

Miniature Circuit Breakers B4/B6/B10



Technical Datasheet

The IMO range of miniature circuit breakers have been designed for protection of electrical installations against overload and short circuits and are manufactured in accordance with IEC 60898-1

Technical Data

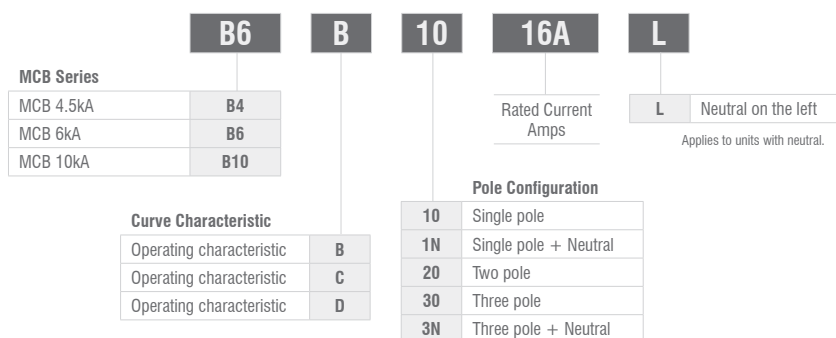
- Handle central-tripping function for circuit fault indicating
- New front design; cover and handle in arc shape
- Contact position indicating window; transparent cover to carry label
- High short circuit capacity
- Suitable for terminal and Pin/Fork type busbar connection
- Finger protected connection terminals
- Handle padlock device



Tripping characteristics in accordance with B, C and D type curves

- Curve B: 3-5 I_n Certification:
- Curve C: 5-10 I_n B4: Semko / CE
- Curve D: 10-20 I_n B10: VDE / Semko / CE

Options & Ordering Codes



Specifications

In accordance with	IEC 60898-1	
Certification	CE, SEMKO (only with B4), Kema (only with B10), RCM (only with B4 & B10)	
Pole composition	1P, 1P+N, 2P, 3P, 3P+N	
Tripping Curve	B, C, D	
Calibration temperature	+30°C	
Rated frequency	50/60Hz	
Rated operational voltage	240/415VAC; 60VDC Max	
Rated insulation voltage	240VAC / 415VAC	
Rated impulse withstand voltage:	6.2kV	
Rated short circuit breaking capacity as per IEC 60898-1 and IEC60947-2	B4	1P+N, C curve: 4.5kA
	B6	1P, B curve: 6kA
	B10	1P/2P/3P/3P+N, C & D curve: 10kA
Mechanical lifetime	> 20,000 cycles	
Electrical lifetime	> 8,000 cycles	
Tightening torque	2.0 Nm	
Screw Type	M5	
Terminal capacity	35mm ² solid, 25mm ² stranded conductor (10mm ² for 1P+N)	
Mounting	DIN Rail EN 60715 (EN 50022)	
Protection degree	IP20	
Operating temperature	-5°C +40°C	

Selection Chart



Type	B			C			D		
Poles	1	1N	2	3	3N	1	2	3	
2	Blue	Green							
4	Blue	Green							
6	Blue	Green			Grey				
10	Blue	Green							
16	Blue	Green							
20	Blue	Green							
25	Blue	Green							
32	Blue	Green							
40	Blue	Green							
50	Blue	Green							
63	Blue	Green							
Weight (g/pc)	100	100	200	200	300	400	100	200	300
Packing (Qty)	12	12	6	6	4	3	12	6	4

Single Module Unit

Miniature Circuit Breakers B4/B6/B10

Accessories

Auxiliary Switch	B10-F3
For monitoring the status of the protection device (open/closed)	
1 pole changeover (for C & D curve only)	
Rated current: 6A @ 230VAC & 24VDC or 3A @ 400VAC	
Dielectric Strength: 2000V/1min	
Terminal Capacity: 1-4mm ²	
Mounting on the Left side	

Shunt Trip	B10-S3
Shunt Trip to remotely switch off the protection device	
Rating voltage Ue: AC 110V / 230V / 400V	
Oving Voltage: 70%~110% X Ue	
Mounting on the Left side	

Busbars	
Description	Ref.
Busbar 1 Pole, 80A, Fork Type, 1M	B10BB1F100-1M
Busbar 3 Pole, 80A, Fork Type, 1M	B10BB3F100-1M
Busbar 1 Pole, 80A, Pin Type, 1M	B10BB1P100-1M
Busbar 3 Pole, 80A, Pin Type, 1M	B10BB3P100-1M
End Cap 3 Pole (Fork type only)	B10BBCAP3F100

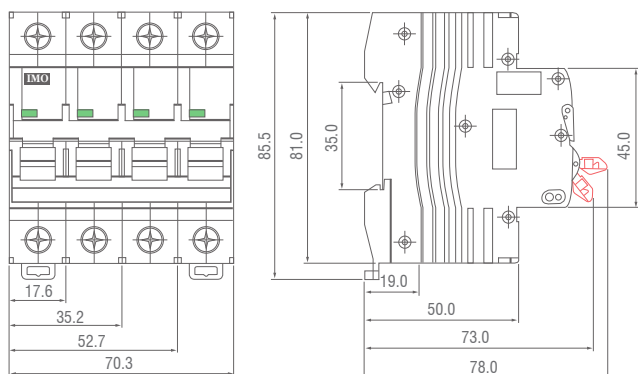
Terminal Adapter	BA1
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Locking Device	B10-LOCK
4mm padlock max diameter, non included	

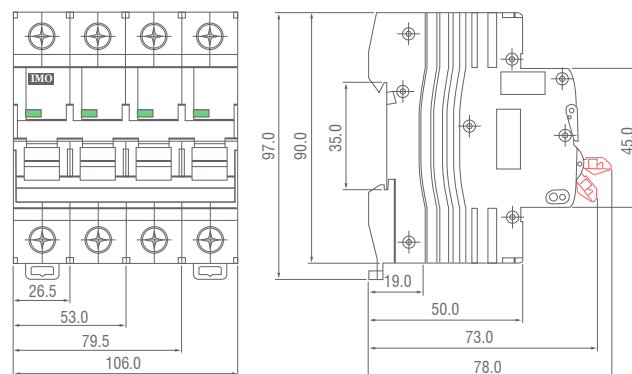
Locking Device	B10-TERM
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Dimensions (mm)

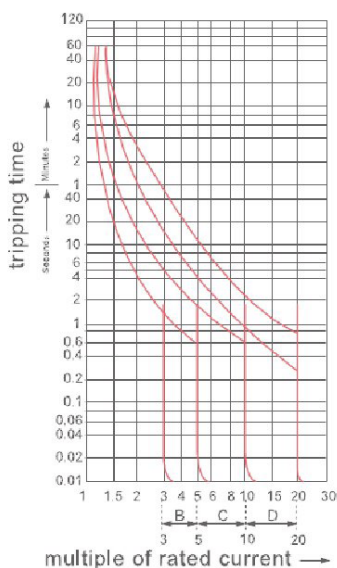
Miniature Circuit Breakers up to 63A



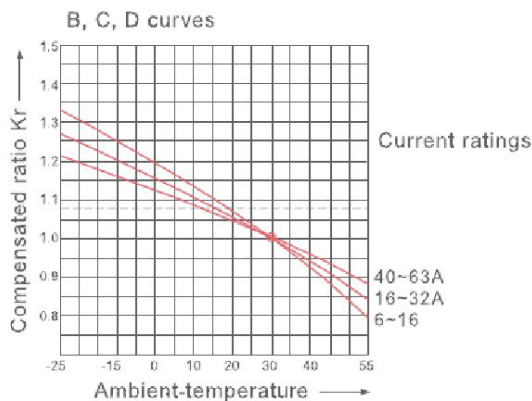
Miniature Circuit Breakers from 80A



B, C, D Tripping Curve



Ambient temperature & Current rating curve



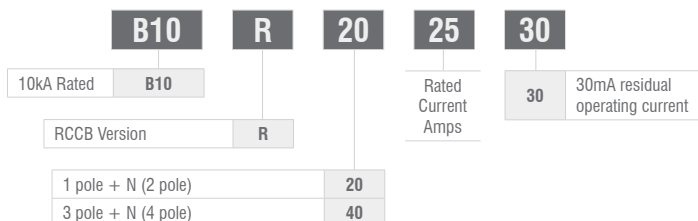
Residual Current Circuit Breakers B10R



Technical Datasheet

The IMO range of Residual Current Circuit Breakers have been designed for protection of electrical installations against earth fault / leakage current and are manufactured in accordance with IEC 61008-1.

Options & Ordering Codes



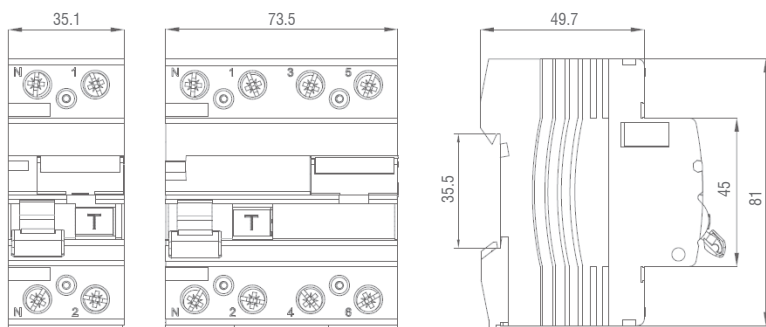
Specifications

In accordance with	IEC 61008-1
Certification	CE, SEMKO
Pole composition	2P, 4P
Rated current:	16A, 25A, 32A, 40A, 63A
Residual current characteristics:	AC
Calibration Temperature:	+30°C
Rated frequency:	50/60Hz
Rated voltage:	230VAC/400VAC
Rated residual operating current I Δ n:	30mA, 100mA, 300mA
Max. Switching Time@ I Δ n:	100ms
Residual tripping current range:	0.5 I Δ n ~ 1 I Δ n
Rated conditional short circuit current:	10kA
Electrical lifetime	> 4,000 cycles
Fastening torque:	2.0Nm
Terminal capacity:	35mm ² solid, 25mm ² stranded conductor
Mounting on	DIN Rail EN 60715 (EN 50022)
Protection degree:	IP20
Operating temperature:	-25°C - +55°C

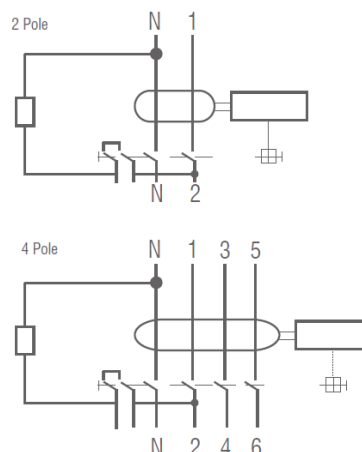
Selection Chart

Type		Operating Characteristics	
		2N	3N
Poles	16		
	25		
	32		
	40		
	63		
Weight (g/pc)		206	412
Packing (Qty)		6	3

Overall & Installation Dimensions



Wiring Diagram



Residual Current Circuit Breakers With Overload Protection

The IMO range of Residual Current-Circuit Breakers with Overload have been designed for protection of electrical installations against earth fault / leakage current, overload and short circuit and are manufactured in accordance with IEC 61009.

RCBO Features

- Provides protection against earth fault / leakage current,
- overload, short circuit and function of isolation
- Elegant appearance; cover and handle in arc shape.
- Contact position indicating window; transparent cover to carry label
- High short circuit current withstand capacity
- Applicable to terminal and Pin/Fork type busbar connection
- Finger protected connection terminals
- Compatible with MCB accessories range
- Handle padlock device

Tripping characteristics in accordance with B, C and D type curves

- Curve B: $3-5 I_n$
- Curve C: $5-10 I_n$
- Curve D: $10-20 I_n$

Specifications

In accordance with:	IEC 61009
Certification:	CE, SEMKO, RCM
Pole composition:	2P
Residual current characteristics:	AC, A
Tripping Curve:	B, C, D
Calibration temperature:	+30°C
Rated current :	6A, 10A, 16A, 20A, 25A, 32A, 40A
Rated short circuit capacity :	10kA
Rated frequency:	50/60Hz
Rated voltage:	110VAC, 230VAC
Rated residual operating current $I_{\Delta n}$:	30mA
Residual tripping current range:	$0.5 I_{\Delta n} \sim 1 I_{\Delta n}$
Electrical lifetime	> 4,000 cycles
Fastening torque:	2.0Nm
Terminal capacity:	35mm ² solid, 25mm ² stranded conductor
Mounting on	DIN rail EN 60715 (EN 50022)
Protection degree:	IP20
Operating temperature range:	-25°C - +55°C

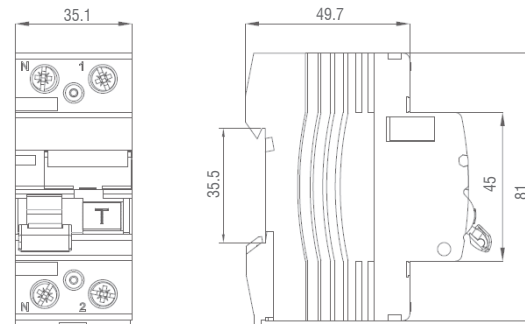
For Dimensions refer to RCCB Data.
For Tripping Curve refer to MCB.



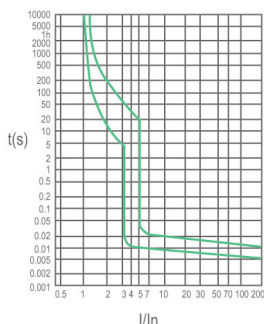
Options & Ordering Codes

B6	B	R	1N	16	-	30	-	A	-	110
10kA Rated	B6			Rated Current Amps						
	Tripping Curve	B				30mA Residual Operating Current	30			
	Tripping Curve	C								
	Tripping Curve	D								
	Residual Current	R						AC		
				1 Pole + N (2 Pole)	1N			Type A	A	
										230VAC
										110VAC
										110

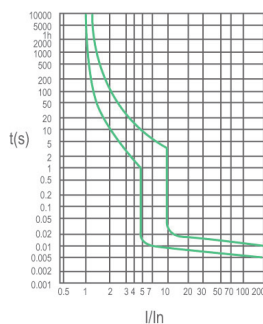
Dimensions (mm)



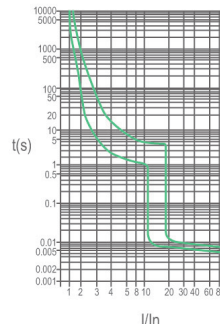
Tripping Curve B



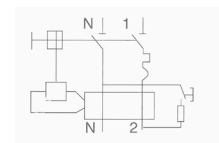
Tripping Curve C



Tripping Curve D



Wiring Diagram



BIS Isolating Switches

The IMO range of isolating switch have been designed to isolate safely your electrical circuit from the main supply and are manufactured in accordance with IEC 60947-3.

- Capable of switch electric circuit with load
- Elegant appearance; cover and handle in arc shape
- Contact position indicating window; transparent cover to carry label
- Applicable to terminal and Pin/Fork type busbar connection
- Finger protected connection terminals
- Compatible with MCB accessories range
- Handle padlock device



Technical Datasheet



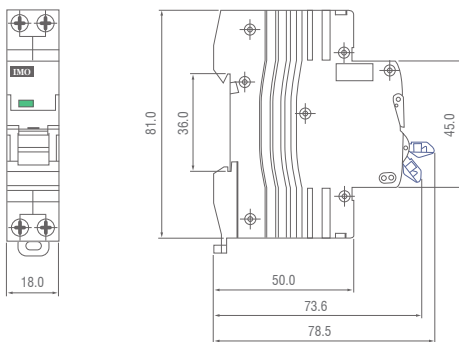
Options & Ordering Codes

Distribution board Isolating Switch		BIS		
		2		
			063A	
1 Pole	1		N32A	Compact Size, Blue Handle, 32A
2 Pole	2		063A	63 Amps
3 Pole	3		100C	100 Amps
4 Pole	4		125A	125 Amps
			250A	250 Amps

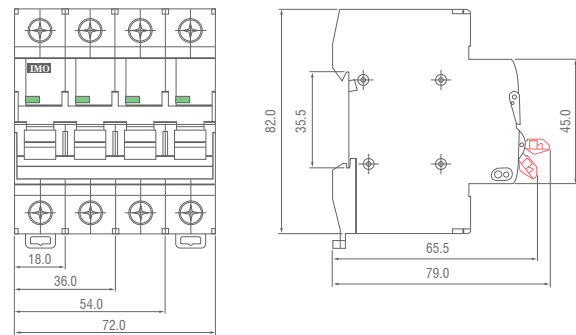
Specifications

In accordance with	IEC 60947-3
Certification	CE, SEMKO (63 and 125A only)
Pole composition	1P / 2P / 3P / 4P
Rated current	32A / 63A / 100A / 125A / 250A
Rated voltage	AC 230 / 400V
Rated frequency	50/60Hz
Rated short circuit capacity	6kA (3kA for 100A version)
Electrical lifetime	> 10,000 cycles
Fastening torque	2.0Nm
Terminal capacity	35mm ² solid, 25mm ² stranded conductor
Protection degree	IP20

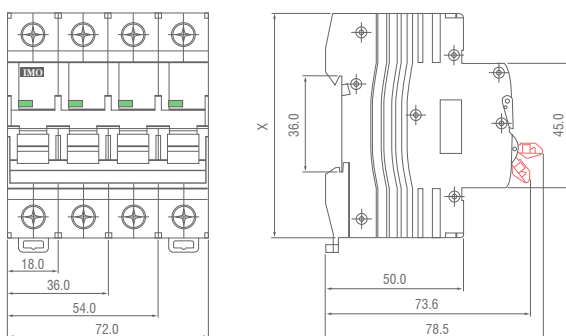
Dimensions (mm) for Compact 32A version



Dimensions (mm) for 100A version

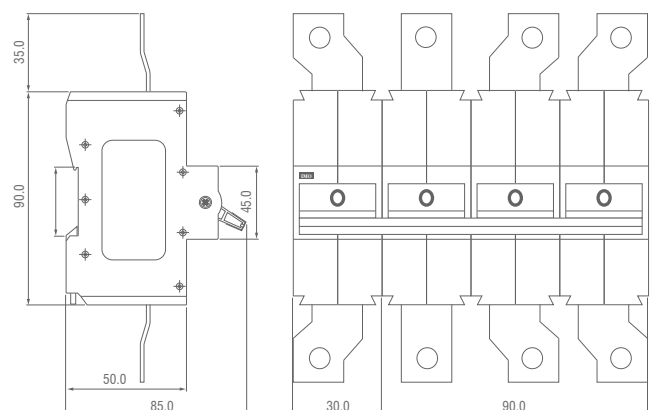


Dimensions (mm) for 63A & 125A version



Rating	X
63A	81mm
125A	90mm

Dimensions (mm) for 250A version



Residual Current Circuit Breakers With Overload Protection 1P+N Single Module

The IMO range of Residual Current-Circuit Breakers with Overload have been designed for protection of electrical installations against earth fault / leakage current, overload and short circuit and are manufactured in accordance with IEC 61009-1.



RCBO Features

- Provides protection against earth fault / leakage current, overload, short circuit and function of isolation
- Elegant appearance; cover and handle in arc shape.
- Single width module RCBO, 119mm tall
- Contact position indicating window; transparent cover to carry label
- High short circuit current withstand capacity
- Applicable to terminal and Pin/Fork type busbar connection (line input only)
- Finger protected connection terminals
- Compatible with MCB accessories range
- Handle padlock device

Tripping characteristics in accordance with B, C and D type curves

- Curve B: 3-5 I_n
- Curve C: 5-10 I_n
- Curve D: 10-20 I_n

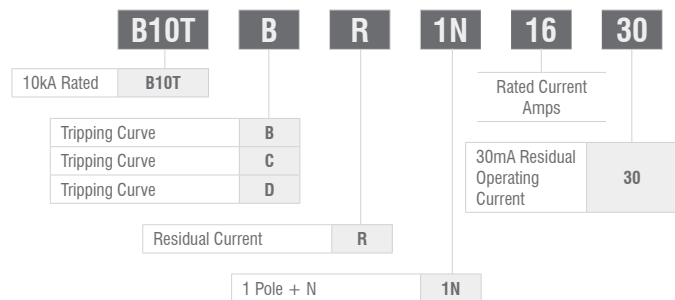
Specifications

In accordance with	IEC 61009-1
Certification	CE
Pole composition	3P+N
Residual current characteristics	AC
Tripping Curve	B, C, D
Rated current	6A, 10A, 16A, 20A, 25A, 32A
Rated short circuit capacity	10 kA
Calibration Temperature	+30°C
Rated frequency	50/60Hz
Rated voltage	230/400VAC
Rated residual operating current $I_{\Delta n}$	30mA
Residual tripping current range	0.5 $I_{\Delta n}$ ~ 1 $I_{\Delta n}$
Electrical lifetime	> 4,000 cycles
Fastening torque	2.0 Nm
Terminal capacity (Live input)	35mm ² solid or 25mm ² stranded
Terminal capacity (output)	10mm ² solid or 6mm ² stranded
Mounting on	DIN rail EN 60715 (EN 50022)
Protection degree	IP20
Operating temperature	-25°C - +55°C

Dimensions (mm) for 1P+N: 1 module (18W x 119H x 69D)
For Tripping Curve refer to MCB.



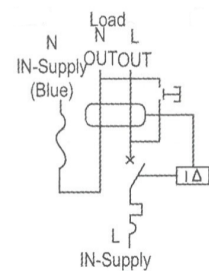
Options & Ordering Codes



Selection Chart

Type	Operating Characteristics
Poles	1N
	6
	10
	16
	20
	25
	32
Weight (g/pc)	178

Wiring Diagram



Residual Current Circuit Breakers With Overload Protection 3P+N

The IMO range of Residual Current-Circuit Breakers with Overload have been designed for protection of electrical installations against earth fault / leakage current, overload and short circuit and are manufactured in accordance with IEC 61009-1.

RCBO Features

- Provides protection against earth fault / leakage current, overload, short circuit and function of isolation
- Elegant appearance; cover and handle in arc shape.
- 3P+N version, 5 module width RCBO, 119mm tall
- Contact position indicating window; transparent cover to carry label
- High short circuit current withstand capacity
- Applicable to terminal and Pin/Fork type busbar connection
- Finger protected connection terminals
- Compatible with MCB accessories range
- Handle padlock device

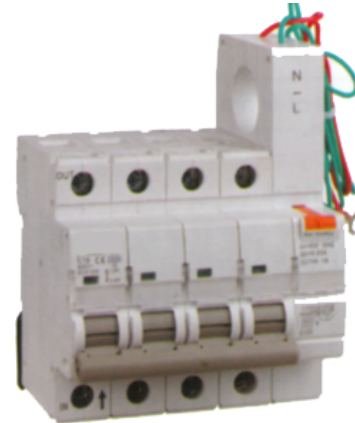
Tripping characteristics in accordance with B, C and D type curves

- Curve B: $3-5 I_n$
- Curve C: $5-10 I_n$
- Curve D: $10-20 I_n$

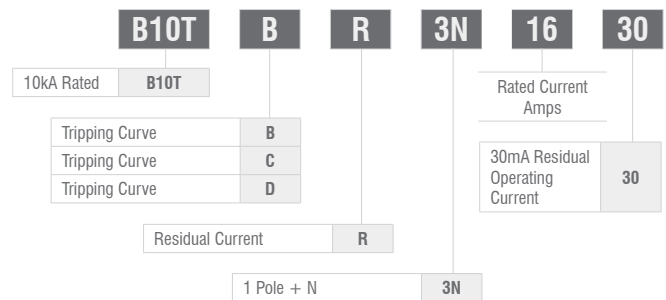
Specifications

In accordance with	IEC 61009-1
Certification	CE
Pole composition	3P+N
Residual current characteristics	AC
Tripping Curve	B, C, D
Rated current	6A, 10A, 16A, 20A, 25A, 32A
Rated short circuit capacity	10 kA
Calibration Temperature	+30°C
Rated frequency	50/60Hz
Rated voltage	230/400VAC
Rated residual operating current $I_{\Delta n}$	30mA
Residual tripping current range	$0.5 I_{\Delta n} \sim 1 I_{\Delta n}$
Electrical lifetime	> 4,000 cycles
Fastening torque	2.0 Nm
Terminal capacity	35mm ² solid or 25mm ² stranded
Mounting on	DIN rail EN 60715 (EN 50022)
Protection degree	IP20
Operating temperature	-25°C - +55°C

Dimensions (mm) for 3P+N: 4 module (72W x 81H x 69D) + 1 module (18W x 130H x 69D).
For Tripping Curve refer to MCB.



Options & Ordering Codes



Selection Chart

Type	Operating Characteristics
Poles	3N
6	
10	
16	
20	
25	
32	
Weight (g/pc)	500

Wiring Diagram

