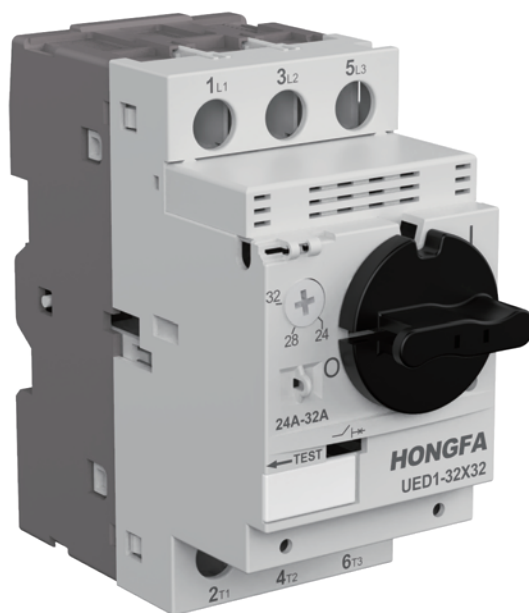


MOTOR CONTROL AND PROTECTION COMPONENTS

UED1 Motor Protection Circuit Breakers



INTRODUCTION



Sunban Industrial Park

Hongfa, (Shanghai Stock Exchange: 600885), founded in 1984, has been adhering to the enterprise spirit of "persevere for progress, strive for excellence", and has built a complete industry system with complete categories and supporting facilities. At present, Hongfa has more than 30 subsidiaries and has established three districts of R & D and production bases. Its products cover various categories, such as medium and low voltage products, relays, high and low voltage switchgear, capacitors, precision parts and automation equipment.

Xiamen Hongfa Electrical Safety & Controls Co., Ltd. is a wholly-owned subsidiary of Hongfa, which specializes in R & D, design and manufacture medium and low voltage products. Its distribution apparatus, terminal apparatus, control apparatus and other products are widely used in real estate, electric power, new energy, industry, HVAC, transportation, information and other fields.

In the United States, Europe, Southeast Asia and other regions, Hongfa has established localized marketing and service networks with global market operation and technical service. Relying on professional and rigorous technical support, fast response and all-round service, safe and reliable product quality and high cost performance, Hongfa has reached business cooperation relationship with many global top 500 enterprises and other well-known enterprises, such as Enel, GE, Honeywell, Carrier, Trane, Johnson Controls, Danfoss, State Grid, China Southern Power Grid, CRRC, China Mobile, China Unicom, etc.



Donglin Industrial Park



Haicang Industrial Park



Zhongjiang Industrial Park



Zhangzhou Industrial Park



Zhoushan Industrial Park



Xi'an Factory

In terms of technology R & D and manufacturing, taking the national enterprise technology center as the platform, Hongfa has set up postdoctoral research workstation, academician and expert workstation. Now it has developed into a leading scientific research and production base in the industry. From product development, mold manufacturing, parts manufacturing, automated product assembly and online testing, Hongfa has successfully built an integrated whole industry chain of medium and low voltage products. In terms of product testing, Hongfa testing center has passed the certification of VDE, UL, CNAS and other international organizations, and has complete testing and analysis equipment for low-voltage products, such as 50kA ultimate short circuit test, 8kA electrical life test, 80kA characteristic test, mechanical simulation and testing system, electro-magnetic simulation and testing system.

Hongfa always adheres to the policy of "focused on the market, winning through quality", and has a completed quality assurance system. Its products have passed UL / CUL, VDE, CQC, CCC and other international safety certification. In the process of quality management, Hongfa actively implements the advanced quality concept, constantly improves the quality management system, continuously promotes the product process quality control and testing, strengthens the supply chain management, and is committed to providing each customer with high-quality products and creating greater value.

Advanced technology and strict quality control have created Hongfa's brand strength. Hongfa is willing to work hand in hand with global customers to share the convenience and well-being brought by science and technology.

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NOTE:

The contents and data in this catalogue are not binding. We reserve the right to modify the contents of this document on the basis of technical development of the products, without prior notice. The real order requirements and technical agreements shall prevail.

UED1 Motor Protection Circuit Breakers

Product Overview

UED1-32 and UED1-80 are motor protective circuit breakers applicable to AC 50Hz or 60 Hz, with the maximum rated insulation voltage of 690V, selective use category A and use category AC-3, rated working voltage of 690V and below, and rated working current of 0.1A...65A. Short circuit, overload and phase failure protection shall be provided by manually switching on/off the load. In addition, auxiliary control, remote shunt excitation and under voltage protection can be realized through additional auxiliary function modules.

Product Features

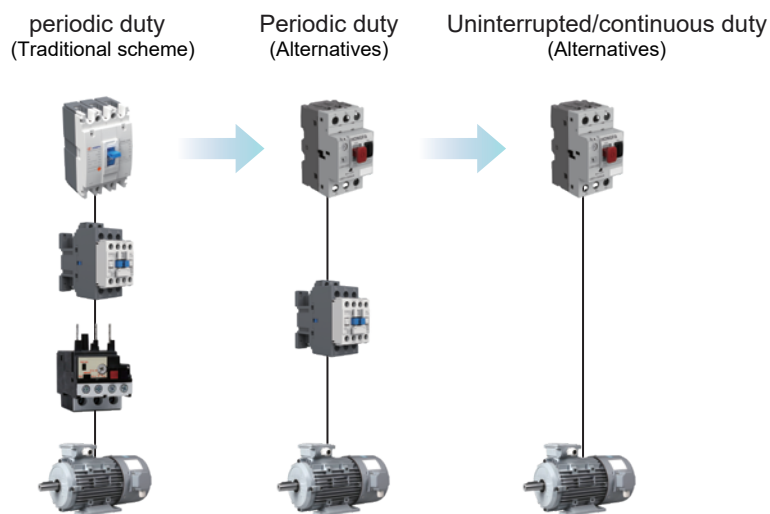
- Compact structure, replacing the traditional “molded case circuit breaker + thermal overload relay”, greatly reducing the installation space and wiring amount.
- The auxiliary function modules are rich and can be combined at will.
- Capable of harsh use environment, more durable.

Design Features




- Family style design, high recognition.
- The whole series supports 35mm clamp rail installation.

Product application

It can be widely used in engineering machinery, new energy, machine tools, chemical industry, metallurgy and other industries, mainly for the start/stop control of motors and other similar loads. Replacing the traditional “molded case circuit breaker + thermal overload relay”, greatly reducing the installation space and wiring amount.



Approval Certificate

	CCC	GB/T 14048.2、GB/T 14048.4
	CE	IEC/EN 60947-2、IEC/ EN 60947-4-1
	UKCA	BS 60947-2、BS 60947-4-1

Ordering Information

UED1 Motor Protection Circuit Breaker

	UED	1	-	32	A	0.16
Motor Protection Circuit Breaker series						
Design series number						
Reference code						
32: Setting current 0.1A...32A						
80: Setting current 9A...65A						
Function						
A: Motor Protection Circuit Breaker (Button switch control, only for reference code 32)						
X: Motor Protection Circuit Breaker (Rotary switch control)						
Code for the current setting range:						

Reference code 32:						
0.16: 0.1A...0.16A	1.6: 1.0A...1.6A	14: 9 A...14A				
0.25: 0.16A...0.25A	2.5: 1.6A...2.5A	18: 13A...18A				
0.4: 0.25A...0.4A	4.0: 2.5A...4.0A	23: 17A...23A				
0.63: 0.4A...0.63A	6.3: 4A...6.3A	25: 20A...25A				
1.0: 0.63A...1.0A	10: 6A...10A	32: 24A...32A				

Reference code 80:						
13: 9A...13A	32: 23A...32A	65: 48A...65A				
18: 12A...18A	40: 30A...40A					
25: 17A...25A	50: 37A...50A					

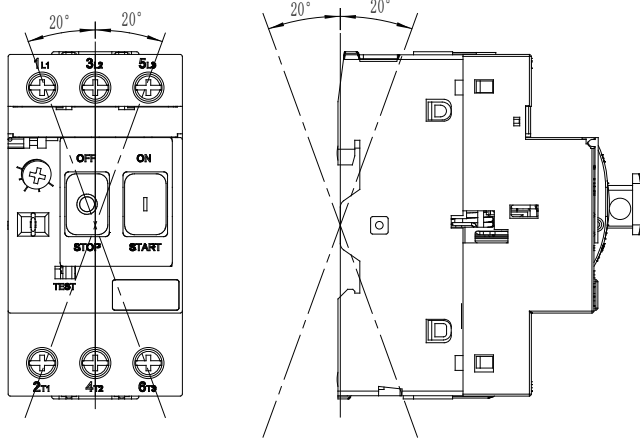
Shunt release, Under-voltage release

	D	1	AS	11	7
Accessories of motor protection circuit breaker					
Design series number					
Accessories type					
AS: Shunt release		AU: Under-voltage release			
Operating voltage code					
11: 110V		38: 380V			
22: 220V		44: 440V			
Frequency code					
5: 50 Hz					
6: 60 Hz					
7: 50 Hz / 60 Hz					

Ordering Information

Auxiliary contact, Busbar					
	D	1	AE	11	□
Accessories of motor protection circuit breaker					
Design series number					
Accessories type					
AE: Top mounting auxiliary contact					
AN: Side mounting auxiliary contact					
AM: Short Circuit Signaling contact					
AD: Auxiliary contact and fault signalling contact					
G: Busbar					
Number of auxiliary contacts/number of taps					
Auxiliary contact, Short Circuit Signaling contact					
11: 1NO+1NC 20: 2NO(Applicable to auxiliary contct)					
Auxiliary contact and fault signalling contact					
1010: 1NO(fault) + 1NO(Auxiliary)					
1001: 1NO(fault) + 1NC(Auxiliary)					
0110: 1NC(fault) + 1NO(Auxiliary)					
0101: 1NC(fault) + 1NC(Auxiliary)					
number of taps (Applicable to busbar)					
2: 2 taps					
3: 3 taps					
4: 4 taps					
Clearance (It is only applicable to busbar, and this bit is empty for other accessory types.)					
45: 45mm					

Technical Data

Model		UED1-32	UED1-80
Parameters			
Operating environment			
Rated insulation voltage U_i (V)		690	
Rated impulse withstand voltage U_{imp} (kV)		6	
Conforming to standards		GB/T 14048.2, GB/T 14048.4 IEC/EN 60947-2, IEC/EN 60947-4-1 BS 60947-2, BS 60947-4-1	
Certifications		CCC, CE, UKCA	
Degree of protection		IP20	
Ambient air temperature (°C)	Storage	-50...+80	
	Operation	-25...+55	
Max. operating altitude (m)		2000	
Pollution degree		3	
Mounting category		III	
Mounting type		35mm rail	35mm rail, 75mm rail
Flame resistance		Current-carrying part: 960°C	
Operating position ⁽¹⁾		Vertical mounting($\pm 20^\circ$) 	

Note:⁽¹⁾There is no acid, alkaline or other corrosive gas in the surrounding air.
The product shall be installed and used in the place without significant vibration and impact.

Technical Data

UED1-32 Motor protection circuit breaker

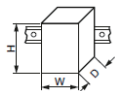


Parameters		Breaking capacity									
		230/240V		400/415V		440V		500V		690V	
		I_{cu} (kA)	I_{cs} (kA)	I_{cu} (kA)	I_{cs} (kA)	I_{cu} (kA)	I_{cs} (kA)	I_{cu} (kA)	I_{cs} (kA)	I_{cu} (kA)	I_{cs} (kA)
Rated current I_n (A)	0.16	100	100	100	100	100	100	80	80	80	80
	0.25	100	100	100	100	100	100	80	80	80	80
	0.4	100	100	100	100	100	100	80	80	80	80
	0.63	100	100	100	100	100	100	80	80	80	80
	1.0	100	100	100	100	100	100	80	80	80	80
	1.6	100	100	100	100	100	100	80	80	80	80
	2.5	100	100	100	100	100	100	80	80	3	2.25
	4.0	100	100	100	100	100	100	80	80	3	2.25
	6.3	100	100	100	100	50	50	50	50	3	2.25
	10	100	100	100	100	15	15	10	10	3	2.25
	14	100	100	15	7.5	8	4	6	4.5	3	2.25
	18	100	100	15	7.5	8	4	6	4.5	3	2.25
	23	50	50	15	6	6	3	4	3	3	2.25
	25	50	50	15	6	6	3	4	3	3	2.25
	32	50	50	10	5	6	3	4	3	3	2.25
Setting current of short-circuit release (I_r)		12 I_n									
Max. electrical operating frequency (cycles/h) AC-3		25									
Max. mechanical operating frequency (cycles/h)		120									
Outline dimension W x H x D (mm)		UED1-32A: 44.6×89×78 UED1-32X: 44.6×89×89.3									
Net weight (kg)		UED1-32A: 0.26 UED1-32X: 0.27									




UED1-80 Motor protection circuit breaker



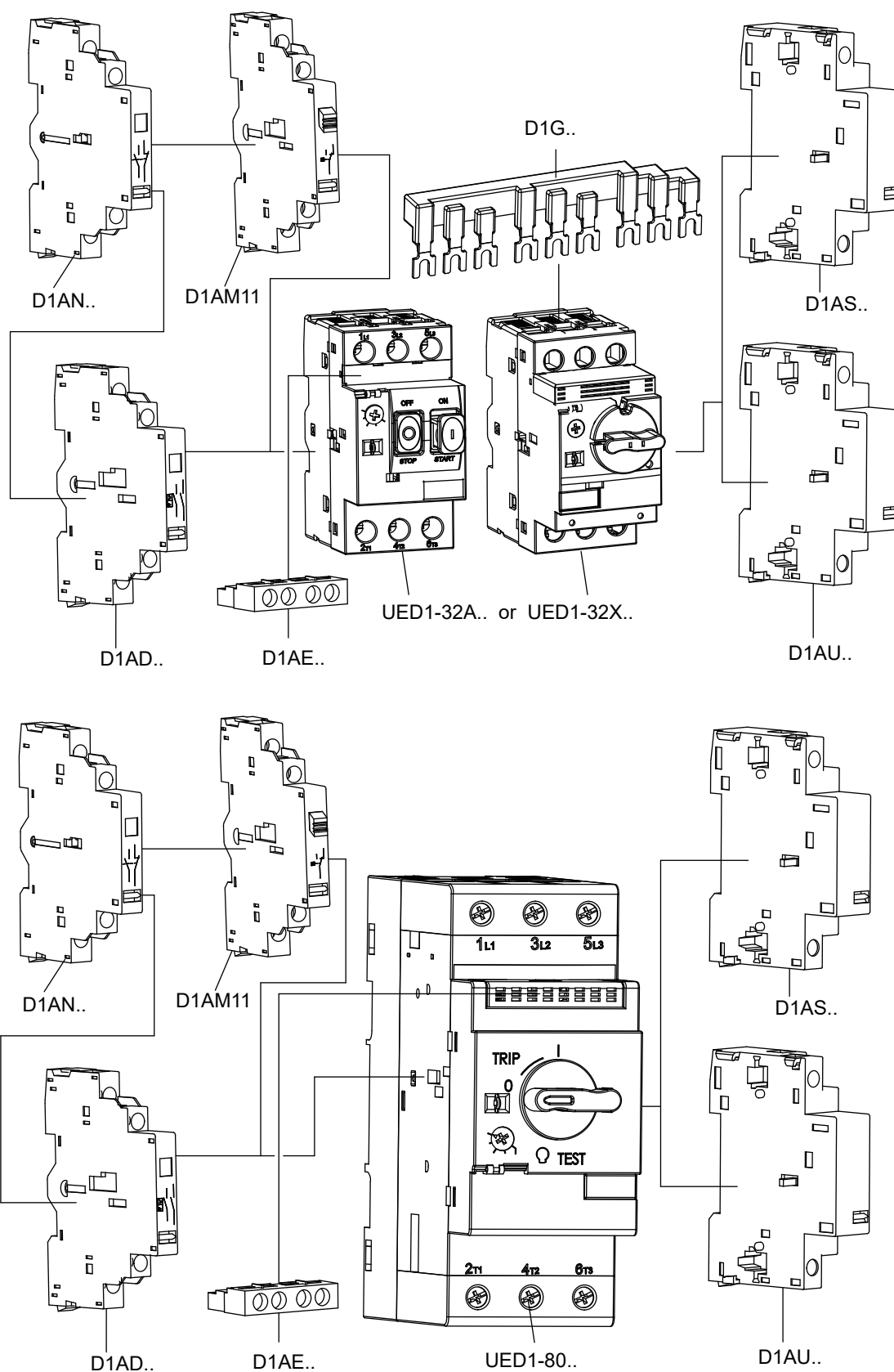
Parameters		Breaking capacity									
		230/240V		400/415V		440V		500V		690V	
		I_{cu} (kA)	I_{cs} (kA)	I_{cu} (kA)	I_{cs} (kA)	I_{cu} (kA)	I_{cs} (kA)	I_{cu} (kA)	I_{cs} (kA)	I_{cu} (kA)	I_{cs} (kA)
Rated current I_n (A)	13	100	100	100	100	50	50	12	6	6	3
	18	100	100	100	100	50	50	12	6	6	3
	25	100	100	100	100	50	50	12	6	6	3
	32	100	100	100	100	50	50	12	6	6	3
	40	100	100	50	50	50	50	12	6	6	3
	50	100	100	50	50	50	50	12	6	6	3
	65	100	100	50	50	50	50	12	6	6	3
Setting current of short-circuit release(I_i)		$14I_n$									
Max. electrical operating frequency (cycles/h) AC-3		25									
Max. mechanical operating frequency (cycles/h)		120									
Outline dimension W x H x D (mm)		55×139.2×135.4									
Net weight (kg)		1.03									













Technical Data

Parameters		Model	UED1-32	UED1-80X
Power circuit connections				
Solid cable without cable end 	1 conductor (mm ²)		1.5...10(AWG 16...8)	2.5...25(AWG 14...4)
	2 conductors (mm ²)		2.5...10(AWG 14...8)	2.5...16(AWG 14...6)
Flexible cable without cable end 	1 conductor (mm ²)		2.5...10(AWG 14...8)	2.5...25(AWG 14...4)
	2 conductors (mm ²)		2.5...10(AWG 14...8)	2.5...16(AWG 14...6)
Flexible cable with cable end 	1 conductor (mm ²)		1.5...10(AWG 16...8)	2.5...25(AWG 14...4)
	2 conductors (mm ²)		1.5...6(AWG 16...10)	2.5...16(AWG 14...6)
Lugs	Max. L (mm)		10	—
	Min. l (mm)		4.2	—
Screwdriver	Phillips screwdriver		N°2	N°2
	Φ Slotted screwdriver		Φ 6	Φ 6
Tightening torque(N·m)			2.5(22 lb-in)	4.5(41 lb-in)

Accessories

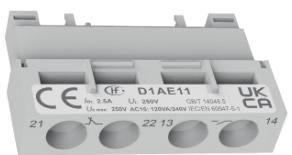


Accessories


Model		D1AE..	D1AN..	D1AS..	D1AU..	D1AM11	D1AD..
Parameters							
Conforming to standards		GB/T 14048.5, IEC/EN 60947-5-1, BS 60947-5-1					
Certifications		CE, UKCA					
Degree of protection		IP20					
Ambient air temperature (°C)	Storage	-50...+80					
	Operation ⁽¹⁾	-25...+55					
Max. operating altitude (m)		2000					
Solid cable without cable end 	1 conductor (mm ²)	1...4(AWG 18...12)					
	2 conductors (mm ²)	1...4(AWG 18...12)					
Flexible cable without cable end 	1 conductor (mm ²)	1...4(AWG 18...12)					
	2 conductors (mm ²)	1...4(AWG 18...12)					
Flexible cable with cable end 	1 conductor (mm ²)	1...4(AWG 18...12)					
	2 conductors (mm ²)	1...2.5(AWG 18...16)					
Lugs 	Max. L(mm)	7.5					
	Min. l(mm)	3.7					
Screwdriver	Phillips screwdriver	N°2					
	Φ Slotted screwdriver	Φ6					
Tightening torque (N·m)		0.8...1.2(11 lb-in)					
Adaptive motor protection circuit breaker		UED1-32, UED1-80					

Note: ⁽¹⁾ There is no acid, alkaline or other corrosive gas in the surrounding air.
The product shall be installed and used in the place without significant vibration and impact.

Accessories - Top mounting auxiliary contact

Parameters		Model		D1AE11,D1AE20			
							
Maximum rated voltage U_e (V)				250			
Rated insulation voltage U_i (V)				250			
Rated impulse withstand voltage U_{imp} (kV)				2.5			
auxiliary contact				1NO+1NC,2NO			
Min. switching capacity	U_{min} (V)			24			
	I_{min} (A)			0.1			
AC-15	Conventional enclosed thermal current I_{the} (A)			2.5			
	Rated operational voltage U_e (V)	120	240	-	-	-	-
	Rated operational current (A)	1.5	0.75	-	-	-	-
	Make apparent power VA rating (VA)			1800			
	Break apparent power VA rating (VA)			180			
DC-13	Conventional enclosed thermal current I_{the} (A)			2.5			
	Rated operational voltage U_e (V)	24	48	60	-	-	-
	Rated operational current (A)	1	0.3	0.15	-	-	-
	Make apparent power VA rating (VA)			24			
	Break apparent power VA rating (VA)			24			
Max. electrical operating frequency (cycles/h)				25			
Max. mechanical operating frequency (cycles/h)				120			
Adaptive motor protection circuit breaker				UED1-32,UED1-80			

Accessories - Side mounting auxiliary contact

Parameters		Model						
		D1AN11,D1AN20 						
Maximum rated voltage U_e (V)		690						
Rated insulation voltage U_i (V)		690						
Rated impulse withstand voltage U_{imp} (kV)		4						
auxiliary contact		1NO+1NC,2NO						
Min. switching capacity	U_{min} (V)	24						
	I_{min} (A)	0.1						
AC-15	Conventional enclosed thermal current I_{the} (A)	6						
	Rated operational voltage U_e (V)	120	240	380	480	500	600	
	Rated operational current (A)	3	1.5	0.95	0.75	0.72	0.6	
	Make apparent power VA rating (VA)	3600						
	Break apparent power VA rating (VA)	360						
DC-13	Conventional enclosed thermal current I_{the} (A)	2.5						
	Rated operational voltage U_e (V)	24	48	110				
	Rated operational current (A)	2.8	1.4	0.6				
	Make apparent power VA rating (VA)	69						
	Break apparent power VA rating (VA)	69						
Max. electrical operating frequency (cycles/h)		25						
Max. mechanical operating frequency (cycles/h)		120						
Adaptive motor protection circuit breaker		UED1-32,UED1-80						

Accessories - Shunt release & Under-voltage release


Parameters		Model		
		D1AS117	D1AS227	D1AS387
Rated insulation voltage U_i (V)		690		
Rated impulse withstand voltage U_{imp} (kV)		4		
Control voltage specification	Voltage(V)	110	220	380
	Frequency(Hz)	50/60		
Action performance		Under any voltage between (70...110)% of the rated control power voltage U_s , the shunt release can operate normally.		
Adaptive motor protection circuit breaker		UED1-32,UED1-80		




Parameters		Model						
		D1AU115	D1AU225	D1AU385	D1AU116	D1AU226	D1AU386	D1AU446
Rated insulation voltage U_i (V)		690						
Rated impulse withstand voltage U_{imp} (kV)		4						
Control voltage specification	Voltage(V)	110	220	380	110	220	380	440
	Frequency(Hz)	50			60			
Action preformance	Closing operation	The circuit breaker can be normally closed under any voltage between (85...110)% of the rated control power voltage U_s .						
	Trip	When 70% of the rated control power supply voltage U_s gradually drops to 35%,the circuit breaker can trip under voltage.						
	Prevent closing	When the rated control power supply voltage U_s is less than 35%,the under-voltage release can prevent the circuit breaker from closing.						
Adaptive motor protection circuit breaker		UED1-32,UED1-80						



Accessories - Short Circuit Signaling contact

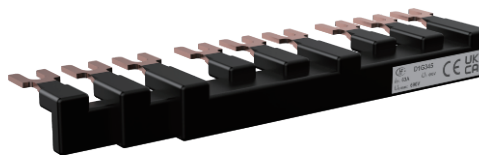
Parameters		Model						
		D1AM11 						
Maximum rated voltage U_e (V)		690						
Rated insulation voltage U_i (V)		690						
Rated impulse withstand voltage U_{imp} (kV)		2.5						
Signal contact		1NO+1NC(Common terminal)						
Min. switching capacity	U_{min} (V)	24						
	I_{min} (A)	0.1						
AC-14	Conventional enclosed thermal current I_{the} (A)	2.5						
	Rated operational voltage U_e (V)	120	240	-	-	-	-	-
	Rated operational current (A)	0.6	0.3	-	-	-	-	-
	Make apparent power VA rating (VA)	432						
	Break apparent power VA rating (VA)	72						
DC-13	Conventional enclosed thermal current I_{the} (A)	2.5						
	Rated operational voltage U_e (V)	24	48	60	-	-	-	-
	Rated operational current (A)	1	0.3	0.15	-	-	-	-
	Make apparent power VA rating (VA)	24						
	Break apparent power VA rating (VA)	24						
Max. mechanical operating frequency (cycles/h)		120						
Adaptive motor protection circuit breaker		UED1-32,UED1-80						

Accessories-Auxiliary contact and fault signalling contact

Parameters		Model	D1AD0110, D1AD0101, D1AD1010, D1AD1001						
									
Maximum rated voltage U _e (V)			240(fault signalling contact),690(Auxiliary contact)						
Rated insulation voltage U _i (V)			690						
Rated impulse withstand voltage U _{imp} (kV)			2.5(fault signalling contact),4(Auxiliary contact)						
Auxiliary contact and fault signalling contact			1NC(fault)+1NO(Auxiliary),1NC(fault)+1NC(Auxiliary) 1NO(fault)+1NO(Auxiliary),1NO(fault)+1NC(Auxiliary)						
Min. switching capacity	U _{min} (V)		24						
	I _{min} (A)		0.1						
fault signalling contact	AC-14	Conventional enclosed thermal current I _{the} (A)	2.5						
		Rated operational voltage U _e (V)	120	240	-	-	-	-	
		Rated operational current (A)	0.6	0.3	-	-	-	-	
		Make apparent power VA rating (VA)	432						
		Break apparent power VA rating (VA)	72						
	DC-13	Conventional enclosed thermal current I _{the} (A)	2.5						
		Rated operational voltage U _e (V)	24	48	60	-	-	-	
		Rated operational current (A)	1	0.3	0.15	-	-	-	
		Make apparent power VA rating (VA)	24						
		Break apparent power VA rating (VA)	24						
Auxiliary contact	AC-15	Conventional enclosed thermal current I _{the} (A)	6						
		Rated operational voltage U _e (V)	120	240	380	480	500	600	
		Rated operational current (A)	3	1.5	0.95	0.75	0.72	0.6	
		Make apparent power VA rating (VA)	3600						
		Break apparent power VA rating (VA)	360						
	DC-13	Conventional enclosed thermal current I _{the} (A)	2.5						
		Rated operational voltage U _e (V)	24	48	110	-	-	-	
		Rated operational current (A)	2.8	1.4	0.6	-	-	-	
		Make apparent power VA rating (VA)	69						
		Break apparent power VA rating (VA)	69						
Max. electrical operating frequency (cycles/h)			25						
Max. mechanical operating frequency (cycles/h)			120						
Adaptive motor protection circuit breaker			UED1-32,UED1-80						

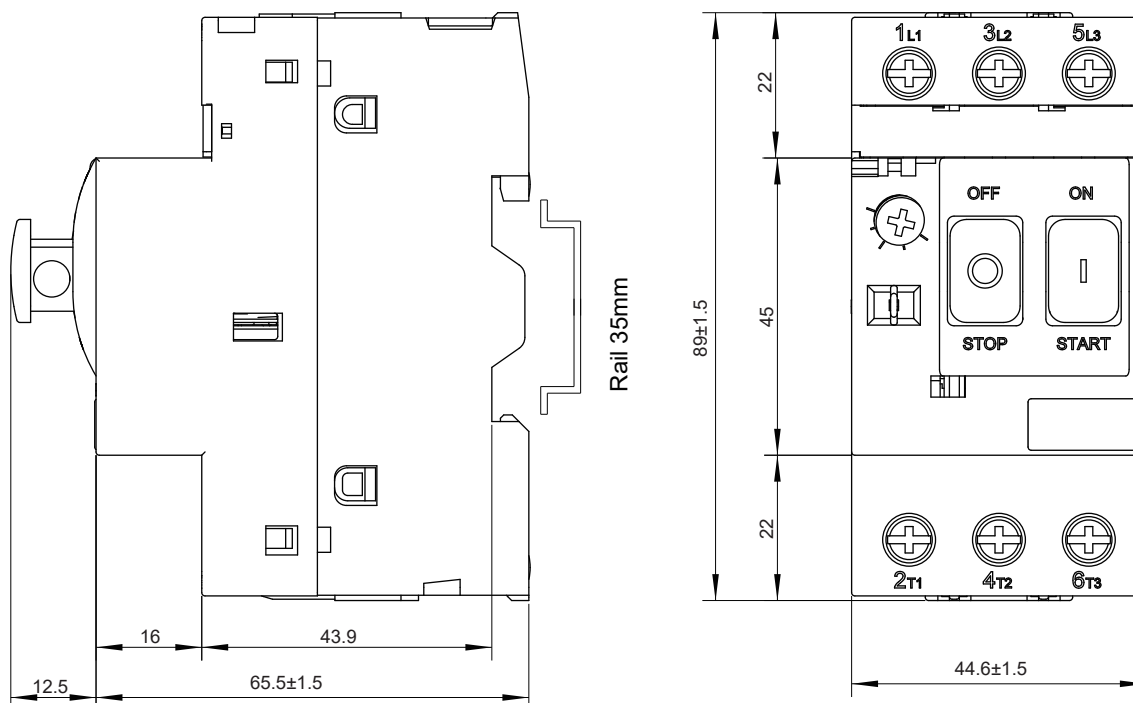
Accessories – Busbar

Parameters		Model		
		D1G245	D1G345	D1G445
Conforming to standards		GB/T 14048.1, IEC/EN 60947-1, BS 60947-1		
Certifications		CE,UKCA		
Degree of protection		IP20		
Ambient air temperature (°C)	Storage	-50...+80		
	Operation ⁽¹⁾	-25...+55		
Max. operating altitude (m)		2000		
Maximum rated voltage U _e (V)		690		
Rated insulation voltage U _i (V)		690		
Rated impulse withstand voltage U _{imp} (kV)		6		
Conventional enclosed thermal current I _{the} (A)		63		
Number of parallel products(pc)		2	3	4
Clearance(mm)		45		
Adaptive motor protection circuit breaker		UED1-32		

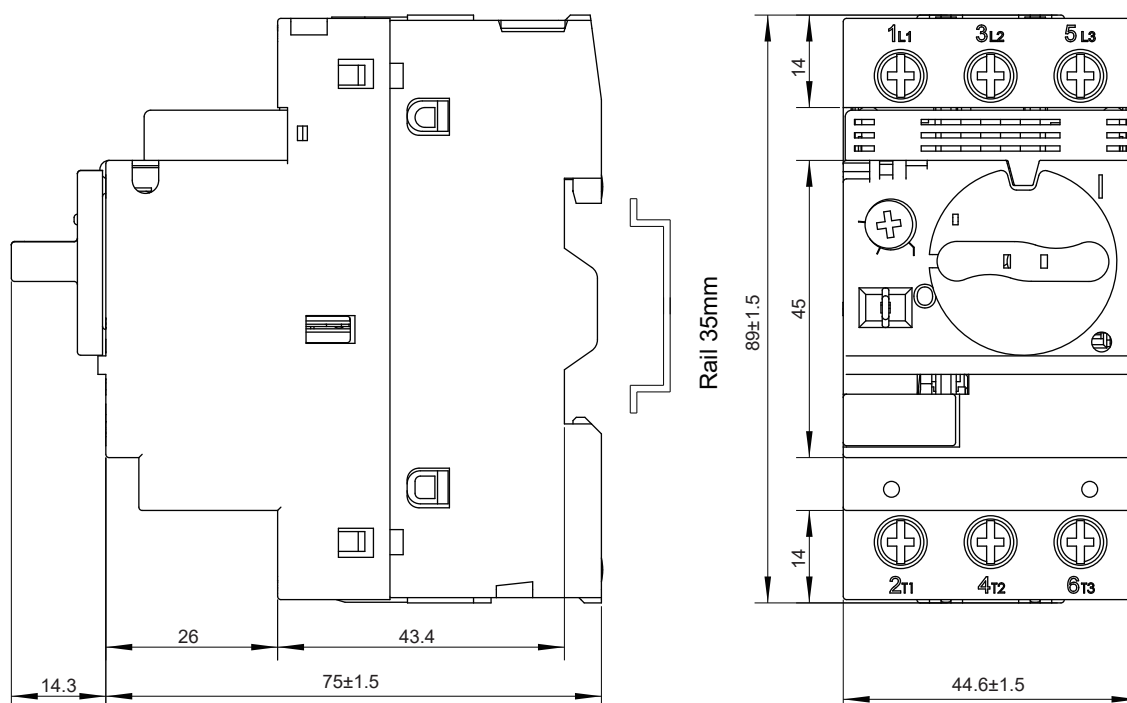


Note:⁽¹⁾There is on acid, alkaline or other corrosive gas in the surrounding air.
The product shall be installed and used in the place without significant vibration and impact.

Dimensions

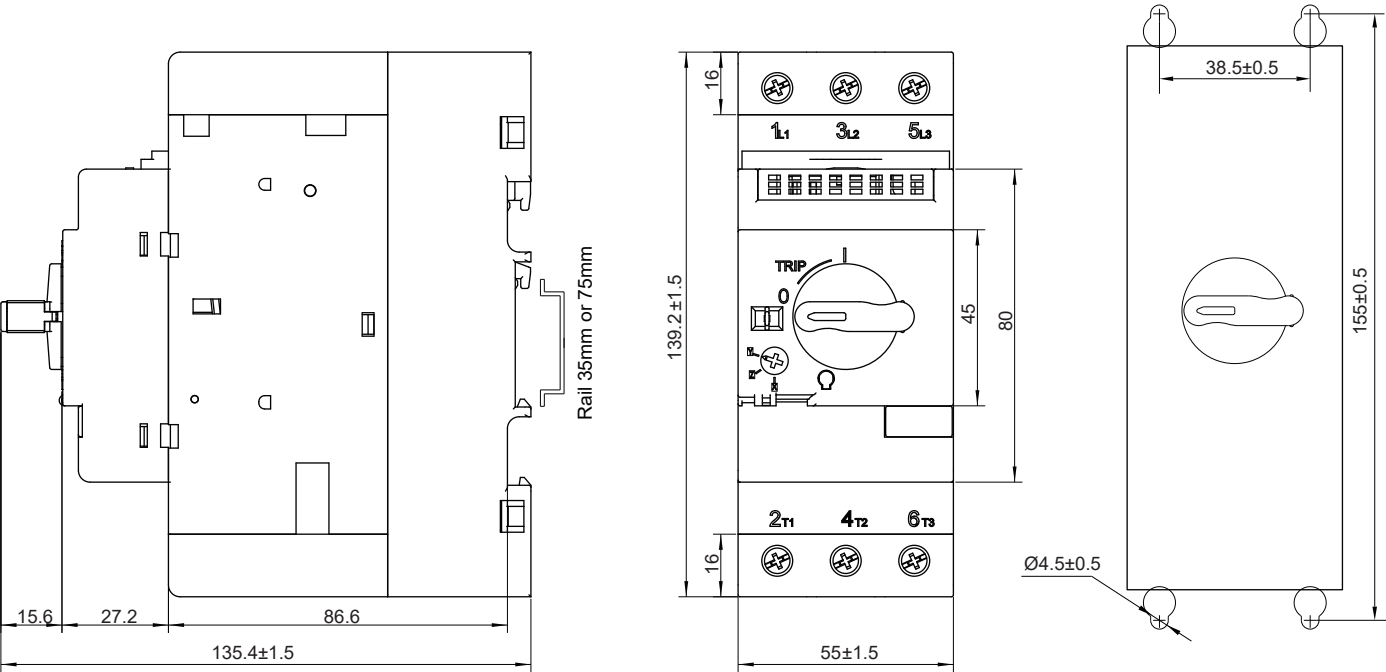


UED1-32A

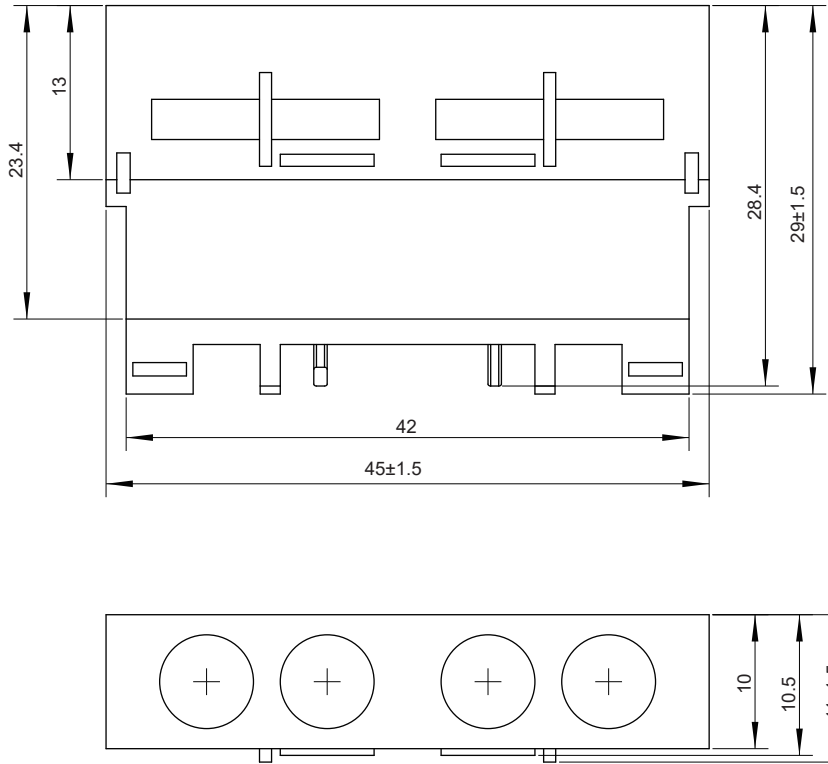


UED1-32X

Dimensions

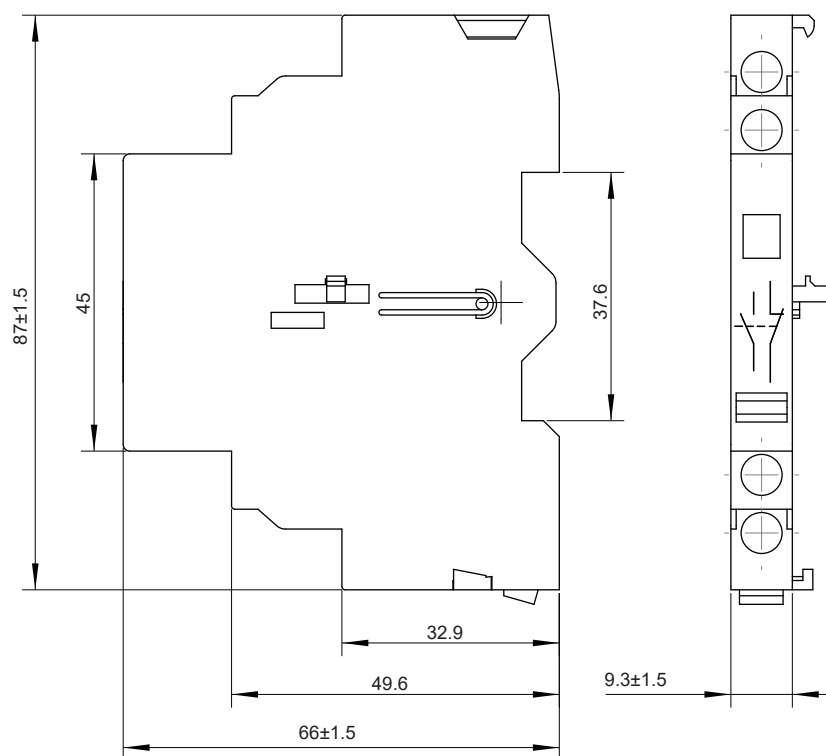


UED1-80

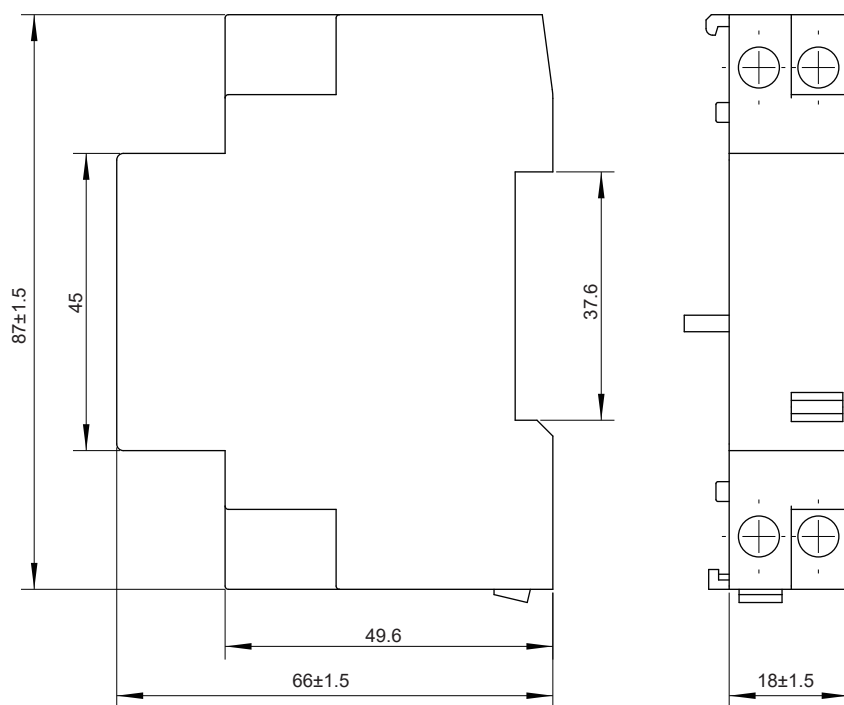


D1AE

Dimensions

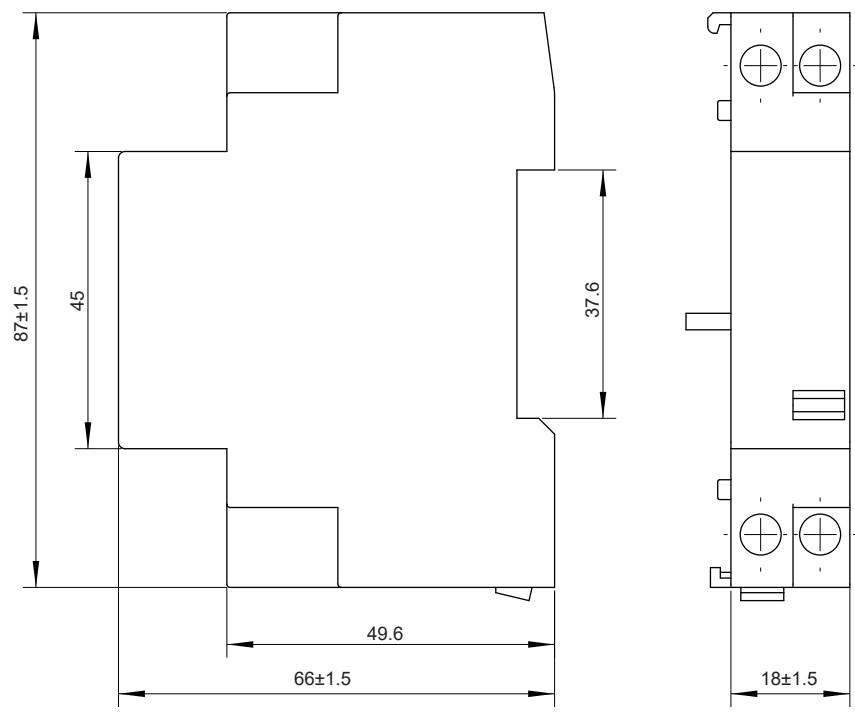


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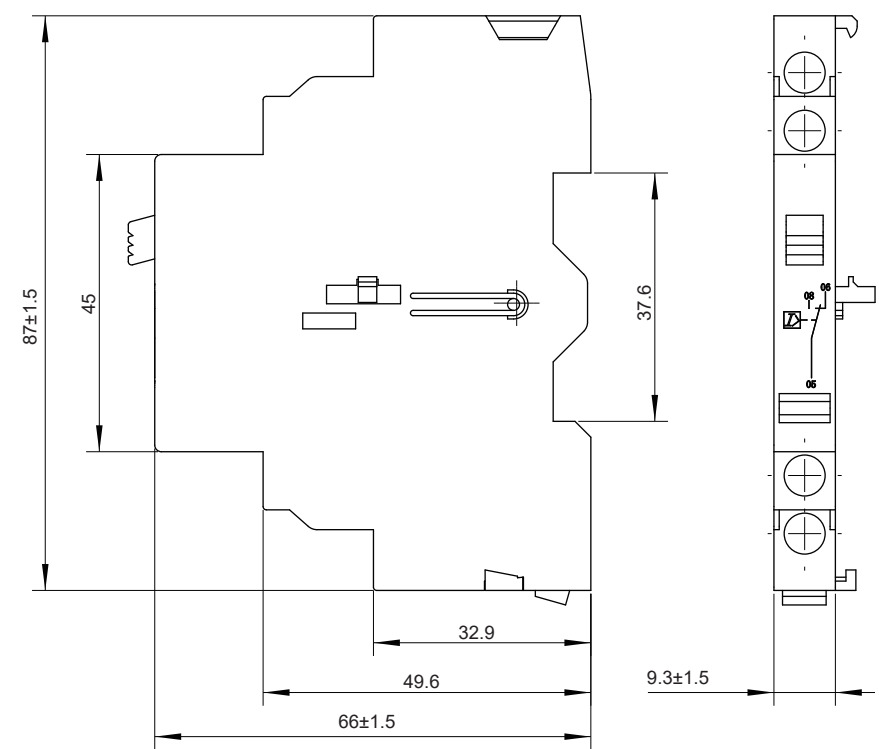


D1AS

Dimensions

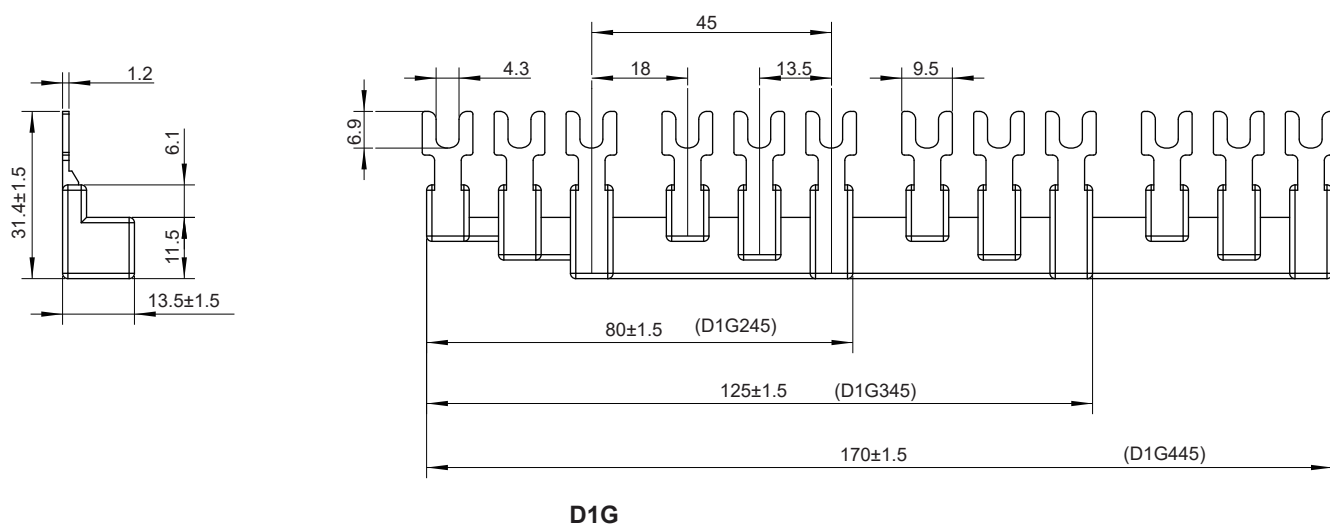
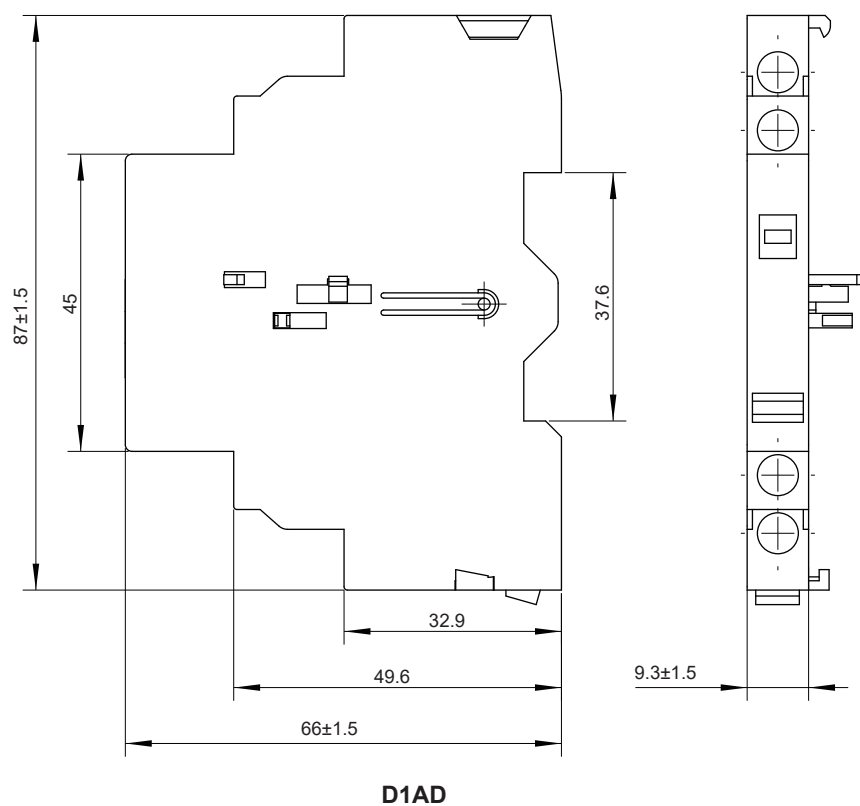


D1AU



D1AM11

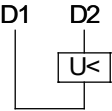
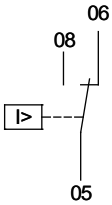
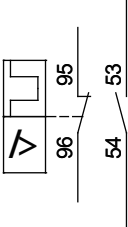
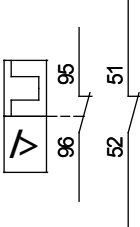
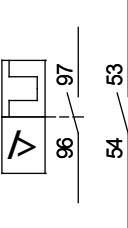
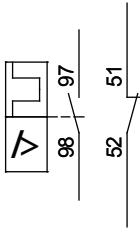
Dimensions



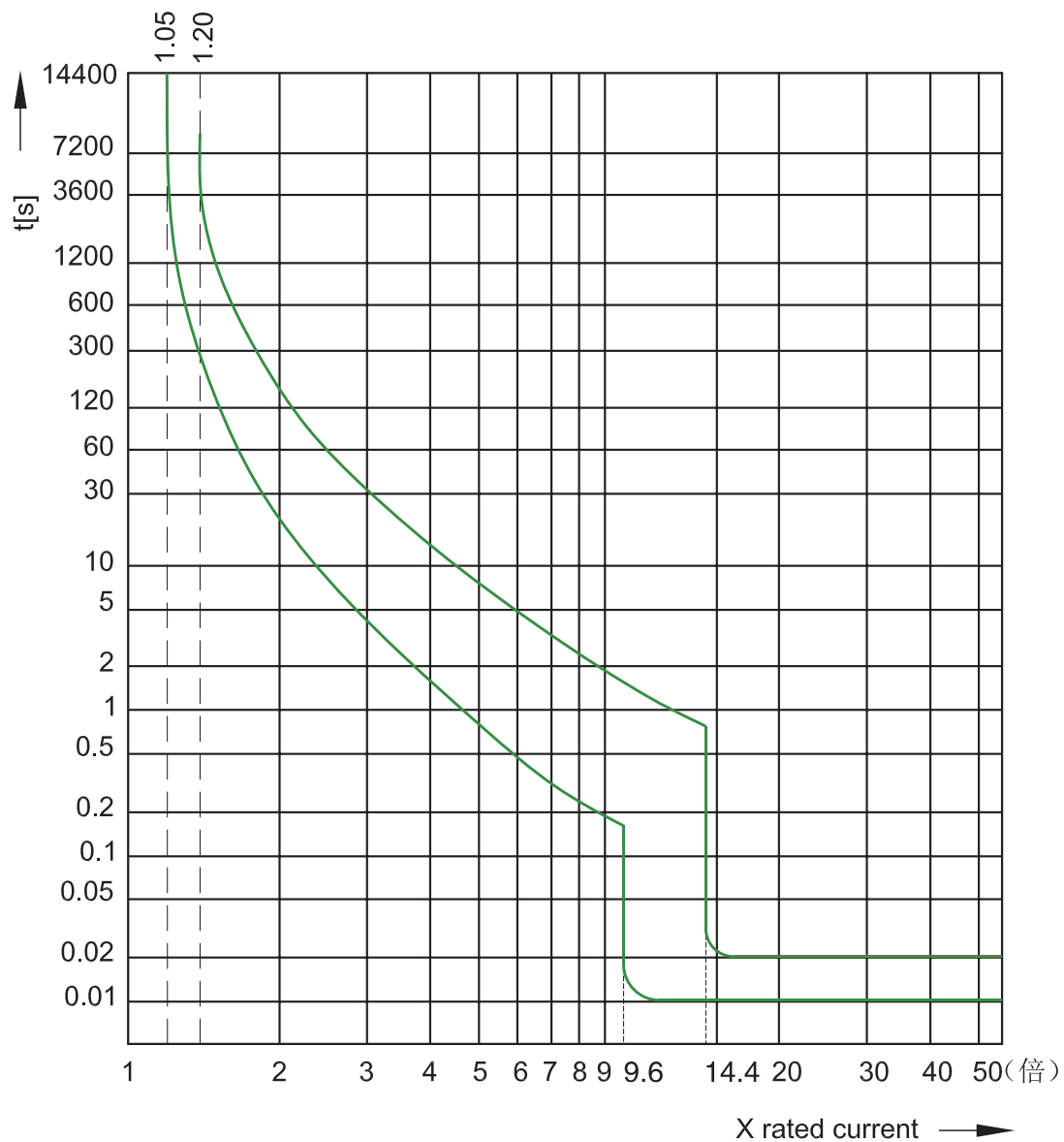
Note: The Unit is mm. The tolerance for dimensions: ± 1.5 , unless otherwise specified.

Circuit Diagram

Model	Circuit Diagram	
UED1-32A		
UED1-32X UED1-80X		
D1AE11 D1AE20		
D1AN11 D1AN20		
D1AS117 D1AS227 D1AS387		

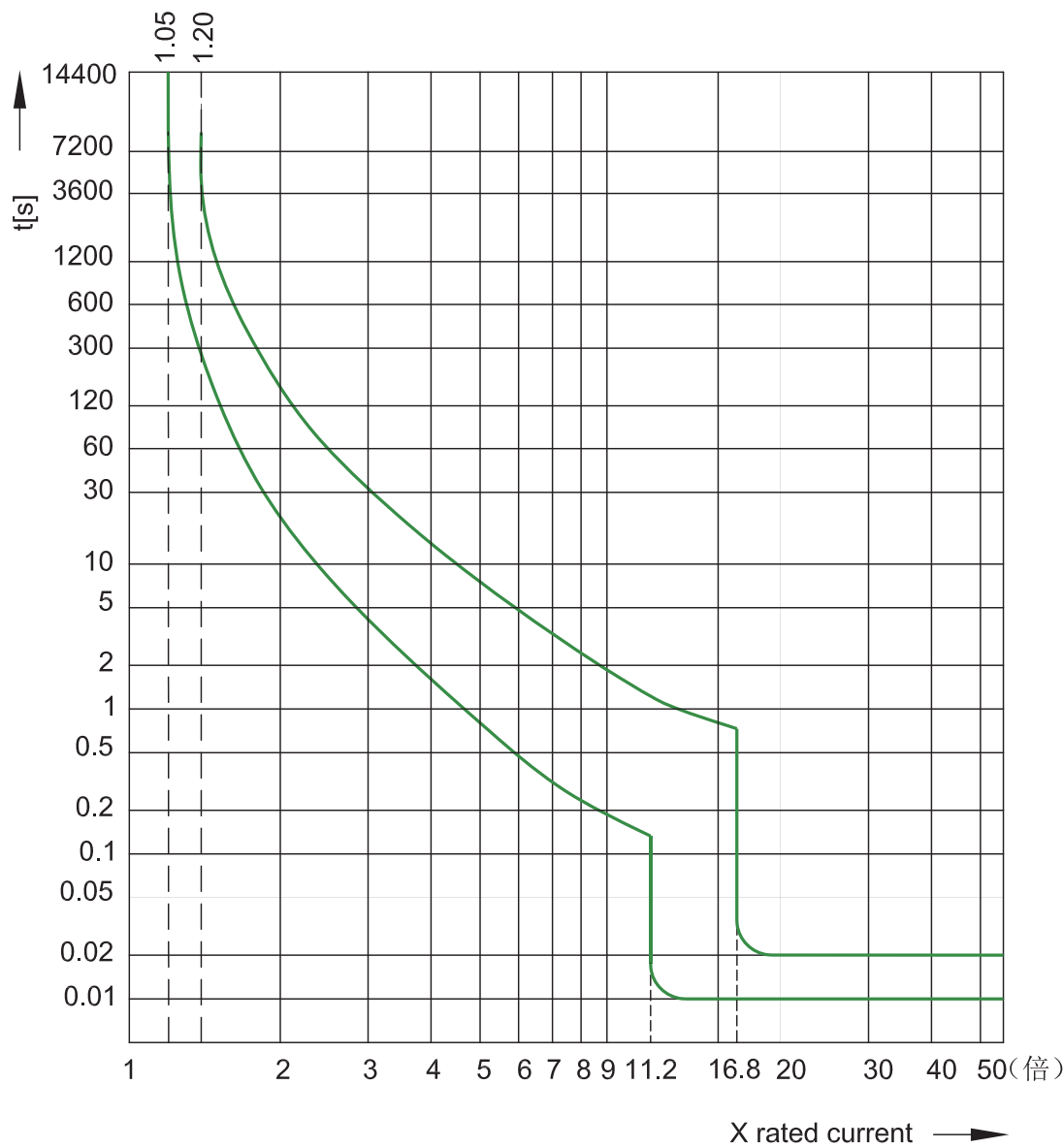
Model	Circuit Diagram	
D1AU115 D1AU225 D1AU385 D1AU116 D1AU226 D1AU386 D1AU446		
D1AM11		
D1AD0110 D1AD0101 D1AD1010 D1AD1001	<p>D1AD0110</p> 	<p>D1AD0101</p> 
	<p>D1AD1010</p> 	<p>D1AD1001</p> 

Tripping Curve



Action time characteristics of UED1-32

Tripping Curve



Action time characteristics of UED1-80

Reference Selection Table

UED1-32 Motor Protection Circuit Breaker						
Rated working power of motor ⁽¹⁾ AC-3 400V	Rated operational current I _n	Current setting range I _e	Setting current of short-circuit release(12I _n) I _t ±20%	Reference	Operation mode	Net weight (1 pc)
kW	A	A	A		Button / Rotary	kg
Button switch control						
—	0.16	0.1 - 0.16	1.92	UED1-32A0.16	Button switch	0.26
0.06	0.25	0.16 - 0.25	3.0	UED1-32A0.25	Button switch	0.26
0.09	0.4	0.25 - 0.4	4.8	UED1-32A0.4	Button switch	0.26
0.12	0.63	0.4 - 0.63	7.56	UED1-32A0.63	Button switch	0.26
0.25	1.0	0.63 - 1.0	12.0	UED1-32A1.0	Button switch	0.26
0.37	1.6	1.0 - 1.6	19.2	UED1-32A1.6	Button switch	0.26
0.75	2.5	1.6 - 2.5	30.0	UED1-32A2.5	Button switch	0.26
1.5	4.0	2.5 - 4.0	48.0	UED1-32A4.0	Button switch	0.26
2.2	6.3	4 - 6.3	75.6	UED1-32A6.3	Button switch	0.26
4	10	6 - 10	120	UED1-32A10	Button switch	0.26
5.5	14	9 - 14	168	UED1-32A14	Button switch	0.26
7.5	18	13 - 18	216	UED1-32A18	Button switch	0.26
11	23	17 - 23	276	UED1-32A23	Button switch	0.26
11	25	20 - 25	300	UED1-32A25	Button switch	0.26
15	32	24 - 32	384	UED1-32A32	Button switch	0.26
Rotary switch control						
—	0.16	0.1 - 0.16	1.92	UED1-32X0.16	Rotary switch	0.27
0.06	0.25	0.16 - 0.25	3.0	UED1-32X0.25	Rotary switch	0.27
0.09	0.4	0.25 - 0.4	4.8	UED1-32X0.4	Rotary switch	0.27
0.12	0.63	0.4 - 0.63	7.56	UED1-32X0.63	Rotary switch	0.27
0.25	1.0	0.63 - 1.0	12.0	UED1-32X1.0	Rotary switch	0.27
0.37	1.6	1.0 - 1.6	19.2	UED1-32X1.6	Rotary switch	0.27
0.75	2.5	1.6 - 2.5	30.0	UED1-32X2.5	Rotary switch	0.27
1.5	4.0	2.5 - 4.0	48.0	UED1-32X4.0	Rotary switch	0.27
2.2	6.3	4 - 6.3	75.6	UED1-32X6.3	Rotary switch	0.27
4	10	6 - 10	120	UED1-32X10	Rotary switch	0.27
5.5	14	9 - 14	168	UED1-32X14	Rotary switch	0.27
7.5	18	13 - 18	216	UED1-32X18	Rotary switch	0.27
11	23	17 - 23	276	UED1-32X23	Rotary switch	0.27
11	25	20 - 25	300	UED1-32X25	Rotary switch	0.27
15	32	24 - 32	384	UED1-32X32	Rotary switch	0.27

Note: ⁽¹⁾ According to the efficacy and rated current specified in GB/T 14048.4 and Annex G of IEC/EN 60947-4-1, the user can adjust the model according to the actual motor nameplate.






Reference Selection Table

UED1-80 Motor Protection Circuit Breaker

Rated working power of motor ⁽¹⁾ AC-3 400V	Rated operational current I_n	Current setting range I_e	Setting current of short-circuit release($14I_n$) $I_{\Delta}\pm 20\%$	Reference	Operation mode	Net weight (1 pc)
kW	A	A	A		Button / Rotary	kg
5.5	13	9...13	182	UED1-80X13	Rotary switch	1.03
7.5	18	12...18	252	UED1-80X18	Rotary switch	1.03
11	25	17...25	350	UED1-80X25	Rotary switch	1.03
15	32	23...32	448	UED1-80X32	Rotary switch	1.03
18.5	40	30...40	560	UED1-80X40	Rotary switch	1.03
22	50	37...50	700	UED1-80X50	Rotary switch	1.03
30	65	48...65	910	UED1-80X65	Rotary switch	1.03

Note:⁽¹⁾ According to the efficacy and rated current specified in GB/T 14048.4 and Annex G of IEC/EN 60947-4-1, the user can adjust the model according to the actual motor nameplate.






Auxiliary contact & Short Circuit Signaling contact

Accessories name	Product diagram	Number of main NO / NC contacts		Reference	Installation position	Net weight (1 pc)
						kg
Top mounting auxiliary contact		1	1	D1AE11	Top installation	0.016
		2	0	D1AE20	Top installation	0.016
Side mounting auxiliary contact		1	1	D1AN11	Left installation	0.039
		2	0	D1AN20	Left installation	0.039
Short Circuit Signaling contact		1 ⁽¹⁾	1 ⁽¹⁾	D1AM11	Left installation	0.039



Note:⁽¹⁾ NO and NC share a common terminal.

Reference Selection Table


Auxiliary contact and fault signalling contact

Accessories name	Product diagram	Fault signalling contact		Auxiliary contact		Reference	Installation position	Net weight (1 pc)
							Top/Left/Right	kg
Auxiliary contact and fault signalling contact		0	1	1	0	D1AD0110	Left installation	0.040
		0	1	0	1	D1AD0101	Left installation	0.040
		1	0	1	0	D1AD1010	Left installation	0.040
		1	0	0	1	D1AD1001	Left installation	0.040

Shunt release & Under-voltage release

Accessories name	Product diagram	Control voltage specification		Reference	Installation position	Net weight (1 pc)
		Voltage V	Frequency Hz		Top/Left/Right	kg
Shunt release		110	50/60	D1AS117	Right installation	0.099
		220	50/60	D1AS227	Right installation	0.099
		380	50/60	D1AS387	Right installation	0.099
Under-voltage release		110	50	D1AU115	Right installation	0.103
		220	50	D1AU225	Right installation	0.103
		380	50	D1AU385	Right installation	0.103
		110	60	D1AU116	Right installation	0.103
		220	60	D1AU226	Right installation	0.103
		380	60	D1AU386	Right installation	0.103
		440	60	D1AU446	Right installation	0.103

Reference Selection Table

Busbar						
Accessories name	Product diagram	Adaptive motor protection circuit breaker	Number of parallel products (pc)	Reference	Installation position	Net weight (1 pc)
						kg
Busbar		UED1-32	2	D1G245	Line/Load	0.033
		UED1-32	3	D1G345	Line/Load	0.057
		UED1-32	4	D1G445	Line/Load	0.081

Information for Use

Altitude dependent compensation factor:

The rarefied atmosphere at high altitude reduces the dielectric strength of the air and hence the rated operational voltage of the contactor.

At an altitude of less than 2000m, no significant effect on the performance of the product. When the altitude is above 2000m, conditions of air cooling and decrease of rated impulse withstand voltage have to be considered, so the design and application need to be further communicated with manufacturer.

Correction coefficients of operational voltage when the altitude is above 2000m are described as below.

Altitude(m)	Rated operational voltage
≤2500	0.90
≤3000	0.80
≤3500	0.70
≤4000	0.60

Technical parameter explanation

Parameters contained in this catalogue such as electrical durability and mechanical durability are based on standard samples' test results, and the actual use may differ from these due to the difference of environment, operating frequency, devices etc.

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