault signalling switch	
1	073 54	Auxiliary changeover 6 A - 250 V switch + fault signalling switch, can be modified to 2 auxiliary changeover switches	1
		Command auxiliaries	
		Shunt trip	
		Enable the MCB to be tripped from a remote location	
1	073 61	110 to 415 V~ 110 to 125 V⎓ Minimum voltage trips. Time delay adjustable from 0 to 300 ms	1
1	073 65	24 V⎓	1
1	073 66	48 V⎓	1
1	073 68	230 V~	1

*Auxilliary common to: DX / DX-H / RCD'S / RCBO'S / DX-IS

Pack	Cat. No.	Accessories
		Padlocking
2	044 42	Support for Ø 4 mm or Ø 6 mm padlock for DX, DX-H, MCBs and 2 P RCDs
		Terminal shields
1	044 39	Single pole for DX MCBs from 80 A to 125 A
1	044 47	Insulating shields for DX MCBs and DX-H

Some items sold separately
For pack quantity, please refer to numerical index pages
For trade price, please see your local HPM Legrand representative for the current price list

Performance of MCBs and auxiliaries

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

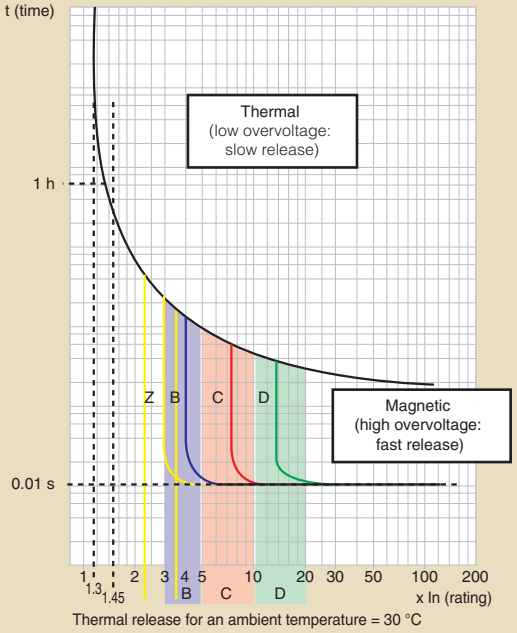
	DX Single pole + Neutral	DX B and C curves D curve < 63 A	DX-H B and C curves DX D curve 80 to 125 A	DX-L C curve
Icn 1	4500 A	6 kA	10 kA	25 kA
Ui	250 V	500 V	500 V	500 V

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, add-on modules ≤ 63 A DX-L add-on modules	32	25
• DX-H, add-on modules 80, 100, 125 A, DX-L	70	50
• Auxiliaries	2.5	2.5

Release curves of MCBs



Thermal release for an ambient temperature = 30 °C

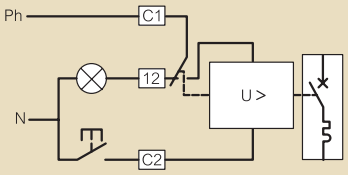
Curves	Magnetic threshold setting
Z (1)	2.4 to 3,6 In
B	3 to 5 In
C	5 to 10 In
D	10 to 14 In (10 to 20 depending on standard)
MA (1)	12 to 14 In

(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

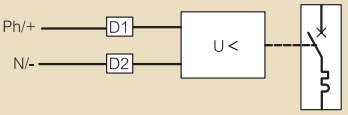


nominal voltage (Un)
- 12 to 48 V~ and ⎓
- 110 to 415 V~ 110 to 125 V⎓
Fitted with automatic breaking contact

Min. and max. voltage: from 0.7 to 1.1 Un
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

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

Undervoltage releases



nominal voltage (Un)
24 V⎓
48 V⎓
230 V~

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 VA 1 VA

Mechanical characteristics

Endurance: 20 000 mechanical switching operations
10 000 on load switching operations at In x cos φ 0·9

	In ≤ 63 A	In ≥ 80 A
Connection cross-sections (in mm²)	25 mm² flexible cables 35 mm² rigid cables	50 mm² flexible cable 70 mm² rigid cable
Applied connection torque	2·5 Nm	3 Nm

Derating according to ambient temperature (In A)

	Ambient temperature						
In at 30° C	**0° C**	**10° C**	**20° C**	**30° C**	**40° C**	**50° C**	**60° C**
1	1·1	1·07	1·03	1	0·97	0·93	0·90
2	2·2	2·1	2·06	2	1·94	1·86	1·80
3	3·3	3·2	3·1	3	2·9	2·8	2·6
4	4·4	4·2	4·1	4	3·9	3·8	3·6
6	6·6	6·4	6·2	6	5·8	5·5	5·4
10	11	10·7	10·3	10	9·7	9·3	9·0
16	18	17·3	16·6	16	15·4	14·7	14·1
20	22·4	21·6	20·8	20	19·2	18·4	17·6
25	28·3	27·2	26	25	24	22·7	21·7
32	36·2	34·9	33·3	32	30·7	29·1	27·8
40	46	44	42	40	38	36	34
50	57·5	55	52·5	50	47·5	45	42·5
63	73·1	69·9	66·1	63	59·8	56·1	52·9
80	91	88	84	80	76	72	69
100	114	110	105	100	95	90	86
125	142	137	131	125	119	113	108

Protection of DC circuits

Lexic DX and DX-H MCBs (1P/2P/3P/4P - In ≤ 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

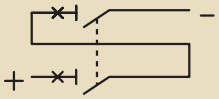
Max. magnetic tripping threshold: multiplied by 1.4
Example: For a C curve MCB for which the AC tripping threshold is between 5 and 10 In, the DC tripping threshold will be between 7 and 14 In

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

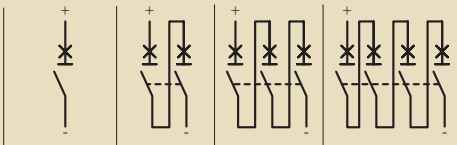


Example: for a 110 V voltage, use a 2-pole MCB and connect the 2 poles in series

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	Icu	≤ 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 %

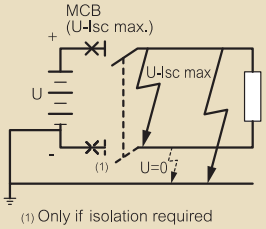
DX-H		voltage	single-pole	2P	3P	4P
Acc. to IEC 60947.2	Icu	≤ 48 V	10 kA	10 kA		
		110 V		10 kA	10 kA	
		230 V				15 kA
	Ics (1)	≤ 48 V	100 %	100 %		
		110 V		100 %	100 %	
		230 V				100 %

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
polarity

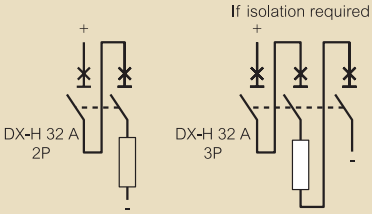


(1) Only if isolation required

(1) As a % of Icu

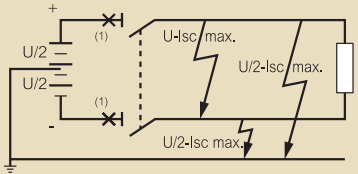
Example: circuit earthed via the negative polarity / U = 110 V= / Isc = 10 kA / In = 32 A
Protect the positive polarity using an MCB capable of breaking 10 kA at 110 V (DX-H 2P 32 A with 2 poles on the positive polarity)
For isolation, use a DX-H 3P 32 A with 2 poles on the positive polarity and one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

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



• Network earthed via a middle point:

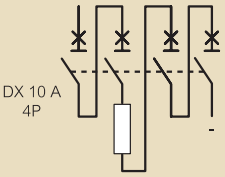
Place on each polarity the number of poles necessary for max. Isc breaking at half voltage



(1) MCB (U/2-Isc max.)

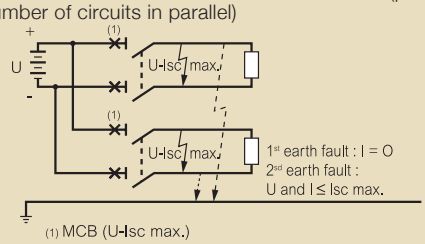
Example: circuit earthed via a middle point / U = 230 V= / Isxc = 6 kA / In = 10 A
Protect each polarity using an MCB capable of breaking 6 kA at half voltage, i.e. 115 V (DX 4P 10 A with 2 poles on each polarity)

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



• Isolated earth supply:

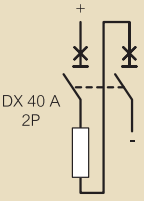
Distribute the poles necessary for breaking over the 2 polarities to provide protection in the event of a double earth fault (particularly if there are a number of circuits in parallel)



(1) MCB (U-Isc max.)

Example: isolated earth circuit / U = 48 V= / Isc = 4,5 kA / In = 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)

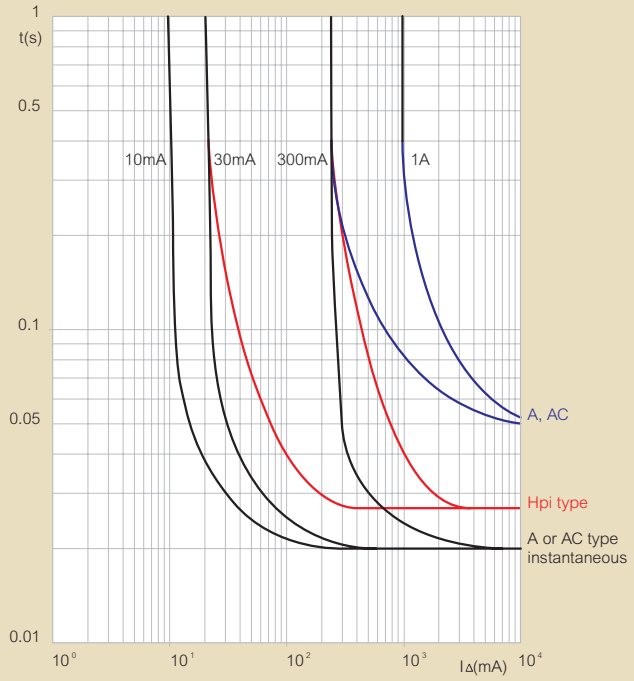
DX LEXIC		voltage	single-pole	2P	3P	4P
Acc. to IEC 60947.2	Icu	≤ 48 V	6 kA	6 kA		
		110 V		6 kA	6 kA	
		230 V				10 kA



Performance of MCBs and auxiliaries (continued)

RCD tripping curves

• Average RCD operating curves



2P and 4P RCDs: withstand to short-circuits

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

Downstream RCD		Upstream cartridge fuse gG				Upstream MCB					
		≤ 40 A	63 A	80 A	100 A	DX (B/C) 1P+N	DX (B/C) 2,3,4P	DX-H (B/C) ≤ 63 A	DX-H (B/C) 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 (1)	12.5 kA	50 kA	25 kA
	25 A	100 kA	50 kA	15 kA	10 kA	6 kA	10 kA	20 kA (1)	12.5 kA	50 kA	25 kA
	40 A	100 kA	50 kA	15 kA	10 kA	6 kA	10 kA	15 kA (1)	12.5 kA	50 kA	25 kA
	63 A	100 kA	50 kA	15 kA	10 kA		10 kA	12.5 kA (1)	12.5 kA	50 kA	25 kA
	80 A	100 kA	50 kA	15 kA	10 kA			12.5 kA (1)	12.5 kA		25 kA
	100 A	100 kA	50 kA	15 kA	10 kA			12.5 kA (1)	12.5 kA		25 kA

(1) Same nominal rating for both, MCB and RCD

DX RCBOs residual current breaking capacity

IΔm according to EN 61009-1

Add-on modules - DX 6000 , DX-H, D curve	6000 A

RCBOs - P + N	3000 A
- 2P (4 modules)	6000 A
- 4P 10 to 32 A (4 modules)	4500 A
- 4P 40 to 63 A (7 modules)	6000 A

Technical information

- **Maximum voltage**: 240 V - 415 V~ ~10 %
- **Maximum voltage**: 80 V⎓ per pole
- **Insulation voltage**: 500 V~
- **Dielectric**: 2 500 V~

Power dissipated in W per pole at In

In A	1	2	3	4	6	10	16	20	25	32	40	50	63	80	100	125
Type B	2·1	2·1	2·4	2·5	1·1	1·1	1·5	1·7	2·4	3·1	4	4·5	5·5	-	-	-
Type C	2·1	2·1	2·4	2·5	1·1	1·1	1·5	1·7	2·4	3·1	4	4·5	5·5	8·8	7·8	15·6
Type D	2·1	2·1	2·4	2·5	1·1	1·1	1·5	1·7	2·4	3·1	4	4·5	5·5	8·8	7·8	15·6

Technical information

Derating of MCBs according to the number of adjacent MCBs

Number of adjacent MCBs	from 1 to 3	from 4 to 6	from 7 to 9	over 10
Coefficient	1	0·8	0·7	0·6

MCB supplementary data (6 kA and 10 kA)

Terminal depth : 14 mm
Terminals protected to IP 20
Maximum terminal torque : 3 Nm
(recommended : 2·5 Nm)
Average weight per pole : 0·160 kg
Supply : can be supplied from the top or bottom
Padlockable in either ON or OFF position
Operation with DC volt supply : up to a maximum of 80 V DC per pole – for voltages above 80 V DC use multipole devices wired IN SERIES (e.g. two pole 160 V⎓ maximum)
Positive contact indication in accordance with the IEE 16th Edition Wiring Regulations