



WHO SAYS

WORLD CLASS SOLUTIONS CAN'T BE ACCESSIBLE?

Launching DRX MCCBs

With a range of accessories and winning features.



 **legrand**[®]

LIVE THE ADVANTAGE

LIVE THE ADVANTAGE

The pace of life today demands continuous upgrades in efficiency and ways to live smarter. At Legrand, we anticipate your needs with technologically advanced products, investing as much as 5% on Research & Development to deliver superior electrical and digital building infrastructure.

As global specialists, we are aware of reducing the footprint and make our products energy efficient. Our engineering is exacting and is fuelled by design thinking. We call this Designering. It's not just a deep understanding of our markets, but delivering innovation and technology for being energy positive.

Such expertise helps us fulfil your needs. It also ensures that we keep introducing products that change the way you look at form and function. The energy efficient DRX MCCBs, for example, gives you features, choices and accessories that gives reliable protection and makes your organisation energy positive, as well.



Who says that simple solutions to complex problems won't work, or that the right solutions are always expensive? At Legrand, our focus on innovation and innate understanding of the Indian ecosystem has allowed us to see from the eyes of all our customers. It has given us a clear view of what's needed most in the country. Your needs are in focus once again and the DRX series of Thermomagnetic and Electronic MCCBs combine ease of operation and simplicity with robust safety and reliability.





WHY DO

THE IDEAL SOLUTIONS
NEED TO BE UNDERMINED
BY A BUDGET?

The Indian ecosystem is value conscious and seeks a solution that works to address their needs to help them manage their budgets and resources better. With the DRX series, greater value is easily within reach.

WHY CAN'T WORLD CLASS SOLUTIONS BE CUSTOMIZED TO LOCAL NEEDS?

DRX 125^{HP}, NEW DRX 250^{HP} AND DRX 630

COMPLETE RANGE. MULTIPLE FEATURES.

CHOICE

- Three different sizes
- Ratings range from 16 to 630 A
- Three breaking capacities: 25, 36 and 50 kA

RELIABILITY

- SEMKO - LOVAG certification
- Compliant with standard IEC 60947-2
- High mechanical endurance (up to 20,000 operations)

ADAPTABILITY

- Fixing on plate
- Dedicated accessories to aid ease of installation
- Wiring via cables or busbars

A COMPREHENSIVE RANGE

The robust design of DRX 125^{HP}, DRX 250^{HP} and DRX 630 offer adjustable protection, different accessories for connection and remote tripping. They are the ideal choice in terms of efficiency and affordability for protection of your electrical installations of up to 630A.



THE RANGE	DRX 125 ^{HP} Adjustable Version	DRX 250 ^{HP} Adjustable Version	DRX 630 Adjustable Version	DRX 250 ^{HP} Electronic S2 Version	DRX 250 ^{HP} Electronic Sg Version	DRX 630 Electronic S2 Version	DRX 630 Electronic Sg Version
	THERMAL MAGNETIC RANGE				ELECTRONIC RANGE		
MOUNTING	ON PLATE	ON PLATE	ON PLATE	ON PLATE	ON PLATE	ON PLATE	ON PLATE
Rated current (In)	From 16 to 125A	From 16 to 250A	From 320 to 630A	From 40 to 250A	From 40 to 250A	From 320 to 630A	From 320 to 630A
Breaking capacity (Icu) at 415 V~	25 kA, 36 kA, 50 kA	25 kA, 36 kA, 50 kA	36 kA, 50 kA	36 kA, 50 kA	36 kA, 50 kA	36 kA, 50 kA	36 kA, 50 kA
Rated service short-circuit breaking capacity Ics (% Icu)	100	100	100	100	100	100	100
Overload, Ir (A)	0.8 to 1 In	0.8 to 1 In	0.8 to 1 In	0.4 to 1 In	0.4 to 1 In	0.4 to 1 In	0.4 to 1 In
Overload time delay, tr (s)	--	--	--	3 - 5 - 10 - 15 - 20	3 - 5 - 10 - 15 - 20	3 - 5 - 10 - 15 - 20 - 30	3 - 5 - 10 - 15 - 20 - 30
Short circuit, Isd (A)	Fixed: 400 A, for In upto 40A 10 x In, for 50 A < In < 125 A	5 to 10 In	5 to 10 In	1.5 to 10 Ir	1.5 to 10 Ir	1.5 to 10 Ir	1.5 to 10 Ir
Short circuit time delay, tsd(s)	--	--	--	0.01 to 0.5	0.01 to 0.5	0.01 to 0.5	0.01 to 0.5
Earth fault,Ig (A)	--	--	--	--	0.2 to 1 In	--	0.2 to 1 In
Earth fault time delay, tg (s)	--	--	--	--	0.1 to 1s	--	0.1 to 1s
Switchable Thermal Memory	--	--	--	Yes	Yes	Yes	Yes
Overload Pre-Alarm	--	--	--	I>0.9 Ir	I>0.9 Ir	I>0.9 Ir	I>0.9 Ir
Overload Alarm	--	--	--	I>1.05 Ir	I>1.05 Ir	I>1.05 Ir	I>1.05 Ir
Over Temperature Alarm	--	--	--	T>90° C	T>90° C	T>90° C	T>90 °C
Number of poles	3P and 4P	3P and 4P	3P and 4P	3P and 4P	3P and 4P	3P and 4P	3P and 4P

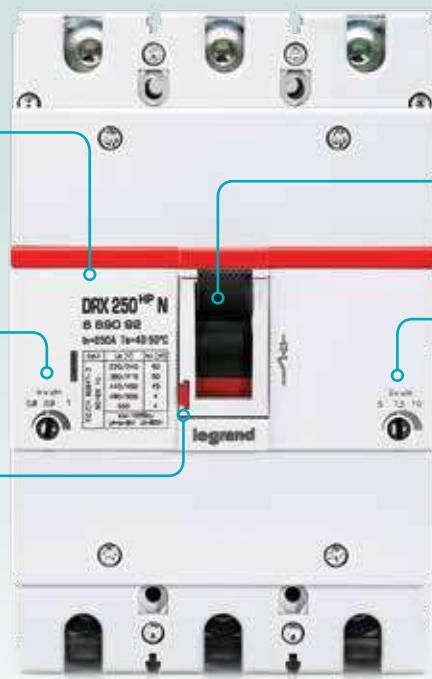
WHY CAN'T A SINGLE SOLUTION ANSWER ALL NEEDS?

DRX 250^{HP} ADJUSTABLE

Clear, simple, indelible marking on the front of the MCCB stating:
 - the thermal magnetic protection,
 - the rated current,
 - the breaking capacity.

Thermal adjustment:
 I_r from 0.8 to 1 x I_n
 on the adjustable version

Test button

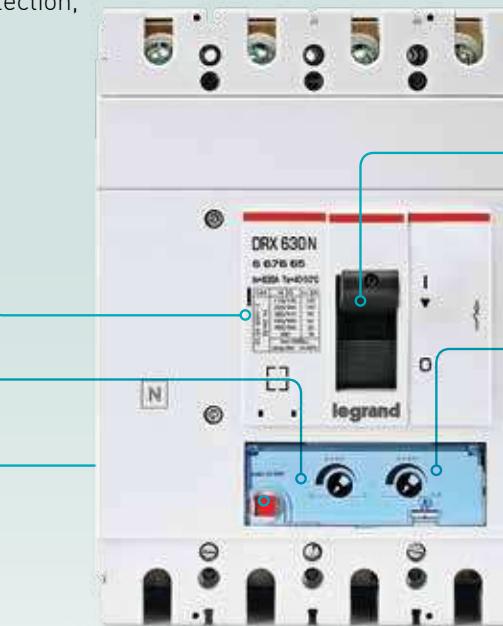


Clear identification of the state of the circuit breaker:
 I = On
 0 = Off

Magnetic adjustment:
 I_h from 5 to 10 x I_n
 on the adjustable version⁽¹⁾

DRX 630 ADJUSTABLE

Clear, simple, indelible marking on the front of the MCCB stating:
 - the thermal magnetic protection,
 - the rated current,
 - the breaking capacity.



Clear identification of the state of the circuit breaker:
 I = On
 0 = Off

Thermal adjustment: I_r from 0.8 to 1 x I_n
 (on the adjustable version)

ADJUSTABLE PROTECTION

The DRX range is suited for a wide range of applications across a cross-section of industries. The adjustable version gives the possibility to adjust thermal (protection against overloads) and magnetic⁽¹⁾ (protection against short-circuits) tripping levels.



SOLUTIONS FOR ALL TYPES OF SITES

The comprehensive DRX range provides the following solutions:

- any installation requiring flexibility for protecting electric circuits
- all residential, commercial or industrial sites requiring protection and remote tripping functions



HOW CAN A DESIGN SOLUTION ENSURE RELIABILITY AND SAFETY?

THE DRX RANGE HAS A ROBUST DESIGN WITH RUGGED CONSTRUCTION WHICH ENSURES CONTINUITY OF OPERATION EVEN IN EXCESSIVE TEMPERATURES.



The DRX series can easily work at temperatures up to 50°C.

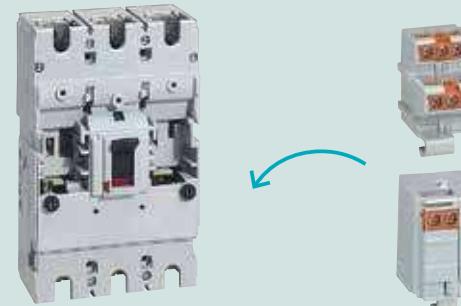


TEST OF ENDURANCE
The DRX has proven mechanical endurance up to 20,000 operations.



QUALITY LEVEL
Guaranteed by SEMKO and LOVAG certifications. Compliant with standard IEC 60947-2.

REMOTE TRIPPING FOR SAFETY



→
The control and signalling auxiliaries simply clip on.



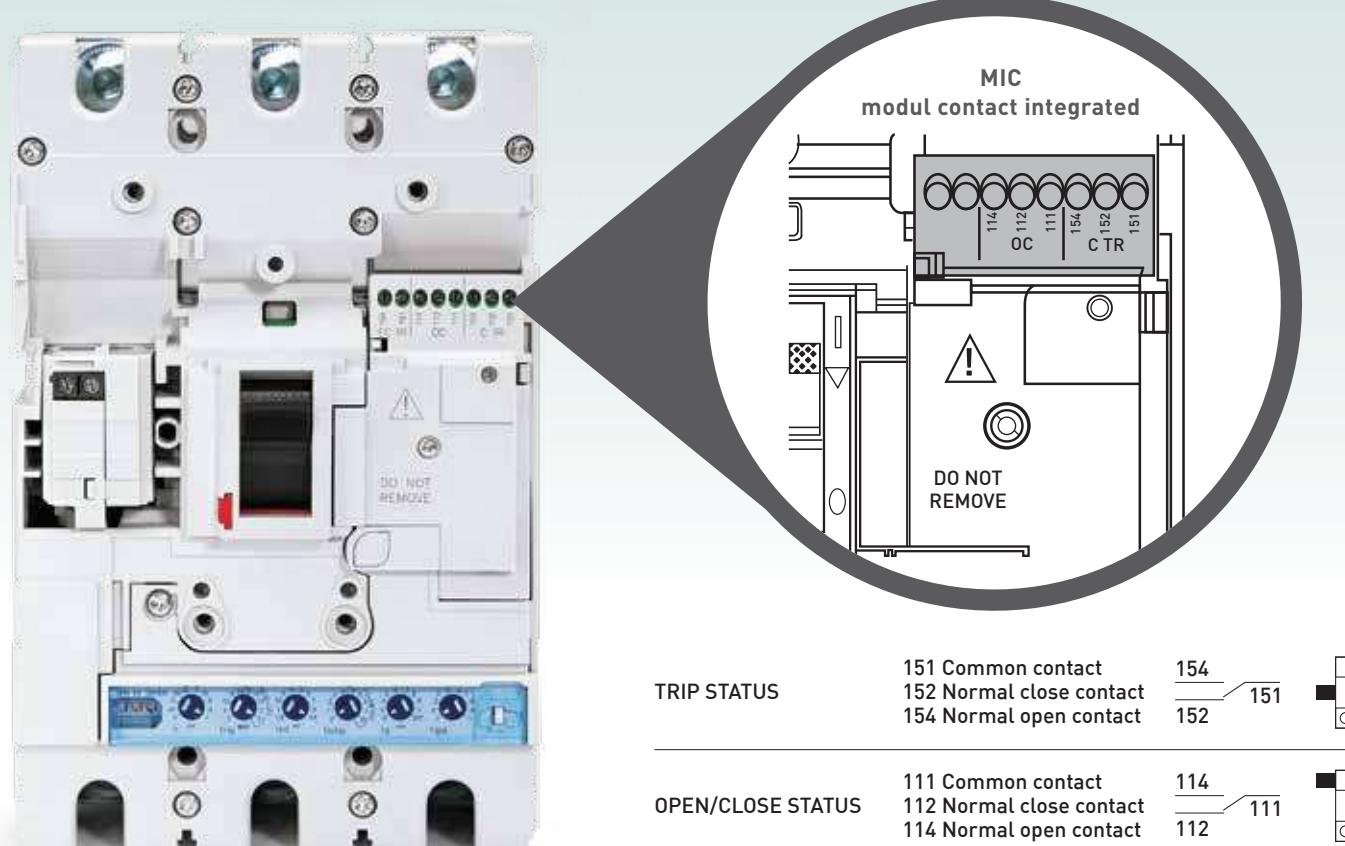
FACEPLATE PROTECTION
No live parts are accessible once installed under a faceplate.

RISK-FREE INTERVENTION
The padlock can be used to lock the handle in "Open" position during maintenance operations and thus avoid any risk of accidents due to mishandling.

HOW CAN ENERGY SAVING BE MADE TIME SAVING TOO?

The DRX 125^{HP}, DRX 250^{HP} and DRX 630 range include numerous accessories which make wiring and installation easier.

In-built auxiliary and trip contact offer faster installation. Mounting in vertical/horizontal position gives enhanced flexibility. Rotary handles offer ease of operation along with possibility to mount Keylocks for mechanical interlocking and safety.

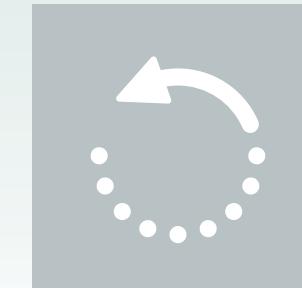


ROTARY HANDLE

The rotary handle, is available in direct or external version in order to accommodate the habits of different users or specific constraints of the site.

HORIZONTAL OPERATION

DRX 125^{HP}, DRX 250^{HP} and DRX 630 can be installed horizontally too, according to the size and type of enclosure.



DRX™ 125 HP adjustable

thermal magnetic MCCBs from 16 to 125 A



6 697 49

6 697 59

Technical characteristics and curves p. 12-13
Dimensions and installation principle p. 14-15

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

Pack	Cat.Nos	DRX 125 HP	
		Thermal adjustable from 0.8 to 1 x In	
		Breaking capacity Icu 25 kA (415 V ~)	
		3P	4P
1	6 697 00	6 697 10	16 A
1	6 697 01	6 697 11	20 A
1	6 697 02	6 697 12	25 A
1	6 697 03	6 697 13	32 A
1	6 697 04	6 697 14	40 A
1	6 697 05	6 697 15	50 A
1	6 697 06	6 697 16	63 A
1	6 697 07	6 697 17	80 A
1	6 697 08	6 697 18	100 A
1	6 697 09	6 697 19	125 A
		Breaking capacity Icu 36 kA (415 V ~)	
1	6 697 20	6 697 30	16 A
1	6 697 21	6 697 31	20 A
1	6 697 22	6 697 32	25 A
1	6 697 23	6 697 33	32 A
1	6 697 24	6 697 34	40 A
1	6 697 25	6 697 35	50 A
1	6 697 26	6 697 36	63 A
1	6 697 27	6 697 37	80 A
1	6 697 28	6 697 38	100 A
1	6 697 29	6 697 39	125 A
		Breaking capacity Icu 50 kA (415 V ~)	
1	6 697 40	6 697 50	16 A
1	6 697 41	6 697 51	20 A
1	6 697 42	6 697 52	25 A
1	6 697 43	6 697 53	32 A
1	6 697 44	6 697 54	40 A
1	6 697 45	6 697 55	50 A
1	6 697 46	6 697 56	63 A
1	6 697 47	6 697 57	80 A
1	6 697 48	6 697 58	100 A
1	6 697 49	6 697 59	125 A

DRX™ 125 HP adjustable

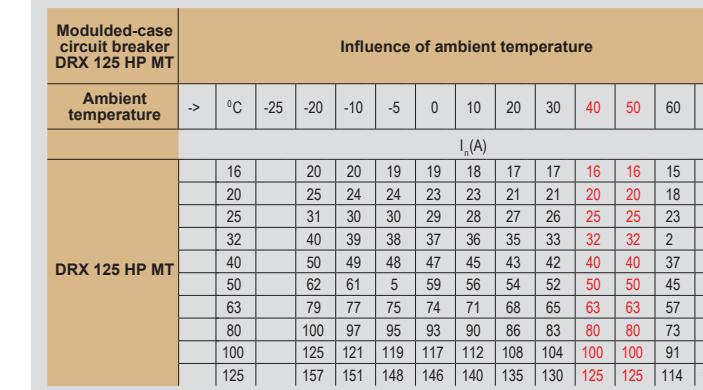
technical characteristics

Electrical and mechanical characteristics

		DRX 125 HP 25 kA	DRX 125 HP 36 kA	DRX 125HP 50 kA
Number of poles		3P - 4P	3P - 4P	3P - 4P
Release type		thermal-magnetic		
Rated current In (A)		16, 20, 25, 32, 40, 50, 63, 80, 100, 125		
Rated insulation voltage Ui (V)		800	800	800
Rated operating voltage (50/60 Hz) Ue (V)		550	550	550
Rated impulse withstand Voltage Uimp (kV)		8	8	8
Rated frequency (Hz)		50 - 60	50 - 60	50 - 60
Reference ambient temperature Tamb (°C)		40 - 50	40 - 50	40 - 50
Operating temperature (°C)		-25 to 70	-25 to 70	-25 to 70
Rated ultimate short-circuit breaking capacity Icu (kA) IEC 60947-2	220/240 V~	40	70	90
	380/415 V~	25	36	50
	440/460 V~	20	30	45
	480/500 V~	4	4	4
	550 V~	4	4	4
Rated service short-circuit breaking capacity Ics (% Icu)		100	100	100
Rated short-circuit making capacity Icm (kA) at 415 V~		52.5	75.6	105
Neutral protection for 4P version (% Ith)		100	100	100
Rated ultimate short-circuit breaking capacity Icu (kA) NEMA AB-1	220/240 V~	40	70	90
	480/500 V~	4	4	4
	550 V~	4	4	4
Category of use		A	A	A
Suitable for isolation		Yes	Yes	Yes
Thermal adjustment Ir (A)		0.8 - 0.9 - 1.0 x In		
Magnetic adjustment Ii (A)		Fixed : 400 A, for In up to 40 A 10 x In, for 50 A ≤ In ≤ 125 A		
Endurance (cycles)	mechanical	20000	20000	20000
	electrical at In	8000	8000	8000
	electrical at 0.5 In	8000	8000	8000
Neutral protection for 4P version (%)		100	100	100
Dimensions W x H x D (mm)	3P	75 x 130 x 86		
	4P	100 x 130 x 86		
Weight (kg)	3P	0.95		
	4P	1.15		

Deration chart

Thermal Magnetic MCCBs



DRX™ 125 HP accessories



0 271 80

0 271 40

0 271 51

0 271 65

Rotary handles

Pack	Cat.Nos
1	6687 70
1	6687 71

1

Connection accessories

Pack	Cat.Nos
1	6693 00
1	6693 01
1	6693 08
1	6693 09

1

Sealable terminal shields

Set of 2

Set of 3

Set of 2

Set of 3 rear terminals

Set of 4 rear terminals

Padlock for DRX 125, 250, DRX 125 HP and DRX 250 HP

For locking on "OFF" position (up to 3 locks)

1

Pack	Cat.Nos
1	0 271 40
1	0 271 41
1	0 271 42
1	0 271 54
1	0 271 55

1

Pack	Cat.Nos
1	0

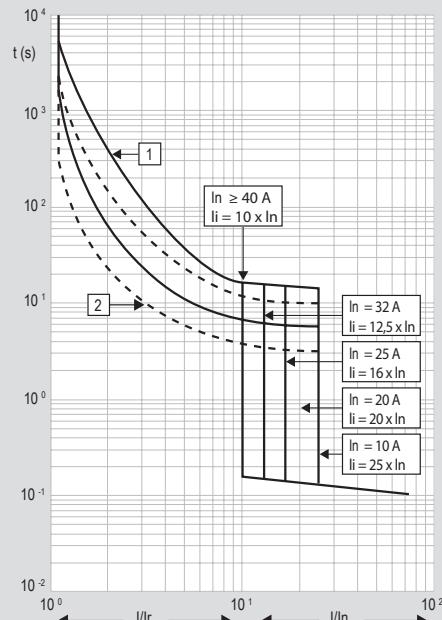
DRX™ 125 HP

tripping curves

Curves

Thermal magnetic tripping curve ($I_n = 16 \text{ A} - 80 \text{ A}$)

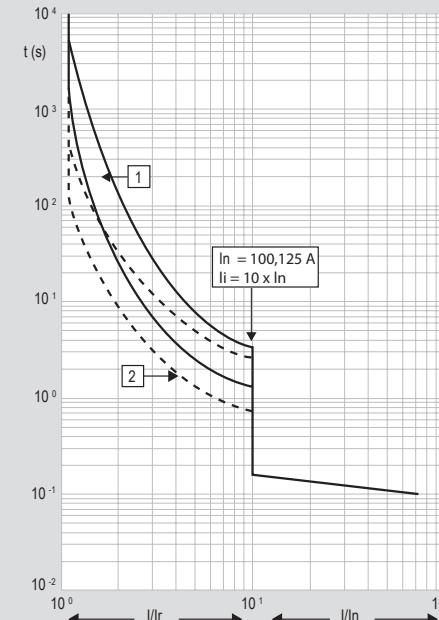
$I_{cu} = 25 / 36 / 50 \text{ kA}$ $I_{max} = 80 \text{ A}$ 3P - 4P $U_e = 415 \text{ V}\sim$



t = time
I = current
 I_n = rated current
 I_r = long time setting current
cur ve 1 = characteristic with cold start
cur ve 2 = characteristic with hot start

Thermal magnetic tripping curve ($I_n = 100 \text{ A} - 125 \text{ A}$)

$I_{cu} = 25 / 36 / 50 \text{ kA}$ $I_{max} = 125 \text{ A}$ 3P - 4P $U_e = 415 \text{ V}\sim$



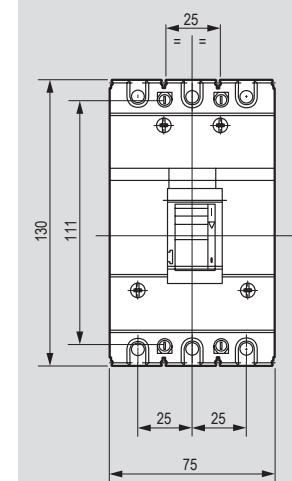
t = time
I = current
 I_n = rated current
 I_r = long time setting current
cur ve 1 = characteristic with cold start
cur ve 2 = characteristic with hot start

DRX™ 125 HP

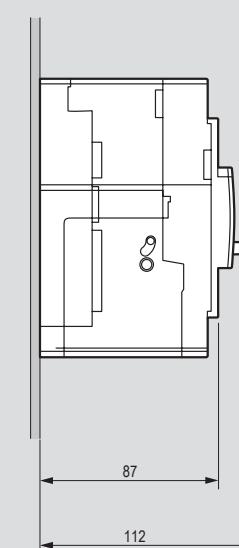
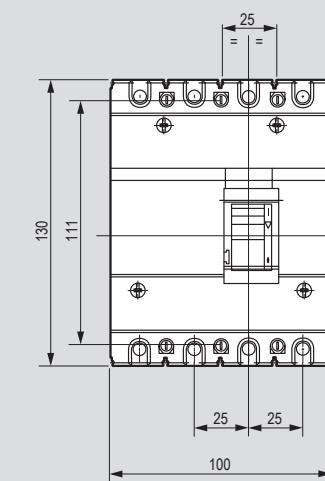
dimensions and mounting principle

Dimensions

3P



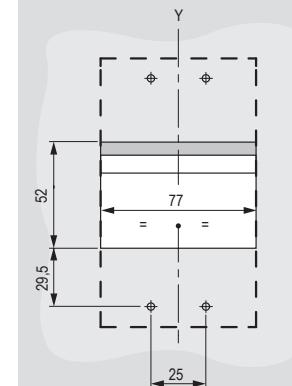
4P



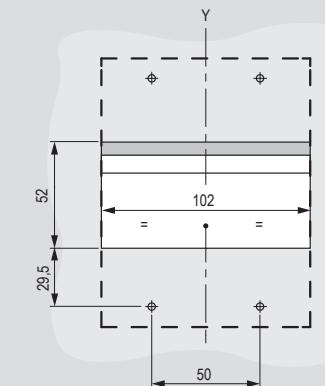
Mounting principle

Door cut-out

3P

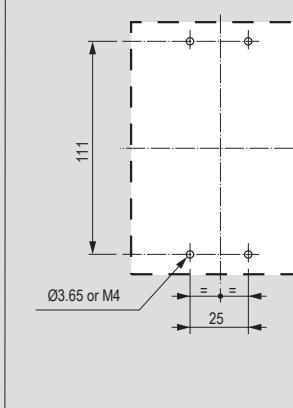


4P

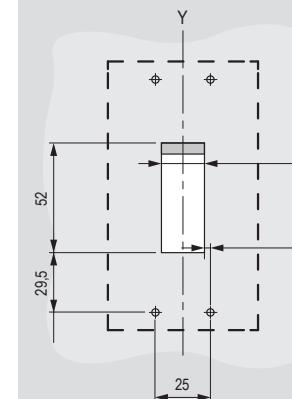


Fixing on plate

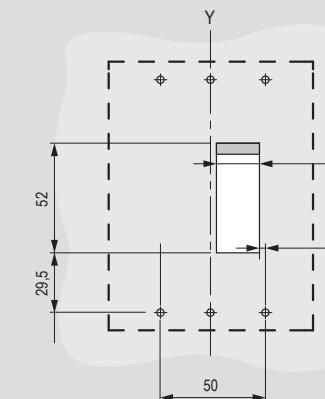
3P



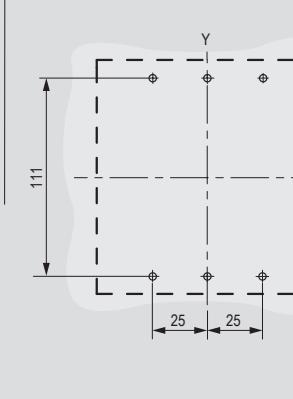
3P



4P



4P

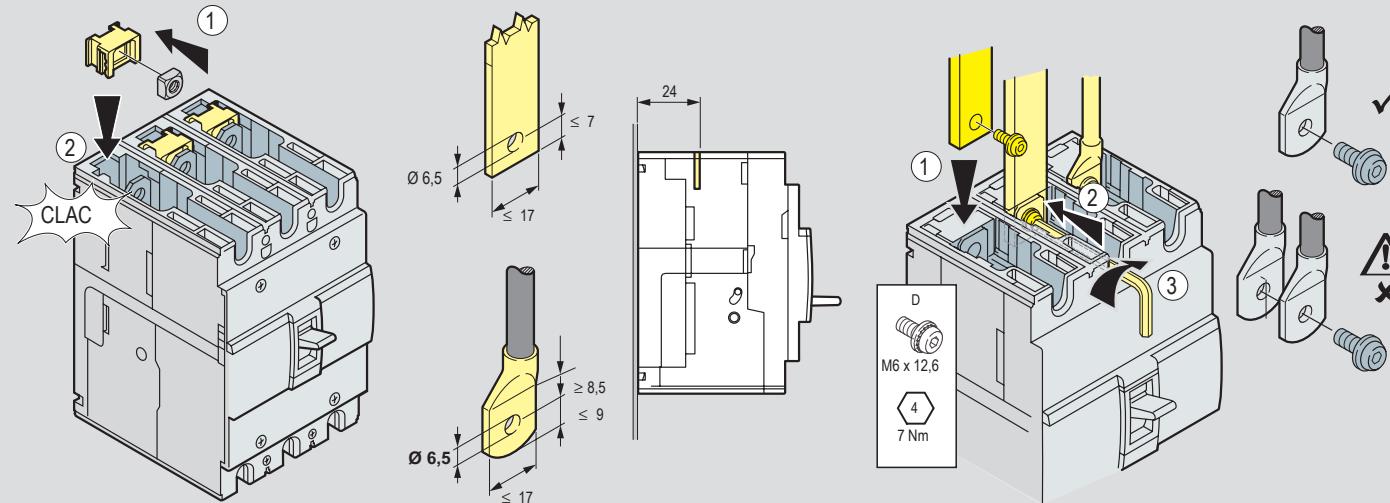


DRX™ 125 HP

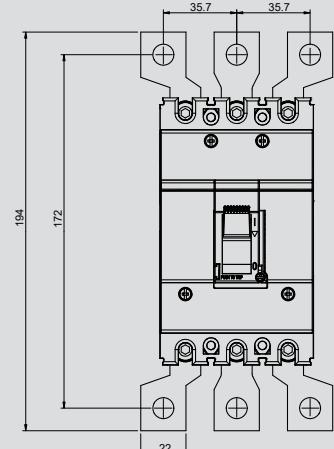
dimensions (continued) and connection

Connection

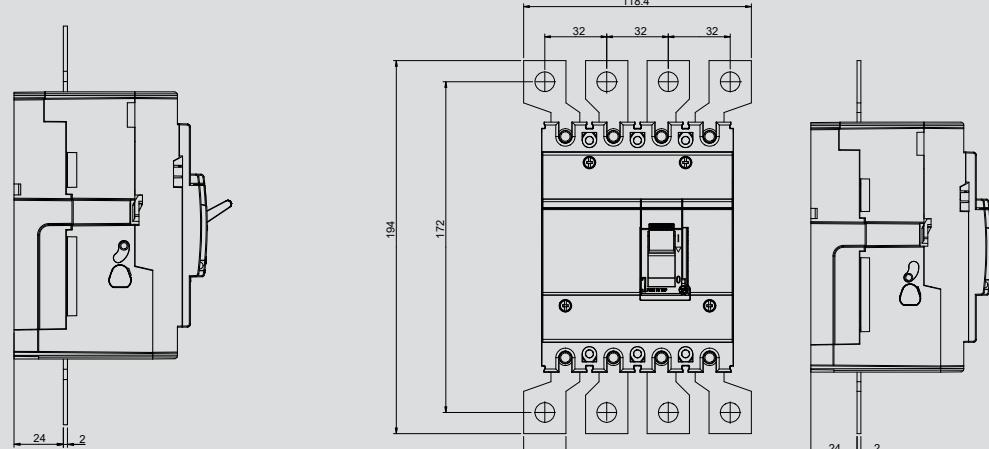
Connection via busbar



DRX125HP 3P



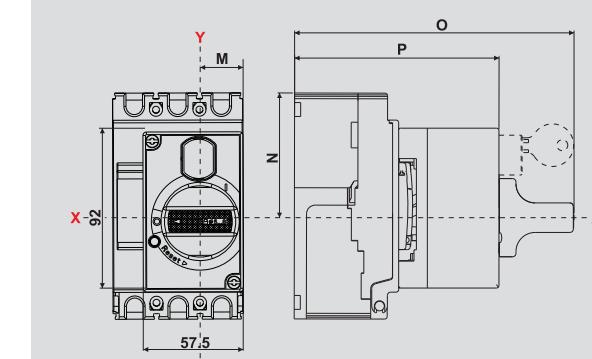
DRX125HP 4P



DRX125 HP

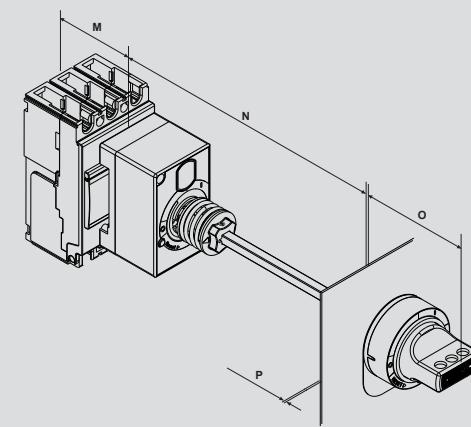
dimensions (continued) and connection

Mounting Details for Direct Handle



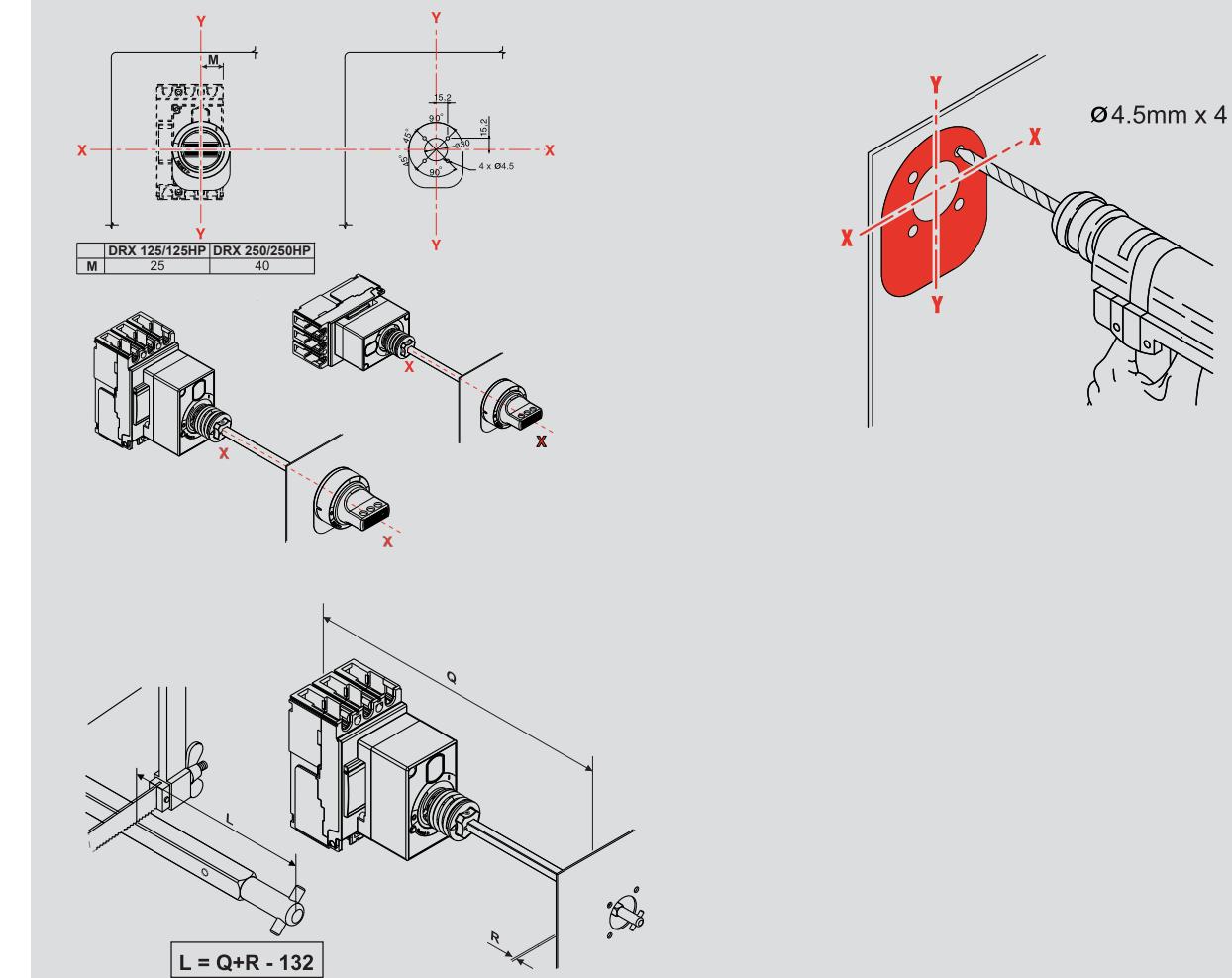
	DRX 125HP
CAT REF	668770, 668785
M	25
N	72.5
O	187
P	144

Mounting Details for Vary Depth Handle



	DRX 125HP/250HP
CAT REF	668771, 668786 668773, 668788
M	86
N	Min 84 - Min 359
O	67.2
P	0.8-2 (R)

Details for Door Cut-Out



DRX™ 250 HP adjustable

thermal magnetic MCCBs from 16 to 250 A



6 690 90



6 691 10

Technical characteristics and curves
Dimensions and installation principle

p. 18-19
p. 20-21

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

Pack	Cat.Nos	DRX 250 HP	
		Thermal adjustable from 0.8 to 1 x In	
		Magnetic adjustable from 5 to 10 x In	
		Breaking capacity Icu 25 kA (415 V~)	
		In	
1	6 690 00	3P	4P
1	6 690 01	16 A	20 A
1	6 690 02	20 A	25 A
1	6 690 03	25 A	32 A
1	6 690 04	32 A	40 A
1	6 690 05	40 A	50 A
1	6 690 06	50 A	63 A
1	6 690 07	63 A	80 A
1	6 690 08	80 A	100 A
1	6 690 09	100 A	125 A
1	6 690 10	125 A	160 A
1	6 690 11	160 A	200 A
1	6 690 12	200 A	250 A
		Breaking capacity Icu 36 kA (415 V~)	
		In	
1	6 690 40	3P	4P
1	6 690 41	16 A	20 A
1	6 690 42	20 A	25 A
1	6 690 43	25 A	32 A
1	6 690 44	32 A	40 A
1	6 690 45	40 A	50 A
1	6 690 46	50 A	63 A
1	6 690 47	63 A	80 A
1	6 690 48	80 A	100 A
1	6 690 49	100 A	125 A
1	6 690 50	125 A	160 A
1	6 690 51	160 A	200 A
1	6 690 52	200 A	250 A
		Breaking capacity Icu 50 kA (415 V~)	
		In	
1	6 690 80	3P	4P
1	6 690 81	16 A	20 A
1	6 690 82	20 A	25 A
1	6 690 83	25 A	32 A
1	6 690 84	32 A	40 A
1	6 690 85	40 A	50 A
1	6 690 86	50 A	63 A
1	6 690 87	63 A	80 A
1	6 690 88	80 A	100 A
1	6 690 89	100 A	125 A
1	6 690 90	125 A	160 A
1	6 690 91	160 A	200 A
1	6 690 92	200 A	250 A

DRX™ 250 HP

electronic S2/Sg - LSI/LSIg



6 691 98



6 692 08

Technical characteristics and curves
Dimensions and installation principle

p. 18-19
p. 20-21

For switching, control, isolation and protection of low-voltage electrical lines. Can be fitted with auxiliaries. Supplied with: screw terminals, fixing screws, insulating shields (2 for 3P and 3 for 4P).
Adjustable electronic LSI / LSIg
Conform to IEC 60947-2

Pack	Cat.Nos	DRX 250 HP electronic S2 - LSI	
		Overload, Ir (A) 0.4 to 1 In	
		Overload time delay, tr (s) 3 - 5 - 10 - 15 - 20	
		Short circuit, Isd (A) 1.5 to 10 Ir	
		Short circuit time delay, tsd(s) 0.01 to 0.5	
		Earth fault, Ig (A)	
		Earth fault time delay, tg (s)	
		Switchable Thermal Memory Yes	
		Overload Pre Alarm >0.9Ir	
		Over Temperature Alarm T>90 °C	
		Breaking Capacity Icu 36 kA (415 V)	
		In	
1	6 691 70	3P	4P
1	6 691 71	40 A	100 A
1	6 691 72	100 A	160 A
1	6 691 73	160 A	250 A
		Breaking Capacity Icu 50 kA (415 V)	
		In	
1	6 691 90	3P	4P
1	6 691 91	40 A	100 A
1	6 691 92	100 A	160 A
1	6 691 93	160 A	250 A
		DRX 250 HP electronic Sg - LSIg	
		Overload, Ir (A) 0.4 to 1 In	
		Overload time delay, tr (s) 3 - 5 - 10 - 15 - 20	
		Short circuit, Isd (A) 1.5 to 10 Ir	
		Short circuit time delay, tsd(s) 0.01 to 0.5	
		Earth fault, Ig (A) 0.2 to 1In	
		Earth fault time delay, tg (s) 0.1 to 1s	
		Switchable Thermal Memory Yes	
		Overload Pre Alarm I>0.9Ir	
		Over Temperature Alarm T>90 °C	
		Breaking Capacity Icu 36 kA (415 V)	
		In	
1	6 691 75	3P	4P
1	6 691 76	40 A	100 A
1	6 691 77	100 A	160 A
1	6 691 78	160 A	250 A
		Breaking Capacity Icu 50 kA (415 V)	
		In	
1	6 691 95	3P	4P
1	6 691 96	40 A	100 A
1	6 691 97	100 A	160 A
1	6 691 98	160 A	250 A

DRX™ 250 HP accessories



6 687 72



0 271 80



0 271 40



0 271 65

Rotary handles

Direct

Standard (grey)

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
For DRX 250 HP

Set of 2

Set of 3

Spreaders

Set of incoming or outgoing spreaders

Padlock for DRX 250 HP

For locking on "OFF" position
(up to 3 locks)

Rear terminal



Rear terminal 3P DRX 250HP



Rear terminal 4P DRX 250HP

Control and signalling auxiliaries for DRX 250 HP

Auxiliary contact blocks

For left-hand side mounting
Up to 250 V~ and =

Block with 1 auxiliary

Block with 1 alarm

Block with 1 auxiliary + 1 alarm

Pack	Cat.Nos
1	0 271 40
1	0 271 41
1	0 271 42

0 271 54

0 271 55

0 271 64

0 271 65



DRX™ 250 HP

thermal magnetic

Electrical and mechanical characteristics

	DRX 250 HP 25 kA	DRX 250 HP 36 kA	DRX 250 HP 50 kA	
Number of poles	3P - 4P	3P - 4P	3P - 4P	
Release type	thermal-magnetic			
Rated current In (A)	16, 20, 25, 32, 40, 50, 63, 80, 100, 125, 160, 200, 250			
Rated insulation voltage Ui (V)	800	800	800	
Rated operating voltage (50/60 Hz) Ue (V)	550	550	550	
Rated impulse withstand Voltage Uimp (kV)	8	8	8	
Rated frequency (Hz)	50 - 60	50 - 60	50 - 60	
Reference ambient temperature Tamb (°C)	40 - 50	40 - 50	40 - 50	
Operating temperature (°C)	-25 to 70	-25 to 70	-25 to 70	
	220/240 V~	40	70	90
Rated ultimate short-circuit breaking capacity Icu (kA) IEC 60947-2	380/415 V~	25	36	50
	440/460 V~	20	30	45
	480/500 V~	4	4	4
	550 V~	4	4	4
Rated service short-circuit breaking capacity Ics (% Icu)		100	100	100
Rated short-circuit making capacity Icm (kA) at 415 V~		52.5	75.6	105
Neutral protection for 4P version (% Ith)		100	100	100
Rated ultimate short-circuit breaking capacity Icu (kA) NEMA AB-1	220/240 V~	40	70	90
	480/500 V~	4	4	4
	550 V~	4	4	4
Category of use	A	A	A	
Suitable for isolation	Yes	Yes	Yes	
Thermal adjustment Ir (A)	0.8 - 0.9 - 1.0 x In			
Magnetic adjustment Ii (A)	Adjustable : 400 A, for In up to 40 A 6.5 - 10 - 13 x In, for In = 50 A 5 - 7.5 - 10 x In, for 63 A ≤ In ≤ 250 A			
Endurance (cycles)	mechanical	12000	12000	12000
	electrical at In	6000	6000	6000
	electrical at 0.5 In	6000	6000	6000
Neutral protection for 4P version (%)		100	100	100
Dimensions W x H x D (mm)	3P	105 x 165 x 86		
	4P	140 x 165 x 86		
Weight (kg)	3P	1.6		
	4P	2.05		

Derating chart

Thermal Magnetic MCCBs

Modulated-case circuit breaker DRX 250 HP MT	Influence of ambient temperature												
	Ambient temperature	°C	-25	-20	-10	-5	0	10	20	30	40	50	60
			I _r (A)										
	16	24	23	22	21	21	20	18	17	16	16	13	12
	20	29	29	27	26	26	24	23	21	20	20	17	15
	25	37	36	34	33	32	30	29	27	25	25	21	19
	32	47	46	44	42	41	39	37	34	32	32	27	24
	40	59	57	54	53	52	49	46	43	40	40	34	30
	50	74	72	68	66	64	61	57	54	50	50	42	38
	63	93	90	86	83	81	77	72	68	63	63	53	47
	80	118	114	109	106	103	98	92	86	80	80	67	60
	100	147	143	136	132	129	122	115	107	100	100	84	75
	125	184	179	170	166	161	152	143	134	125	125	105	94
	160	235	229	218	212	206	195	184	172	160	160	134	120
	180	265	257	245	238	232	219	207	193	180	180	151	136
	200	294	286	272	265	258	244	230	215	200	200	168	151
	225	331	322	306	298	290	274	258	242	225	225	189	169
	250	368	358	340	331	322	305	287	269	250	250	210	188

DRX™ 250 HP

electronic version

Electrical and mechanical characteristics

	DRX 250 HP 36 kA	DRX 250 HP 50 kA	DRX 250 HP 36 kA	DRX 250 HP 50 kA
Number of poles	3P - 4P	3P - 4P	3P - 4P	3P - 4P
Release type	Electronic S2	Electronic Sg	Electronic S2	Electronic Sg
Rated current In (A)	40-100-160-250	40-100-160-250	40-100-160-250	40-100-160-250
Rated insulation voltage Ui (V)	800	800	800	800
Rated operating voltage (50/60 Hz) Ue (V)	550	550	550	550
Rated impulse withstand Voltage Uimp (kV)	8	8	8	8
Rated frequency (Hz)	50 - 60	50 - 60	50 - 60	50 - 60
Reference ambient temperature Tamb (°C)	40 - 50	40 - 50	40 - 50	40 - 50
Operating temperature (°C)	-25 to 70	-25 to 70	-25 to 70	-25 to 70
	220/240 V~	70	70	90
Rated ultimate short-circuit breaking capacity Icu (kA) IEC 60947-2	380/415 V~	36	50	50
	440/460 V~	30	45	45
	480/500 V~	4	4	4
	550 V~	4	4	4
Rated service short-circuit breaking capacity Ics (% Icu)		100	100	100
Rated short-circuit making capacity Icm (kA) at 415 V~		75.6	105	105
Neutral protection for 4P version (% Ith)		0-50% -100%	0-50% -100%	0-50% -100%
Rated ultimate short-circuit breaking capacity Icu (kA) NEMA AB-1	220/240 V~	70	90	90
	480/500 V~	4	4	4
	550 V~	4	4	4
Category of use	A	A	A	A
Suitable for isolation	Yes	Yes	Yes	Yes
Thermal adjustment Ir (A)	0.8 - 0.9 - 1.0 x In			
Magnetic adjustment Ii (A)	Adjustable : 400 A, for In up to 40 A 6.5 - 10 - 13 x In, for In = 50 A 5 - 7.5 - 10 x In, for 63 A ≤ In ≤ 250 A			
Endurance (cycles)	mechanical	12000	12000	12000
	electrical at In	6000	6000	6000
	electrical at 0.5 In	6000	6000	6000
Neutral protection for 4P version (%)		100	100	100
Dimensions W x H x D (mm)	3P	105 x 165 x 86		
	4P	140 x 165 x 86		
Weight (kg)	3P	1.6		
	4P	2.05		

Derating chart

Electronic S2/Sg MCCBs

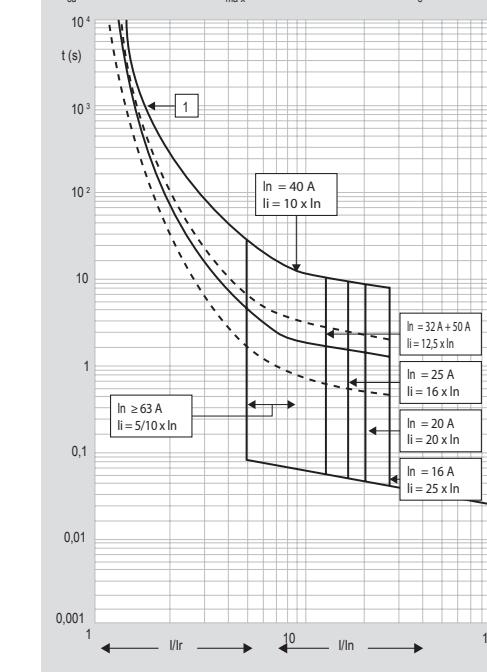
Moulded-case circuit breaker DRX 250 HP E	Influence of ambient temperature					
	Ambient temperature	°C	up to 40	50	60	70
			I _r (A)			
	40	40	40	40	40	40
	100	100	100	100	95	95
	160	160	160	160	155	155
	250	250	250	210	190	190

DRX™ 250 HP

tripping curves

Curves

Thermal magnetic tripping curve

 $I_{cu} = 25/36/50 \text{ kA}$ $I_{max} = 250 \text{ A}$ 3P - 4P $U_e = 415 \text{ V} \sim$ 

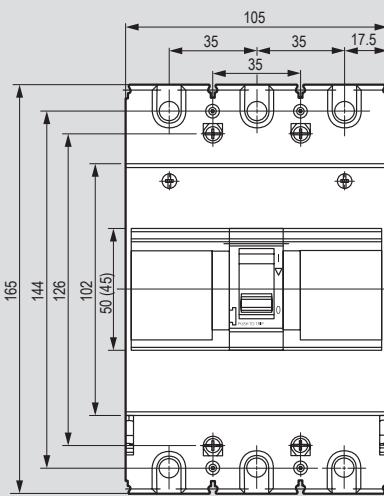
Electronic overload tripping curve

DRX™ 250 HP

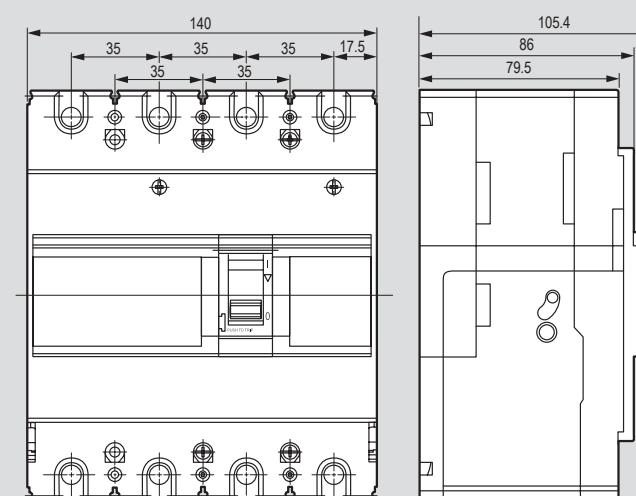
dimensions and mounting principle

Dimensions

3P

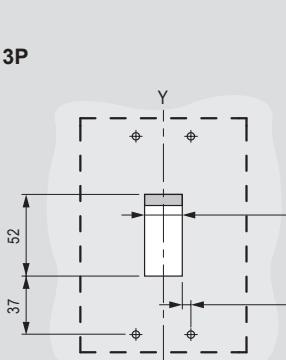
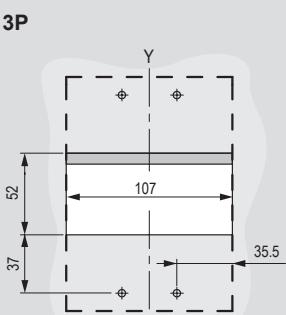


4P

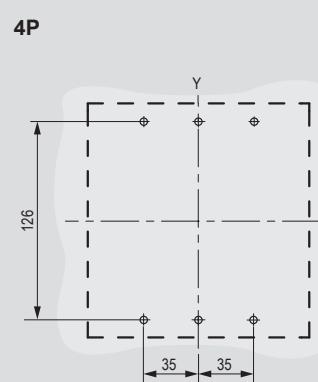
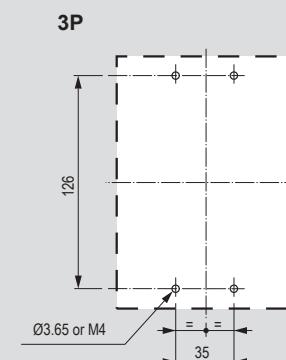


Mounting principle

Door cut-out



Fixing on plate

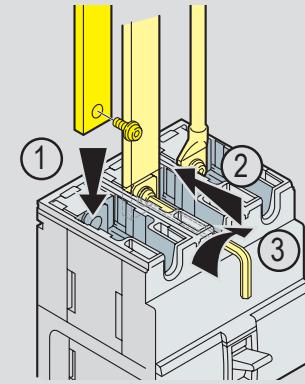
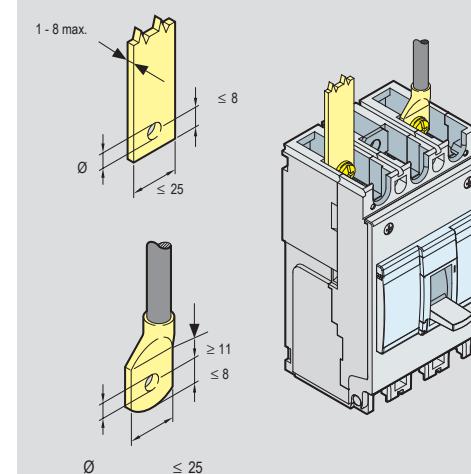


DRX™ 250 HP

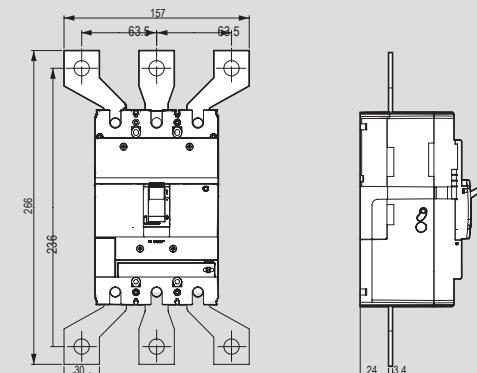
dimensions (continued) and connection

Connection

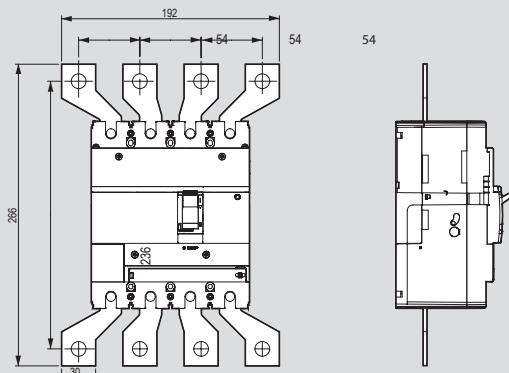
Connection via busbar



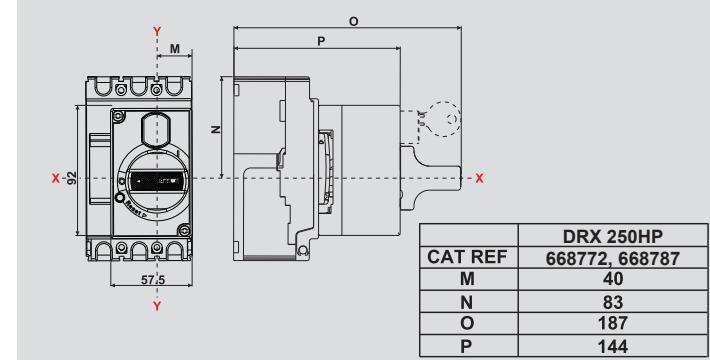
DRX 250HP - 3P



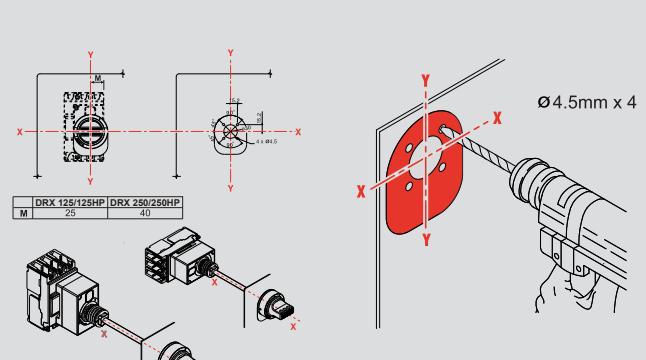
DRX 250HP - 4P



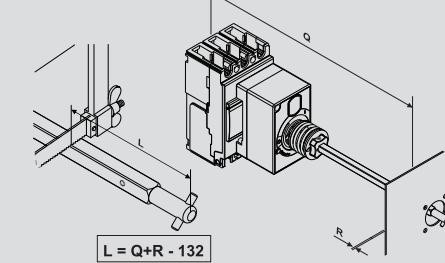
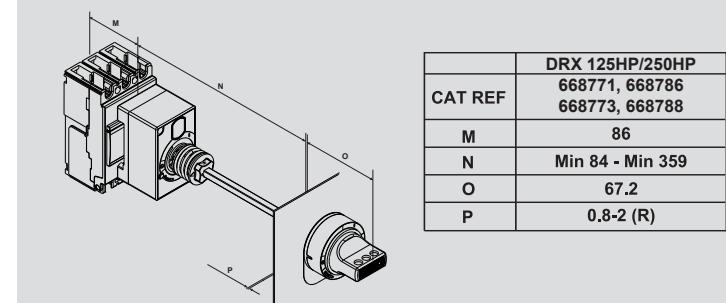
Mounting Details for Direct Handle



Details for Door Cut-Out



Mounting Details for Vary Depth Handle



DRX™ 630 adjustable

thermal magnetic MCCBs from 320 to 630 A



6 676 51

6 676 65

Technical characteristics and curves p. 24-25

For switching, control, isolation and protection of low-voltage electrical lines

Can be fitted with auxiliaries

Supplied with:

- Screw terminals
- Fixing screws
- Insulating shields (2 for 3P and 3 for 4P)

Adjustable thermal and magnetic

Conform to IEC 60947-2

Pack	Cat.Nos	DRX 630
		Thermal adjustable from 0.8 to 1 x In Magnetic adjustable from 5 to 10 x In
		Breaking capacity Icu 36 kA (415 V~) In
1	6 676 50 6 676 54	320 A
1	6 676 51 6 676 55	400 A
1	6 676 52 6 676 56	500 A
1	6 676 53 6 676 57	630 A
		Breaking capacity Icu 50 kA (415 V~) In
1	6 676 58 6 676 62	320 A
1	6 676 59 6 676 63	400 A
1	6 676 60 6 676 64	500 A
1	6 676 61 6 676 65	630 A

DRX™ 630

electronic S2/Sg - LSI/LSIg



6 699 34

6 699 39

Technical characteristics and curves p. -25

For switching, control, isolation and protection of low-voltage electrical lines

Can be fitted with auxiliaries

Supplied with:

- Screw terminals
- Fixing screws
- Insulating shields (2 for 3P and 3 for 4P)

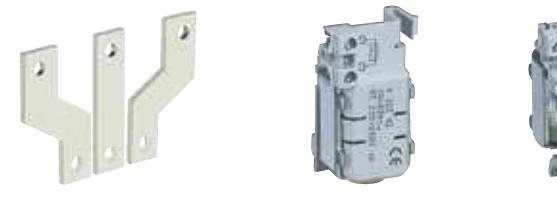
Adjustable electronic LSI / LSIg

Conform to IEC 60947-2

Pack	Cat.Nos	DRX 630 electronic S2 - LSI
		Overload, Ir (A) 0.4 to 1 In Overload time delay, tr (s) 3 - 5 - 10 - 15 - 20 - 30
		Short circuit, Isd (A) 1.5 to 10 Ir Short circuit time delay, tsd(s) 0.01 to 0.5
		Earth fault, Ig (A) Earth fault time delay, tg (s)
		Switchable Thermal Memory Yes Overload Pre Alarm I>0.9Ir Over Temperature Alarm T>90 °C
		Breaking Capacity Icu 36 kA (415 V) In
1	6 699 01 6 699 06	320 A
1	6 699 02 6 699 07	400 A
1	6 699 04 6 699 09	630 A
		Breaking Capacity Icu 50 kA (415 V) In
1	6 699 11 6 699 16	320 A
1	6 699 12 6 699 17	400 A
1	6 699 14 6 699 19	630 A

Pack	Cat.Nos	DRX 630 electronic Sg - LSIg
		Overload, Ir (A) 0.4 to 1 In Overload time delay, tr (s) 3 - 5 - 10 - 15 - 20 - 30
		Short circuit, Isd (A) 1.5 to 10 Ir Short circuit time delay, tsd(s) 0.01 to 0.5
		Earth fault, Ig (A) 0.2 to 1In Earth fault time delay, tg (s) 0.1 to 1s
		Switchable Thermal Memory Yes Overload Pre Alarm I>0.9Ir Over Temperature Alarm T>90 °C
		Breaking Capacity Icu 36 kA (415 V) In
1	6 699 21 6 699 26	320 A
1	6 699 22 6 699 27	400 A
1	6 699 24 6 699 29	630 A
		Breaking Capacity Icu 50 kA(415 V) In
1	6 699 31 6 699 36	320 A
1	6 699 32 6 699 37	400 A
1	6 699 34 6 699 39	630 A

DRX™ 630 accessories



6 250 04

4 222 42

4 222 48

Rotary handles

Direct

Standard (grey)

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
Set of 2 pieces

Spreaders

Set of incoming or outgoing spreaders

Pack	Cat.Nos
1	0 262 40

Padlock for DRX 630

For locking on "OFF" position (up to 3 locks)



Pack	Cat.Nos
1	4 210 11

Control and signalling auxiliaries for DRX 630

For DPX³, DPX³-I and DRX



Pack	Cat.Nos
1	4 222 42

Auxiliary contact or fault signal

For signalling the state of the contacts or opening of the MCCB on a fault
Changeover switch 3 A - 240 V~



Pack	Cat.Nos
1	4 222 43

Shunt releases

Shunt inrush power 300 V~



Pack	Cat.Nos
1	4 222 48

Undervoltage releases

Undervoltage power consumption 5 V~



Pack	Cat.Nos
1	4 222 49

Coil voltage

230 V~ and =

400 V~ and =

Coil voltage

220-240 V~

380-415 V~

DRX™ 630

thermal magnetic MCCBs

DRX™ 630 adjustable electronic version

Technical characteristics

	DRX 630 - 36 kA	DRX 630 - 50 kA	
Number of poles	3P - 4P	3P - 4P	
Releases type	thermal-magnetic		
Rated current In (A)	320, 400, 500, 630		
Rated insulation voltage (50/60Hz) Ui (V)	800	800	
Rated operational voltage (50/60 Hz) Ue (V)	690	690	
Rated impulse withstand voltage Uimp (kV)	8	8	
Rated frequency (Hz)	50 - 60	50 - 60	
Reference ambient temperature Tamb (°C)	40 - 50	40 - 50	
Operating temperature (°C)	-25 to 70	-25 to 70	
110/130 V~	70	100	
220/240 V~	70	100	
380/415 V~	36	50	
440/460 V~	30	40	
480/550 V~	25	30	
690 V~	14	18	
Rated service short-circuit breaking capacity Ics (%Icu)	100	100	
Rated short-circuit making capacity Icm (at 415 V~)	75.6	105	
Neutral protection for 4P version (%Ith)	100	100	
110/130 V~	18	25	
220/240 V~	18	25	
380/415 V~	9	13	
440/460 V~	8	10	
480/550 V~	5	6	
690 V~	4	5	
Rated ultimate short-circuit breaking capacity Icu (kA) NEMA AB-1	220/240 V~	70	100
480/500 V~	25	30	
690 V~	14	18	
Category of use	A	A	
Suitable for isolation	Yes	Yes	
Thermal adjustment Ir (A)	0.8 + 0.9 ÷ 1 x In		
Magnetic adjustment Ii (A)	5 + 10 x In		
Endurance (cycles)	mechanical	6000	6000
	electrical at In	2000	2000
	electrical at 0.5 In	4000	4000
Dimensions W x H x D (mm)	3P	140 x 260 x 105	
	4P	184 x 260 x 105	
Weight (kg)	3P	5.20	
	4P	6.85	

Deration chart

Thermal magnetic MCCBs

	Temperature Ta (°C)						
I _n (A)	10	20	30	40	50	60	70
320	416	384	352	320	320	288	256
400	475	460	425	400	400	360	320
500	600	550	525	500	500	455	410
630	700	683	650	630	630	580	530

Deration chart

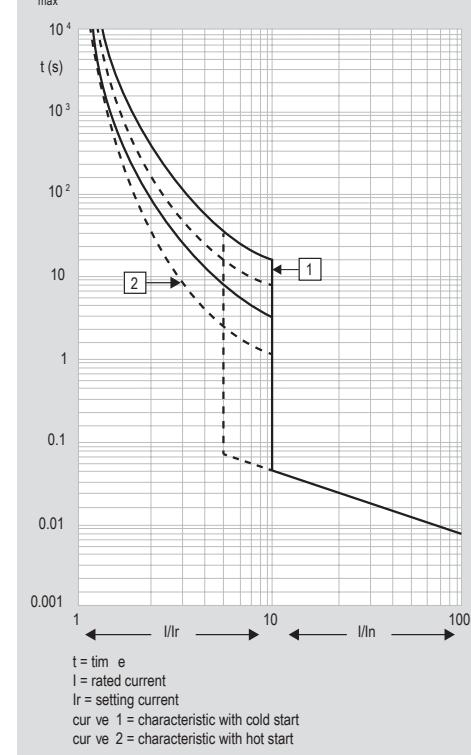
Electronic MCCBs

	Temperature Ta (°C)		
I _n (A)	up to 50	60	70
320	320	320	320
400	400	360	340
500	500	500	500
630	630	567	536

DRX™ 630 and DRX™ 630 adjustable tripping curves

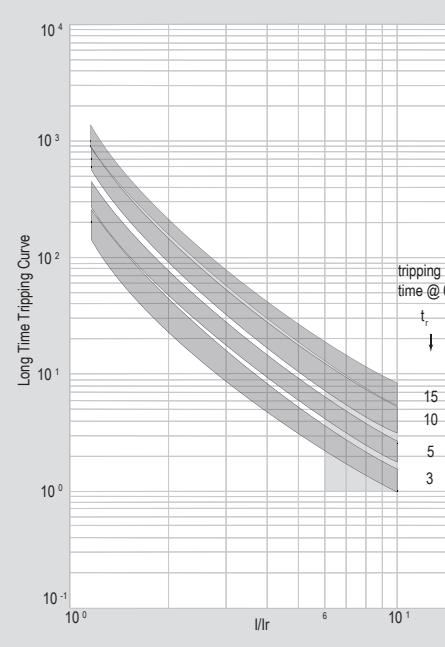
Curves - DRX 630

Thermal magnetic version tripping curve I_{max} = 630 A from 36 kA to 50 kA 3P - 4P

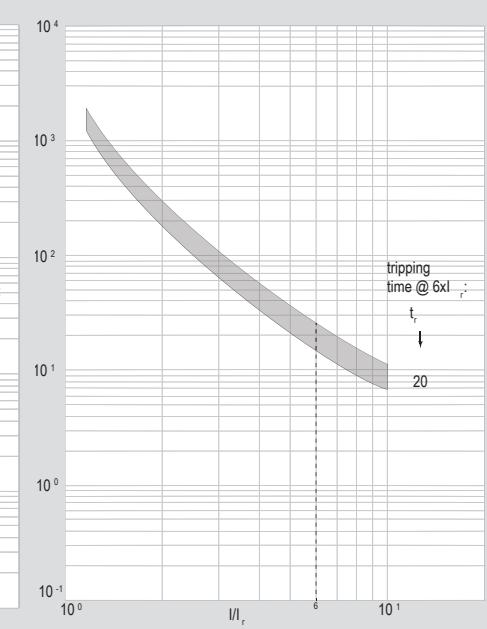


Long Time Tripping Curve
t = time
I = rated current
I_r = setting current
curve 1 = characteristic with cold start
curve 2 = characteristic with hot start

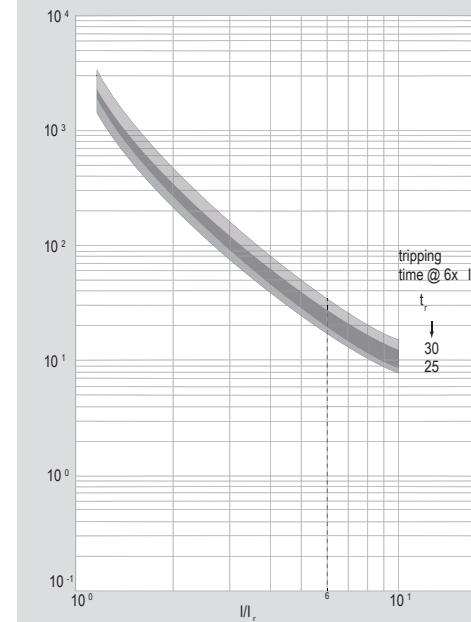
Electronic version overload tripping curve - 3 to 15 sec



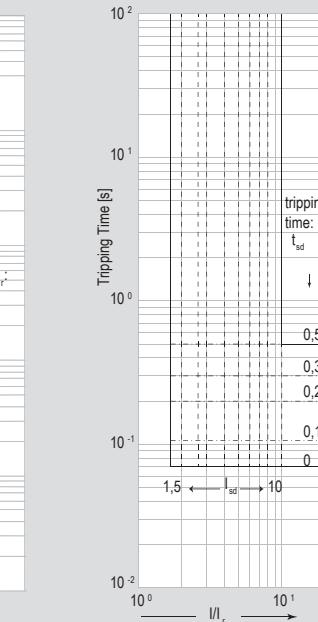
Electronic version overload tripping curve - 20 sec



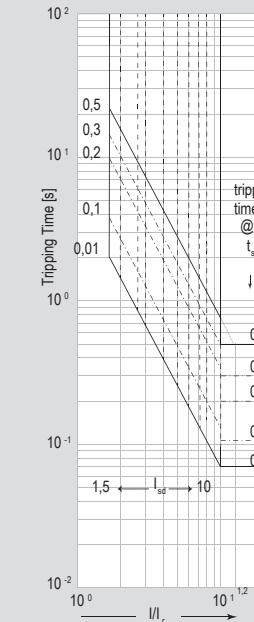
Electronic version overload tripping curve
- 25 to 30 sec



Electronic version short circuit tripping curve - I_{2t} OFF



Electronic version Short circuit tripping curve - I_{2t} = K

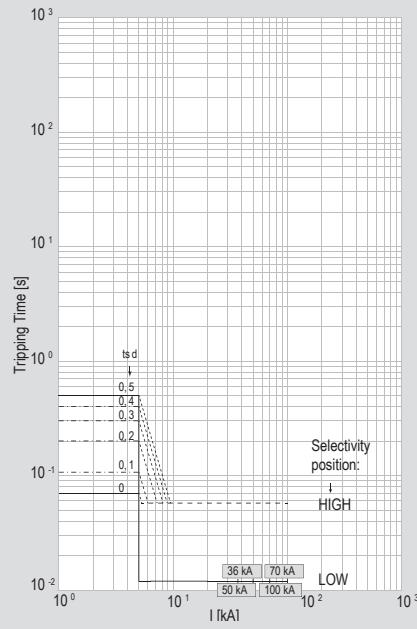


DRX™ 630 and DRX™ 630 adjustable

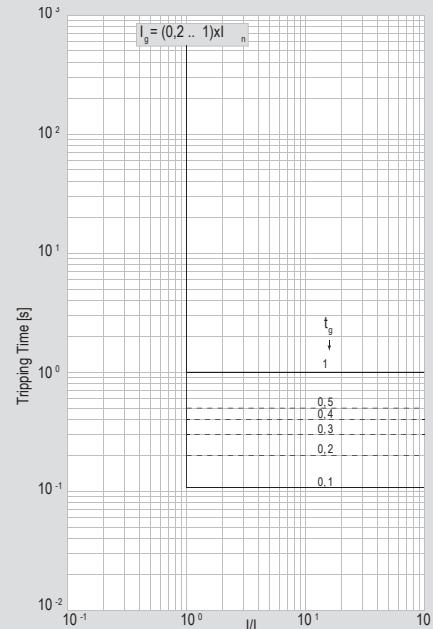
tripping curves

Curves - DRX 630

Electronic version
Instantaneous tripping curve



Electronic version
Instantaneous tripping curve

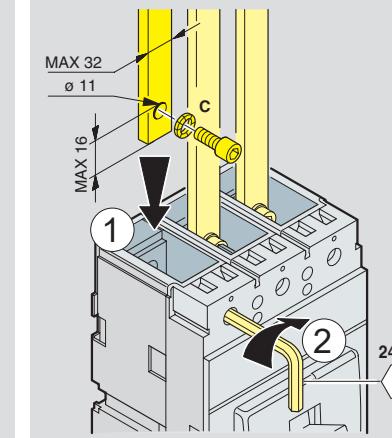


DRX™ 630 and DRX™ 630 adjustable

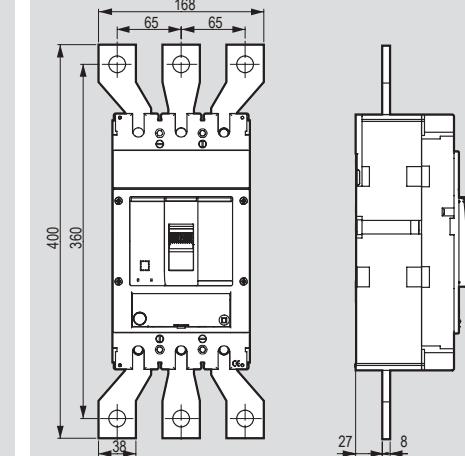
connection

Connection

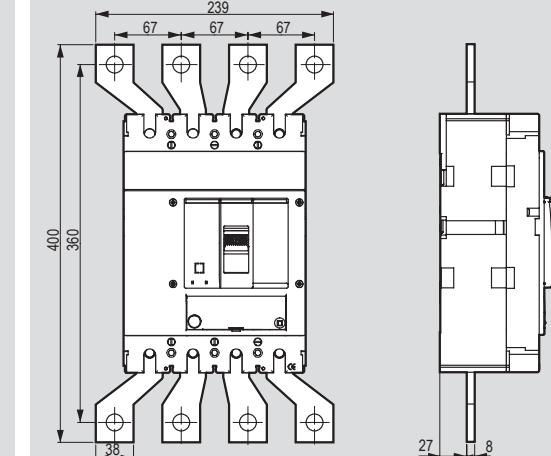
Connection via busbar



DRX630-3P



DRX630-4P

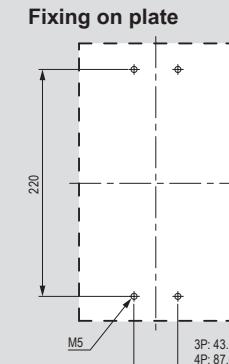
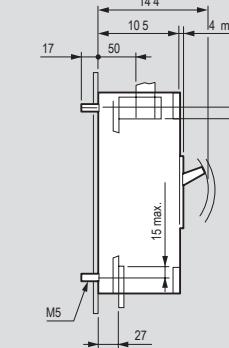
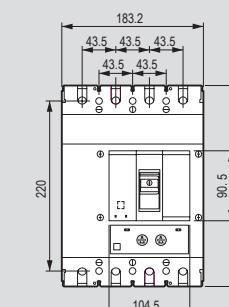
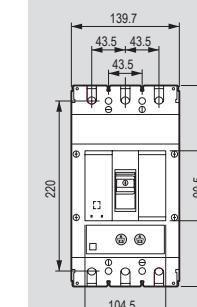


DRX™ 630 and DRX™ 630 adjustable

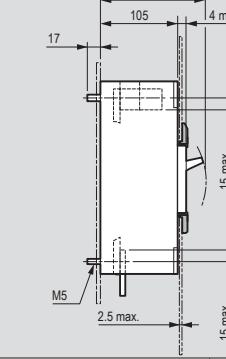
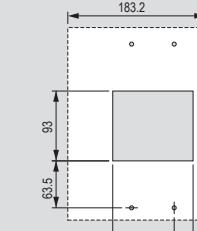
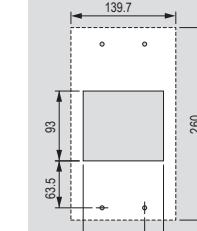
dimensions and mounting principle

Dimensions

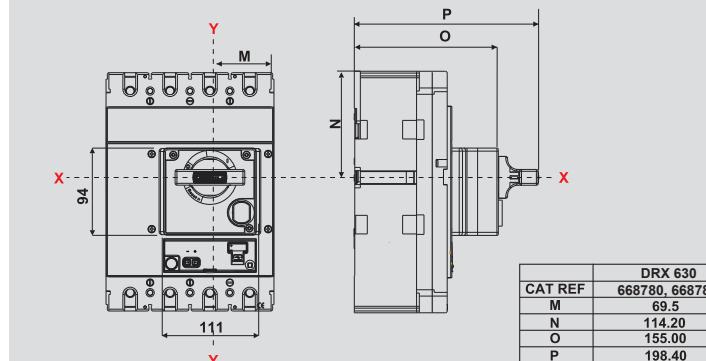
DRX 630 and DRX 630 adjustable



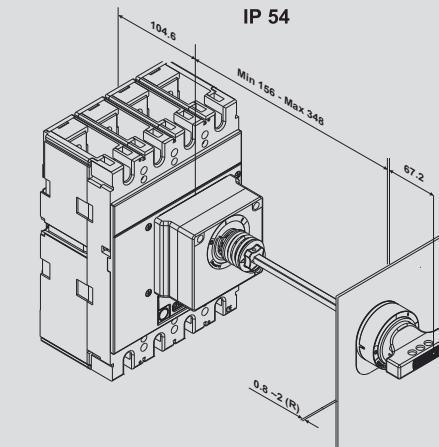
Door cut



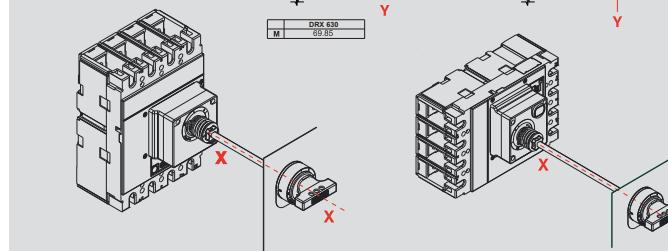
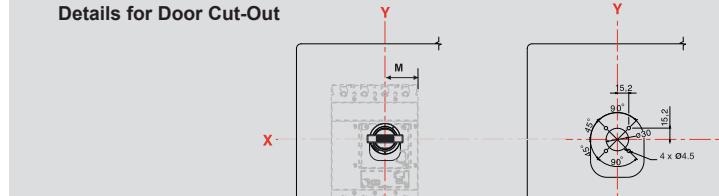
DRX630 - Mounting Details for Direct Rotary Handle



DRX630 - Mounting Details for Vary Depth Rotary Handle

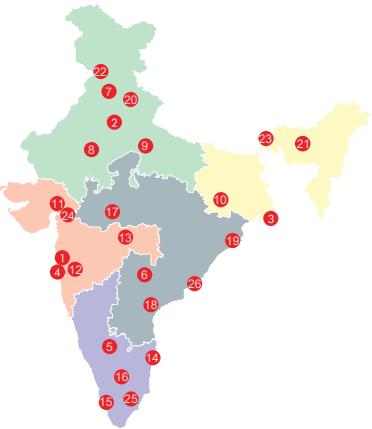


Details for Door Cut-Out



NOTES

NOTES



Branch offices

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- Plot No.95, II Floor, Shreyash Heights, VIP Road, Ramdaspeth, **NAGPUR** – 440 010.
Tel : (0712) 662 7857 / 858
Fax : (0712) 662 7859
- 10 B, (10th Floor), Prestige Center Court Office Block Vijaya Forum Mall, #183, N.S.K. Salai, Vadapalani **CHENNAI** – 600 026.
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- 94, Udhampur Singh Sarani, Ground Floor, Ashrampara, **SILIGURI** – 734 001.
Tel : (0353) 264 1067
- A-207, Universal Business Center, Near Madhuvan circle, L.P. Savani Road, Adajan, **SURAT** - 395 009. [INQAL](#)
- Aparna Towers, 1st Floor, 2/3, Bypass Road, **MADURAI** – 625 010.
Telefax : (0452) 230 8414
- 43-9-205,Near srikanya theatre 3rd floor, Plot No 10, Subbalaskhmi Nagar, Allipuram Ward, Dondaparthy Area, **VISHAKAPATHANAM** - 530 016.
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