

DRX™ 100

thermal magnetic MCCBs from 15 to 100 A



Technical characteristics and curves **p. 123 to 125**

For switching, control, isolation and protection of low-voltage electrical lines
Can be fitted with auxiliaries

Supplied with:

- M5 terminal for $I_n \leq 50$ A and M8 range for $I_n > 50$ 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 100
			Breaking capacity Icu 10 kA (415 V~)
	3P	4P	In
1	0 270 00	0 270 10	15 A
1	0 270 01	0 270 11	20 A
1	0 270 02	0 270 12	25 A
1	0 270 03	0 270 13	30 A
1	0 270 04	0 270 14	40 A
1	0 270 05	0 270 15	50 A
1	0 270 06	0 270 16	60 A
1	0 270 07	0 270 17	75 A
1	0 270 08	0 270 18	100 A
			Breaking capacity Icu 20 kA (415 V~)
			In
1	0 270 20	0 270 30	15 A
1	0 270 21	0 270 31	20 A
1	0 270 22	0 270 32	25 A
1	0 270 23	0 270 33	30 A
1	0 270 24	0 270 34	40 A
1	0 270 25	0 270 35	50 A
1	0 270 26	0 270 36	60 A
1	0 270 27	0 270 37	75 A
1	0 270 28	0 270 38	100 A
			Breaking capacity Icu 35 kA (415 V~)
	1P	2P	In
1	0 270 40 ¹	0 270 50	15 A
1	0 270 41 ¹	0 270 51	20 A
1	0 270 42 ¹	0 270 52	25 A
1	0 270 43 ¹	0 270 53	30 A
1	0 270 44 ¹	0 270 54	40 A
1	0 270 45 ¹	0 270 55	50 A
1	0 270 46 ¹	0 270 56	60 A
1	0 270 47 ¹	0 270 57	75 A
1	0 270 48 ¹	0 270 58	100 A
	3P	4P	In
1	0 270 60	0 270 70	15 A
1	0 270 61	0 270 71	20 A
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	0 270 67	0 270 77	75 A
1	0 270 68	0 270 78	100 A

Pack	Cat.Nos	Mounting on rail
1	0 271 89	Plates for fixing DRX 100 on DIN rail
1	0 271 90	For 1P
1	0 271 91	For 2P
1	0 271 87	For 3P and 4P



Pack	Cat.Nos	Rotary handles
1	0 271 76	Direct on DRX Standard (grey)
1	0 271 77	Vari-depth handle Comprising: connecting rod, bracket, drilling template, mounting accessories, door locking mechanism Standard (grey)
		Connection accessories
		Insulating shields Used to isolate the connection between each pole
1	0 271 81	Set of 2
1	0 271 82	Set of 3
		Sealable terminal shields
1	0 271 91	Set of 2
		Cage terminals
1	0 271 83	Set of 2
1	0 271 70	Up to 50 A (inclusive)
1	0 271 71	From 60 to 100 A
1	0 271 92	Set of 60 pieces up to 50 A (inclusive)
1	0 271 93	Set of 60 pieces from 60 to 100 A
1	0 271 80	Padlock For locking in "off" position (up to 3 locks)
		Electrical accessories
		Auxiliary contact blocks For left-hand side mounting Up to 250 V~ and =
1	0 271 40	Block with 1 auxiliary
1	0 271 41	Block with 1 alarm
1	0 271 42	Block with 1 auxiliary + 1 alarm
		Shunt trips
1	0 271 50	12 V~ and =
1	0 271 51	24 V~ and =
1	0 271 52	48 V~ and =
1	0 271 53	100/130 V~
1	0 271 54	200/277 V~
1	0 271 55	380/480 V~
		Undervoltage releases
1	0 271 60	12 V~ and =
1	0 271 61	24 V~ and =
1	0 271 62	48 V~ and =
1	0 271 68	110 V=
1	0 271 63	110/130 V~
1	0 271 64	200/240 V~
1	0 271 67	277 V~
1	0 271 65	380/415 V~
1	0 271 66	440/480 V~

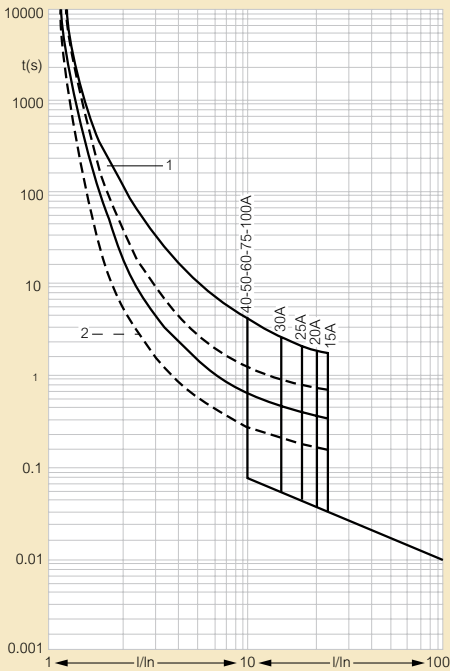
1: Icu 25 kA (240 V~) for 1P

DRX™ 100

technical characteristics and curves

Curves

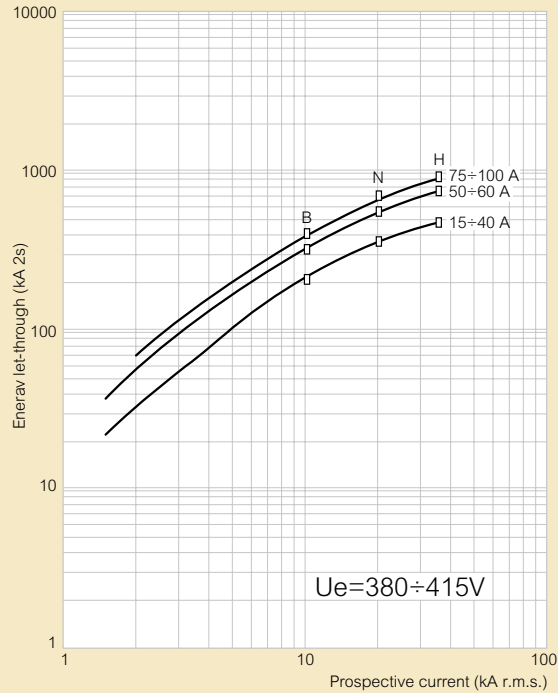
DRX 100 In max = 100 A 1P - 2P - 3P - 4P at 415 V~



t = time
I = rated current
I_r = setting current
1 = characteristic with cold start
2 = characteristic with hot start

Let through specific energy characteristics

DRX 100 In max = 100 A 1P - 2P - 3P - 4P at 415 V~

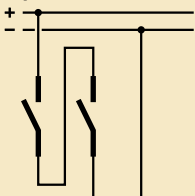


Technical characteristics

	DRX - 10 kA	DRX - 20 kA	DRX - 25 kA ⁽¹⁾	DRX - 35 kA	DRX - 35 kA
Number of poles	3P - 4P	3P - 4P	1P	2P	3P - 4P
Nominal current I _n (A)	15-100	15-100	15-100	15-100	15-100
Neutral protection for 4P version (%)	100	100	100	100	100
Rated insulation voltage U _i (V)	690	690	690	690	690
Rated impulse withstand current U _{imp} (kV)	6	6	6	6	6
Rated operating voltage (50/60 Hz) U _e (V)	600	600	600	600	600
Ultimate breaking capacity I _{cu} (kA) IEC 60947-2	110/130 V~	50	75	50	100
	220/240 V~	25	40	25	60
	277 V~	-	-	15	50
	380/415 V~	10	20	10	35
	440/460 V~	10	15	-	30
	480/550 V~	7,5	10	-	20
	600 V~	5	5	-	10
Ultimate breaking capacity I _{cu} (kA) NEMA AB-1	125 V=	10 ⁽²⁾	10 ⁽²⁾	10	20 ⁽²⁾
	250 V=	5 ⁽²⁾	5 ⁽²⁾	5	10 ⁽²⁾
	240 V~	25	40	25	100
Standard breaking capacity I _{cs} (% I _{cu})	480 V~	7,5	10	-	20
	600 V~	5	5	-	10
Category of use	A	A	A	A	A
Suitable for isolation	YES	YES	YES	YES	YES
Endurance (cycles)	mechanical	25000	25000	25000	25000
	electrical at I _n	8000	8000	8000	8000
	electrical at 0.5 I _n	10000	10000	10000	10000

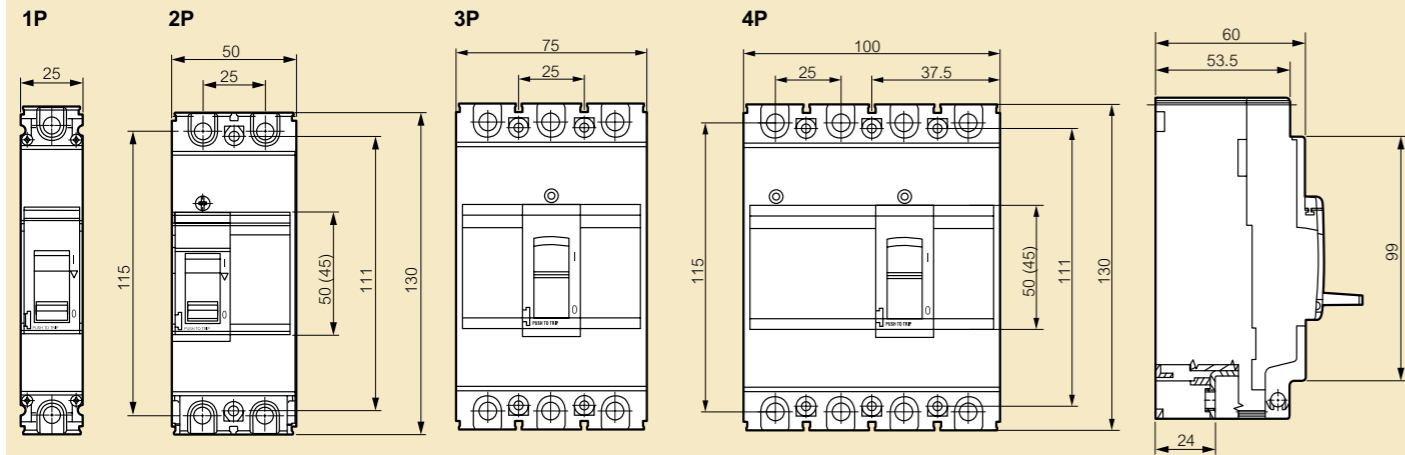
1: 1P - I_{cu} 25 kA (220/240 V~)
2: 2 poles in series

2 poles in series

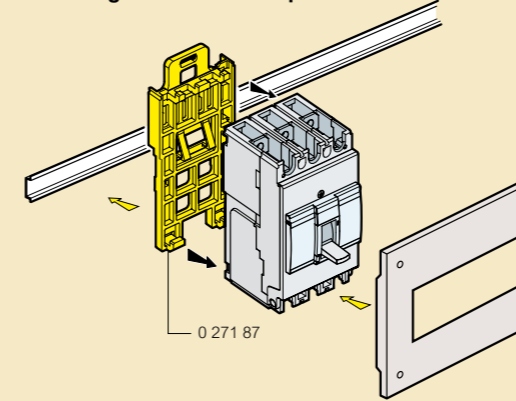


DRX™ 100
dimensions, mounting principle and connection

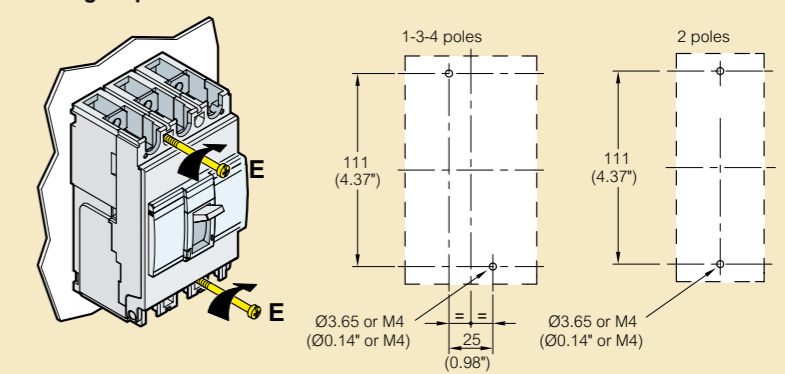
■ Dimensions



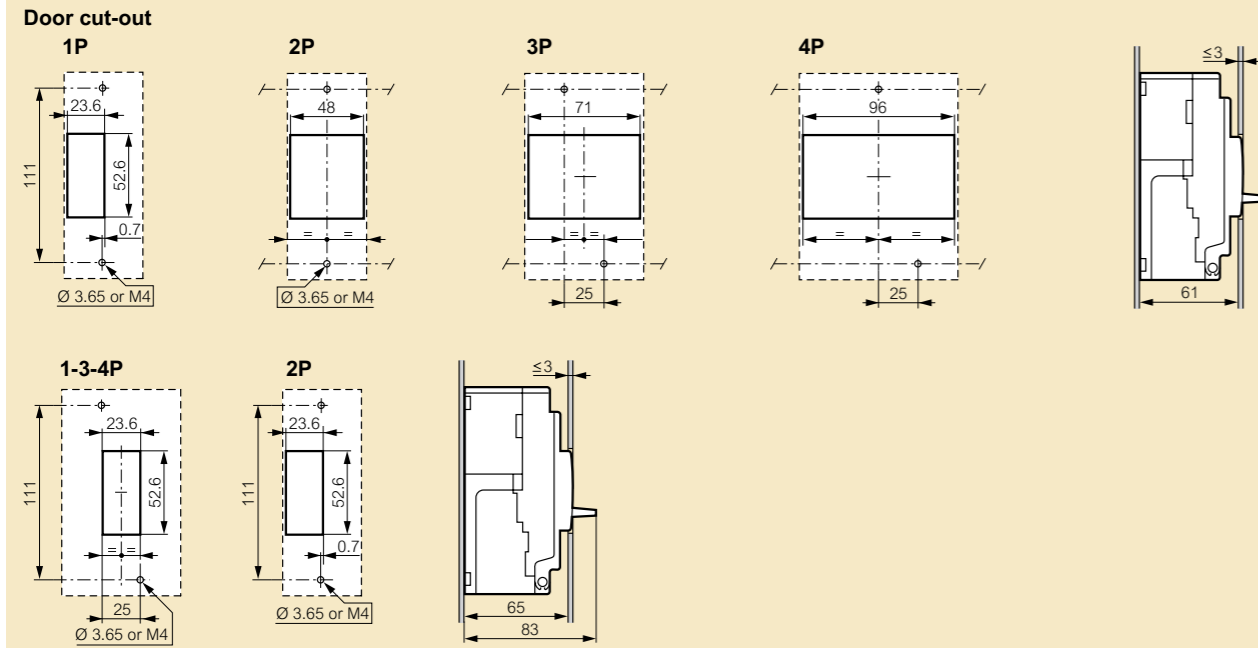
Mounting on DIN rail with plate



Fixing on plate

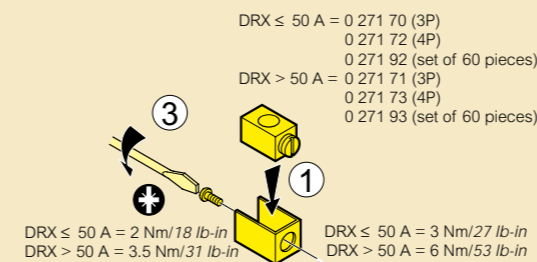


■ Mounting principle

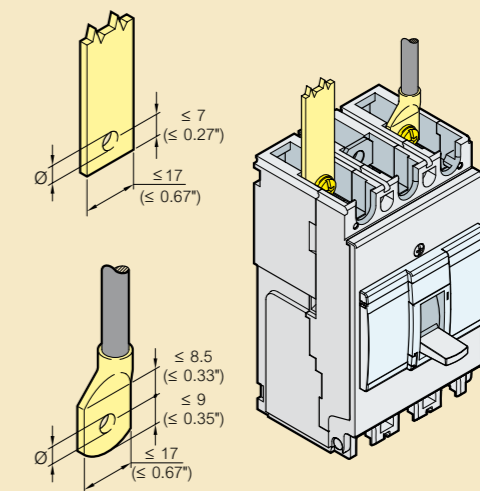


■ Connection

Connection via cable



Connection via busbar

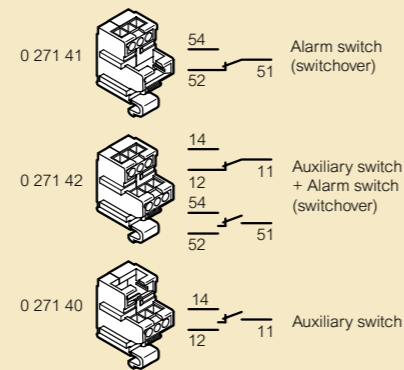


DRX ≤ 50 A		DRX > 50 A	
Flexible	2,5 → 16 mm ² #14 → #6 AWG	Flexible	10 → 35 mm ² #8 → #2 AWG
or	Solid	or	Solid
	2,5 → 25 mm ² #14 → #4 AWG		10 → 50 mm ² #8 → #1/0 AWG
2,5 to 4 mm ² (#14 to #10 AWG) flexible cables connection via crimped end-barrels			

DRX ≤ 50 A	DRX > 50 A	DRX ≤ 50 A	DRX > 50 A
Ø 5.5 mm / 0.21"	Ø 8.5 mm / 0.33"	M5	M8
		2 Nm / 18 lb-in	5.5 Nm / 49 lb-in

■ Auxiliary contacts

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



DRX™ 250

thermal magnetic MCCBs from 125 to 250 A



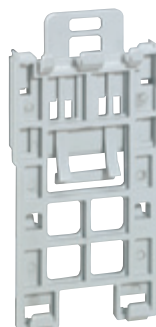
0 271 06



0 271 04



0 271 12 (captive cover)



0 271 88



0 271 74



0 271 80

Technical characteristics and curves p. 127 to 129

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
	3P	4P	Breaking capacity Icu 18 kA (415 V~)
1	0 271 00	0 271 06	In 125 A
1	0 271 01	0 271 07	150 A
1	0 271 02	0 271 08	175 A
1	0 271 03	0 271 09	200 A
1	0 271 04	0 271 10	225 A
1	0 271 05	0 271 11	250 A
			Breaking capacity Icu 25 kA (415 V~)
1	0 271 12	0 271 18	In 125 A
1	0 271 13	0 271 19	150 A
1	0 271 14	0 271 20	175 A
1	0 271 15	0 271 21	200 A
1	0 271 16	0 271 22	225 A
1	0 271 17	0 271 23	250 A
			Breaking capacity Icu 36 kA (415 V~)
1	0 271 24	0 271 30	In 125 A
1	0 271 25	0 271 31	150 A
1	0 271 26	0 271 32	175 A
1	0 271 27	0 271 33	200 A
1	0 271 28	0 271 34	225 A
1	0 271 29	0 271 35	250 A

1	0 271 88	Mounting on rail	
		Plate for fixing DRX 250 on DIN rail	

1	0 271 78	Rotary handles	
		Direct on DRX	
		Standard (grey)	
		Vari-depth handle	
		Comprising: connecting rod, bracket, drilling template, mounting accessories, door locking mechanism	
1	0 271 79	Standard (grey)	

Pack	Cat.Nos		Connection accessories
	3P	4P	Insulating shields
1	0 271 81	0 271 82	Used to isolate the connection between each pole
1			Set of 2
			Set of 3
1	0 271 85	0 271 86	Sealable terminal shields
			Set of 2
1	0 271 74	0 271 75	Cage terminals
1	0 271 94		Up to 250 A
			Set of 60 pieces
1	0 271 80		Padlock
			For locking in "off" position (up to 3 locks)

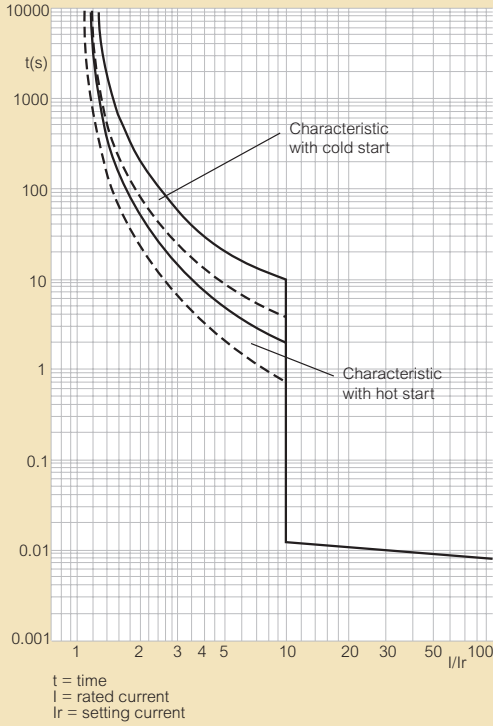
Pack	Cat.Nos		Electrical accessories
			Auxiliary contact blocks
			For left-hand side mounting
			Up to 250 V~ and =
1	0 271 40		Block with 1 auxiliary
1	0 271 41		Block with 1 alarm
1	0 271 42		Block with 1 auxiliary + 1 alarm
			Shunt trips
1	0 271 50		12 V~ and =
1	0 271 51		24 V~ and =
1	0 271 52		48 V~ and =
1	0 271 53		100/130 V~
1	0 271 54		200/277 V~
1	0 271 55		380/480 V~
			Undervoltage releases
1	0 271 60		12 V~ and =
1	0 271 61		24 V~ and =
1	0 271 62		48 V~ and =
1	0 271 68		110 V=
1	0 271 63		110/130 V~
1	0 271 64		200/240 V~
1	0 271 67		277 V~
1	0 271 65		380/415 V~
1	0 271 66		440/480 V~

DRX™ 250

technical characteristics and curves

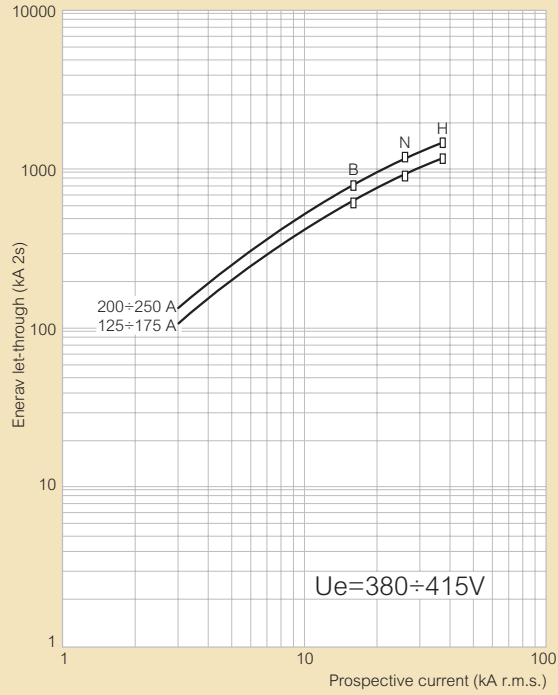
Curves

DRX 250 $I_{max} = 250\text{ A}$ 3P - 4P



Let through specific energy characteristics

DRX 250 $I_{max} = 250\text{ A}$ 3P - 4P at 415 V \sim

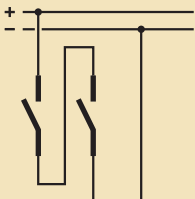


Technical characteristics

	DRX - 18 kA	DRX - 25 kA	DRX - 36 kA	
Number of poles	3P - 4P	3P - 4P	3P - 4P	
Nominal current I_n (A)	125-250	125-250	125-250	
Neutral protection for 4P version (%)	100	100	100	
Rated insulation voltage U_i (V)	690	690	690	
Rated impulse withstand current I_{imp} (kV)	6	6	6	
Rated operating voltage (50/60 Hz) U_e (V)	600	600	600	
Ultimate breaking capacity I_{cu} (kA) IEC 60947-2	110/130 V \sim	35	60	85
	220/240 V \sim	35	50	65
	380/415 V \sim	18	25	36
	440/460 V \sim	15	25	30
	480/550 V \sim	10	15	20
Ultimate breaking capacity I_{cu} (kA) NEMA AB-1	600 V \sim	7,5	10	12
	125 V \equiv	10 ⁽¹⁾	20 ⁽¹⁾	30 ⁽¹⁾
	250 V \equiv	5 ⁽¹⁾	10 ⁽¹⁾	15 ⁽¹⁾
Standard breaking capacity I_{cs} (% I_{cu})	240 V \sim	35	50	65
	480 V \sim	10	15	20
Category of use	A	A	A	
Suitable for isolation	YES	YES	YES	
	mechanical	25000	25000	25000
Endurance (cycles)	electrical at I_n	8000	8000	8000
	electrical at 0.5 I_n	10000	10000	10000

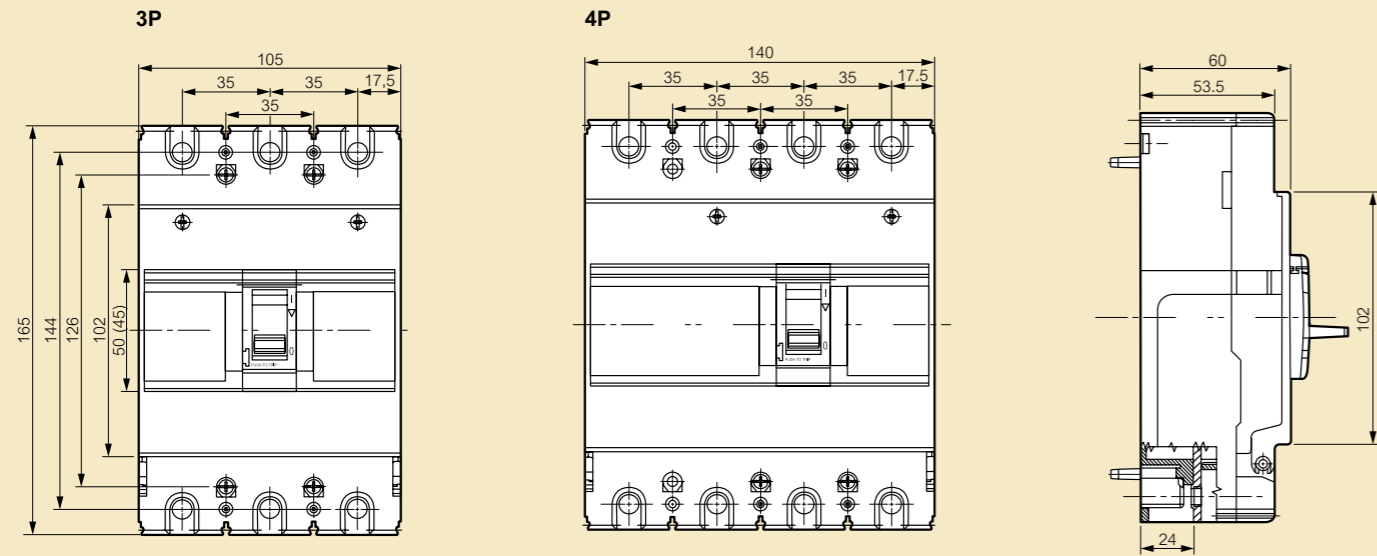
1: 2 poles in series

2 poles in series



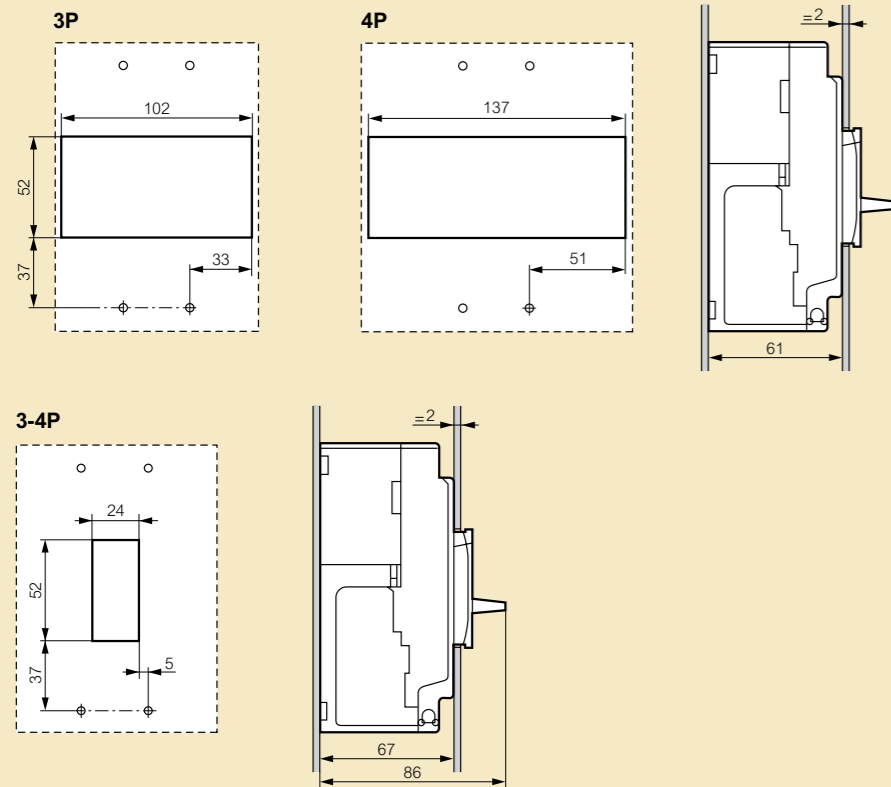
DRX™ 250
dimensions, mounting principle and connection

■ Dimensions

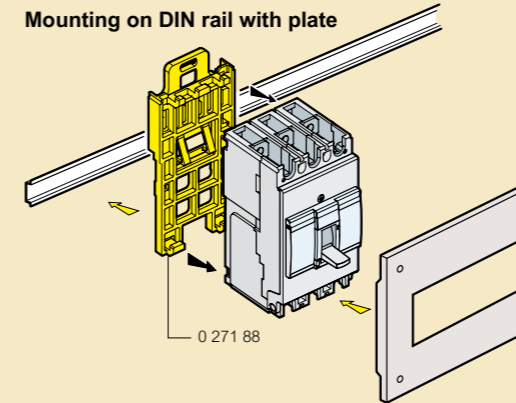


■ Mounting principle

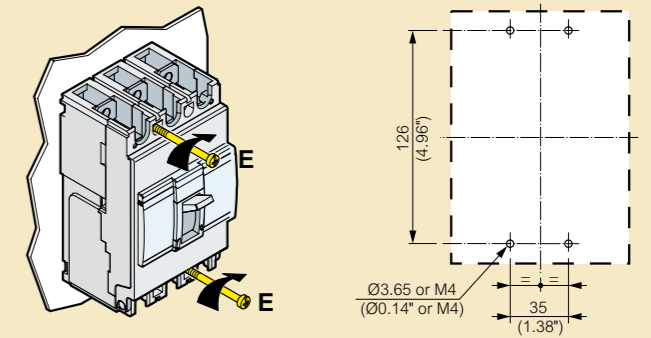
Door cut-out



Mounting on DIN rail with plate

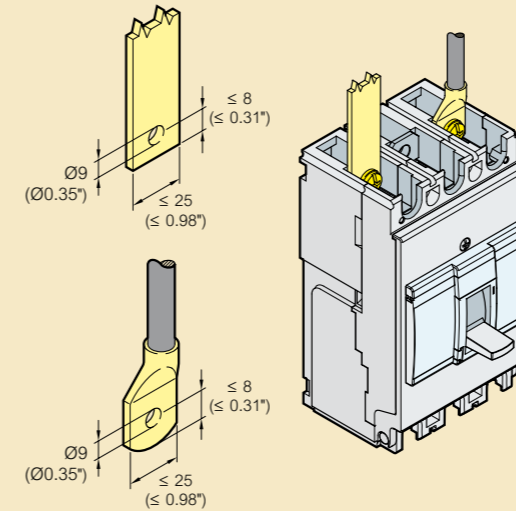


Fixing on plate

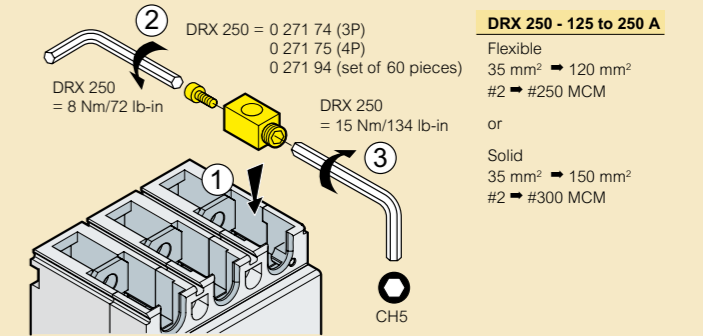


■ Connection

Connection via busbar



Connection via cable



DRX 250 - 125 to 250 A
Flexible
35 mm² → 120 mm²
#2 → #250 MCM
or
Solid
35 mm² → 150 mm²
#2 → #300 MCM

■ Auxiliary contacts

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

