



" Delixi Electric Easy Electric "



Delixi Electric Easy Electric



Friendly service
Convenient purchasing process
Unique brand advantage



Convenient and flexible setting parameters

Offer different rated residual operating current
 Adjustable Time-Delay



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CDM6L Earth-Leakage Circuit Breaker

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Impact of High Temperature on Tipping Release Performance Impact of Altitude on Tipping Release Performance 3-Pole (W) Total Power Loss Tripping Release Curve

OutstandingAppearance

Easy Operation

Adjustable Capacity



Co	oding	Svs	tem_					
name	Frame size		Rate Current	Pole	Accessory	Voltage of Accessory	Residual current	Installation method
CDM6L	100	L	100	3P	М	1	F	R
	1	1	1	1	Ų.	<u> </u>	1	1
	100:100AF	_:L type	40,50, 63,80,100	3:3P	X:No Accessory	X:AC400V;NO Accessory voltage; Leakage module voltage AC400V	Y:300/100/500mA (100AF, 250AF)	F:fix-type in front of the board
	250:250AF	M:M type	100.125. 160.180.200. 225.250	A:4P A Type N phase is not equipped with overcurrent trip component and N phase is always connected. The N phase does not open/close with the other 3 poles.	M:MX	N:AC230V;intenal accessory AC230V; Leakage module AC230V	T:100/300/500mA (100AF, 250AF, 400AF, 630AF)	R:fix-type behind the board
	400:400AF		200.225. 250.315. 350.400	B: 4P Type N phase is not equipped with overcurrent trip component, and N phase opens/closes with the other 3 poles. (N phase closes first and then opens)	O:OF	D:DC24V	F:300/500/1000mA (400AF, 630AF)	P:insert-type behind the board
	630:630AF		400.500.630	C: 4P C Type N phase is equipped with overcurrent trip component, and N phase always opens/closes with the other 3 poles. (N phase closes first and then opens) D: 4P D Type.	N:MN	1:Internal accessory AC400V; Leakage module AC230V		
				N phase is equipped with overcurrent trip component and N phase is always connected. The N phase does not open/close with the other 3 poles	F:OF+OF	2: Internal accessory AC230V;Leakage module AC400V		
					S:SD	3:Internal accessory DC24V;Leakage module AC400V		
					D:OF+S	4:Internal accessory DC24V;Leakage module AC230V		
					U:Leakage alarm without action module			
					I:Leakage alarm with action module			
					A:MX+Leakage alarm without action module			
					1:MX+Leakage alarm with action module			
					B:OF+Leakage alarm without action module 2:OF+Leakage alarm with action module			
					C:MN+Leakage alarm without action module			
					3:MN+Leakage alarm with action module			
					E:OF+OF+Leakage alarm without action module			
					4:OF+OF+Leakage alarm with action module			
					G:SD+Leakage alarm without action module			
					5:SD+Leakage alarm with action module			
					H:OF+SD+Leakage alarm without action module			
					6:OF+SD+Leakage alarm with action module			

ype	Pole	In A	L-type	M-type
DM6L-100	3	40	CDM6L100L403XX*F	CDM6L100M403XX*F
	i	50	CDM6L100L503XX*F	CDM6L100M503XX*F
		63	CDM6L100L633XX*F	CDM6L100M633XX*F
		80	CDM6L100L803XX*F	CDM6L100M803XX*F
DISARCE MODEL		100	CDM6L100LI003XX*F	CDM6L100M1003XX*F
	4	40	CDM6L100L404XX*F	CDM6L100M404XX*F
«		50	CDM6L100L504XX*F	CDM6L100M504XX*F
1000		63	CDM6L100L634XX*F	CDM6L100M634XX*F
0.0000		80	CDM6L100L804XX*F	CDM6L100M804XX*F
		100	CDM6L100LI004XX*F	CDM6L100M1004XX*F
DM6L-250	3	100	CDM6L250L1003XX*F	CDM6L250M1003XX*F
		125	CDM6L250L1253XX*F	CDM6L250M1253XX*F
		160	CDM6L250L1603XX*F	CDM6L250M1603XX*F
		180	CDM6L250L1803XX*F	CDM6L250M1803XX*F
LINE LINE		200	CDM6L250L2003XX*F	CDM6L250M2003XX*F
		225	CDM6L250L2253XX*F	CDM6L250M2253XX*F
DELIXI		250	CDM6L250L2503XX*F	CDM6L250M2503XX*F
	4	100	CDM6L250L1004XX*F	CDM6L250M1004XX*F
(C stand		125	CDM6L250L1254XX*F	CDM6L250M1254XX*F
	The state of the s	160	CDM6L250L1604XX*F	CDM6L250M1604XX*F
1,3000		180	CDM6L250L1804XX*F	CDM6L250M1804XX*F
0,0		200	CDM6L250L2004XX*F	CDM6L250M2004XX*F
		225	CDM6L250L2254XX*F	CDM6L250M2254XX*F
		250	CDM6L250L2504XX*F	CDM6L250M2504XX*F
M6L-400	3	200	CDM6L400L2003XX*F	CDM6L400M2003XX*F
		225	CDM6L400L2253XX*F	CDM6L400M2253XX*F
0.0.00		250	CDM6L400L2503XX*F	CDM6L400M2503XX*F
		315	CDM6L400L3153XX*F	CDM6L400M3153XX*F
THE REAL PROPERTY OF THE PERSON OF THE PERSO		350	CDM6L400L3503XX*F	CDM6L400M3503XX*F
90 MET -192.		400	CDM6L400L4003XX*F	CDM6L400M4003XX*F
I ON	4	200	CDM6L400L2004XX*F	CDM6L400M2004XX*F
- C		225	CDM6L400L2254XX*F	CDM6L400M2254XX*F
THE RESERVE OF THE PERSON NAMED IN		250	CDM6L400L2504XX*F	CDM6L400M2504XX*F
.0000000		315	CDM6L400L3154XX*F	CDM6L400M3154XX*F
		350	CDM6L400L3504XX*F	CDM6L400M3504XX*F
		400	CDM6L400L4004XX*F	CDM6L400M4004XX*F
M6L-630	3	400	CDM6L630L4003XX*F	CDM6L630M4003XX*F
		500	CDM6L630L5003XX*F	CDM6L630M5003XX*F
		630	CDM6L630L6303XX*F	CDM6L630M6303XX*F
	4	400	CDM6L630L4004XX*F	CDM6L630M4004XX*F
The second secon	7	500	CDM6L630L5004XX*F	CDM6L630M5004XX*F
000000		360	CDM6L630L5004XX*F	CDM6L630M5004XX*F

Note:* express residual current

Standard: IEC 60947-2









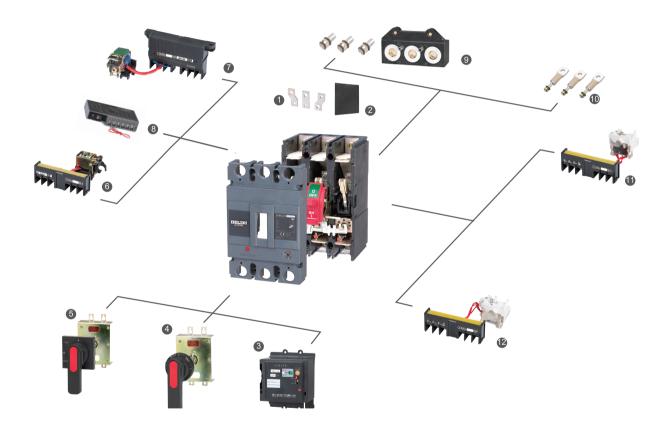


Technical Date																
Thermo-adjustable																
Basic Information(IEC60947-2)	Basic Information(IEC60947-2) Frame Size AF 100 250 400 630															
Number of Poles	3			P	3		50 4	P	Т	40 P		.P	630 3P 4P			P
Breaking Capacity Level	L	М	L	М	L	М	L	М	L	М	L	М	L	М	L	M
Rated Ultimate Short—circuit Breaking Capacity Icu(kA rms)	35	50	35	50	35	50	35	50	50	70	50	70	50	70	50	70
Rated Service Short-circuit Breaking Capacity Ics(kA rms)	22	30	22	30	22	30	22	30	30	40	30	40	30	40	30	40
Mechanical Endurance Electrical Endurance On-0ff Cycle		85 15				70 10				40	00				000	
Tripping Unit													l			
Rated Current(A) In		/50/63	3/80/1	00			/160/1 25/250		20		/250/3 /400	15/	400/500/630			
Accessory																
Indication Accessories																
OF		-			•			•			•					
SD	-						•			•						
Control Accessories																
MX(AC400,230V,DC220V)	-			•			-				•					
MN(AC400,230V)	•			•			-				•					
Extended Rotary Handle(Round and Square)					•			•				•				
AC Motor Mechanism(AC400,230V)														ı		
Mounting&Connection																
Fixed,Rear Connection			•											ı		
Plug-in,Rear Connection																
Connection																
Spreader														ı		
Protection																
Phase Barrier	-			-			•					ı				
Installation Information		See P	age 9		9	See Pa	age 10)		See P	age 1	1	,	See P	age 12	2

[&]quot;■" shows it has this option

Basic Technical Data

- Rated Insulation Voltage Ui,AC 800V
- Rated Impulse Withstand Voltage Uimp,8KV
- Rated Working Voltage Ue,AC 400V
- Rated Operational Frequency,50Hz
- Utilization Category,A



Con	Complete Functions and Accessories								
1	Spreader	6	MX	11	SD				
2	Phase Barrier	7	MN	12	OF				
3	AC Motor Mechanism	8	Leakage Module (Can't order separately)						
4	Round Exended Rotary Handle	9	Plug-in Rear Connection						
5	Square Exended Rotary Handle	10	Fixed Rear Connection						

Standard: IEC 60947-2

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Except the basic features of overload and short circuit protection, the CDM6L residual current protecting circuit breaker can also provide indirect contact protection for people and prevent fire accident due to damaged insulation and defective grounding current. The circuit breaker can also add functions if needed,including electricity leakage alarm.

Versatile functions

The circuit breaker conforms to the latest national standards, and uses reliable 3-phase power supply technology. If one phase is missing, i.e. there is one phase loss, the circuit breaker can still provide reliable leakage protection. The product has wide range of voltage input. When the voltage drops to 85V due to power supply failure, the circuit breaker can still provide reliable leakage protection. The time delay function includes non-delay mode and 3-section delay mode, which can be chosen by the user according to residual current.

Easy operation

The testing button is easy and convenient to use. The micro-switch has sensitive contact and long service life. The trip coil has excellent material and performance with remarkable trip indicating button, which provides a safe and reliable operation environment for clients.

Basic parameter information

The 4-pole products with N phase are divided to four types.

A type: N phase is not equipped with overcurrent trip component and N phase is always connected. The N phase does not open/close with the other 3 poles

B type: N phase is not equipped with overcurrent trip component, and N phase opens/closes with the other 3 poles (N phase closes first and then opens)

C type: N phase is equipped with overcurrent trip component, and N phase always opens/closes with the other 3 poles (N phase closes first and then opens)

D type: N phase is equipped with overcurrent trip component and N phase is always connected. The N phase does not open/close with the other 3 poles.

Electric motor protection

CDM6L residual current protection circuit breaker with plastic case can be used for electricity distribution protection, frame current under 400 and electric motor protection.

Isolation function

CDM6L series product has isolation protection function. The operation handle can indicate "OFF" position only when the contact is really opened.

Complete Accessories of CDM6L Series

Indicating Accessories



Auxiliary Contact(OF):

Be connected in the auxiliary circuit of switch device and used for the accessories to indicate the position of the circuit breaker contacts

Alarm Switch(SD):

Be used for the accessories under the state of on and off or trip of the indication circuit breaker for the following reasons:

- o Overload or short-circuit fault
- o Residual ea rth-leakage fault
- o Artificial Testing Release
- o Shunt Trip Release
- o Line Fault and Under-voltage Release Tripping

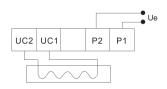


Accessory Name	Switch-on	Switch-off/Tripping
OF	F12 F11	F12 F11
Accessory Name	Switch-on	Switch-off/Tripping
SD	B12 B14 B11	B 14 B 11

Electrical Parameter of OF&SD		
		3A
Rated Thermal Current(A) Utilization Category	AC15	DC13
Working Current 50Hz AC400V	0.3A	-
DC220V	-	0.15A



Undervoltage Release Wiring



Control Accessories

Under-voltage Release(MN)

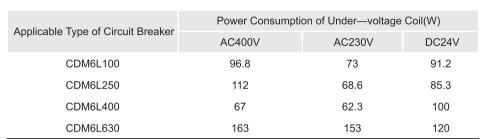
Tripping threshold between 0.35 and 0.7 times the rated voltage; when it is at 85%-110% of rated working voltage, Under-voltage Release shall ensure re the circuit breaker switch-on; when the rated working voltage is less than 35, Under voltage Release shall prevent switch-on of the Circuit breaker

Applicable Type of Circuit Breaker	Power Consumption of Under—voltage Coil(W)					
	AC400V	AC230V				
CDM6L100	3.9	3.2				
CDM6L250	4.3	3.3				
CDM6L400	3.6	2.5				
CDM6L630	2	1.6				

Complete Accessories of CDM6L Series

Shunt Release(MX)

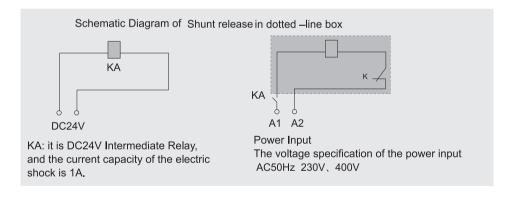
When the working voltage is between 70%-110%Us ,the shunt release shall reliably trip the circuit breaker.



When the rated control supply voltage of the shunt release is DC24V the maximum length of the copper conductor shall satisfy the following requirements:

Conductor Area Rated Control Supply Voltage(DC24V)	1.5mm²	2.5mm²
100%Us	150m	250m
85%Us	100m	160m

When the requirements above cannot be satisfied, it is recommended to adopt the following chart to design control loop of the shunt release.





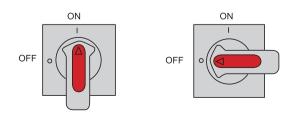
Shunt Release Wiring





• Extended Rotary Handle

- $\circ\;$ Function:indication of the three positions of switch—on,switch—off and trip
- $\circ\,$ The circuit breaker cannot be switch—on when the switch board door is open
- $\circ\;$ The door cannot be opened if the circuit breaker is ON
- An extension shaft that can be adjusted to the distance between the back of circuit breaker and door the specific distance refers to the dimensions at the rear and the installation part.
- o The OFF—Position of the circuit breaker can han9 1—3 locks with the diameter of 5 mm

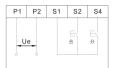


Complete Accessories of CDM6L Series

• AC Motor Mechanism

Provide on-site and remote distance control circuit breaker to implement switch-on and switch-off.







Phase Barriers

The phase barriers are used to reinforce isolation of connection points in installation with bus-bars Whether insulated or not We can easily install the phase barrier through the phase slot of the this product.

Both the inlet and outlet line of CDM6s has phase barrier.



• Leakage Alarm module

(Alarm but Non Tripping Function: Alarm but non tripping in case of leakage reach the alarm limitation meanwhile still in energized state)

The module indicates alarm by means of luminous diode.

As luninous diode indicates red, it means system leakage exceed setting value, and at that time, normally open contact turn to normal close, normal closed contact trun to normal open.





Connection Accessories

Fixed, Rear Connection
 It is easy to install and connect the products

It is easy to install and connect the products in the Rear Connection.

Plug-in Rear Connection

The plug-in connection for the products is easy for maintenance and replacement, but plug-in and plug-out cannot be done with the electricity.

Standard: IEC 60947-2

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Installation Location of Accessories

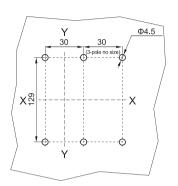
Installation Method for Tripping Release and Accessories Code



Name of Accessory		Produt Type	
	CDM6L100/250	CDM6L400	CDM6L630
Alarm Switch	← □	← □	← □
Shunt Release	•	← ● →	← • • • • • • • • • • • • • • • • • • •
Auxiliary Contact	← ■	←	←
Undervoltage Release	• 0	• 0	
Two Group Auxiliary Contact	←	←	←
Auxiliary Contact Alarm Switch	← □	← □	← □

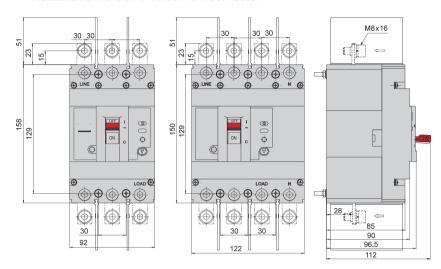
CDM6L 100AF Installation Dimension

• Chart of Fixed Front Connection Installation Hole

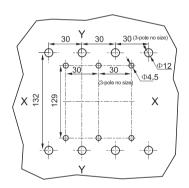


Remark: X-X, Y-Y is the center of 3-pole circuit breaker

Installation Dimension of Fixed Front Connection

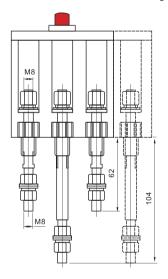


• Chart of Fixed Rear Connection Installation Hole



Remark: X-X, Y-Y is the center of 3-pole circuit breaker

• Fixed Rear Connection Wiring



• Chart of Terminal Connection Installation Hole

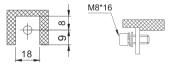
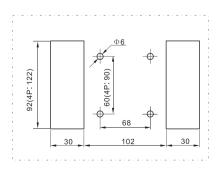
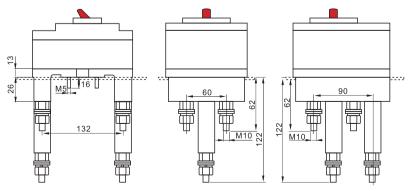


 Chart of Plug-in Rear Connection Installation Hole

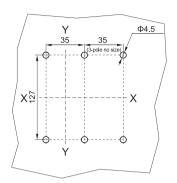


• Plug-in Rear Connection Wiring



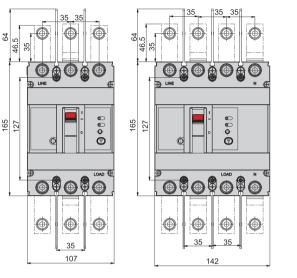
CDM6L 250AF Installation Dimension

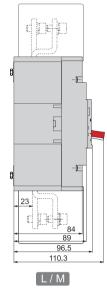
• Chart of Fixed Front Connection Installation Hole



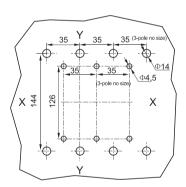
Remark: X-X, Y-Y is the center of 3-pole circuit breaker

• Installation Dimension of Fixed Front Connection





• Chart of Fixed Rear Connection Installation Hole



Remark: X-X, Y-Y is the center of 3-pole circuit breaker

• Fixed Rear Connection Wiring

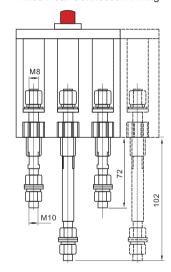


 Chart of Terminal Connection Installation Hole

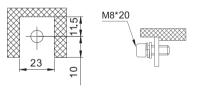
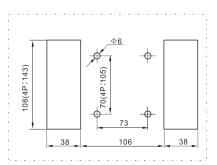
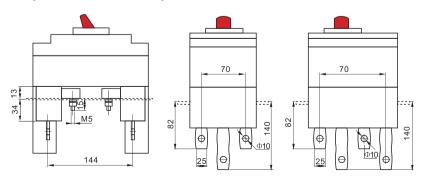


Chart of Plug-in Rear Connection Installation Hole

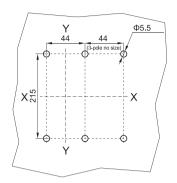


Plug-in Rear Connection Wiring



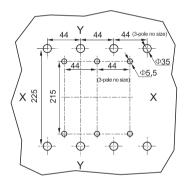
CDM6L 400AF Installation Dimension

• Chart of Fixed Front Connection Installation Hole



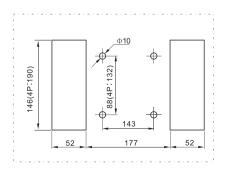
Remark: X-X, Y-Y is the center of 3-pole circuit breaker

 Chart of Fixed Rear Connection Installation Hole

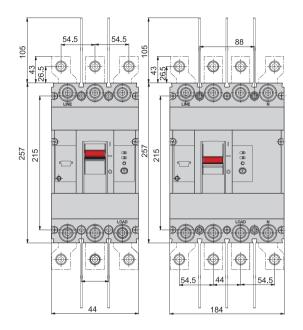


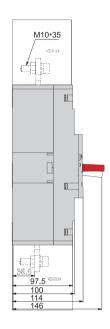
Remark: X-X, Y-Y is the center of 3-pole circuit breaker

• Chart of Plug-in Rear Connection Installation Hole



• Installation Dimension of Fixed Front Connection





• Fixed Rear Connection Wiring

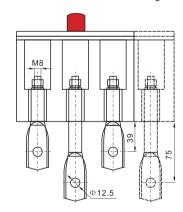
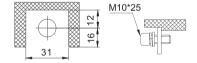
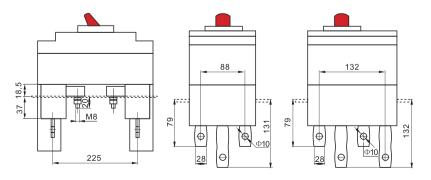


 Chart of Terminal Connection Installation Hole

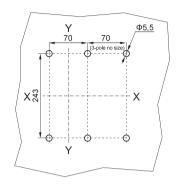


• Plug-in Rear Connection Wiring



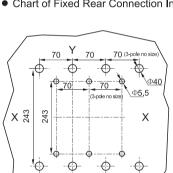
CDM6L 630AF Installation Dimension

Chart of Fixed Front Connection Installation Hole



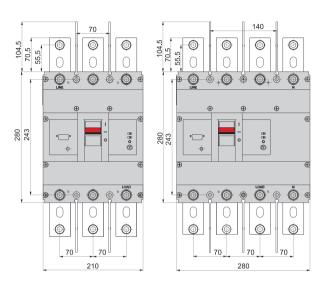
Remark: X-X, Y-Y is the center of 3-pole circuit breaker

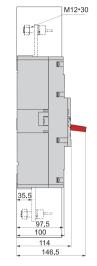
• Chart of Fixed Rear Connection Installation Hole



Remark: X-X, Y-Y is the center of 3-pole circuit breaker

• Installation Dimension of Fixed Front Connection





Fixed Rear Connection Wiring

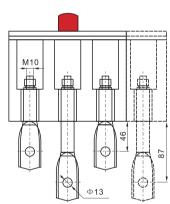


 Chart of Terminal Connection Installation Hole

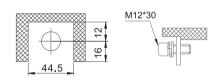
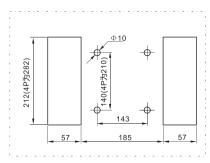
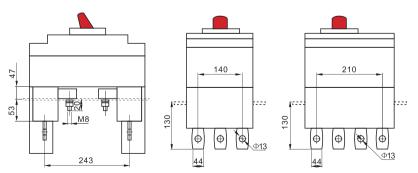


 Chart of Plug-in Rear Connection Installation Hole



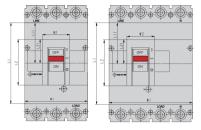
Plug-in Rear Connection Wiring



Standard: IEC 60947-2

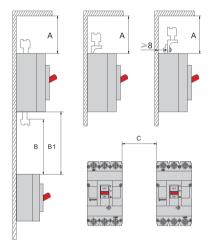
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• CDM6L Earth—Leakage circuit Breaker connection Hole-opening Dimension



CDM6L100-630 3P CDM6L100-630 4P

Type of Circuit Breaker	Pole	Exposure of Pull—out H	of Front Cove Handle	er and	Exposure of Pull—out Handle Only		
	No.	W1	L1	L11	W2	L2	L21
CDMCI 100AE	3P	92	88	42	35	60	30
CDM6L100AF	4P	122	88	42	35	60	30
CDM6L250AF	3P	107	102	51	35	60	30
	4P	142	102	51	35	60	30
CDM6L400AF	3P	140	180	90	61	102	53
CDM6L400AF	4P	184	180	90	61	102	53
CDM6L620AE	3P	210	200	100	65	102	51
CDM6L630AF	4P	280	200	100	65	102	51



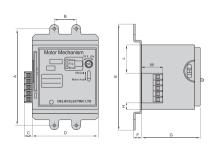
• Safety Distance

Type of Circuit Breaker	A(mm)	B(mm)	B1(mm)	C(mm)
CDM6L100AF	60	60		30
CDM6L250AF	60	60	Length of Exposed	30
CDM6L400AF	110	110	Conductor +B	70
CDM6L630AF	110	110		70

Remark:no matter whether the products have the accessories,the distance between the products must meet the requirements of C distance.

Installation Dimension

AC Motor Mechanism

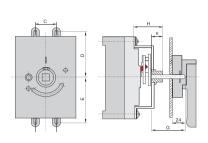


Type of Circuit Breaker	Α	В	С	D	Е	F	G	Н	L	М	
CDM6L100AF	129	30	11	90	144	14	80	8.5	38.5	28.5	
CDM6L250AF	126	35	11	104	138	13	80	8.5	38.5	28.5	
CDM6L400AF	215	44	11	140	232	22	112	12	97.5	28.5	
CDM6L630AF	243	70	11	150	260	16	112	12	97.5	28.5	

Standard: IEC 60947-2

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• CDM6L100—630 Frame Extension Rotary Handle Base Dimension

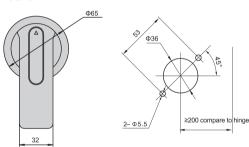


Type of Circuit Breaker	С	D	E	Н	К
CDM6L100AF	30	51.5	51.5	54	20
CDM6L250AF	35	71.5	71.5	56	20
CDM6L400AF	44	107.5	107.5	76	20
CDM6L630AF	70	121.5	121.5	76	20

Remark: the shortest distance of G connecting rod is 50mm and ex-factory standard configuration is 150mm, please contact the factory if the special customization is required.

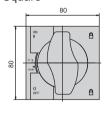
• CDM6L100—630 Frame Extension Rotary Handle

Round

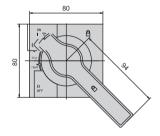


CDM6L100 and CDM6L250 is 65 or 95 for option, the default value is 65. CDM6L400, CDM6L630 is 95 or 1 25 for option, the default value is 95.

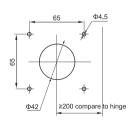
Square



CDM6L 100/250AF

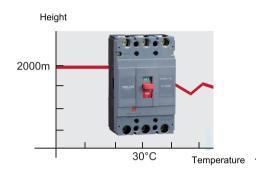


CDM6L 400/630AF



Impact of High Temperature on tripping Release Performance

When environmental temperature is over 40°C,small changes have taken place on overload protection properties,In tripping release time,current curve,the Ir setting value of the circuit breaker must be corrected as per the following factors.



Type of Circuit	Ambient Temperature							
Breaker	30	35	40	45	50			
CDM6L100AF	1	0.97	0.95	0.92	0.89			
CDM6L250AF	1	0.98	0.97	0.95	0.94			
CDM6L400AF	1	0.98	0.95	0.93	0.91			
CDM6L630AF	1	0.98	0.95	0.93	0.91			

Impact of Altitude on Tipping Release Performance

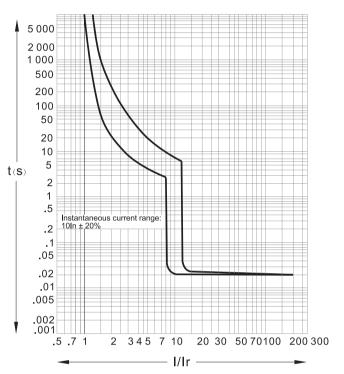
There is no impact on the performance of the circuit breaker when the height is below 2000m, But when it is over 2000m, the falling factors as air insulation properties and cooling capability shall be considered, the correction factors given in the table below are applicable for the conditions of the height for the installation over 2000m, the breaking capacity of the circuit breaker remains unchanged.

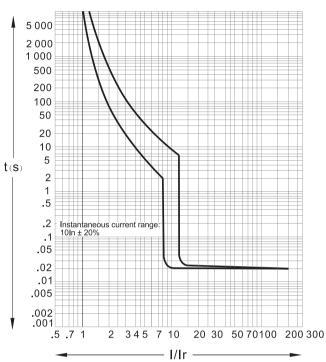
Altitude(m)	2000	3000	4000	5000
Max.Working Voltage(V)	415	350	310	270
30°C Thermal Rated Value(A)	In	0.96In	0.93In	0.96In
Average Isolation Voltage(V)	800	700	600	500
Dielectric Strength(V)	3000	2500	2100	1800

3-Pole (W) Total Power Loss									
Type of Circuit Breaker	Power-up Current	Front Connectuion Wiring(Standard)	Rear Connectuion Wiring	Plug-in Wiring					
CDM6L100AF	100A	40	50	50					
CDM6L250AF	250A	63	90	90					
CDM6L400AF	400A	103	110	130					
CDM6L630AF	800A	200	230	290					

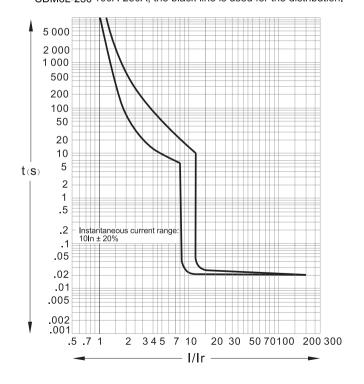
Tripping Release Curve

- CDM6L-100 16A-50A, the black line is used for the distribution
- CDM6L-100 63A-100A, the black line is used for the distribution





• CDM6L-250 100A-250A, the black line is used for the distribution.

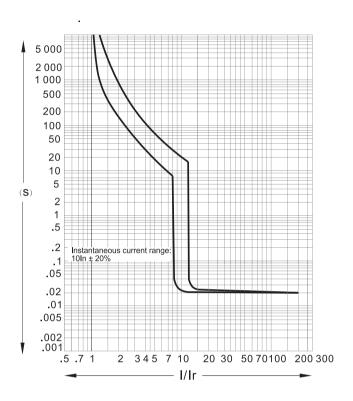


Standard: IEC 60947-2

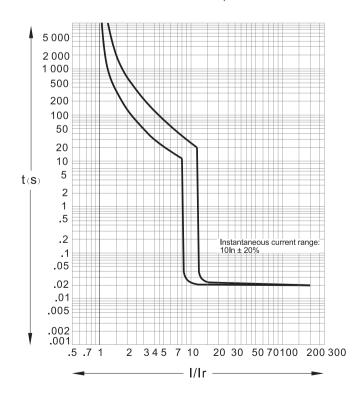
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Tripping Release Curve

• CDM6L-400 200A-400A, the black line is used for the power distribution



• CDM6L-630 400A-630A is used for the power distribution.



Memo			

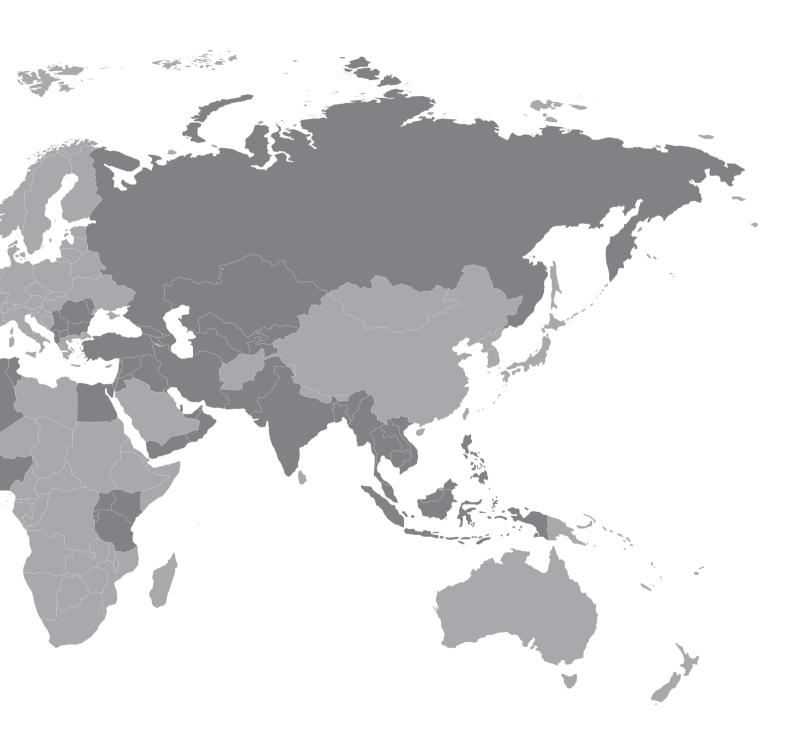
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A Company to Serve



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