

1 Product overview

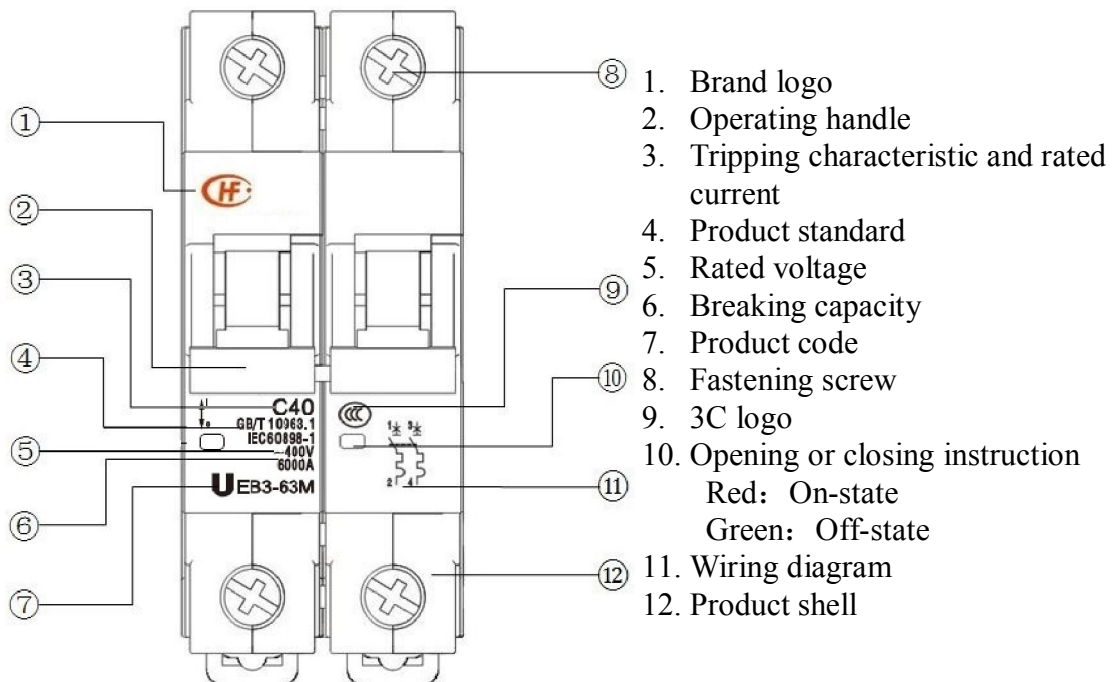
1.1 Scope of application

UEB3-63 series miniature circuit breaker are mainly used in circuit of AC 50Hz/60Hz, rated voltage 230V/400V, rated current under 63A, to protect the circuit and electric equipment of building and the similar places from over current , short circuit and isolating function, it's also applicable for the infrequent make and break operation.

1.2 Product characteristics

- UEB3-63 series miniature circuit breaker with Overload and short circuit protection;
- Arc-resistance material contact with high breaking capacity and long electrical life;
- Use the safe wiring structure against the electrical shock;
- The shelf and the parts use the imported high flame and stamping resistance plastic;
- Module structure for free combination;
- TH35 standard DIN rail installation method;
- The product meets the standard of GB/T 10963.1, electrical accessories-overcurrent protection circuit breakers for domestic and similar place. The first part: for alternating circuit breaker;

1.3 Product structure



1.4 Standard

	CCC	GB/T 10963.1
CB	CB	IEC 60898-1

2 Standard working environment and installation conditions

- Operation temperature range: $-25^{\circ}\text{C} \sim +60^{\circ}\text{C}$
- Storage temperature range: $-40^{\circ}\text{C} \sim +80^{\circ}\text{C}$
- Relative humidity: no higher than 50% at 40°C , no higher than 90% at 20°C
- Altitude: not more than 2000m
- Pollution degree: Class 2
- Installation category: Class II/III.
- Installation condition: Install in standard guide rail of 35mm, the gradient of mounting surface and vertical plane is not exceeded $\pm 5^{\circ}$.
- Products are applied in the places with not significant vibration and shock.

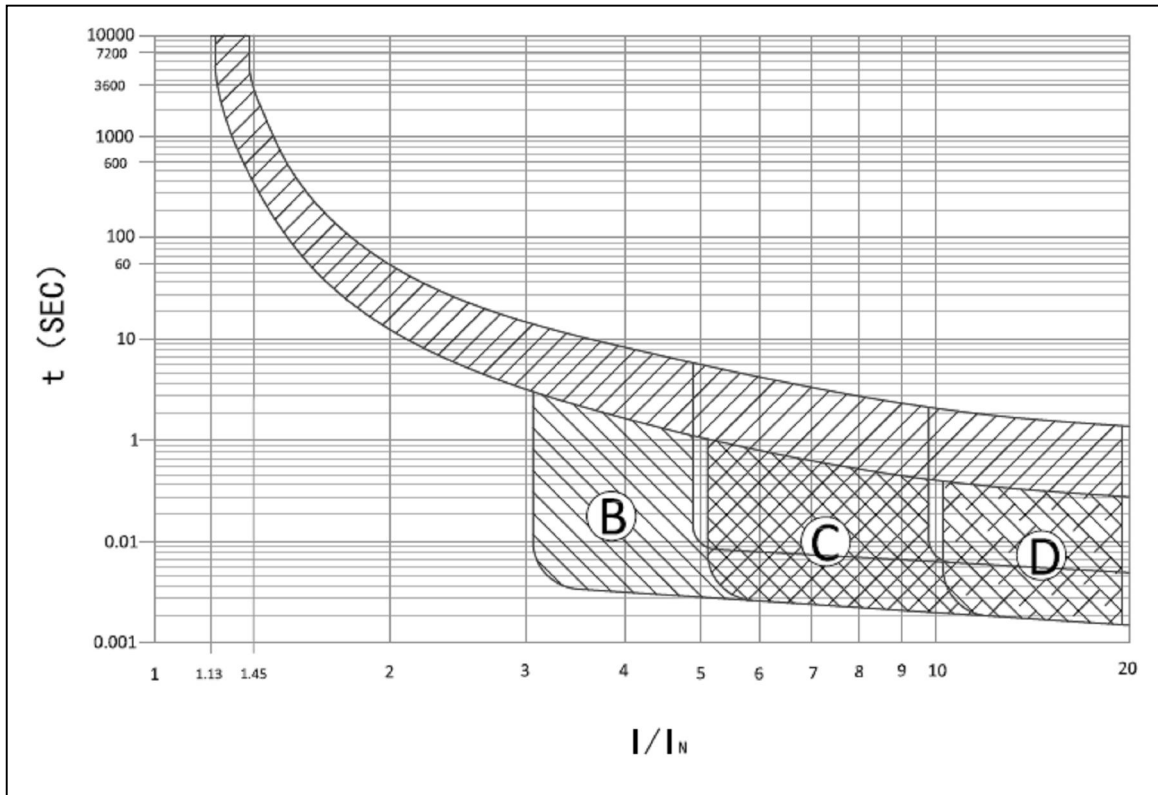
3 Product model and meaning

	UE	B	3	- 63	M	/C	06	1N
Manufacturer code: Xiamen Hongfa Electrical Safety & Controls Co. Ltd.								
Product code : MCB Circuit breaker								
Design serial number : 3								
Maximum rated current: 63 : 63A								
Breaking capacity: L: 4.5KA M: 6kA								
Instantaneous tripping characteristic: B: $3I_n \sim 5I_n$; C: $5I_n \sim 10I_n$; D: $10I_n \sim 20I_n$								
Rated Current: 6A、10A、16A、20A、25A、32A、40A、50A、63A								
Number of poles: 1: 1P; 1N: 1P+N; 2: 2P; 3: 3P; 3N: 3P+N; 4: 4P								

4 Main technical parameters

Type	UEB3-63	
Number of poles	1P, 1P+N, 2P, 3P, 3P+N, 4P	
Instantaneous tripping characteristic	B : $3I_n \sim 5I_n$; C : $5I_n \sim 10I_n$; D : $10I_n \sim 20I_n$	
Values of rated short-circuit capacity	UEB3-63L : $I_{cn}=I_{cs}=4.5kA$ UEB-63M : $I_{cn}=I_{cs}=6kA$	
Rated ultimate short-circuit breaking capacity I_{cu}	UEB-63L : $I_{cu}=4.5kA$ UEB-63M : $I_{cu}=6kA$	
Rated current I_n	6A, 10A, 16A, 20A, 25A, 32A, 40A, 50A, 63A	
Rated voltage U_e	AC230V/400V (1P) ; AC230V (1P+N) ; AC400V (2P/3P/3P+N/4P)	
Rated insulation voltage U_i	400V	
Rated impulse withstand voltage U_{imp}	4kV	
Power-frequency withstand voltage	2kV	
Mechanical life(cycles)	20000	
Electrical life (cycles)	10000	
Protection class	IP20	
Weight (g)	1P	94.5
	1P+N	208
	2P	210.5
	3P	281.5
	3P+N	378.5
	4P	420.5
Product packaging information	Outer packing box 520mm×313mm×177mm	
Line way	Upward Line	

5 Overload release characteristics curve

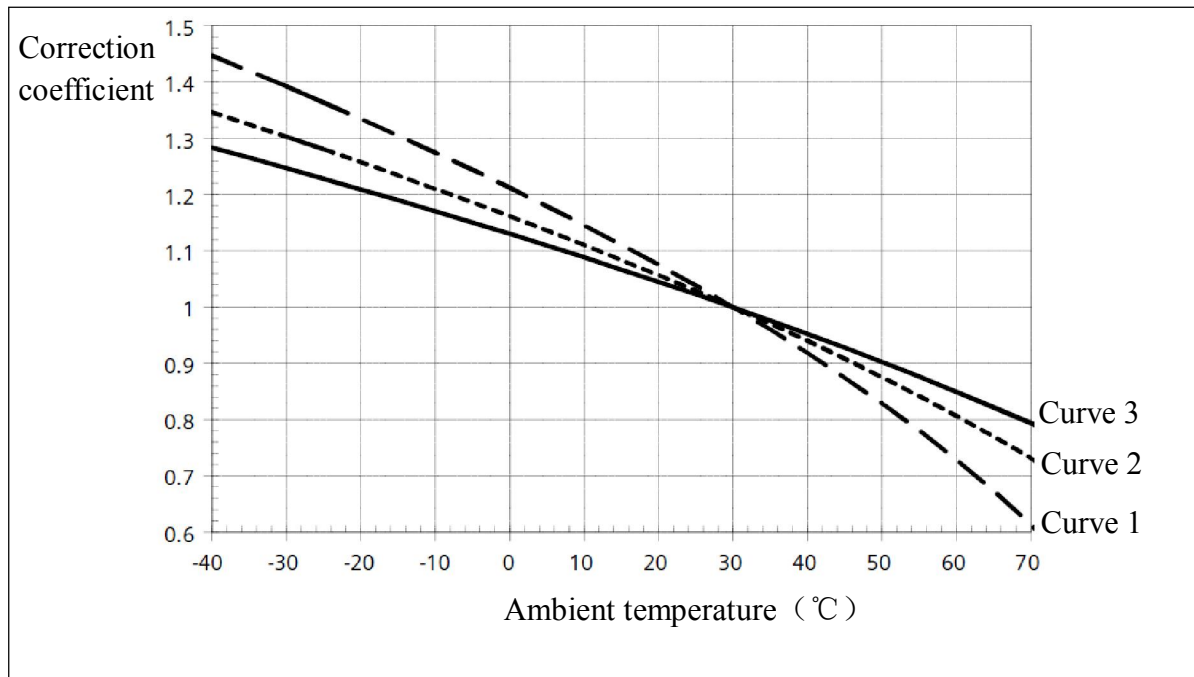


6 Volume reduction coefficients

6.1 Temperature compensation coefficient

At different temperatures, the supplement coefficient corresponding at the overload release current should not exceed the equipment rating under normal condition.

The curve corresponding to the correction coefficient									
Ratedcurrent (A)	6	10	16	20	25	32	40	50	63
B	1	1	2	2	2	2	2	2	3
C	1	1	2	2	2	2	2	2	3
D	1	1	2	2	2	2	2	2	3



6.2 Frequency coefficient

Thermal release: invariant

Electromagnetic release: Multiplying the corresponding value by the frequency coefficient K.

F (Hz)	16Hz ~ 60Hz	100 Hz	200 Hz	300 Hz	400 Hz
K	1	1.1	1.2	1.4	1.5

6.3 Reduction Coefficient of plateau area

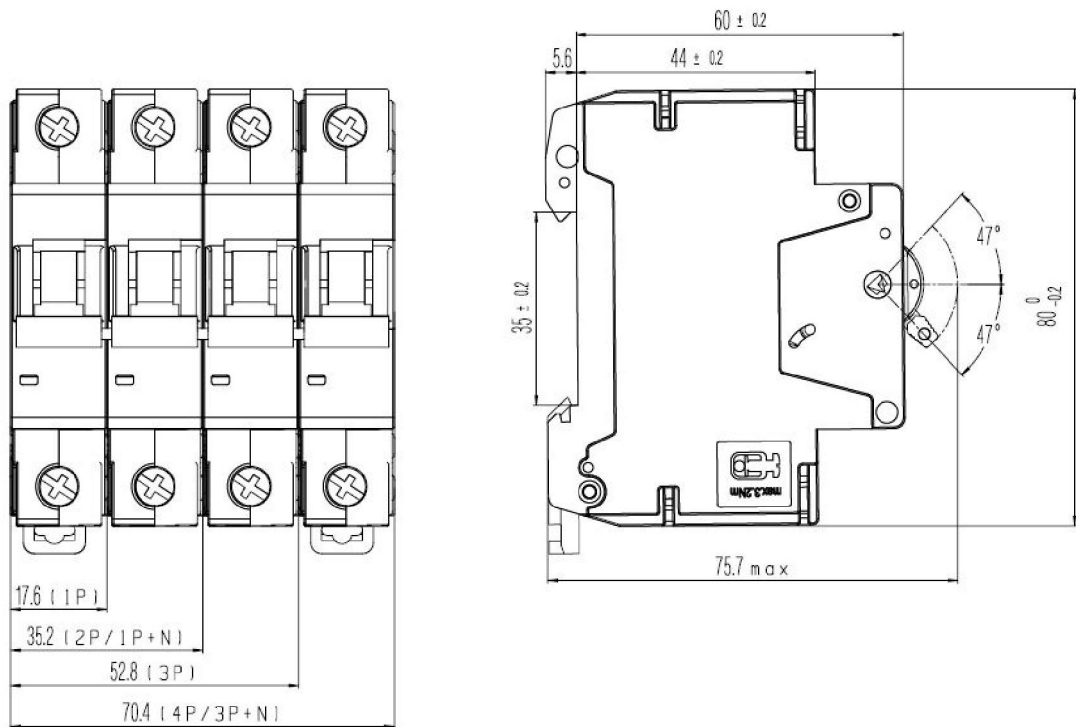
Altitude (m)	2000	3000	4000	5000
Rated current I_n	1	0.97	0.91	0.86
Rated insulation voltage U_i	1	0.90	0.82	0.76
Power-frequency withstand voltage	1	0.90	0.82	0.76
Rated impulse withstand voltage U_{imp}	1	0.90	0.82	0.76
Values of rated short-circuit capacity	1	0.87	0.77	0.67
Electrical life (cycles)	1	0.87	0.77	0.67

7 connecting wire requirements

Connection type, $1\text{mm}^2 \sim 25\text{mm}^2$ wire can be connected

Wiring screw specification	Rated torque	Ultimate torque	National standard torque	Single strand of hard copper wire	Multiple soft copper wire
M5	$2.0\text{N}\cdot\text{m}$	$3.0\text{N}\cdot\text{m}$	$2.0\text{N}\cdot\text{m}$	$1\text{mm}^2 \sim 25\text{mm}^2$	$1\text{mm}^2 \sim 25\text{mm}^2$

8 outline mounting dimension diagram



9 Products selection table

Number of poles	Type (B characteristic)	Type (C characteristic)	Type (D characteristic)	Rated current (A)	Breaking Capacity (kA)
1P	UEB3-63L/B061	UEB3-63L/C061	UEB3-63L/D061	6	4.5
1P	UEB3-63L/B101	UEB3-63L/C101	UEB3-63L/D101	10	4.5
1P	UEB3-63L/B161	UEB3-63L/C161	UEB3-63L/D161	16	4.5
1P	UEB3-63L/B201	UEB3-63L/C201	UEB3-63L/D201	20	4.5
1P	UEB3-63L/B251	UEB3-63L/C251	UEB3-63L/D251	25	4.5
1P	UEB3-63L/B321	UEB3-63L/C321	UEB3-63L/D321	32	4.5
1P	UEB3-63L/B401	UEB3-63L/C401	UEB3-63L/D401	40	4.5
1P	UEB3-63L/B501	UEB3-63L/C501	UEB3-63L/D501	50	4.5
1P	UEB3-63L/B631	UEB3-63L/C631	UEB3-63L/D631	63	4.5
1P+N	UEB3-63L/B061N	UEB3-63L/C061N	UEB3-63L/D061N	6	4.5
1P+N	UEB3-63L/B101N	UEB3-63L/C101N	UEB3-63L/D101N	10	4.5
1P+N	UEB3-63L/B161N	UEB3-63L/C161N	UEB3-63L/D161N	16	4.5
1P+N	UEB3-63L/B201N	UEB3-63L/C201N	UEB3-63L/D201N	20	4.5
1P+N	UEB3-63L/B251N	UEB3-63L/C251N	UEB3-63L/D251N	25	4.5
1P+N	UEB3-63L/B321N	UEB3-63L/C321N	UEB3-63L/D321N	32	4.5
1P+N	UEB3-63L/B401N	UEB3-63L/C401N	UEB3-63L/D401N	40	4.5
1P+N	UEB3-63L/B501N	UEB3-63L/C501N	UEB3-63L/D501N	50	4.5
1P+N	UEB3-63L/B631N	UEB3-63L/C631N	UEB3-63L/D631N	63	4.5
2P	UEB3-63L/B062	UEB3-63L/C062	UEB3-63L/D062	6	4.5
2P	UEB3-63L/B102	UEB3-63L/C102	UEB3-63L/D102	10	4.5
2P	UEB3-63L/B162	UEB3-63L/C162	UEB3-63L/D162	16	4.5
2P	UEB3-63L/B202	UEB3-63L/C202	UEB3-63L/D202	20	4.5
2P	UEB3-63L/B252	UEB3-63L/C252	UEB3-63L/D252	25	4.5
2P	UEB3-63L/B322	UEB3-63L/C322	UEB3-63L/D322	32	4.5
2P	UEB3-63L/B402	UEB3-63L/C402	UEB3-63L/D402	40	4.5
2P	UEB3-63L/B502	UEB3-63L/C502	UEB3-63L/D502	50	4.5
2P	UEB3-63L/B632	UEB3-63L/C632	UEB3-63L/D632	63	4.5
3P	UEB3-63L/B063	UEB3-63L/C063	UEB3-63L/D063	6	4.5
3P	UEB3-63L/B103	UEB3-63L/C103	UEB3-63L/D103	10	4.5
3P	UEB3-63L/B163	UEB3-63L/C163	UEB3-63L/D163	16	4.5
3P	UEB3-63L/B203	UEB3-63L/C203	UEB3-63L/D203	20	4.5
3P	UEB3-63L/B253	UEB3-63L/C253	UEB3-63L/D253	25	4.5
3P	UEB3-63L/B323	UEB3-63L/C323	UEB3-63L/D323	32	4.5
3P	UEB3-63L/B403	UEB3-63L/C403	UEB3-63L/D403	40	4.5
3P	UEB3-63L/B503	UEB3-63L/C503	UEB3-63L/D503	50	4.5
3P	UEB3-63L/B633	UEB3-63L/C633	UEB3-63L/D633	63	4.5
3P+N	UEB3-63L/B063N	UEB3-63L/C063N	UEB3-63L/D063N	6	4.5
3P+N	UEB3-63L/B103N	UEB3-63L/C103N	UEB3-63L/D103N	10	4.5
3P+N	UEB3-63L/B163N	UEB3-63L/C163N	UEB3-63L/D163N	16	4.5
3P+N	UEB3-63L/B203N	UEB3-63L/C203N	UEB3-63L/D203N	20	4.5
3P+N	UEB3-63L/B253N	UEB3-63L/C253N	UEB3-63L/D253N	25	4.5
3P+N	UEB3-63L/B323N	UEB3-63L/C323N	UEB3-63L/D323N	32	4.5
3P+N	UEB3-63L/B403N	UEB3-63L/C403N	UEB3-63L/D403N	40	4.5

3P+N	UEB3-63L/B503N	UEB3-63L/C503N	UEB3-63L/D503N	50	4.5
3P+N	UEB3-63L/B633N	UEB3-63L/C633N	UEB3-63L/D633N	63	4.5
4P	UEB3-63L/B064	UEB3-63L/C064	UEB3-63L/D064	6	4.5
4P	UEB3-63L/B104	UEB3-63L/C104	UEB3-63L/D104	10	4.5
4P	UEB3-63L/B164	UEB3-63L/C164	UEB3-63L/D164	16	4.5
4P	UEB3-63L/B204	UEB3-63L/C204	UEB3-63L/D204	20	4.5
4P	UEB3-63L/B254	UEB3-63L/C254	UEB3-63L/D254	25	4.5
4P	UEB3-63L/B324	UEB3-63L/C324	UEB3-63L/D324	32	4.5
4P	UEB3-63L/B404	UEB3-63L/C404	UEB3-63L/D404	40	4.5
4P	UEB3-63L/B504	UEB3-63L/C504	UEB3-63L/D504	50	4.5
4P	UEB3-63L/B634	UEB3-63L/C634	UEB3-63L/D632	63	4.5

Number of poles	Type (B characteristic)	Type (C characteristic)	Type (D characteristic)	Rated current (A)	Breaking Capacity (kA)
1P	UEB3-63M/B061	UEB3-63M/C061	UEB3-63M/D061	6	6
1P	UEB3-63M/B101	UEB3-63M/C101	UEB3-63M/D101	10	6
1P	UEB3-63M/B161	UEB3-63M/C161	UEB3-63M/D161	16	6
1P	UEB3-63M/B201	UEB3-63M/C201	UEB3-63M/D201	20	6
1P	UEB3-63M/B251	UEB3-63M/C251	UEB3-63M/D251	25	6
1P	UEB3-63M/B321	UEB3-63M/C321	UEB3-63M/D321	32	6
1P	UEB3-63M/B401	UEB3-63M/C401	UEB3-63M/D401	40	6
1P	UEB3-63M/B501	UEB3-63M/C501	UEB3-63M/D501	50	6
1P	UEB3-63M/B631	UEB3-63M/C631	UEB3-63M/D631	63	6
1P+N	UEB3-63M/B061N	UEB3-63M/C061N	UEB3-63M/D061N	6	6
1P+N	UEB3-63M/B101N	UEB3-63M/C101N	UEB3-63M/D101N	10	6
1P+N	UEB3-63M/B161N	UEB3-63M/C161N	UEB3-63M/D161N	16	6
1P+N	UEB3-63M/B201N	UEB3-63M/C201N	UEB3-63M/D201N	20	6
1P+N	UEB3-63M/B251N	UEB3-63M/C251N	UEB3-63M/D251N	25	6
1P+N	UEB3-63M/B321N	UEB3-63M/C321N	UEB3-63M/D321N	32	6
1P+N	UEB3-63M/B401N	UEB3-63M/C401N	UEB3-63M/D401N	40	6
1P+N	UEB3-63M/B501N	UEB3-63M/C501N	UEB3-63M/D501N	50	6
1P+N	UEB3-63M/B631N	UEB3-63M/C631N	UEB3-63M/D631N	63	6
2P	UEB3-63M/B062	UEB3-63M/C062	UEB3-63M/D062	6	6
2P	UEB3-63M/B102	UEB3-63M/C102	UEB3-63M/D102	10	6
2P	UEB3-63M/B162	UEB3-63M/C162	UEB3-63M/D162	16	6
2P	UEB3-63M/B202	UEB3-63M/C202	UEB3-63M/D202	20	6
2P	UEB3-63M/B252	UEB3-63M/C252	UEB3-63M/D252	25	6
2P	UEB3-63M/B322	UEB3-63M/C322	UEB3-63M/D322	32	6
2P	UEB3-63M/B402	UEB3-63M/C402	UEB3-63M/D402	40	6
2P	UEB3-63M/B502	UEB3-63M/C502	UEB3-63M/D502	50	6
2P	UEB3-63M/B632	UEB3-63M/C632	UEB3-63M/D632	63	6
3P	UEB3-63M/B063	UEB3-63M/C063	UEB3-63M/D063	6	6
3P	UEB3-63M/B103	UEB3-63M/C103	UEB3-63M/D103	10	6
3P	UEB3-63M/B163	UEB3-63M/C163	UEB3-63M/D163	16	6
3P	UEB3-63M/B203	UEB3-63M/C203	UEB3-63M/D203	20	6
3P	UEB3-63M/B253	UEB3-63M/C253	UEB3-63M/D253	25	6
3P	UEB3-63M/B323	UEB3-63M/C323	UEB3-63M/D323	32	6

3P	UEB3-63M/B403	UEB3-63M/C403	UEB3-63M/D403	40	6
3P	UEB3-63M/B503	UEB3-63M/C503	UEB3-63M/D503	50	6
3P	UEB3-63M/B633	UEB3-63M/C633	UEB3-63M/D633	63	6
3P+N	UEB3-63M/B063N	UEB3-63M/C63N	UEB3-63M/D063N	6	6
3P+N	UEB3-63M/B103N	UEB3-63M/C103N	UEB3-63M/D103N	10	6
3P+N	UEB3-63M/B163N	UEB3-63M/C163N	UEB3-63M/D163N	16	6
3P+N	UEB3-63M/B203N	UEB3-63M/C203N	UEB3-63M/D203N	20	6
3P+N	UEB3-63M/B253N	UEB3-63M/C253N	UEB3-63M/D253N	25	6
3P+N	UEB3-63M/B323N	UEB3-63M/C323N	UEB3-63M/D323N	32	6
3P+N	UEB3-63M/B403N	UEB3-63M/C403N	UEB3-63M/D403N	40	6
3P+N	UEB3-63M/B503N	UEB3-63M/C503N	UEB3-63M/D503N	50	6
3P+N	UEB3-63M/B633N	UEB3-63M/C633N	UEB3-63M/D633N	63	6
4P	UEB3-63M/B064	UEB3-63M/C064	UEB3-63M/D064	6	6
4P	UEB3-63M/B104	UEB3-63M/C104	UEB3-63M/D104	10	6
4P	UEB3-63M/B164	UEB3-63M/C164	UEB3-63M/D164	16	6
4P	UEB3-63M/B204	UEB3-63M/C204	UEB3-63M/D204	20	6
4P	UEB3-63M/B254	UEB3-63M/C254	UEB3-63M/D254	25	6
4P	UEB3-63M/B324	UEB3-63M/C324	UEB3-63M/D324	32	6
4P	UEB3-63M/B404	UEB3-63M/C404	UEB3-63M/D404	40	6
4P	UEB3-63M/B504	UEB3-63M/C504	UEB3-63M/D504	50	6
4P	UEB3-63M/B634	UEB3-63M/C634	UEB3-63M/D632	63	6