

HDR3 Thermal Overload Relay

Order Information
Standard: IEC/EN 60947-4-1

3SERIES
MORE VALUE FOR PRICE!



HDR3 Thermal Overload Relay

Product Name	Frame current	Auxiliary Contact
HDR3	25	P16
	↓	↓
	25:25A 36:36A 93:93A	1P6: 1.0-1.6A P16: 0.1-0.16 ... 93: 80-93A P means decimal point

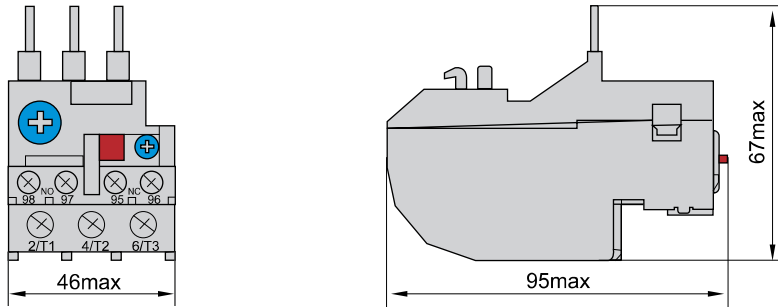
Frame Rating Current (A)	Setting Current(A)	Fuse current used for matching with Relay	Contactor used for matching with Relay	Reference
25	0.1-0.16	HRT16 is recommended	HDC3 is recommended	HDR325P16
	0.16-0.25			HDR325P25
	0.25-0.4			HDR325P4
	0.4-0.63			HDR325P63
	0.63-1			HDR3251
	1-1.6			HDR3251P6
	1.6-2.5			HDR3252P5
	2.5-4			HDR3254
	4-6			HDR3256
	5.5-8			HDR3258
	7-10			HDR32510
	9-13			HDR32513
	12-18			HDR32518
	17-25			HDR32525
36	23-32	63	25-32	HDR33632
	30-40	80	32-38	HDR33640
93	23-32	63	40-95	HDR39332
	30-40	80	40-95	HDR39340
	37-50	100	50-95	HDR39350
	48-65	100	50-95	HDR39365
	55-70	125	65-95	HDR39370
	63-80	125	80-95	HDR39380
	80-93	160	95	HDR39393



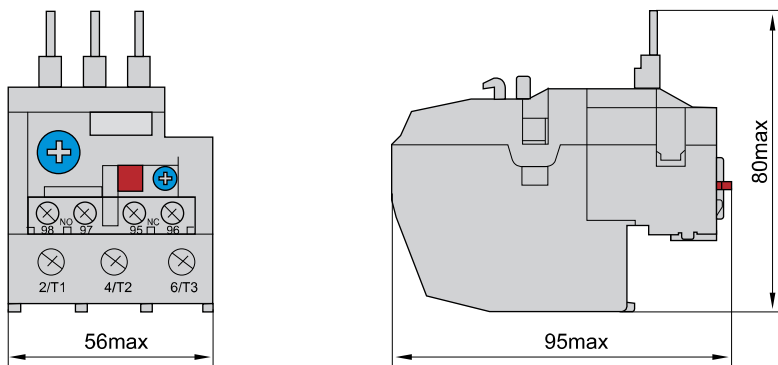
HDR3 Thermal Overload Relay

Overall and installation dimensions
Standard: IEC/EN 60947-4-1

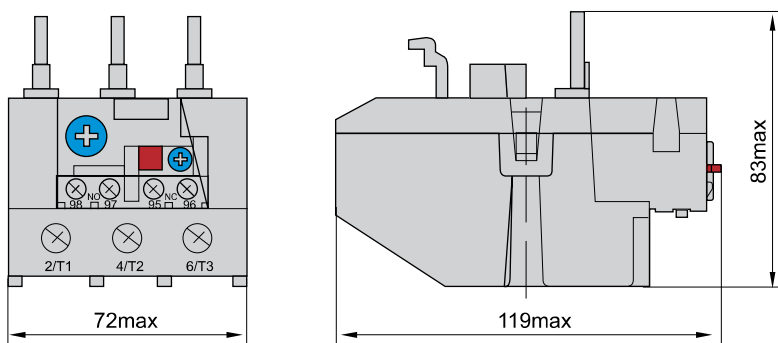
Overall dimension drawing of HDR3-25/Z



Overall dimension drawing of HDR3-36/Z

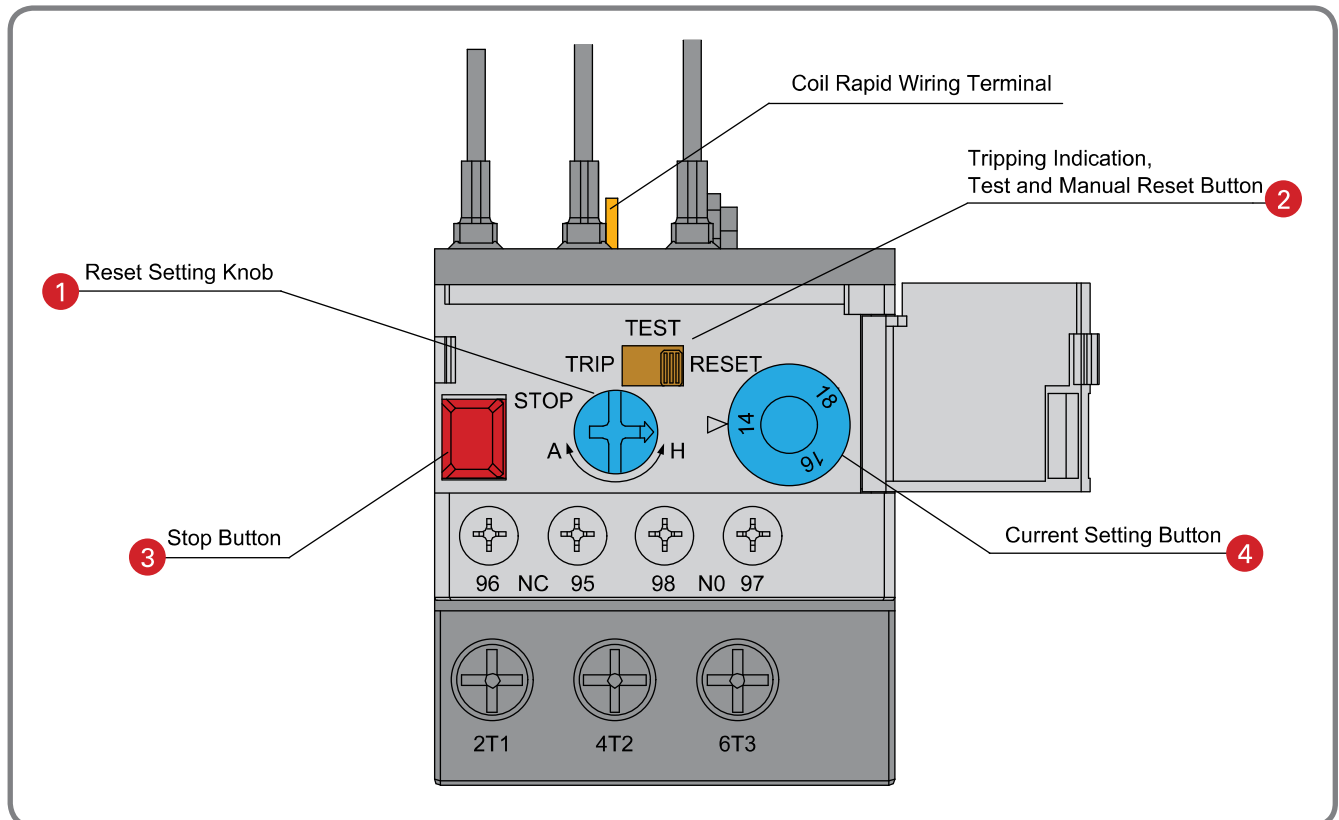


Overall dimension drawing of HDR3-93/Z

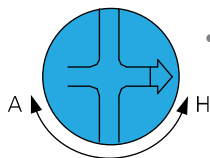


HDR6 Thermal Overload Relay

Introduction for Functions
Standard: IEC/EN 60947-4-1

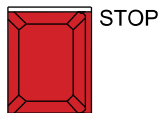


1 Reset Setting Knob



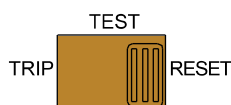
- Manual Reset for Arrow Pointing to 'H';
- Automatic Reset for Arrow Pointing to 'A'.

3 Stop Button



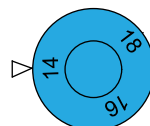
- Make NC Contact operate, but not influence NO contact. After pressing Stop Button, cut control circuit off and the electromotor stops working.

2 Tripping Indicator, Test and Manual Reset Button



- After the operation of tripping indication and thermal overload relay, yellow button to 'Trip' position means 'tripping'
- After the operation of manual reset, the reset is realized to put yellow button back to 'Reset' position;
- Implement the test to simulate the tripping (use NO and NC contact to operate) and check the control circuit. When carrying out the test under manual reset state, put back to 'Reset' position after reaching 'Trip'. Automatically rebound to 'Reset' after switching to 'Trip' for automatic reset.

4 Current Setting Button



- Set the value of setting current for rated electromotor.

HDR6 Thermal Overload Relay

Technical Parameter

Standard: IEC/EN 60947-4-1



Main Technical Parameter

Temperature Compensation		-10° C~+55° C
Trip Class	10A	HDR6-18,32,630/F
	10	HDR6-95,185
Frame Current	HDR6-18	0.1~18A
	HDR6-32	6.3~32A
	HDR6-95	18~95A
	HDR6-185	48~185A
	HDR6-630/F	145~630A
Rates impulse withstand voltage (Uimp)		6kV
Protection Function		Over-load Protection
		Phase Failure Protection
		Manual and Automatic Reset
		Tripping Indication
		Stop Button
		Test Button
Installation Method		Assembly / Independent: HDR6-18~185
		Independent: HDR6-630/F
Auxiliary Circuit		
Rated Thermal Current		6A
Contact Type		1NO+1NC
Rated Insulating Voltage		690V
	AC-15 220V/240V	1.64A
Control Capacity	AC-15 380V/415V	0.95A
	DC-13 220V/240V	0.23A
	Wire Section	1mm ²
Wiring Ability		

HDR6 Thermal Overload Relay

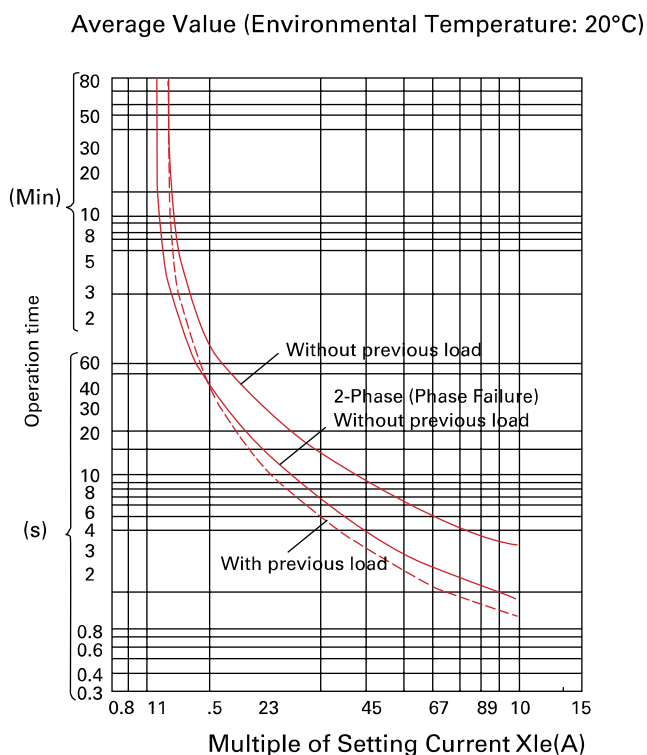
Tripping Characteristics and Wiring Diagram
Standard: IEC/EN 60947-4-1



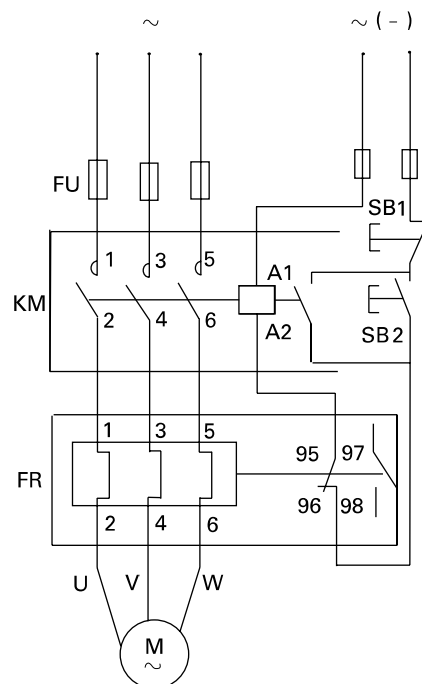
Tripping Characteristics

No.	Multiple of Setting Current		Tripping Time		Initial Condition	Ambient Temperature
			Trip class 10A	Trip class 10		
Tripping Characteristics for Current Balance						
1	1.05		Non-tripping within 2h	Non-tripping within 2h	Without previous load	+20°C
2	1.2		Tripping within 2h	Tripping within 2h	After No.1 Test	
3	1.5		<2min	<4min	After No.1 Test	
4	7.2		2s < T _p ≤ 10s	4s < T _p ≤ 10s	Without previous load	+20°C
Tripping Characteristics for Current Imbalance						
Any 2-Phase, 3rd Phase						
1	1.0	0.9	Non-tripping within 2h	Non-tripping within 2h	Without previous load	+20°C
2	1.15	0	Tripping within 2h	Tripping within 2h	After No.1 Test	

Tripping Characteristics



Wiring Diagram

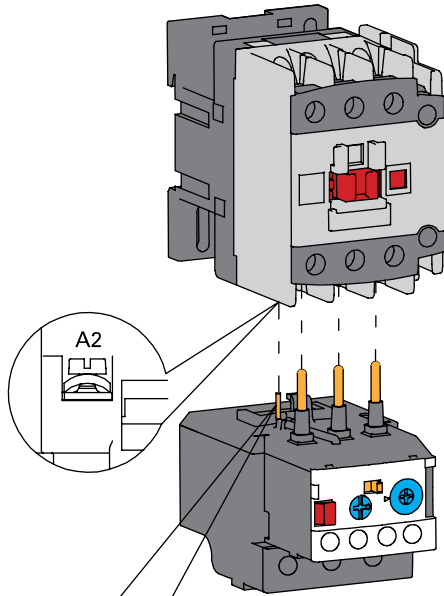


HDR6 Thermal Overload Relay

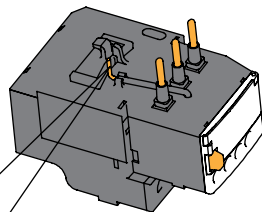
Installation Methods
Standard: IEC/EN 60947-4-1



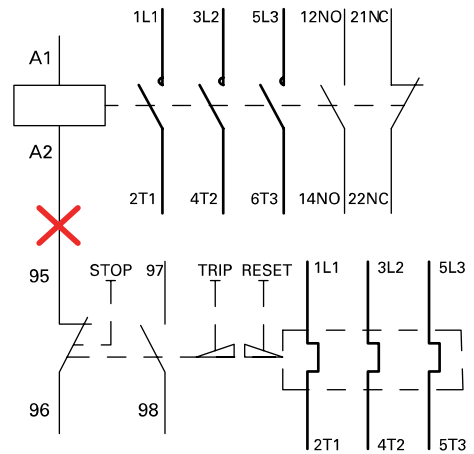
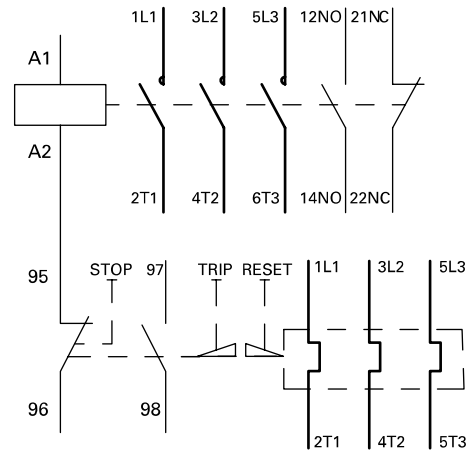
HDR6-9~95 Assembly Installation



This wire is the coil rapid wiring terminal which can be used as the assembly with the contactor. When two are completely connected, it is to ensure that the screw in A2 contact point of the contactor coil is tightened.



If this wiring terminal is not used it can be cut short and then insulating tape can be used in conductive parts.



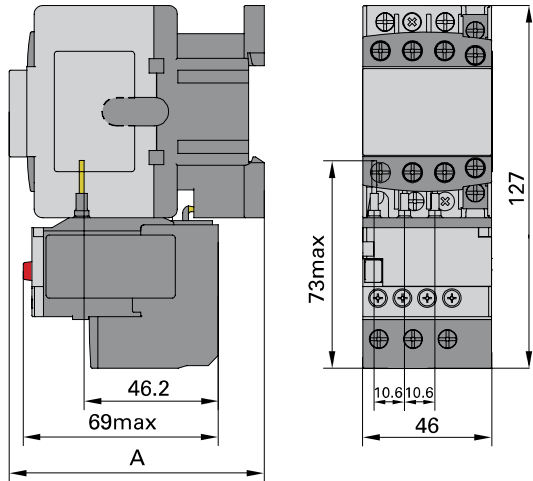
HDR6 Thermal Overload Relay

Overall Dimension of Installation

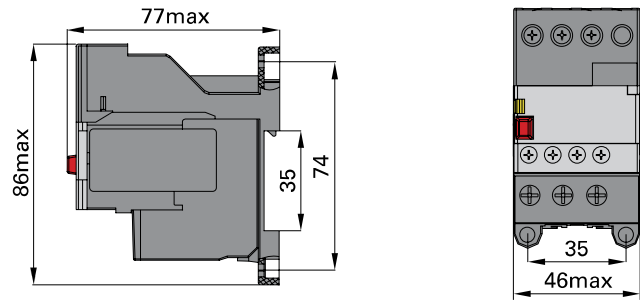
Standard: IEC/EN 60947-4-1



HDR6-18 Assembly Installation



HDR6-18 Independent Installation



Assembly Installation for HDR6-18 and HDC6-09, 12, 18

	HDC6-09	HDC6-12	HDC6-18
A	84	84	89

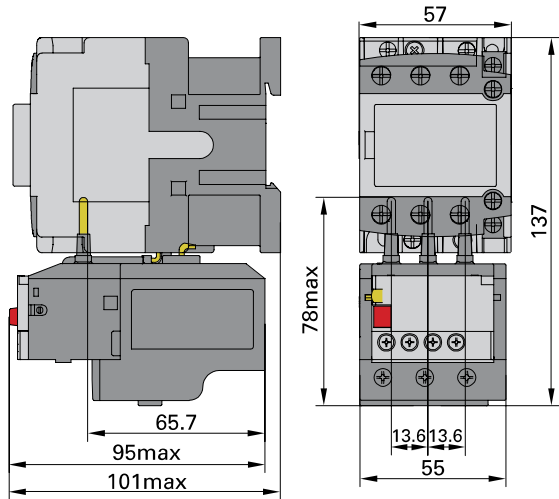
HDR6 Thermal Overload Relay

Overall Dimension of Installation

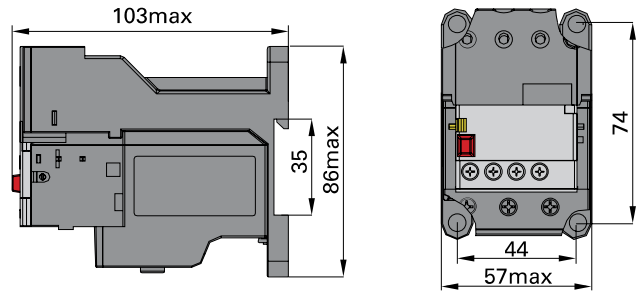
Standard: IEC/EN 60947-4-1



HDR6-32 Assembly Installation



HDR6-32 Independent Installation



Motor Control and Protection