











THE **GLOBAL SPECIALIST** IN ELECTRICAL AND DIGITAL BUILDING INFRASTRUCTURES



AN EXTENDED RANGE UP TO 630 A

Designed to work in any type of environment, the DRX range of thermal magnetic circuit breakers has been expanded to meet your essential needs in terms of protecting an electrical installation up to 630 A.

For many years, the robust design of the DRX range has made it the ideal choice for efficiency and economy.

THE RANGE: THERMAL MAGNETIC MCCBs

Mounting

Rated current (In)

Breaking capacity (Icu) at 415 V \sim

Standard breaking capacity Ics (%Icu)

Number of poles

* From 15 to 100 A



A solution adapted to numerous different sites, whether residential, commercial or even in the industrial sector.

Works in any type of environment, including in extreme temperatures.

THE BENEFITS OF THE DRX RANGE

THE CHOICE

- Three different sizes
- Ratings ranging from 15 to 630 A
- Several breaking capacities between 16 and 50 kA

ROBUST DESIGN

- SEMKO LOVAG certification
- Compliant with standard IEC 60947-2
- Mechanical endurance up to 25,000 operations

ADAPTABILITY

- An exclusive system to change from the 50 mm standard to the 45 mm DIN standard
- Fixing on DIN rail or plate for DRX 125 and 250
- Wiring via cables or busbars
- Installation in any position
- Suitable for all environments (tropicalisation, pollution, salt corrosion, etc.)
- Operates in AC or DC



DRX	125		DRX 2	250	1:1	DRX 630	
ON RA	AIL பா OR ON I	PLATE	ON RAIL 🖵 OR ON PLATE			ON F	PLATE
From 15 to 125 A		From 125 to 250 A			From 320	to 630 A	
16 kA	20 kA	36 kA	18 kA	25 kA	36 kA	36 kA	50 kA
50	50	50	50	50	50	50	50
3P - 4P	3P - 4P	1P* - 2P* 3P - 4P	3P - 4P	3P - 4P	3P - 4P	3P - 4P	3P - 4P

SIMPLICITY EFFICIENCY ACCESSIBILITY With just 3 circuit brea

With just 3 circuit breaker sizes, the DRX range has it covered when it comes to providing protection against overloads and short-circuits, for sites up to 630 A.





the:

Clear, simple, indelible marking

on the front of the MCCB states

- thermal magnetic protection

nominal currentbreaking capacity

EASE OF WIRING Numerous wiring accessories are available to assist installation.

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ROBUST DESIGN RELIABILITY SAFETY With the DRX range, you can guarantee

With the DRX range, you can guarantee long-term protection for your customers' installations. Its rugged construction ensures continuity of operation even in excessive temperatures.



EXTREME TEMPERATURES DRX MCCBs operate in extreme temperature conditions, between - 25°C and + 70°C, and need no temperature derating up to 50°C.

00 95 % to 55 °C

UTE C63100 GUIDE Can be used in any type of environment: ropicalisation execution II (all climates, relative humidity between 95% and 55°C).



ROBUST DESIGN The DRX has proven mechanical endurance up to 25,000 operations.

ROTARY HANDLE

each type of site.

The rotary handle, is available

in direct or external version

different users' habits or the specific constraints affecting

in order to accommodate

It is simple and quick to fit.



SAFETY No live parts are accessible once installed under a faceplate.



HORIZONTAL OPERATION If required, DRX MCCBs can also be installed horizontally in enclosures like XL3-N 630.



QUALITY LEVEL Guaranteed by SEMKO certification. Compliant with standard IEC 60947-2.

OPERATES IN AC OR DC

EASE OF INSTALLATION AND WIRING

The DRX range includes numerous accessories which make wiring and installation easier and allow remote tripping, saving time during installation and enhancing safety.

EASE OF INSTALLATION AND FLEXIBILITY



MCCB easily positioned and removed from the DIN rail with the adaptor (only on DRX 125 and 250).

→ An exclusive system to change from the 50 mm standard to the 45 mm DIN standard



A VARIETY OF WIRING SYSTEM OPTIONS

24 mm distance between base and terminal, for mounting on busbars.





Cable spreaders, cage terminals, rear terminals, terminal shields, etc; our wiring accessories cover all your requirements.









REMOTE TRIPPING FOR SAFETY



← Both the DRX 125 and 250 have a hinge so the front can open and close.

→ The control and signalling auxiliaries simply clip on.





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RX630

INTERVENTION The padlock can be used to lock the handle in "Open"

RISK-FREE

lock the handle in "Open" position during maintenance operations and thus avoid any risk of accidents due to mishandling.

> The DRX range can also be installed in XL³-N 125/250 enclosures



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DRX™ 125

thermal magnetic MCCBs from 15 to 125 A





Technical characteristics and curves p. 7 to 9

For switching, control, isolation and protection of low-voltage electrical lines Can be fitted with auxiliaries (p. 10) Supplied with: - M5 terminal for In \leq 50 A and M8 range for In > 50 A

Fixing screws
 Insulating shields (2 for 3P and 3 for 4P)
 Fixed thermal and magnetic
 Conform to IEC 60947-2, in compliance with NEMA

Pack	Cat.Nos	DRX 125	Pack	Cat.Nos	Mounting on rail ு
1	3P 4P 0 270 00 0 270 10 0 270 01 0 270 11	20 A	20 12 6	0 271 89 0 271 90 0 271 87	Plates for fixing DRX 125 on DIN rail For 1P For 2P For 3P and 4P
1 1 1 1 1 1 1 1	$\begin{array}{ccccc} 0 & 270 & 02 & 0 & 270 & 12 \\ 0 & 270 & 03 & 0 & 270 & 13 \\ 0 & 270 & 04 & 0 & 270 & 14 \\ 0 & 270 & 05 & 0 & 270 & 15 \\ 0 & 270 & 06 & 0 & 270 & 16 \\ 0 & 270 & 39 & 0 & 270 & 29 \\ 0 & 270 & 07 & 0 & 270 & 17 \\ 0 & 272 & 55^2 & 0 & 272 & 56^2 \\ 0 & 270 & 08 & 0 & 270 & 18 \\ 0 & 270 & 09 & 0 & 270 & 19 \\ \end{array}$	30 A 40 A 50 A 60 A 63 A 75 A 80 A 100 A	1	0 271 76 0 271 77	Rotary handles Direct on DRX Standard (grey) Vari-depth handle Comprising: connecting rod, bracket, drilling template, mounting accessories, door locking mechanism Standard (grey)
	'	Breaking capacity Icu 20 kA (415 V \sim) In			Connection accessories
1 1 1 1 1 1 1 1 1 1 1	$\begin{array}{c c c c c c c c c c c c c c c c c c c $	15 A 20 A 25 A 30 A 40 A 50 A 60 A 63 A 75 A	1 1 1	^{3P} 0 271 81 0 271 82 0 271 91 ^{3P} 0 271 83 0 271 84 3P 4P	Sealable terminal shields Set of 2
1	0 270 28 0 270 38 0 272 21 0 272 23 1P 2P 0 270 40 ¹ 0 270 50	100 A 125 A Breaking capacity Icu 36 kA (415 V ∿) In	1 1 1 1 1	$\begin{array}{c ccccc} 0 & 271 & 70 & 0 & 271 & 72 \\ 0 & 271 & 71 & 0 & 271 & 73 \\ 0 & 272 & 52 & 0 & 272 & 53 \\ 0 & 271 & 92 \\ 0 & 271 & 93 \\ 0 & 272 & 54 \end{array}$	
1 1 1 1 1 1 1	0 270 41 ¹ 0 270 51 0 270 42 ¹ 0 270 52 0 270 42 ¹ 0 270 52 0 270 44 ¹ 0 270 53 0 270 44 ¹ 0 270 54 0 270 45 ¹ 0 270 55 0 270 46 ¹ 0 270 57 0 270 48 ¹ 0 270 58	20 A 25 A 30 A 40 A 50 A 60 A 75 A	1	0 271 80	Padlock for DRX 125 and 250 For locking on "OFF" position (up to 3 locks) 1: lcu 25 kA (240 V \sim) for 1P 2: Available from January 2015
1 1 1	3P 4P 0 270 60 0 270 70 0 270 61 0 270 71 0 270 62 0 270 72	In 15 A 20 A			

	021001	021011	2070
1	0 270 62	0 270 72	25 A
1	0 270 63	0 270 73	30 A
1	0 270 64	0 270 74	40 A
1	0 270 65	0 270 75	50 A
1	0 270 66	0 270 76	60 A
1	0 272 24	0 272 26	63 A
1	0 270 67	0 270 77	75 A
1	0 272 59 ²	0 272 60 ²	80 A
1	0 270 68	0 270 78	100 A
1	0 272 25	0 272 27	125 A

DRXTM 125 technical characteristics and curves

Curves



Current limitation

DRX 125 Imax = 125 A from 10 kA to 36 kA 3P - 4P at 415 V \sim



Pass-through specific energy characterictics





Technical characteristics

		DRX 10 kA	DRX 20 kA	DRX 36 kA ⁽¹⁾	DRX 36 kA	DRX 36 kA
Number of poles		3P - 4P	3P - 4P	1P	2P	3P - 4P
Nominal current In (A)		15-125	15-125	15-100	15-100	15-125
Neutral protection for	4P version (%)	100	100	100	100	100
Rated insulation volta	ge Ui (V)	690	690	690	690	690
Rated impulse withstar	d current Uimp (kV)	6	6	6	6	6
Rated operating voltage	ge (50/60 Hz) Ue (V)	550	550	550	550	550
	110/130 V \sim	50	75	50	75	100
	$220/240~ m V \sim$	25	40	25	60	100
	277 V∿	-	-	15	50	-
Ultimate breaking	$380/415~V \sim$	10	20	10	36	36
capacity Icu (kA)	440/460 V \sim	10	15	-	30	30
IEC 60947-2	\pm 480/550 V \sim	7,5	10	-	20	20
	$-$ 600 V \sim	5	5	-	10	10
	125 V	10(2)	10(2)	10	20(2)	20(2)
	250 V	5(2)	5(2)	5	10(2)	10(2)
Ultimate breaking	$240~ m V \sim$	25	40	25	100	100
capacity Icu (kA)	480 V ∿	7.5	10	-	20	20
NEMA AB-1	600 V \sim	5	5	-	10	10
Standard breaking capacity Ics (% Icu)		50	50	50	50	50
Category of use		А	A	А	А	A
Suitable for isolation		YES	YES	YES	YES	YES
En dumant a	mechanical	25000	25000	25000	25000	25000
Endurance (cycles)	electrical at In	8000	8000	8000	8000	8000
(-)	electrical at 0.5 In	10000	10000	10000	10000	10000

1: 1P - Icu 25 kA (220/240 V∿) 2: 2 poles in series

2 poles in series



DRX™ 125

dimensions, mounting principle and connection



Mounting principle

Door cut-out







2P

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Auxiliary contacts

	Voltage (V)	Resistive load (A)
Vac	125	5
Vac	250	5
	30	5
	50	1
Vdc	75	0.75
	125	0.5
	250	0.25
Mechanical endurance (No. of operations)		5 x 10 ⁶
Temperat	ure (°C)	- 40 to 85 °C





≤ 9

(≤ 0.35") <u>≤ 17</u> (≤ 0.67")

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DRX™ 250

thermal magnetic MCCBs from 125 to 250 A



Technical characteristics and curves p. 11 to 13

For switching, control, isolation and protection of low-voltage electrical lines Can be fitted with auxiliaries Supplied with: - M8 terminals - Fixing screws - Insulating shields (2 for 3P and 3 for 4P) Fixed thermal and magnetic Conform to IEC 60947-2

Pack	Cat.Nos	DRX 250	Pack	Cat.Nos	Connection accessories
1 1	3P 4P 0 271 00 0 271 06 0 271 01 0 271 07		1	^{3P} 4P 0 271 81	Insulating shields Used to isolate the connection between each pole Set of 2
1 1 1 1	0 272 28 0 272 29 0 271 02 0 271 08 0 271 03 0 271 09 0 271 04 0 271 10 0 271 05 0 271 11	175 A 200 A 225 A	1	0 271 82 0 271 85 0 271 86	Sealable terminal shields
	02/105/02/111	Breaking capacity Icu 25 kA (415 V \sim)	1 1	0 271 74 0 271 75 0 271 94	v
1 1 1	0 271 12 0 271 18 0 271 13 0 271 19 0 272 30 0 272 31 0 271 14 0 271 20	150 A 160 A 175 A	1	0 271 80	Padlock for DRX 125 and 250 For locking on "OFF" position (up to 3 locks)
1 1 1	0 271 15 0 271 21 0 271 16 0 271 22 0 271 17 0 271 23	225 A			Control and signalling auxiliaries for DRX 125 and 250
1 1 1 1	0 271 24 0 271 30 0 271 25 0 271 31 0 272 32 0 272 33 0 271 26 0 271 32 0 271 27 0 271 33 0 271 28 0 271 34	Breaking capacity Icu 36 kA (415 V ∿) In 125 A 150 A 160 A 175 A 200 A	1 1 1	0 271 40 0 271 41 0 271 42	Auxiliary contact blocks For left-hand side mounting Up to 250 V \sim and $=$ Block with 1 auxiliary Block with 1 alarm Block with 1 auxiliary + 1 alarm Shunt trips
1	0 271 29 0 271 34		1 1 1 1 1	0 271 50 0 271 51 0 271 52 0 271 53 0 271 53 0 271 54 0 271 55	12 V∿ and == 24 V∿ and == 48 V∿ and == 100/130 V∿ 200/277 V∿ 380/480 V∿
1	0 271 78 0 271 79	Rotary handles Direct on DRX Standard (grey) Vari-depth handle Comprising: connecting rod, bracket, drilling template, mounting accessories, door locking mechanism Standard (grey)	1 1 1 1 1 1 1 1	$\begin{array}{c} 0 \ 271 \ 60 \\ 0 \ 271 \ 61 \\ 0 \ 271 \ 62 \\ 0 \ 271 \ 68 \\ 0 \ 271 \ 63 \\ 0 \ 271 \ 64 \\ 0 \ 271 \ 67 \\ 0 \ 271 \ 65 \\ 0 \ 271 \ 66 \end{array}$	Undervoltage releases 12 V∿ and = 24 V∿ and = 48 V∿ and = 110 V= 110/130 V∿ 200/240 V∿ 277 V∿ 380/415 V∿ 440/480 V∿

DRX[™] 250 technical characteristics and curves

Curves

DRX 250 Imax = 250 A from 18 kA to 36 kA 3P - 4P at 415 V \sim



Current limitation

DRX 250 Imax = 250 A from 18 kA to 36 kA 3P - 4P at 415 V \sim 10³ IP (kA)



Pass-through specific energy characterictics DRX 250 Imax = 250 A from 18 kA to 36 kA 3P - 4P at 415 V \sim 10¹⁰ |²t (A²s) 10⁹ 10⁸ 107 In=200-250 A 106 In=125-175 A 10⁵ 104 10³ 10² 10¹ 10³ 10⁴ lcc (A) 10⁵ 10⁰ 10¹ 10² Icc = estimated short circuit symmetrical current (RMS value) $I^{2}t(A^{2}s) = pass-throught specific energy$

Technical characteristics

		DRX - 18 kA	DRX - 25 kA	DRX - 36 kA
Number of poles		3P - 4P	3P - 4P	3P - 4P
Nominal current In (A)	125-250	125-250	125-250	
Neutral protection for 4P ver	rsion (%)	100	100	100
Rated insulation voltage Ui	(V)	690	690	690
Rated impulse withstand cu	rrent Uimp (kV)	6	6	6
Rated operating voltage (50)	60 Hz) Ue (V)	600	600	600
	110/130 V \sim	35	60	85
	220/240 V \sim	35	50	65
	380/415 V \sim	18	25	36
Ultimate breaking capacity	440/460 V \sim	15	25	30
Icu (kA) IEC 60947-2	480/550 V \sim	10	15	20
	600 V \sim	7,5	10	12
	125 V	10(1)	20(1)	30(1)
	250 V	5(1)	10(1)	15(1)
Ultimate breaking capacity	240 V \sim	35	50	65
Icu (kA)	480 V \sim	10	15	20
NEMA ÁB-1	600 V \sim	7.5	10	15
Standard breaking capacity	Ics (% Icu)	50	50	50
Category of use	A	A	A	
Suitable for isolation		YES	YES	YES
	mechanical	25000	25000	25000
Endurance (cycles)	electrical at In	8000	8000	8000
	electrical at 0.5 In	10000	10000	10000

1: 2 poles in series

2 poles in series



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DRX™ 250

dimensions, mounting principle and connection





Mounting principle

Door cut-out







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Connection via cable



DRX 250 - 125 to 250 A

Flexible $35 \text{ mm}^2 \rightarrow 120 \text{ mm}^2$ $\#2 \rightarrow \#250 \text{ MCM}$ or Solid $35 \text{ mm}^2 \rightarrow 150 \text{ mm}^2$ $\#2 \rightarrow \#300 \text{ MCM}$

Auxiliary contacts

	Voltage (V)	Resistive load (A)
Vac	125	5
vac	250	5
	30	5
	50	1
Vdc	75	0.75
	125	0.5
	250	0.25
Mechanical endurance (No. of operations)		5 x 10 ⁶
Temperat	ure (°C)	- 40 to 85 °C



DRX™ 630

thermal magnetic MCCBs from 320 to 630 A



Technical characteristics and curves **p. 15 to 17**

For switching, control, isolation and protection of low-voltage electrical lines Can be fitted with auxiliaries Supplied with: - M8 terminals - Fixing screws - Insulating shields (2 for 3P and 3 for 4P) Fixed thermal and magnetic Conform to IEC 60947-2

Pack	Cat.Nos	DRX 630	Pack	Cat.Nos	Connection accessories (continued)
1	3P 4P 0 272 34 0 272 38 0 272 35 0 272 39		1	^{3P} 0 262 48 0 262 49	Spreaders Set of incoming or outgoing spreaders
1 1	0 272 36 0 272 40 0 272 37 0 272 41	500 A	1	0 263 50 0 263 51	Swivel terminals Set of incoming or outgoing swivel terminals
1 1 1 1	0 272 42 0 272 46 0 272 43 0 272 47 0 272 44 0 272 48 0 272 45 0 272 49	320 A 400 A 500 A	1	0 263 52 0 263 53	Flat terminals Set of incoming or outgoing flat terminals
1	0 272 50	Rotary handles Direct on DRX Standard (grey)	1	0 262 40	Padlock for DRX 630 For locking on "OFF" position (up to 3 locks)
1	0 272 51	Vari-depth handle Comprising: connecting rod, bracket, drilling template, mounting accessories, door locking mechanism Standard (grey)			Control and signalling auxiliaries for DRX 630 For DPX ³ , DPX ³ -I and DRX Auxiliary contact or fault signal
		Connection accessories Insulating shields Used to isolate the connection between each pole	1	4 210 11	For signalling the state of the contacts or opening of the MCCB on a fault Changeover switch 3 A - 240 V \sim Shunt releases
1	0 262 30 ^{3P} 0 262 44 0 262 45	Set of 2 pieces Sealable terminal shields	1 1 1 1	4 222 39 4 222 40 4 222 41 4 222 42 4 222 43	Shunt inrush power $300 V_{\sim}$ Coil voltage 24 V_{\sim} and 48 V_{\sim} and 110 V_{\sim} and 230 V_{\sim} and 400 V_{\sim} and
1 1 1	4 222 34 4 222 35 0 262 50 0 262 51	Set of two terminal covers Cage terminals Set of 4 cage terminals for cables Set of 4 high capacity cage	1	4 222 44	Undervoltage releases Undervoltage power consumption 5 V∿ ^{Coil voltage} 24 V ₌
1	0 262 47	terminals for cables Extended front terminals Set of 4 extended front terminals	1 1 1 1 1	4 222 45 4 222 46 4 222 47 4 222 48 4 222 48 4 222 49	24 V∿ 48 V∿ and 110 V∿ and 230 V∿ and 400 V∿ and

DRXTM 630 technical characteristics and curves

Curves

DRX 630 Imax = 630 A from 36kA to 50 kA 3P - 4P



Current limitation

DRX 630 Imax = 630 A from 36kA to 50 kA 3P - 4P



Pass-through specific energy characterictics DRX 630 Imax = 630 A from 36kA to 50 kA 3P - 4P at 415 V \sim 10¹⁰ $I^2t(A^2s)$ 10⁹ 10⁸ 10 10⁶ 10⁵ 10⁴ 10³ 10 10¹ 10⁰ 10⁰ 10² 10³ 10¹ 10⁴ Icc(A) 10⁵

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Technical characteristics

		DRX - 36 kA	DRX - 50 kA
Number of poles		3P - 4P	3P - 4P
Nominal current In (A)	320-630	320-630	
Neutral protection for 4P version	(%)	100	100
Rated insulation voltage Ui (V)		690	690
Rated impulse withstand current	Uimp (kV)	6	6
Rated operating voltage (50/60 Hz	z) Ue (V)	600	600
	220/240 V ∿	65	100
	380/415 V \sim	36	50
Ultimate breaking capacity Icu	440/460 V \sim	30	40
(kA) IEC 60947-2	480/550 V ∿	25	30
	125 V	40	42
	250 V	36	38
Ultimate breaking capacity Icu	240 V \sim	60	80
(kA)	480 V ∿	25	30
NEMA AB-1	550 V \sim	25	30
Standard breaking capacity Ics (%	6 lcu)	50	50
Category of use		А	A
Suitable for isolation		YES	YES
	mechanical	25000	25000
Endurance (cycles)	electrical at In	8000	8000
	electrical at 0.5 In	10000	10000

1: 2 poles in series

2 poles in series



DRX™ 630

dimensions, mounting principle and connection

Dimensions







Door cut







Rotary handle-direct on DPX



Terminal shields



Rotary handle-vari-depth handle on door Mounting with flexible seal



1: 75 mm without mechanical system

L7 legrand

Connection



Connection via cable With cage terminals Cat.No 0 262 50







With high capacity cage terminals Cat.No 0 262 51





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