

HDP17Z Motor protector

Standards: IEC 60947-1 IEC 60947-2 and IEC 60947-4-1



Ordering Information

Product Name	Frame Current	Setting Current
HDP17Z	32	P16
	32:32A	P16:0.1~0.16A
	80:80A	...
		80:56-80A

Frame Current (A)	Setting Current (A)	Order Code
32	0.10 ~ 0.16	HDP17Z32P16
	0.16 ~ 0.25	HDP17Z32P25
	0.25 ~ 0.40	HDP17Z32P4
	0.40 ~ 0.63	HDP17Z32P63
	0.63 ~ 1.00	HDP17Z321
	1.00 ~ 1.60	HDP17Z321P6
	1.60 ~ 2.50	HDP17Z322P5
	2.50 ~ 4.00	HDP17Z324
	4.00 ~ 6.30	HDP17Z326P3
	6.00 ~ 10.0	HDP17Z3210
	9.00 ~ 14.0	HDP17Z3214
	13.0 ~ 18.0	HDP17Z3218
	17.0 ~ 23.0	HDP17Z3223
	20.0 ~ 25.0	HDP17Z3225
24.0 ~ 32.0	HDP17Z3232	
80	25.0 ~ 40.0	HDP17Z8040
	40.0 ~ 63.0	HDP17Z8063
	63.0 ~ 80.0	HDP17Z8080

Motor Control & Protection



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Technical Parameter

Technical Parameter										
Rated Isolation Voltage Ui V	690									
Rated Operational Voltage Ue V	230/240, 400/415, 440, 500, 690									
Rated Impulse Withstand Voltage Uimp V	6000									
Rated Frequency Hz	50/60									
Applicable Category	AC - 3A									
Operation Mode	Button Type									
Trip Class	10A									
Electrical Durability Times	100000									
Mechanical Durability Times	100000									
Flash-Over Distance mm	≥40									
Accessories	Under-Voltage Release, Shunt Release, Instantaneous Auxiliary Contact (Side and Face-up Installation)									
Rated Current In A	0.16	0.25	0.4	0.63	1	1.6	2.5	4		
Setting Current A	0.10-0.16	0.16-0.25	0.25-0.40	0.40-0.63	0.63-1.00	1.00-1.60	1.60-2.50	2.50-4.00		
Rated Operating Power KW Class AC-3 50/60 HZ	400V	-	-	-	-	0.37	0.75	1.5		
	690V	-	-	-	0.37	0.55	1.1	1.5	3	
Breaking Capacity KA	400V Icu	100	100	100	100	100	100	100	100	
	400V Ics	100	100	100	100	100	100	100	100	
	690V Icu	100	100	100	100	100	100	3	3	
	690V Ics	100	100	100	100	100	100	2.25	2.25	

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Accessories	Under-Voltage Release, Shunt Release, Instantaneous Auxiliary Contact (Side and Face-up Installation)										
Rated Current In A	6.3	10	14	18	23	25	32	40	63	80	
Setting Current A	4.00-6.30	6.00-10.0	9.00-14.0	13.0-18.0	17.0-23.0	20.0-25.0	24.0-32.0	25.0-40.0	40.0-63.0	56.0-80.0	
Rated Operating Power KW Class AC-3 50/60 HZ	400V	2.2	4	5.5	7.5	11	11	15	16	20	25
	690V	4	7.5	9	11	15	18.5	23	18.5	30	40
Breaking Capacity KA	400V Icu	100	100	15	15	15	15	10	30	30	35
	400V Ics	100	100	7.5	7.5	6	6	5	15	15	17.5
	690V Icu	3	3	3	3	3	3	3	5	6	8
	690V Ics	2.25	2.25	2.25	2.25	2.25	2.25	2.25	2.25	3	4

Note: Ics means the breaking capacity of rated short circuit operation; Icu means the breaking capacity of rated short circuit operation and rated limited short circuit.

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Product Features

HDP17Z-32 Motor protector is applicable for the circuits with AC 50/60HZ, Rated Voltage to 690V and Rated Current of 0.1-32A and used for overload, phase failure, Short circuit protection and non-frequent start control of three-phase squirrel-cage asynchronous motor, and also can be used for distribution line protection and non-frequent load transfer and adopted as isolator.

Applicable Standards: IEC60947-1\IEC60947-2\IEC60947-4-1

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°C
2	1.2	Operation within 2h	Hot State (After No.1 Test)	
3	1.5	Operation within 2min	Hot State (After No.1 Test)	
4	7.2	Operation at 2s<Tp≤10s	Cold State	
Operating Characteristics for Phase Load Unbalance (Phase Failure)				
	Any 2-Phase	3 rd Phase		
1	1	0.9	Without operation within 2h	Cold State +20°C ± 2°C
2	1.15	0	Operation within 2h	Hot State (After No.1 Test)

Setting Current A	0.10 ~ 0.16	0.16 ~ 0.25	0.25 ~ 0.40	0.40 ~ 0.63	0.63 ~ 1.00	1.00 ~ 1.60
Instantaneous Electromagnetic Tripping Current Setting Value Ir A	1.92	3	4.8	7.56	12	19.2
Setting Current A	1.60 ~ 2.50	2.50 ~ 4.00	4.00 ~ 6.30	6.00 ~ 10.0	9.00 ~ 14.0	13.0 ~ 18.0
Instantaneous Electromagnetic Tripping Current Setting Value Ir A	30	48	75.6	120	168	216
Setting Current A	17.0 ~ 23.0	20.0 ~ 25.0	24.0 ~ 32.0	25.0 ~ 40.0	40.0 ~ 63.0	56.0 ~ 80.0
Instantaneous Electromagnetic Tripping Current Setting Value Ir A	276	300	384	480	756	960

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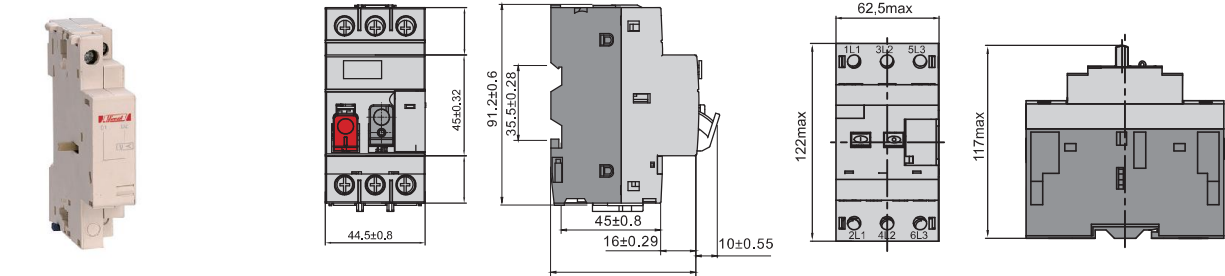
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Installation Dimensions

HDP17Z-32

HDP17Z-80



Accessories

Name	Type	Specification	Reference	
Under-voltage Release	AU (32AF)	110 ~ 127V	HDP17Z32AU110	
		220 ~ 240V	HDP17Z32AU220	
		380 ~ 415V	HDP17Z32AU380	
Shunt Release	AS (32AF)	110 ~ 127V	HDP17Z32AU110	
		220 ~ 240V	HDP17Z32AU220	
		380 ~ 415V	HDP17Z32AU380	
Instantaneous Auxiliary Contact	Face-Up Installation	AE (32AF)	2NO 1NC+1NO	HDP17Z32AE20 HDP17Z32AE11
		Side Installation	AN (32AF)	2NO 1NC+1NO
	A (80AF)		1NC+1NO	HDP17Z80A01
	A (80AF)		2NO	HDP17Z80A02

Basic Parameters of Instantaneous Auxiliary Contact

Name	Rated Isolation Voltage U_i	Applicable Type	Rated Operational Voltage	Rated Operational Current	Conventional thermal current
Face-Up Installed Auxiliary Contact AE	250V	AC-15	24V	2A	2.5A
			48V	1.25A	2.5A
			110V	1A	2.5A
		DC-13	230V	0.5A	2.5A
			24V	1A	2.5A
			48V	0.3A	2.5A
Side Installed Auxiliary Contact AN	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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Working and Installation Conditions

Altitude: $\leq 2000\text{m}$;

Ambient temperature: $-5^{\circ}\text{C}\sim+40^{\circ}\text{C}$, the daily average temperature $\leq+35^{\circ}\text{C}$

Relative Humidity: Maximum temperature is $+40^{\circ}\text{C}$, air relative humidity not more than 50%, it is allowed to have relative higher temperature under lower temperature, for considering the dew in the product surface formed by the changes of the temperature, special measures shall be adopted.

Pollution Level: III

Installation Class: III

Installation Position: the inclination between the installation surface and vertical surface is not more than 5° and there is no obvious shock and vibration.

Wiring Diagram

