HDR6 Thermal Overload Relay

Order Information

Product Type	Frame Current	Setting Current	Installation Type
HDR6	18	P15	
	18:18A … 630:630A	P15：0.1-0.15 … 630:460-630A P means decimal point	Default:None F:Independent installation

Range for Setting Current	Fuse used for Matching with Relay		Matched Contactor	Reference
	aM	gG		
0.10-0.15A	0.25	2	HDC6-09~18	HDR6 18 P15
0.12-0.18A	0.25	2	HDC6-09~18	HDR6 18 P18
0.18-0.25A	0.5	2	HDC6-09~18	HDR6 18 P25
0.25-0.36A	1	2	HDC6-09~18	HDR6 18 P36
0.35-0.50A	1	2	HDC6-09~18	HDR6 18 P5
0.50-0.70A	1	2	HDC6-09~18	HDR6 18 P7
0.63-0.90A	2	4	HDC6-09~18	HDR6 18 P9
0.90-1.20A	2	4	HDC6-09~18	HDR6 18 1P2
1.20-1.80A	4	6	HDC6-09~18	HDR6 18 1P8
1.80-2.50A	4	6	HDC6-09~18	HDR6 18 2P5
2.50-3.60A	6	10	HDC6-09~18	HDR6 18 3P6
3.50-4.80A	8	16	HDC6-09~18	HDR6 18 4P8
4.50-6.30A	8	16	HDC6-09~18	HDR6 18 6P3
5-7A	12	20	HDC6-09~18	HDR6 18 7
6.3-9A	12	20	HDC6-09~18	HDR6 18 9
9-12A	16	25	HDC6-09~18	HDR6 18 12
11-15A	20	35	HDC6-09~18	HDR6 18 15
14-18A	20	35	HDC6-09~18	HDR6 18 18
6.3-9A	12	20	HDC6-25~32	HDR6 32 9
9-12A	16	25	HDC6-25~32	HDR6 32 12
12-18A	20	35	HDC6-25~32	HDR6 32 18
18-25A	25	50	HDC6-25~32	HDR6 32 25
23-32A	40	63	HDC6-25~32	HDR6 32 32
18-25A	25	50	HDC6-40~95	HDR6 95 25
23-32A	40	63	HDC6-40~95	HDR6 95 32
30-40A	40	100	HDC6-40~95	HDR6 95 40
37-50A	63	100	HDC6-40~95	HDR6 95 50
48-65A	63	100	HDC6-40~95	HDR6 95 65
55-70A	80	125	HDC6-40~95	HDR6 95 70
63-80A	80	125	HDC6-40~95	HDR6 95 80
80-95A	100	160	HDC6-40~95	HDR6 95 95

Base

Adaptive Thermal Relay Type	Reference
HDR6-18	HDR6 18 J
HDR6-32	HDR6 32 J
HDR6-95	HDR6 95 J

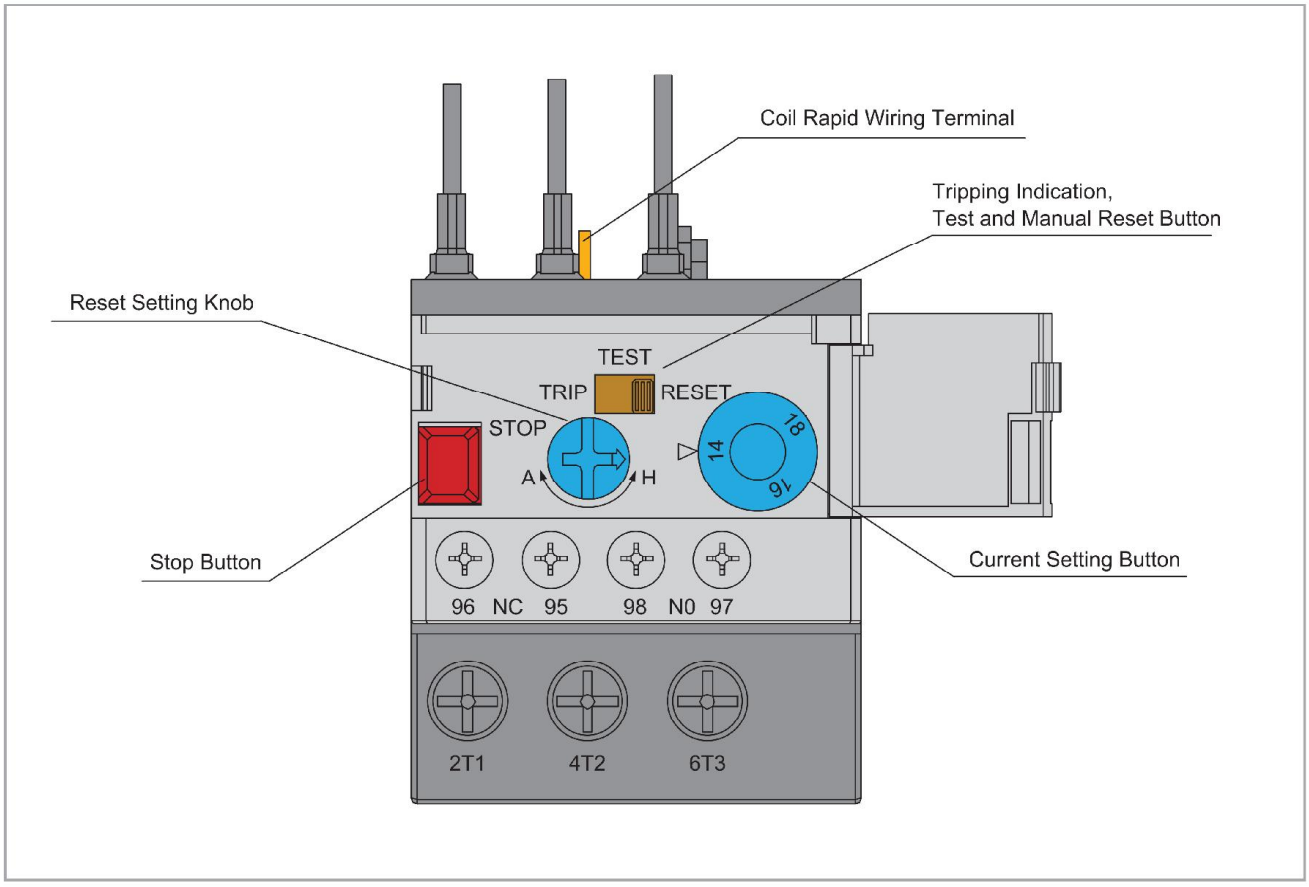
HDR6 Thermal Overload Relay

Order Information

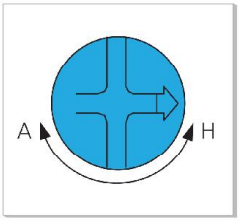
Range for Setting Current	Fuse used for Matching with Relay		Matched Contactor	Reference
	aM	gG		
48-65	80	100	HDC6-115~185	HDR6 185 65
55-70	80	100	HDC6-115~185	HDR6 185 70
63-80	80	100	HDC6-115~185	HDR6 185 80
75-95	100	125	HDC6-115~185	HDR6 185 95
90-115	125	200	HDC6-115~185	HDR6 185 115
105-135	160	200	HDC6-115~185	HDR6 185 135
120-150	160	200	HDC6-115~185	HDR6 185 150
130-160	160	250	HDC6-115~185	HDR6 185 160
150-185	200	250	HDC6-115~185	HDR6 185 185
145-200	200	400	HDC6-225~630	HDR6 630 200F
180-250	250	400	HDC6-225~630	HDR6 630 250F
230-320	355	500	HDC6-225~630	HDR6 630 320F
290-400	400	630	HDC6-225~630	HDR6 630 400F
350-480	500	800	HDC6-225~630	HDR6 630 480F
460-630	630	800	HDC6-225~630	HDR6 630 630F

HDR6 Thermal Overload Relay

Introduction for Functions

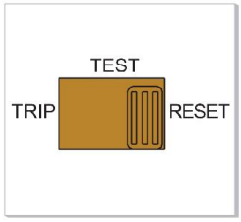


1.Reset Setting Knob



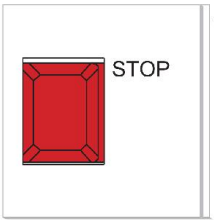
- Manual Reset for Arrow Pointing to “H ”
- Automatic Reset for Arrow Pointing to “A”

2.Tripping Indicator, Test and Manual Reset Button



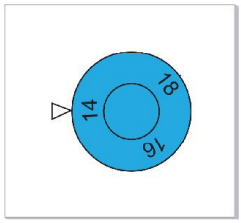
- After the operation of tripping indication and thermal overload relay, yellow button to “Trip” position means “tripping”;
- After the operation of manual reset, the reset is realized to put yellow button back to “Reset” position;
- Implement the test to simulate the tripping (use NO and NC Contact 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.

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.

4.Current Setting Button



- Set the value of setting current for rated electromotor.

HDR6 Thermal Overload Relay

Technical Parameter

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
Control Capacity	AC-15 220V/240V	1.64A
	AC-15 380V/415V	0.95A
	DC-13 220V/240V	0.23A
Wiring Ability	Section of Connecting Conduction	1mm^2
Main Circuit Wiring Ability		

HDR6 Thermal Overload Relay

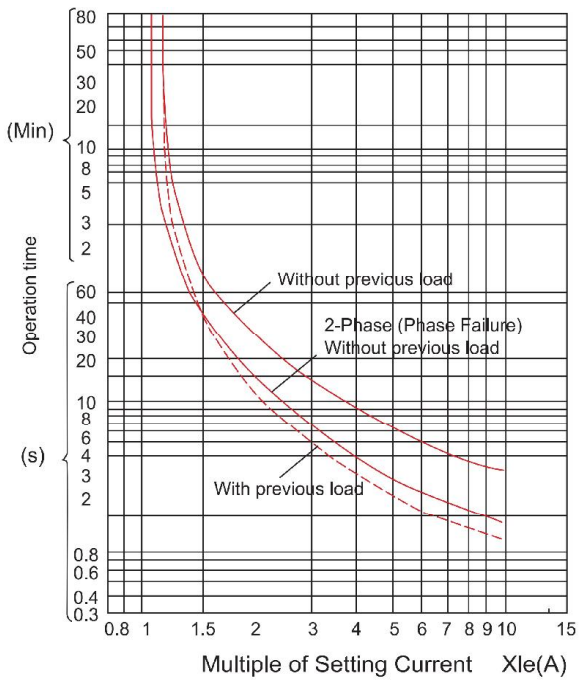
Tripping Characteristics and Wiring Diagram

Tripping Characteristics

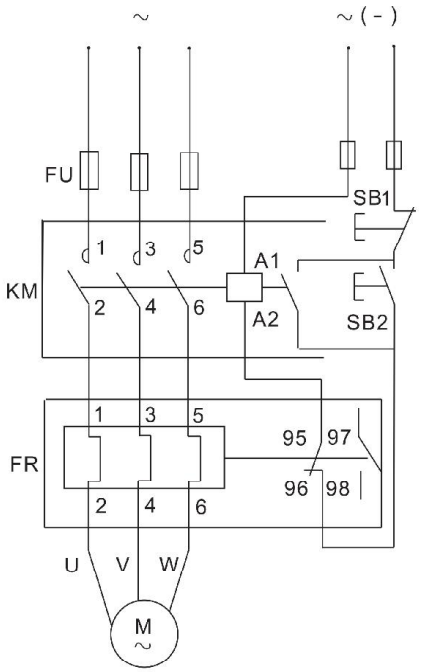
No.	Mulriple of Setting Current		Tripping Time		Initial Condition	Ambient Temperature
			Trip class 10A	Trip class 10		
Tripping Characteristics for Current Balance						
1	1.05		Non-tripping within 2h	Non-tripping within 2h	Without previous load	+20°C
2	1.2		Tripping within 2h	Tripping within 2h	After No.1 Test	
3	1.5		＜2min	＜4min	After No.1 Test	
4	7.2		2s＜Tp≤10s	4s＜Tp≤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

Average Value (Environmental Temperature: 20°C)



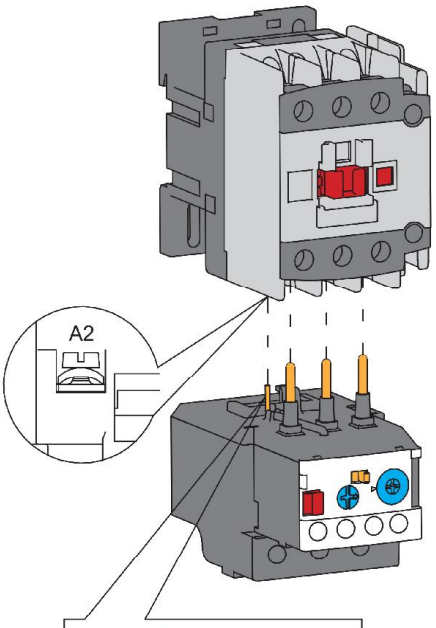
Wiring Diagram



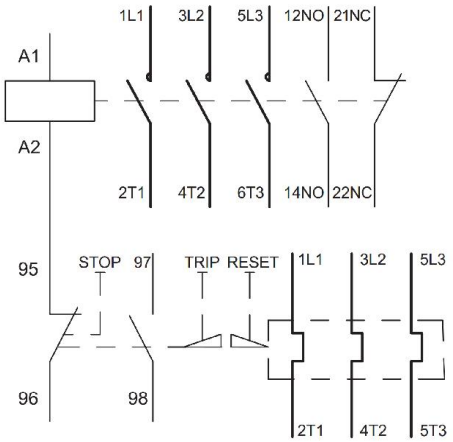
Installation Methods

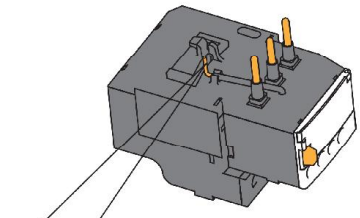
HDR6-9~95

Assembly Installation

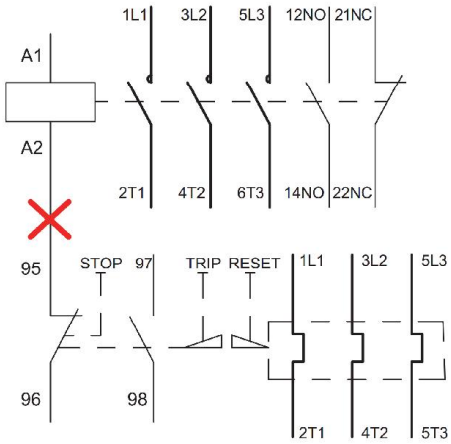


This wire is the coil rapid wiring terminal, which can be used as the assembly with the contactor. When two are completely connected, it is to ensure that the screw in A2 contact point of the contactor coil is tightened.



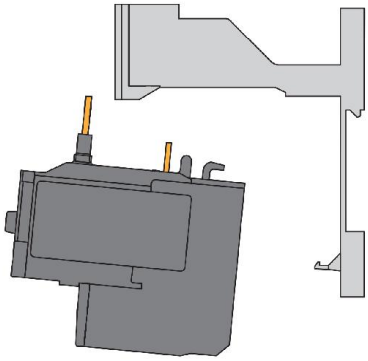


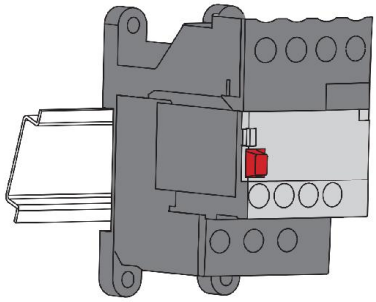
If this wiring terminal is not used, it can be cut short and then insulating tape can be used in conductive parts.



HDR6-9~95

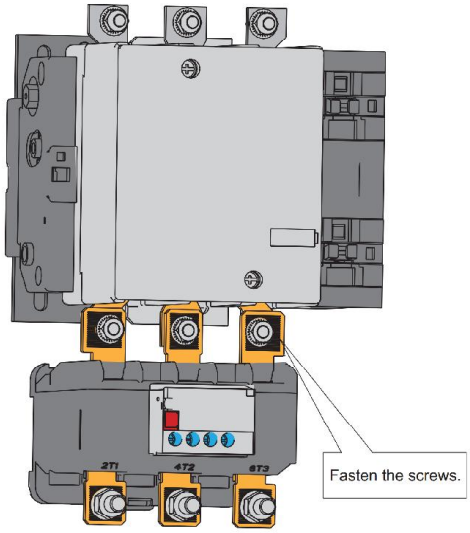
Independent Installation



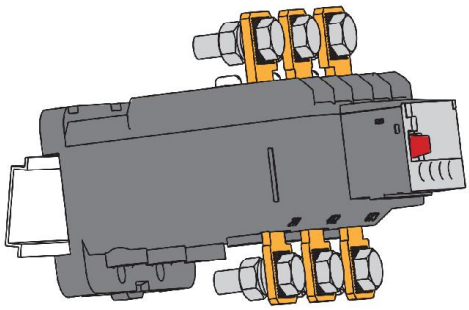


HDR6-185

Assembly Installation



Independent Installation



Note: It also can be fixed by screws.

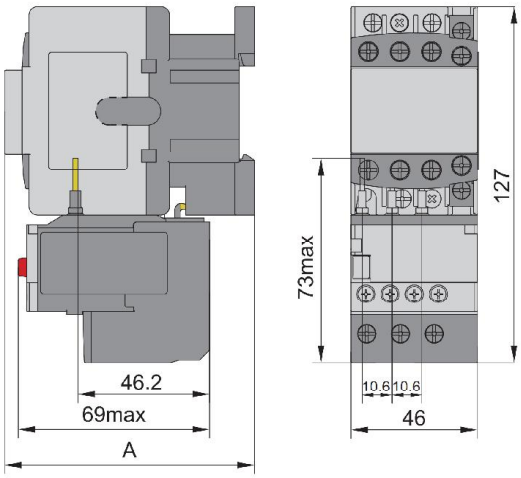
HDR6-630/F

It only can be fixed by 75mm railway or screws.

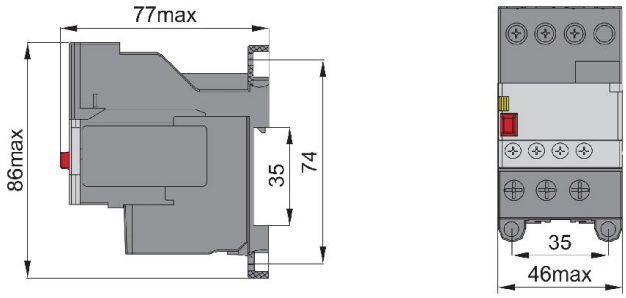
HDR6 Thermal Overload Relay

Overall Dimension of Installation

HDR6-18 Assembly Installation

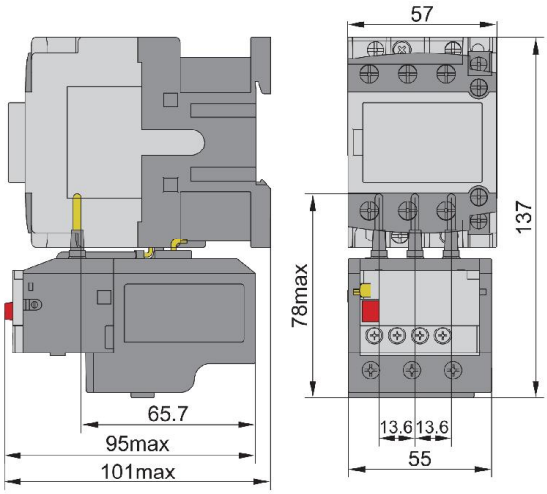


HDR6-18 Independent Installation

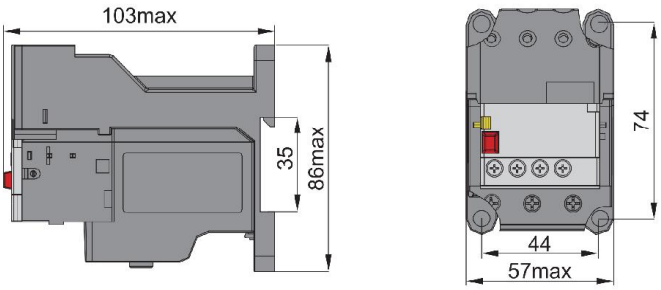


Assembly Installation for HDR6-18 and HDC6-09, 12 , 18			
	HDC6-09	HDC6-12	HDC6-18
A	84	84	89

HDR6-32 Assembly Installation



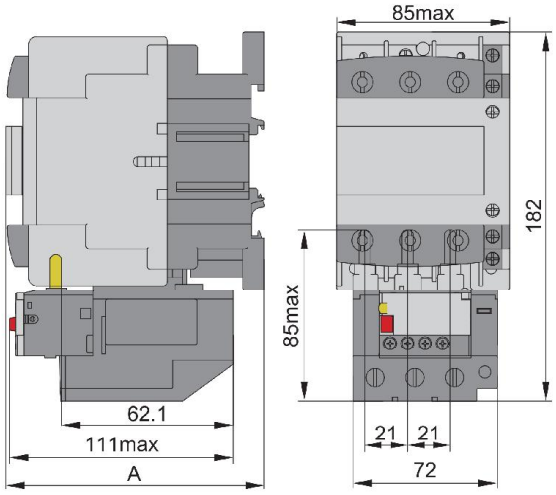
HDR6-32 Independent Installation



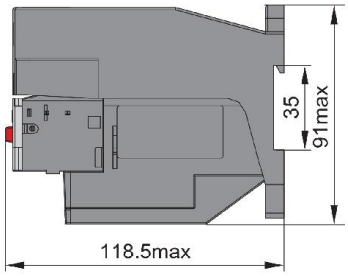
HDR6 Thermal Overload Relay

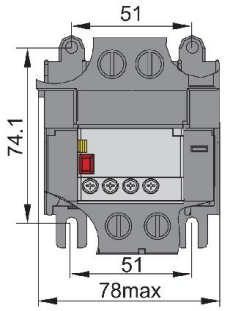
Overall Dimension of Installation

HDR6-95 Assembly Installation



HDR6-95 Independent Installation



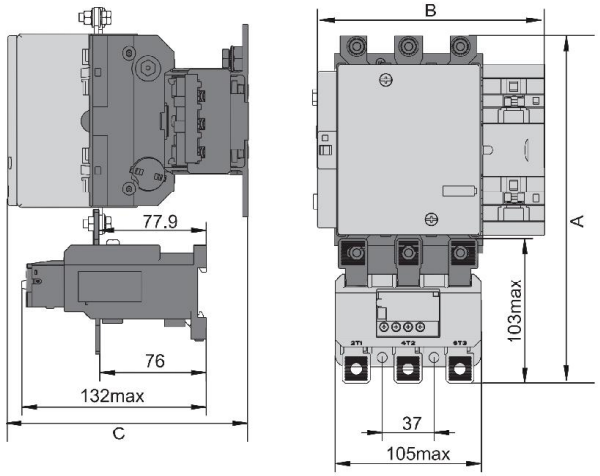


Assembly Installation for HDR6-95 and HDC6-40~95					
	HDC6-40	HDC6-50	HDC6-65	HDC6-80	HDC6-95
A	118.5	118.5	118.5	127.5	127.5

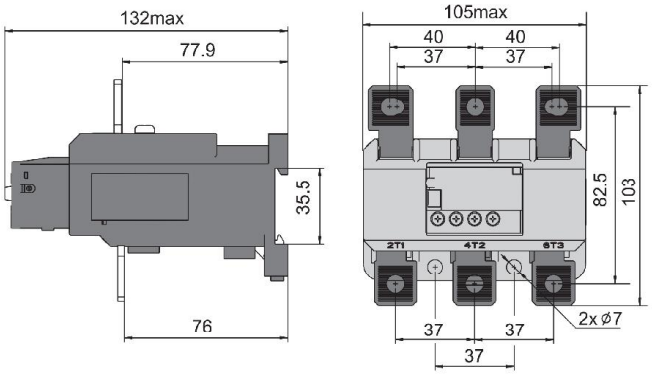
HDR6 Thermal Overload Relay

Overall Dimension of Installation

HDR6-185 Assembly Installation



HDR6-185 Independent Installation



Assembly Installation for HDR6-185 and HDC6-115~185			
	HDC6-115	HDC6-150	HDC6-185
A	248	253	257
B	167	167	171
C	172	172	183

HDR6-630/F Independent Installation