

HDB3wLE Residual Current Operated Circuit Breaker

Standard: IEC61009-1



Function

HDB3wLE Residual Current Operated Circuit Breaker has the following features:

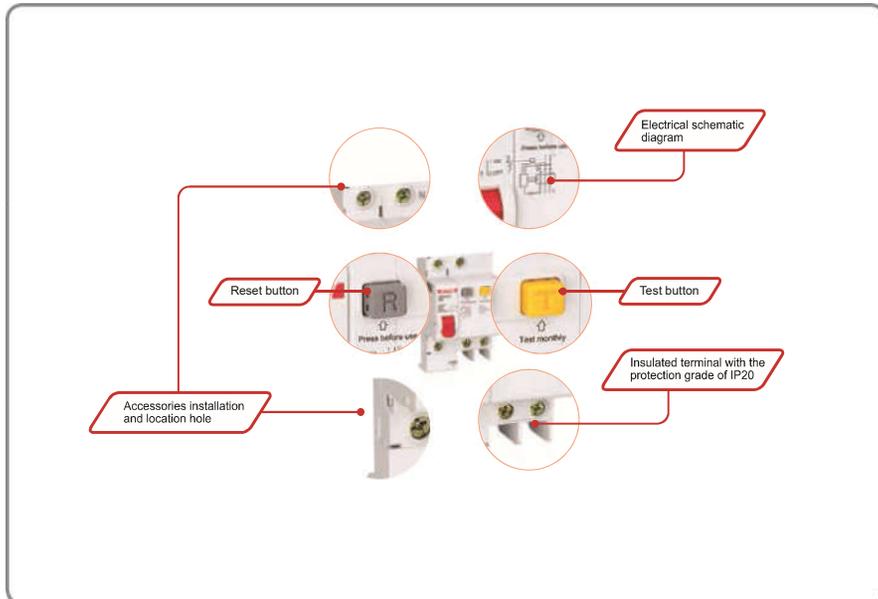
- Short circuit protection
- Overload protection
- Isolating function
- Earthleakage protection function
- Residual Current Operated Circuit Breaker over voltage protection function

Main Features

Rated operating voltage V	1P+N, 2P: 230AC 3P, 3P+N, 4P 400 AC
Rated current A	6-63
Rated frequency Hz	50/60
Number of poles	1P+N, 2P, 3P, 3P+N, 4P
Breaking capacity kA	6
Rated residual operating current mA	30, 50, 75, 100, 300
Over-voltage protection function	280±5% AC (for products only 1P+N,2PC curve)



Product Details Display



HDB3wLE Residual Current Operated Circuit Breaker

Standard: IEC61009-1



Functions and Features

Electrical Characteristics

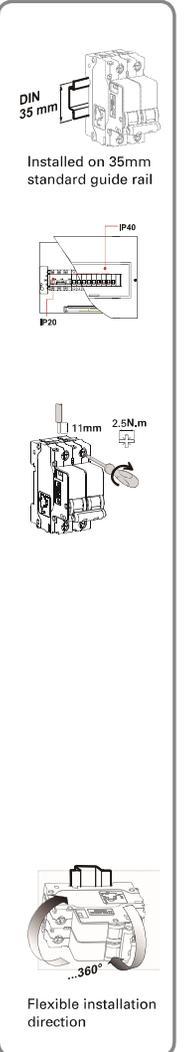
Nominal insulation voltage U_i	(V)	250 (phase-to-ground) 500 (phase-to-phase)
Maximum working voltage U_{Bmax}	1P+N, 2P (V) 3P, 3P+N, 4P (V)	230 AC 400 AC
Rated short-circuit capacity I_{cn} (IEC/EN60898)	(kA)	6
Rated impulse withstand voltage U_{imp} (1.2/50)	(kV)	4
Dielectric test voltage		2kV (50/60HZ, 1min)
Isolating function		Available
Pollution class		2
Electric shock protection grade		II
Trip type:		Thermal magnetic trip
Thermal magnetic trip characteristics:	Type B curve (3In~5In) Type C curve (5In~10In) Type D curve (10In~14In)	- ● ●
Electrical and mechanical accessories		●

Mechanical Characteristics

Trip indication	Upspring of the reset button indicates leakage trip
Manual control	Two reset modes are allowed for the handle
Overcurrent fault	The circuit breaker and the residual current operated device reset simultaneously
Leakage fault	The residual current operated device resets before the circuit breaker resets
Handle	Red, pad printing indicating ON-OFF position
Mechanical endurance	Times 25,000
Electrical endurance	Times 6,000
Protection grade	Installed in distribution box IP40 Installed directly IP20
Mechanical shock resistance	30g, 3 shocks, lasting 11ms (No significant vibration or shock)
Anti-vibration (IEC/EN 60068-2-6)	No significant vibration or shock
High temperature humidity resistance	Category 2, 28 cycles Relative humidity 90%~96% at 55° C Relative humidity 95%~100% at 25° C
Rated ambient temperature	30° C
Operating ambient temperature (daily mean temperature ≤ +35° C)	-20° C~+60° C
Storage temperature	-40° C~+70° C

Installation Features

Terminal form	U terminal
Maximum wiring capacity (A)	Current ratings 6-32:16mm ² Current ratings 40-63:25mm ²
Maximum ultimate torque (A)	Current ratings 6-32:2.5 N.m Current ratings 40-63:3 N.m
Tool	Crosshead screwdriver or flathead screwdriver
Installation	Installed on standard DIN guide rail (35mm)
Line incoming mode	Top



HDB3wLE Residual Current Operated Circuit Breaker

Standard: IEC61009-1



HDB3wLE Residual Current Operated Circuit Breaker

Product name	Breaking capacity	Number of poles	Trip type	Rated current	Residual current	Other functions
HDB3wLE	N	1	C	6		G
	N 6kA	1: 1P+N 2: 2P 3: 3P 6: 3P+N 4: 4P	C: CType D: DType	6: 6A 10: 10A 16: 16A 20: 20A 25: 25A 32: 32A 40: 40A 50: 50A 63: 63A	Default:30mA R50 50mA R75: 75mA R100: 100mA R300: 300mA	Default: No over-voltage protection G: Over-voltage protection

HDB3wLE Residual current operated circuit breaker	Type	Rated current	Trip type			
			C	D		
	1P+N	6	HDB3wLEN1C6	HDB3wLEN1C6R50		
		10	HDB3wLEN1C10	HDB3wLEN1C10R50		
		16	HDB3wLEN1C16	HDB3wLEN1C16R50		
		20	HDB3wLEN1C20	HDB3wLEN1C20R50		
		25	HDB3wLEN1C25	HDB3wLEN1C25R50		
		32	HDB3wLEN1C32	HDB3wLEN1C32R50		
		40	HDB3wLEN1C40	HDB3wLEN1C40R50		
		50	HDB3wLEN1C50	HDB3wLEN1C50R50		
		63	HDB3wLEN1C63	HDB3wLEN1C63R50		
			2P	6	HDB3wLEN2C6	HDB3wLEN2C6R50
				10	HDB3wLEN2C10	HDB3wLEN2C10R50
				16	HDB3wLEN2C16	HDB3wLEN2C16R50
20	HDB3wLEN2C20			HDB3wLEN2C20R50		
25	HDB3wLEN2C25			HDB3wLEN2C25R50		
32	HDB3wLEN2C32			HDB3wLEN2C32R50		
40	HDB3wLEN2C40			HDB3wLEN2C40R50		
50	HDB3wLEN2C50			HDB3wLEN2C50R50		
63	HDB3wLEN2C63			HDB3wLEN2C63R50		

HDB3wLE Residual Current Operated Circuit Breaker

Standard: IEC61009-1



HDB3wLE Residual Current Operated Circuit Breaker

Product name	Breaking capacity	Number of poles	Trip type	Rated current	Residual current	Other functions
HDB3wLE	N	1	C	6		G
	N 6kA	1: 1P+N 2: 2P 3: 3P 6: 3P+N 5: 4P	C: CType D: DType	6: 6A 10: 10A 16: 16A 20: 20A 25: 25A 32: 32A 40: 40A 50: 50A 63: 63A	Default:30mA R50 50mA R75: 75mA R100: 100mA R300: 300mA	Default: No over-voltage protection G: Over-voltage protection

Trip type					
C			D		
HDB3wLEN1C6R75	HDB3wLEN1C6R100	HDB3wLEN1C6R300	HDB3wLEN1D6	HDB3wLEN1D6R50	
HDB3wLEN1C10R75	HDB3wLEN1C10R100	HDB3wLEN1C10R300	HDB3wLEN1D10	HDB3wLEN1D10R50	
HDB3wLEN1C16R75	HDB3wLEN1C16R100	HDB3wLEN1C16R300	HDB3wLEN1D16	HDB3wLEN1D16R50	
HDB3wLEN1C20R75	HDB3wLEN1C20R100	HDB3wLEN1C20R300	HDB3wLEN1D20	HDB3wLEN1D20R50	
HDB3wLEN1C25R75	HDB3wLEN1C25R100	HDB3wLEN1C25R300	HDB3wLEN1D25	HDB3wLEN1D25R50	
HDB3wLEN1C32R75	HDB3wLEN1C32R100	HDB3wLEN1C32R300	HDB3wLEN1D32	HDB3wLEN1D32R50	
HDB3wLEN1C40R75	HDB3wLEN1C40R100	HDB3wLEN1C40R300	HDB3wLEN1D40	HDB3wLEN1D40R50	
HDB3wLEN1C50R75	HDB3wLEN1C50R100	HDB3wLEN1C50R300	HDB3wLEN1D50	HDB3wLEN1D50R50	
HDB3wLEN1C63R75	HDB3wLEN1C63R100	HDB3wLEN1C63R300	HDB3wLEN1D63	HDB3wLEN1D63R50	
HDB3wLEN2C6R75	HDB3wLEN2C6R100	HDB3wLEN2C6R300	HDB3wLEN2D6	HDB3wLEN2D6R50	
HDB3wLEN2C10R75	HDB3wLEN2C10R100	HDB3wLEN2C10R300	HDB3wLEN2D10	HDB3wLEN2D10R50	
HDB3wLEN2C16R75	HDB3wLEN2C16R100	HDB3wLEN2C16R300	HDB3wLEN2D16	HDB3wLEN2D16R50	
HDB3wLEN2C20R75	HDB3wLEN2C20R100	HDB3wLEN2C20R300	HDB3wLEN2D20	HDB3wLEN2D20R50	
HDB3wLEN2C25R75	HDB3wLEN2C25R100	HDB3wLEN2C25R300	HDB3wLEN2D25	HDB3wLEN2D25R50	
HDB3wLEN2C32R75	HDB3wLEN2C32R100	HDB3wLEN2C32R300	HDB3wLEN2D32	HDB3wLEN2D32R50	
HDB3wLEN2C40R75	HDB3wLEN2C40R100	HDB3wLEN2C40R300	HDB3wLEN2D40	HDB3wLEN2D40R50	
HDB3wLEN2C50R75	HDB3wLEN2C50R100	HDB3wLEN2C50R300	HDB3wLEN2D50	HDB3wLEN2D50R50	
HDB3wLEN2C63R75	HDB3wLEN2C63R100	HDB3wLEN2C63R300	HDB3wLEN2D63	HDB3wLEN2D63R50	

HDB3wLE Residual Current Operated Circuit Breaker

Standard: IEC61009-1



HDB3wLE Residual Current Operated Circuit Breaker

Product name	Breaking capacity	Number of poles	Trip type	Rated current	Residual current	Other functions
HDB3wLE	N	1	C	6		G
	N 6kA	1: 1P+N 2: 2P 3: 3P 6: 3P+N 5: 4P	C: CType D: DType	6: 6A 10: 10A 16: 16A 20: 20A 25: 25A 32: 32A 40: 40A 50: 50A 63: 63A	Default:30mA R50 50mA R75: 75mA R100: 100mA R300: 300mA	Default: No over-voltage protection G: Over-voltage protection

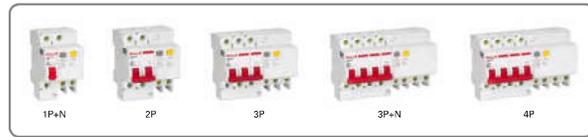
Trip type				Over voltage
D				
HDB3wLEN1D6R75	HDB3wLEN1D6R100	HDB3wLEN1D6R300		
HDB3wLEN1D10R75	HDB3wLEN1D10R100	HDB3wLEN1D10R300	HDB3wLEN1C10G	
HDB3wLEN1D16R75	HDB3wLEN1D16R100	HDB3wLEN1D16R300	HDB3wLEN1C16G	
HDB3wLEN1D20R75	HDB3wLEN1D20R100	HDB3wLEN1D20R300	HDB3wLEN1C20G	
HDB3wLEN1D25R75	HDB3wLEN1D25R100	HDB3wLEN1D25R300	HDB3wLEN1C25G	
HDB3wLEN1D32R75	HDB3wLEN1D32R100	HDB3wLEN1D32R300	HDB3wLEN1C32G	
HDB3wLEN1D40R75	HDB3wLEN1D40R100	HDB3wLEN1D40R300	HDB3wLEN1C40G	
HDB3wLEN1D50R75	HDB3wLEN1D50R100	HDB3wLEN1D50R300	HDB3wLEN1C50G	
HDB3wLEN1D63R75	HDB3wLEN1D63R100	HDB3wLEN1D63R300	HDB3wLEN1C63G	
HDB3wLEN2D6R75	HDB3wLEN2D6R100	HDB3wLEN2D6R300		
HDB3wLEN2D10R75	HDB3wLEN2D10R100	HDB3wLEN2D10R300	HDB3wLEN2C10G	
HDB3wLEN2D16R75	HDB3wLEN2D16R100	HDB3wLEN2D16R300	HDB3wLEN2C16G	
HDB3wLEN2D20R75	HDB3wLEN2D20R100	HDB3wLEN2D20R300	HDB3wLEN2C20G	
HDB3wLEN2D25R75	HDB3wLEN2D25R100	HDB3wLEN2D25R300	HDB3wLEN2C25G	
HDB3wLEN2D32R75	HDB3wLEN2D32R100	HDB3wLEN2D32R300	HDB3wLEN2C32G	
HDB3wLEN2D40R75	HDB3wLEN2D40R100	HDB3wLEN2D40R300	HDB3wLEN2C40G	
HDB3wLEN2D50R75	HDB3wLEN2D50R100	HDB3wLEN2D50R300	HDB3wLEN2C50G	
HDB3wLEN2D63R75	HDB3wLEN2D63R100	HDB3wLEN2D63R300	HDB3wLEN2C63G	

HDB3wLE Residual Current Operated Circuit Breaker

Standard: IEC61009-1



HDB3wLE Residual Current Operated Circuit Breaker



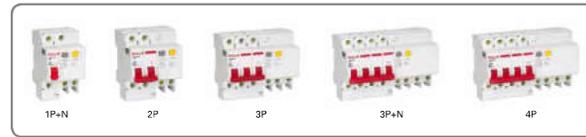
HDB3wLE Residual current operated circuit breaker	Type	Rated current	Trip type	
			C	D
	3P	6	HDB3wLEN3C6	HDB3wLEN3C6R50
		10	HDB3wLEN3C10	HDB3wLEN3C10R50
		16	HDB3wLEN3C16	HDB3wLEN3C16R50
		20	HDB3wLEN3C20	HDB3wLEN3C20R50
		25	HDB3wLEN3C25	HDB3wLEN3C25R50
		32	HDB3wLEN3C32	HDB3wLEN3C32R50
	40	HDB3wLEN3C40	HDB3wLEN3C40R50	
	50	HDB3wLEN3C50	HDB3wLEN3C50R50	
	63	HDB3wLEN3C63	HDB3wLEN3C63R50	
	3P+N	6	HDB3wLEN6C6	HDB3wLEN6C6R50
		10	HDB3wLEN6C10	HDB3wLEN6C10R50
		16	HDB3wLEN6C16	HDB3wLEN6C16R50
20		HDB3wLEN6C20	HDB3wLEN6C20R50	
25		HDB3wLEN6C25	HDB3wLEN6C25R50	
32		HDB3wLEN6C32	HDB3wLEN6C32R50	
	4P	6	HDB3wLEN4C6	HDB3wLEN4C6R50
		10	HDB3wLEN4C10	HDB3wLEN4C10R50
		16	HDB3wLEN4C16	HDB3wLEN4C16R50
		20	HDB3wLEN4C20	HDB3wLEN4C20R50
		25	HDB3wLEN4C25	HDB3wLEN4C25R50
		32	HDB3wLEN4C32	HDB3wLEN4C32R50
	40	HDB3wLEN4C40	HDB3wLEN4C40R50	
	50	HDB3wLEN4C50	HDB3wLEN4C50R50	
	63	HDB3wLEN4C63	HDB3wLEN4C63R50	

HDB3wLE Residual Current Operated Circuit Breaker

Standard: IEC61009-1



HDB3wLE Residual Current Operated Circuit Breaker



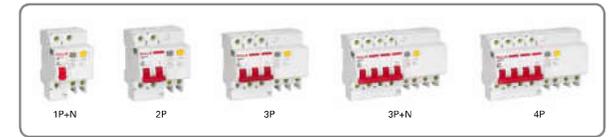
Trip type				
C		D		
HDB3wLEN3C6R75	HDB3wLEN3C6R100	HDB3wLEN3C6R300	HDB3wLEN3D6	HDB3wLEN3D6R50
HDB3wLEN3C10R75	HDB3wLEN3C10R100	HDB3wLEN3C10R300	HDB3wLEN3D10	HDB3wLEN3D10R50
HDB3wLEN3C16R75	HDB3wLEN3C16R100	HDB3wLEN3C16R300	HDB3wLEN3D16	HDB3wLEN3D16R50
HDB3wLEN3C20R75	HDB3wLEN3C20R100	HDB3wLEN3C20R300	HDB3wLEN3D20	HDB3wLEN3D20R50
HDB3wLEN3C25R75	HDB3wLEN3C25R100	HDB3wLEN3C25R300	HDB3wLEN3D25	HDB3wLEN3D25R50
HDB3wLEN3C32R75	HDB3wLEN3C32R100	HDB3wLEN3C32R300	HDB3wLEN3D32	HDB3wLEN3D32R50
HDB3wLEN3C40R75	HDB3wLEN3C40R100	HDB3wLEN3C40R300	HDB3wLEN3D40	HDB3wLEN3D40R50
HDB3wLEN3C50R75	HDB3wLEN3C50R100	HDB3wLEN3C50R300	HDB3wLEN3D50	HDB3wLEN3D50R50
HDB3wLEN3C63R75	HDB3wLEN3C63R100	HDB3wLEN3C63R300	HDB3wLEN3D63	HDB3wLEN3D63R50
HDB3wLEN6C6R75	HDB3wLEN6C6R100	HDB3wLEN6C6R300	HDB3wLEN6D6	HDB3wLEN6D6R50
HDB3wLEN6C10R75	HDB3wLEN6C10R100	HDB3wLEN6C10R300	HDB3wLEN6D10	HDB3wLEN6D10R50
HDB3wLEN6C16R75	HDB3wLEN6C16R100	HDB3wLEN6C16R300	HDB3wLEN6D16	HDB3wLEN6D16R50
HDB3wLEN6C20R75	HDB3wLEN6C20R100	HDB3wLEN6C20R300	HDB3wLEN6D20	HDB3wLEN6D20R50
HDB3wLEN6C25R75	HDB3wLEN6C25R100	HDB3wLEN6C25R300	HDB3wLEN6D25	HDB3wLEN6D25R50
HDB3wLEN6C32R75	HDB3wLEN6C32R100	HDB3wLEN6C32R300	HDB3wLEN6D32	HDB3wLEN6D32R50
HDB3wLEN6C40R75	HDB3wLEN6C40R100	HDB3wLEN6C40R300	HDB3wLEN6D40	HDB3wLEN6D40R50
HDB3wLEN6C50R75	HDB3wLEN6C50R100	HDB3wLEN6C50R300	HDB3wLEN6D50	HDB3wLEN6D50R50
HDB3wLEN6C63R75	HDB3wLEN6C63R100	HDB3wLEN6C63R300	HDB3wLEN6D63	HDB3wLEN6D63R50
HDB3wLEN4C6R75	HDB3wLEN4C6R100	HDB3wLEN4C6R300	HDB3wLEN4D6	HDB3wLEN4D6R50
HDB3wLEN4C10R75	HDB3wLEN4C10R100	HDB3wLEN4C10R300	HDB3wLEN4D10	HDB3wLEN4D10R50
HDB3wLEN4C16R75	HDB3wLEN4C16R100	HDB3wLEN4C16R300	HDB3wLEN4D16	HDB3wLEN4D16R50
HDB3wLEN4C20R75	HDB3wLEN4C20R100	HDB3wLEN4C20R300	HDB3wLEN4D20	HDB3wLEN4D20R50
HDB3wLEN4C25R75	HDB3wLEN4C25R100	HDB3wLEN4C25R300	HDB3wLEN4D25	HDB3wLEN4D25R50
HDB3wLEN4C32R75	HDB3wLEN4C32R100	HDB3wLEN4C32R300	HDB3wLEN4D32	HDB3wLEN4D32R50
HDB3wLEN4C40R75	HDB3wLEN4C40R100	HDB3wLEN4C40R300	HDB3wLEN4D40	HDB3wLEN4D40R50
HDB3wLEN4C50R75	HDB3wLEN4C50R100	HDB3wLEN4C50R300	HDB3wLEN4D50	HDB3wLEN4D50R50
HDB3wLEN4C63R75	HDB3wLEN4C63R100	HDB3wLEN4C63R300	HDB3wLEN4D63	HDB3wLEN4D63R50

HDB3wLE Residual Current Operated Circuit Breaker

Standard: IEC61009-1



HDB3wLE Residual Current Operated Circuit Breaker



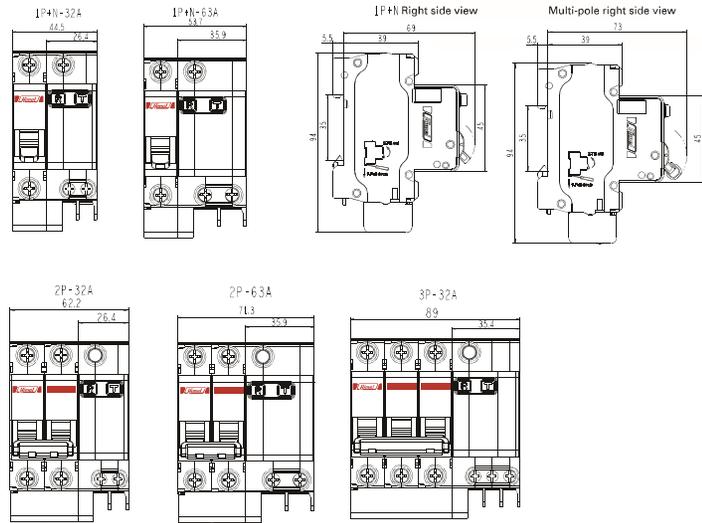
Trip type			Over voltage
D			
HDB3wLEN3D6R75	HDB3wLEN3D6R100	HDB3wLEN3D6R300	
HDB3wLEN3D10R75	HDB3wLEN3D10R100	HDB3wLEN3D10R300	
HDB3wLEN3D16R75	HDB3wLEN3D16R100	HDB3wLEN3D16R300	
HDB3wLEN3D20R75	HDB3wLEN3D20R100	HDB3wLEN3D20R300	
HDB3wLEN3D25R75	HDB3wLEN3D25R100	HDB3wLEN3D25R300	
HDB3wLEN3D32R75	HDB3wLEN3D32R100	HDB3wLEN3D32R300	
HDB3wLEN3D40R75	HDB3wLEN3D40R100	HDB3wLEN3D40R300	
HDB3wLEN3D50R75	HDB3wLEN3D50R100	HDB3wLEN3D50R300	
HDB3wLEN3D63R75	HDB3wLEN3D63R100	HDB3wLEN3D63R300	
HDB3wLEN6D6R75	HDB3wLEN6D6R100	HDB3wLEN6D6R300	
HDB3wLEN6D10R75	HDB3wLEN6D10R100	HDB3wLEN6D10R300	
HDB3wLEN6D16R75	HDB3wLEN6D16R100	HDB3wLEN6D16R300	
HDB3wLEN6D20R75	HDB3wLEN6D20R100	HDB3wLEN6D20R300	
HDB3wLEN6D25R75	HDB3wLEN6D25R100	HDB3wLEN6D25R300	
HDB3wLEN6D32R75	HDB3wLEN6D32R100	HDB3wLEN6D32R300	
HDB3wLEN6D40R75	HDB3wLEN6D40R100	HDB3wLEN6D40R300	
HDB3wLEN6D50R75	HDB3wLEN6D50R100	HDB3wLEN6D50R300	
HDB3wLEN6D63R75	HDB3wLEN6D63R100	HDB3wLEN6D63R300	
HDB3wLEN4D6R75	HDB3wLEN4D6R100	HDB3wLEN4D6R300	
HDB3wLEN4D10R75	HDB3wLEN4D10R100	HDB3wLEN4D10R300	
HDB3wLEN4D16R75	HDB3wLEN4D16R100	HDB3wLEN4D16R300	
HDB3wLEN4D20R75	HDB3wLEN4D20R100	HDB3wLEN4D20R300	
HDB3wLEN4D25R75	HDB3wLEN4D25R100	HDB3wLEN4D25R300	
HDB3wLEN4D32R75	HDB3wLEN4D32R100	HDB3wLEN4D32R300	
HDB3wLEN4D40R75	HDB3wLEN4D40R100	HDB3wLEN4D40R300	
HDB3wLEN4D50R75	HDB3wLEN4D50R100	HDB3wLEN4D50R300	
HDB3wLEN4D63R75	HDB3wLEN4D63R100	HDB3wLEN4D63R300	

HDB3wLE Residual Current Operated Circuit Breaker

Standard: IEC61009-1



HDB3wLE Installation Dimension



HDB3wLE Residual Current Operated Circuit Breaker

Standard: IEC61009-1



HDB3wLE Installation Dimension

