

HDP6 Motor Circuit Breaker

Standard: IEC 60947-1, IEC 60947-2, IEC 60947-4-1



Order Information		
Product Name	Frame Current	Setting Current
HDP6	32	P16
	↓	↓
	32:32A	P16:0.1-0.16A 32:24-32A P means decimal point

Thermal Release	Magnetic Release	400/415V,50/60Hz,AC-3	Recommended	Reference
Setting Current	Current Id	Rated Operating Power	Contactor	
0.1-0.16A	1.5A	-	HDC6-0911	HDP6 32 P16
0.16-0.25A	2.4A	0.06KW	HDC6-0911	HDP6 32 P25
0.25-0.4A	5A	0.09KW	HDC6-0911	HDP6 32 P4
0.4-0.63A	8A	0.12KW	HDC6-0911	HDP6 32 P63
0.63-1A	13A	0.25KW	HDC6-0911	HDP6 32 1
1-1.6A	22.5A	0.37KW	HDC6-0911	HDP6 32 1P6
1.6-2.5A	33.5A	0.75KW	HDC6-0911	HDP6 32 2P5
2.5-4A	51A	1.5KW	HDC6-0911	HDP6 32 4
4-6.3A	78A	2.2KW	HDC6-0911	HDP6 32 6P3
6-10A	138A	4KW	HDC6-0911	HDP6 32 10
9-14A	170A	5.5KW	HDC6-1211	HDP6 32 14
13-18A	223A	7.5KW	HDC6-1811	HDP6 32 18
17-23A	327A	9KW	HDC6-2511	HDP6 32 23
20-25A	327A	11KW	HDC6-2511	HDP6 32 25
24-32A	416A	15KW	HDC6-3211	HDP6 32 32

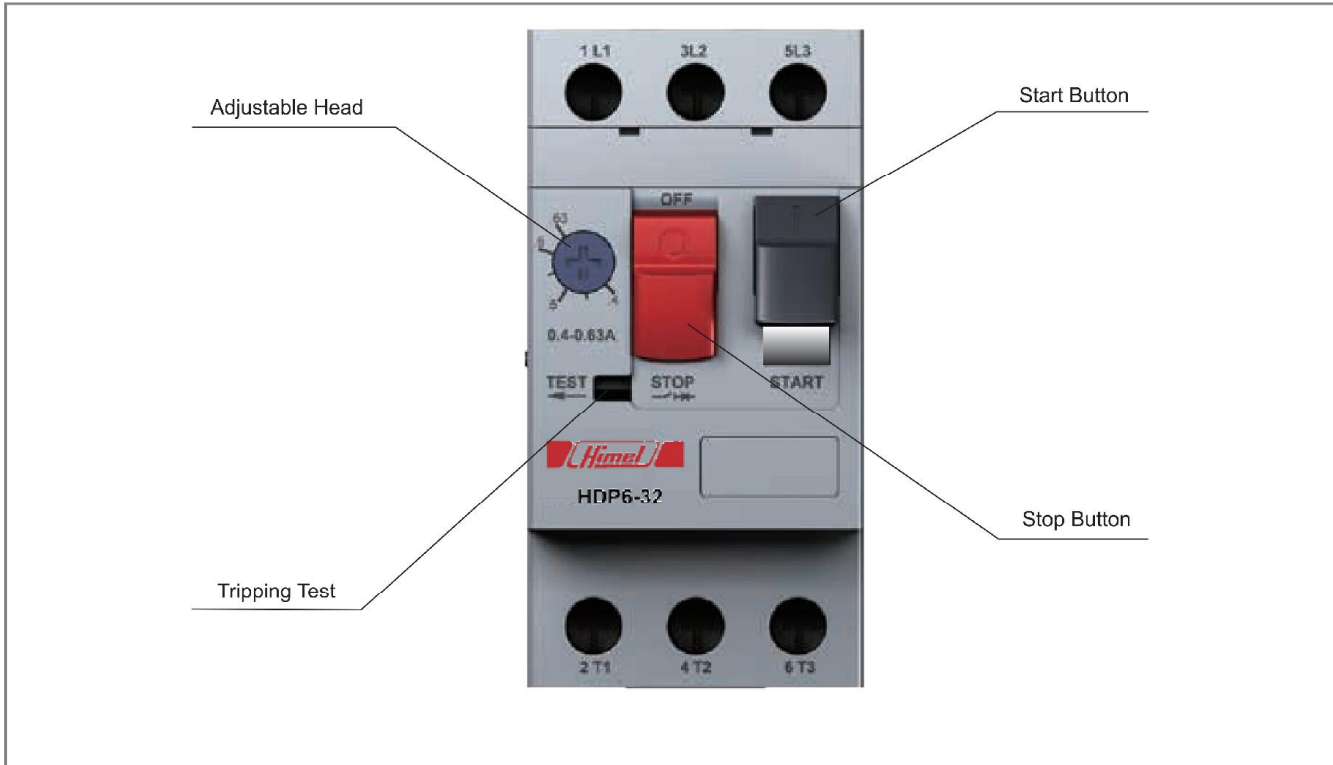
Motor Control & Protection

HDP6 Motor Circuit Breaker

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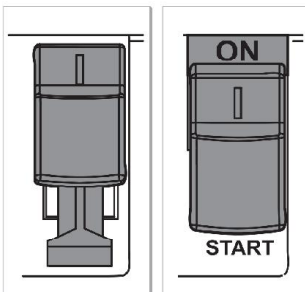


Introduction for Functions



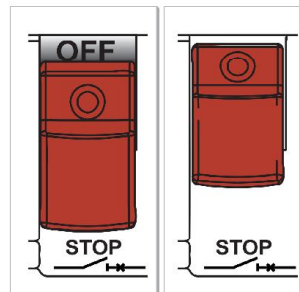
Motor Control & Protection

1.Start Button



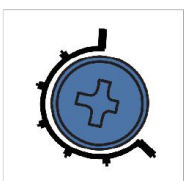
- Press to start HDP6
- After downward pull-out, lock the start button to stop the work

2.Stop Button



- Press to stop HDP6

3.Adjustable Head



- Set the thermal trip current

4.Tripping Test



- Can simulate the tripping action, test product performance

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Main Technical Parameter

Operation Mode	Button Operated
Frame Current	32A
Rated Impulse Withstand Voltage	6000V
Rated Operational Voltage	690V
Rated Isolation Voltage	690V
Rated Operational Frequency	50/60Hz
Trip class	10A
Fastening torque	1.7N • m
Mechanical Durabilities	100000
Electrical Durabilities AC-3 400V	100000
Overload Protection Category	Phase failure, Thermal Overload
Short circuit protection	Yes
Isolation Function	Yes
Temperature Compensation Function	Yes

Breaking Capacity

Setting Current	Ue:230/240V		Ue:400/415V		Ue:440V		Ue:500V		Ue:690V	
	Icu	Ics	Icu	Ics	Icu	Ics	Icu	Ics	Icu	Ics
0.1-0.16A	100kA	100kA	100kA	100kA	100kA	100kA	100kA	100kA	100kA	100kA
0.16-0.25A	100kA	100kA	100kA	100kA	100kA	100kA	100kA	100kA	100kA	100kA
0.25-0.4A	100kA	100kA	100kA	100kA	100kA	100kA	100kA	100kA	100kA	100kA
0.4-0.63A	100kA	100kA	100kA	100kA	100kA	100kA	100kA	100kA	100kA	100kA
0.63-1A	100kA	100kA	100kA	100kA	100kA	100kA	100kA	100kA	100kA	100kA
1-1.6A	100kA	100kA	100kA	100kA	100kA	100kA	100kA	100kA	100kA	100kA
1.6-2.5A	100kA	100kA	100kA	100kA	100kA	100kA	100kA	100kA	3kA	2.25kA
2.5-4A	100kA	100kA	100kA	100kA	100kA	100kA	100kA	100kA	3kA	2.25kA
4-6.3A	100kA	100kA	100kA	100kA	50kA	50kA	50kA	50kA	3kA	2.25kA
6-10A	100kA	100kA	100kA	100kA	15kA	15kA	10kA	10kA	3kA	2.25kA
9-14A	100kA	100kA	15kA	7.5kA	8kA	4kA	6kA	4.5kA	3kA	2.25kA
13-18A	100kA	100kA	15kA	7.5kA	8kA	4kA	6kA	4.5kA	3kA	2.25kA
17-23A	50kA	50kA	15kA	6kA	6kA	3kA	4kA	3kA	3kA	2.25kA
20-25A	50kA	50kA	15kA	6kA	6kA	3kA	4kA	3kA	3kA	2.25kA
24-32A	50kA	50kA	10kA	5kA	6kA	3kA	4kA	3kA	3kA	2.25kA

Remark: Icu Rated Ultimate Short-circuit Breaking Capacity
Ics Rated Service Short-circuit Breaking Capacity

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Main Technical Parameter

Fuse Select gL/gG (When the prospective short-circuit current is greater than the rated ultimate short-circuit breaking capacity Icu, need a spare fuse)

Setting Current	Ue:230/240V	Ue:400/415V	Ue:690V
0.1-0.16A	-	-	-
0.16-0.25A	-	-	-
0.25-0.4A	-	-	-
0.4-0.63A	-	-	-
0.63-1A	-	-	-
1-1.6A	-	-	-
1.6-2.5A	-	-	20
2.5-4A	-	-	32
4-6.3A	-	-	40
6-10A	-	-	40
9-14A	-	80	50
13-18A	-	80	50
17-23A	100	100	50
20-25A	100	100	50
24-32A	100	100	50

*) "-"No need to use Fuse

3 Phase Motor Rated Power,50/60Hz,AC-3

Setting Current	Ue:230/240V	Ue:400/415V	Ue:690V
0.1-0.16A	-	-	-
0.16-0.25A	-	0.06kw	-
0.25-0.4A	-	0.09kw	-
0.4-0.63A	-	0.12kw	0.37kw
0.63-1A	-	0.25kw	0.55kw
1-1.6A	-	0.37kw	1.1kw
1.6-2.5A	0.37kw	0.75kw	1.5kw
2.5-4A	0.75kw	1.5kw	3kw
4-6.3A	1.1kw	2.2kw	4kw
6-10A	2.2kw	4kw	7.5kw
9-14A	3kw	5.5kw	9kw
13-18A	4kw	7.5kw	11kw
17-23A	5.5kw	9kw	15kw
20-25A	5.5kw	11kw	18.5kw
24-32A	7.5kw	15kw	22kw

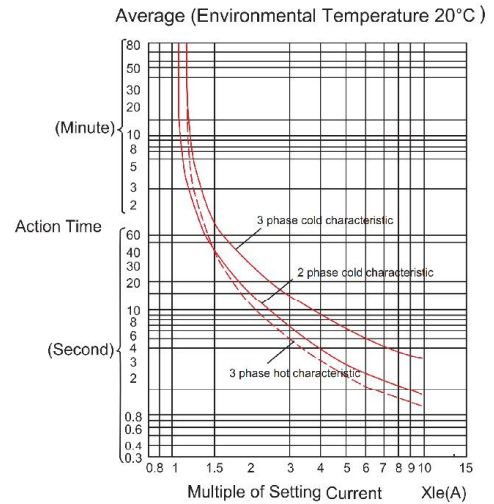
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Operating Characteristics

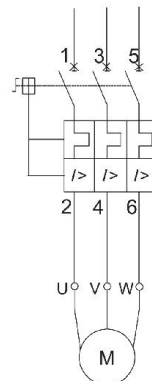
No.	Multiple of Setting Current	Operating Time	Starting Conditions	Environmental Temperature	
Operating Characteristics for Load Balance of the Phases					
1	1.05	Without operation within 2h	Cold State	+20°C	
2	1.2	Operation within 2h	Hot State (After No.1 Test)	+20°C	
3	1.5	Operation within 2min	Hot State (After No.1 Test)	+20°C	
4	7.2	Operation at 2s<Tp≤10s	Cold State	+20°C	
Operating Characteristics for Phase Load Unbalance (Phase Failure)					
	Any 2-Phase	3 rd Phase			
1	1.0	0.9	Without operation within 2h	Cold State	+20°C
2	1.15	0	Operation within 2h	Hot State (After No.1 Test)	+20°C
The temperature compensation performance					
1	1.0	Without operation within 2h	Cold State	+40°C	
2	1.2	Operation within 2h	Hot State (After No.1 Test)	+40°C	
3	1.05	Without operation within 2h	Cold State	-5°C	
4	1.3	Operation within 2h	Hot State (After No.3 Test)	-5°C	



Motor Control & Protection

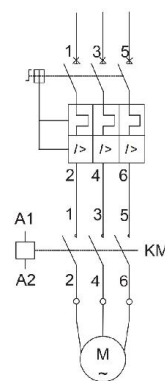
Wiring Diagram

HDP6 drive motor directly



Used for low operation frequency area

HDP6 use with HDC6



Used for high operation frequency area

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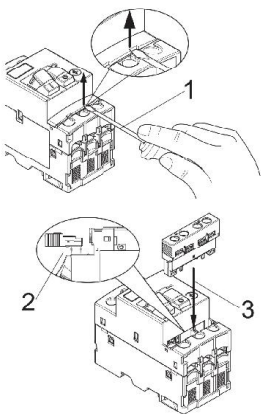
Accessories

Name		Type	Spec.	Reference
Undervoltage Release		HAU	110~127V	HAU110
			220~240V	HAU220
			380~400V	HAU380
			415V	HAU415
Shunt Release		HAS	110~127V	HAS110
			220~240V	HAS220
			380~400V	HAS380
			415V	HAS415
Auxiliary Contact	Top	HAE	2NO	HAE20
			1NC+1NO	HAE11
	Side	HAN	2NO	HAN20
			1NC+1NO	HAN11
Waterproof Cover		HDP6-32MC	IP55	HDP632MC



Motor Control & Protection

Installation of HAE11 or HAE20



1. Pry the top auxiliary protective cover up;
2. Put the flat surface of the top auxiliary contact close to the circuit breaker;
3. Align the installation position and insert it.

Parameters of instantaneous auxiliary contact

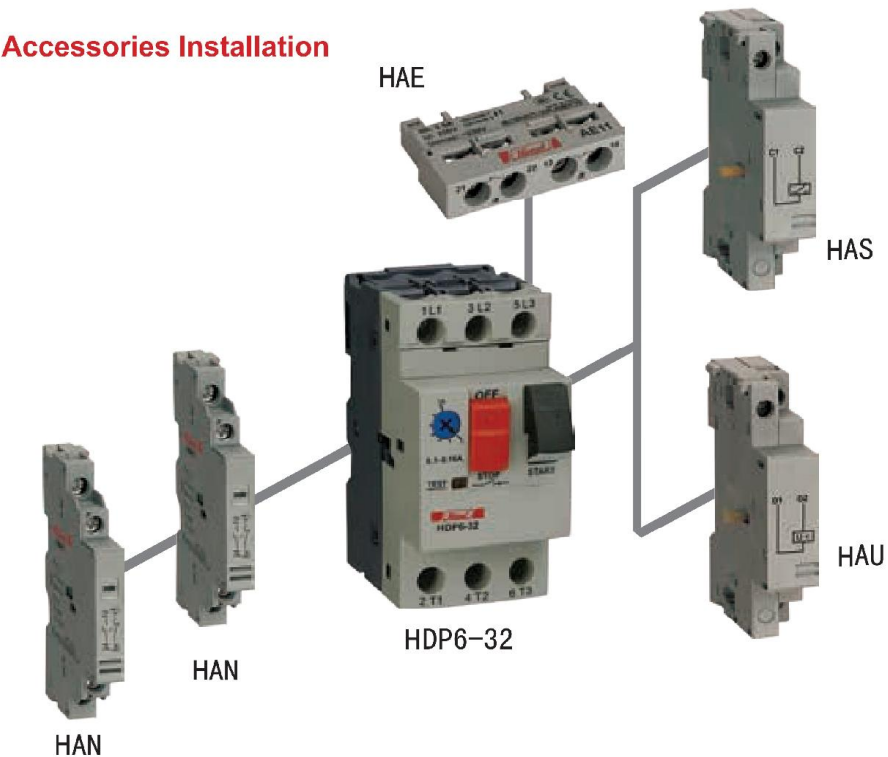
Name	Rated Isolation Voltage UI	Applicable Cat.	Rated Operational Voltage	Rated Operational Current	Conventional Heating Current
Top Auxiliary Contact	250V	AC-15	24V	2A	2.5A
			48V	1.25A	2.5A
			110V	1A	2.5A
			230V	0.5A	2.5A
		DC-13	24V	1A	2.5A
			48V	0.3A	2.5A
Side Auxiliary Contact	690V	AC-15	48V	6A	6A
			110V	4.5A	6A
			230V	3.3A	6A
			380V	2.2A	6A
		DC-13	24V	6A	6A
			48V	5A	6A
			220V	0.5A	6A

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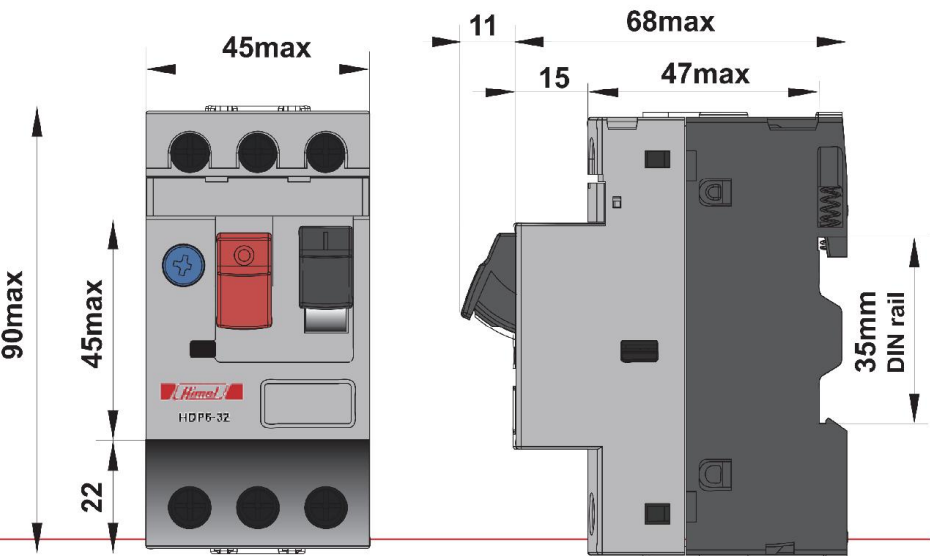


Accessories Installation



Type	Name	Installation Position	The largest installed Qty.
HAE	Top Auxiliary Contact	Face-up	1
HAN	Side Auxiliary Contact	Left Side	2
HAU	Undervoltage Release	Right Side	1
HAS	Shunt Release	Right Side	1

Overall Dimension for Installation



Motor Control & Protection