

sigma
elektrik



OTOMATİK SİGORTALAR

TEKNİK ÖZELLİKLER

			SND 4500				SND 6000				SKD 6000			
Kutup Sayısı			1	2	3	4	1	2	3	4	1	2	3	4
Anma Akımı (30°C de)	In	A	2, 4, 6, 10, 16, 20, 25, 32, 40, 50, 63				1, 2, 3, 4, 5, 6, 10, 16, 20, 25, 32, 40, 50, 63				80, 100, 125			
Ani Açma Sınıfı			B : (3-5)xIn C : (5-10)xIn				B : (3-5)xIn C : (5-10)xIn D: (10-20)xIn				C : (5-10)xIn			
Korunacak Şebeke Cinsi			AC				AC				AC			
Anma Çalışma Gerilimi	Ue	AC (V)	230/400				230/400				230/400			
Anma Yalıtım Gerilimi	Ui	V	750				750				750			
Anma Darbe Dayanma Gerilimi	Uimp	kV	6				6				6			
Kısadevre kesme kapasitesi		kA	4,5				6				6			
Enerji Limiti Sınıfı			3				3				3			
Elektriksel Ömür	op.	230V	4.000				6.000				5.000			
Mekanik Ömür	op.		20.000				20.000				20.000			
Koruma Derecesi			IP 20				IP 20				IP 20			
Çalışma Ortam Sıcaklığı Aralığı		°C	-30 ... +60				-30 ... +60				-30 ... +60			
Depolama Ortam Sıcaklığı Aralığı		°C	-40 ... +70				-40 ... +70				-40 ... +70			
Bağıl Nem			%90				%90				%90			
Montaj Şekli (EN 60715)			35mm. DIN Rayına				35mm. DIN Rayına				35mm. DIN Rayına			
Bağlantı Kesidi		mm ²	1 – 25				1 – 25				25 – 50			
Max. Terminal Sıkma Momenti		Nm	2				2				3,5			

			SMD 10000				SLD 10000				SND 16000			
Kutup Sayısı			1	2	3	4	1	2	3	4	1			
Anma Akımı (30°C de)	In	A	2, 4, 6, 10, 16, 20, 25, 32, 40, 50, 63				80, 100, 125				40, 50, 63, 80, 100, 125			
Ani Açma Sınıfı			B : (3-5)xIn C : (5-10)xIn D: (10-20)xIn				C : (5-10)xIn				C : (5-10)xIn			
Korunacak Şebeke Cinsi			AC				AC				AC			
Anma Çalışma Gerilimi	Ue	AC (V)	230/400				230/400				230/400			
Anma Yalıtım Gerilimi	Ui	V	750				750				750			
Anma Darbe Dayanma Gerilimi	Uimp	kV	6				6				6			
Kısadevre kesme kapasitesi		kA	10				10				16			
Enerji Limiti Sınıfı			3				3				3			
Elektriksel Ömür	op.	230V	6.000				5.000				4.000			
Mekanik Ömür	op.		20.000				20.000				15.000			
Koruma Derecesi			IP 20				IP 20				IP 20			
Çalışma Ortam Sıcaklığı Aralığı		°C	-30 ... +60				-30 ... +60				-30 ... +60			
Depolama Ortam Sıcaklığı Aralığı		°C	-40 ... +70				-40 ... +70				-40 ... +70			
Bağıl Nem			%90				%90				95			
Montaj Şekli (EN 60715)			35mm. DIN Rayına				35mm. DIN Rayına				35mm DIN Rail			
Bağlantı Kesidi		mm ²	1 – 25				25 – 50				2,5 – 50			
Max. Terminal Sıkma Momenti		Nm	2				3,5				3,5			

ÜRÜN TANIMI

Sigma Otomatik Sigortaları, aşırı yük ve/veya kısa devre durumlarında devreyi otomatik olarak açan bir anahtarlama elemanı ve açma biriminden oluşmaktadır. Böylelikle, otomatik sigorta, beslediği yöndeki devreleri aşırı yük ve/veya kısa devrelere karşı korumaktadır. İzolasyon hatalarına karşı koruma, ayrıca kullanılacak bir kaçak akım koruma rölesi ile sağlanabilir. Otomatik sigorta aynı zamanda kontrol ve ayırma fonksiyonlarını da sağlayabilir.

- ▶ Aşırı yük akımı oluşması durumunda devreyi kesme
- ▶ Kısa devre oluşması durumunda devreyi kesme
- ▶ Anma işletme koşullarında çalışma
- ▶ Devrelerin enerjilendirilmesi ve yük altında enerjisinin kesilmesi
- ▶ Enerji sürekliliğini sağlama

OTOMATİK SİGORTA SEÇİMİ

Ürün Seçilecek Kısımdaki Şebeke Bilgileri

- ▶ Topraklama sistemleri (TT, TN, IT) / Earth Systems (TT, TN, IT)
- ▶ Otomatik sigortanın yerleştirildiği yerdeki oluşabilecek kısa devre akımı, otomatik sigortanın kesme kapasitesinden az olmalıdır.
- ▶ Nominal şebeke gerilimi

Korunacak devrenin bilgileri

- ▶ Otomatik sigortanın açma eğrisi
- ▶ Yükün gerektirdiği kutup sayısı
- ▶ Anma akımı
- ▶ Beklenen kısa devre akımı

OTOMATİK SİGORTALARIN SAHİP OLDUĞU STANDARTLAR

Otomatik sigortalar IEC 60898 (EN60898-1) standardına uygun olarak üretilir.

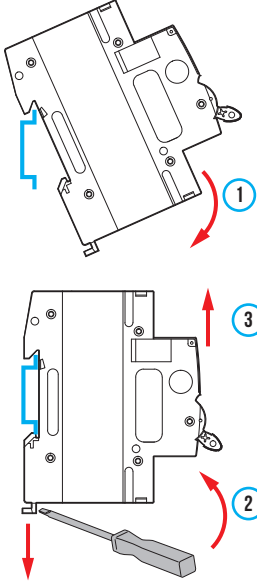
OTOMATİK SİGORTA MONTAJI

Montaj ve demontaj işlemleri sırasında güvenliğinizi için tüm enerjiyi kesiniz.

Teknik bir problemle karşılaşıldığında lütfen cihaza müdahalede bulunmayınız ve en kısa sürede teknik servis ile iletişime geçiniz.

Montaj:

- ▶ Otomatik Sigortanın arkasındaki üst kızığını DIN rayına oturtup ok yönünde (1) hareket ettirerek kilitleme mandalını DIN rayına oturtun.
- ▶ Montajdan sonra enerji akışını sağlamak için otomatik sigortayı ON konumuna getirin.

**Demontaj:**

Tornavidayı veya kontrol kalemini kilitleme mandalındaki çentiğe geçirip ok yönünde (2) hareket ettirin. Otomatik sigortayı ok yönünde (3) hareket ettirin.

DİKKAT!

- ▶ Montaj işlemi yapan kişinin kendine aşırı güvenmesi, risk alması, dikkatsiz, tedbirsiz ve aceleci davranması istenmeyen kazalara yol açabilir.
- ▶ Bu cihazın yanlış kullanımı maddi hasara, ciddi yaralanmalara ve hatta ölüme yol açabilir.

OTOMATİK SİGORTA MANYETİK AÇMA EĞRİLERİ**B Eğrisi:**

- ▶ Manyetik açma: In x 3~5 (IEC 60898-1)
- ▶ Akkor Flamanlı Lamba, Isıtıcılar

C Eğrisi:

- ▶ Manyetik açma: In x 5~10 (IEC 60898-1)
- ▶ Floresan lamba, güç priz devreleri, düşük güçlü motorlar, güç dağıtım panoları, soğutma makinaları

D Eğrisi:

- ▶ Manyetik açma: In x 10~20 (IEC 60898-1)
- ▶ Yüksek güçlü motorlar, pompalar, kompresörler

BAKIM, ONARIM VE KULLANIMINDA DİKKAT EDİLMESİ GEREKEN HUSUSLAR

- ▶ Nemli ve tozlu ortamlarda otomatik sigortanın kontaklarında yapışma olmaması için mutlaka bir muhafaza (sigorta kutusu veya pano) içerisinde kullanılmalıdır.
- ▶ Bu cihazın kurulumu, montaj ve demontaj işlemleri yetkili bir personel tarafından güvenlik yönetmeliklerine ve talimatlarına uygun olarak yapılmalıdır. Yetkisiz kişilerin kullanımını kısıtlamak için otomatik sigortanın bulunduğu pano veya sigorta kutusu kilitlenebilir. Ayrıca özel devreleri koruyan otomatik sigortaların mandalı özel bir kilit sistemiyle kilitlenebilir.
- ▶ Kullanım sırasında elektrik akışı olduğu durumda otomatik sigortanın kablo bağlantı terminallerine ve kablo giriş çıkışlarına temas edilmemelidir, çarpılmaya sebep olabilir.
- ▶ Otomatik sigorta su ile temas etmemelidir. Su ile temas etme riski olan durumlarda IP seviyesi yüksek bir muhafaza içerisinde kullanılmalıdır.
- ▶ Terminal vidaları belirtilen sıkma momentine göre sıkılmalıdır. Isınan kablonun gevşeyip çıkması durumunda istenmeyen elektrik kazaları ve yangınlar yaşanabilir.
- ▶ Otomatik sigortanın sürekli açması durumunda tesisatta bir kısa devre veya aşırı yüklenme söz konusudur. Bu durumda izolasyon ve yük dağılımının kontrolü için yetkili elektrikçinize başvurunuz.

OTOMATİK SİGORTA TAŞIMA VE NAKLİYESİNDE DİKKAT EDİLECEK HUSUSLAR

Otomatik Sigortalar üretici firma tarafından en uygun şekilde ambalajlanmış olup orijinal ambalajında taşınmasına özen gösterilmelidir. Bunun dışında taşıma ile ilgili özel bir önlem bulunmamaktadır.

Depolama sıcaklığı : -40°C ~ +70°C

PERİYODİK BAKIM

Otomatik sigortalar 5 yılda bir periyodik bakım gerektirir. Periyodik bakım yetkin bir elektrikçi tarafından yapılabilir.

KULLANIM HATALARINA İLİŞKİN BİLGİLER

- ▶ Gerilim altındayken otomatik sigortanın terminallerine iletken bir cisim sokulmamalıdır.
- ▶ Kablolar terminallere belirtilen sıkma momentine göre bağlanmalıdır. Kablonun gevşek bağlanması, istenmeyen elektriksel kazalara sebep olabilir.
- ▶ Otomatik Sigortalar direk suya maruz kalmamalıdır, bir sigorta kutusu veya panosu içerisinde muhafaza edilmelidir.
- ▶ Bir otomatik sigorta sürekli açma yapıyorsa çözüm tekrar mandalı yukarı kaldırmak değildir. Bu durumda tesisatta bir yalıtım hatası veya aşırı yüklenme söz konusudur. Böyle bir durumda elektrikçinize başvurunuz.

TÜKETİCİNİN KENDİ YAPABİLECEĞİ BAKIM, ONARIM VE ÜRÜNÜN TEMİZLİĞİNE İLİŞKİN BİLGİLER

Belirtilen periyodik bakım zamanlarında otomatik sigortaların bakımı ve onarımı için yetkili bir personele başvurun.

MALIN ENERJİ TÜKETİMİ AÇISINDAN VERİMLİ KULLANIMINA İLİŞKİN BİLGİLER

Ürünler; kılavuzda belirtilen koşullar altında kullanılmalıdır. Bu ortam sağlandığı durumda ürün en verimli şekilde işlev görecektir.

Kullanım ömrü : 10 yıl

Garanti süresi : 2 yıl

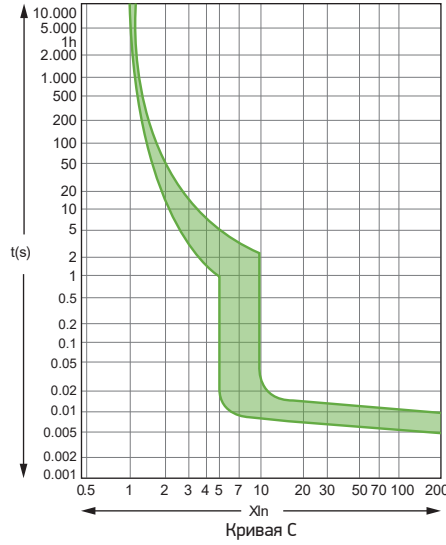
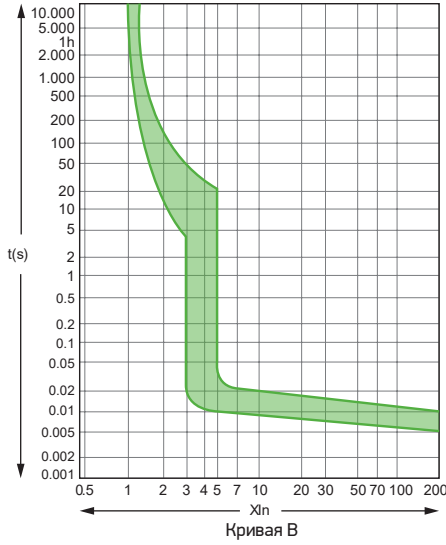
UYARI!

Belirtilen önlemlerin uygulanmaması neticesinde doğabilecek istenmeyen durumlardan Sigma Elektrik hiçbir şekilde sorumlu tutulamaz.

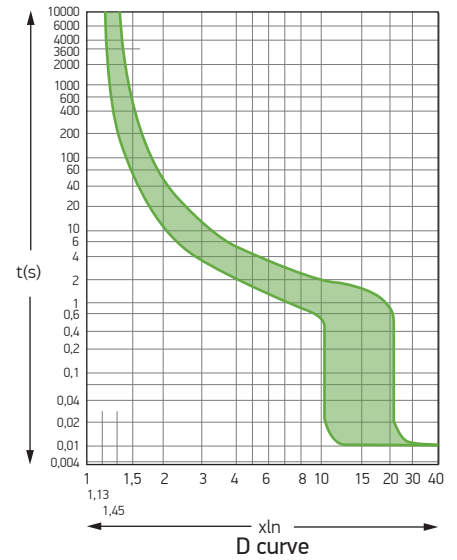
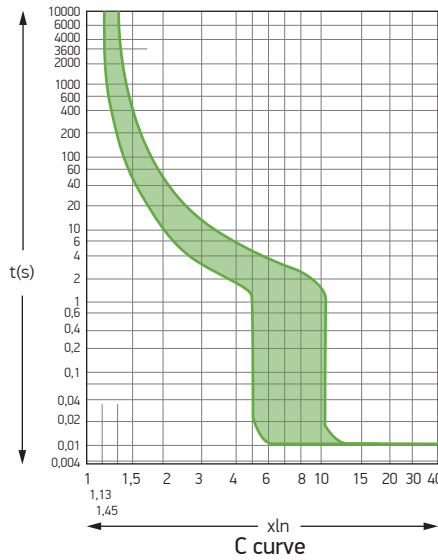
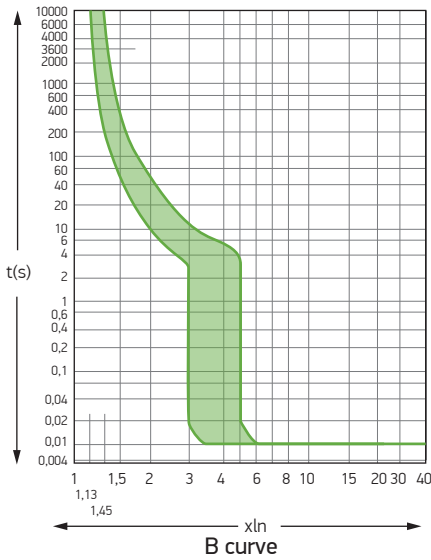
UYARI!

Cihazın kullanım süresi sona erdiğinde Avrupa birliği dahilinde ayrı bir atık grubuna dahil edilmesi gerekir. Cihaz çöpe atılmamalı, cihaz toplama merkezlerine (elektronik cihaz dönüşüm noktaları) teslim edilmelidir.

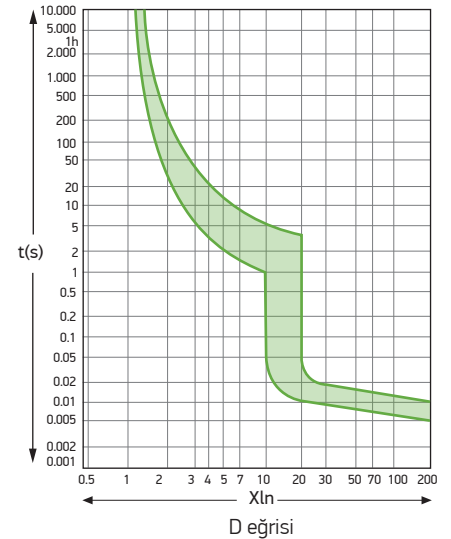
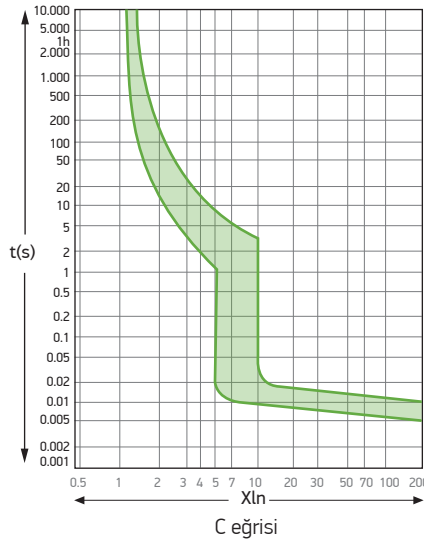
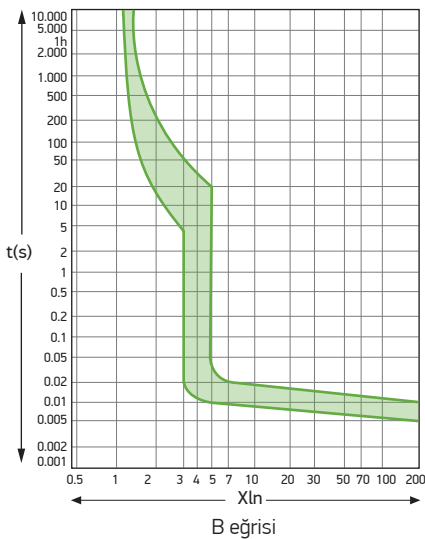
SND 4500



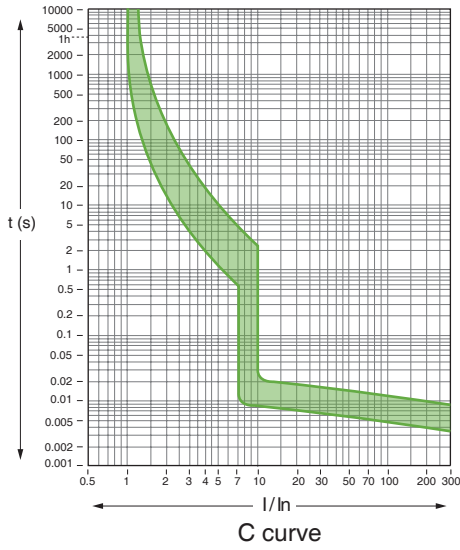
SND 6000



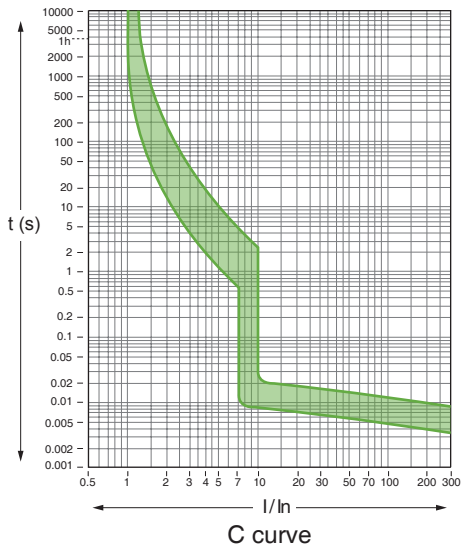
SMD 10000 (TÜV Approved)



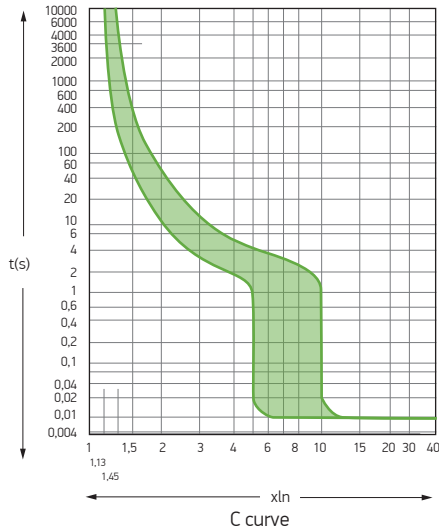
SKD 6000



SLD 10000

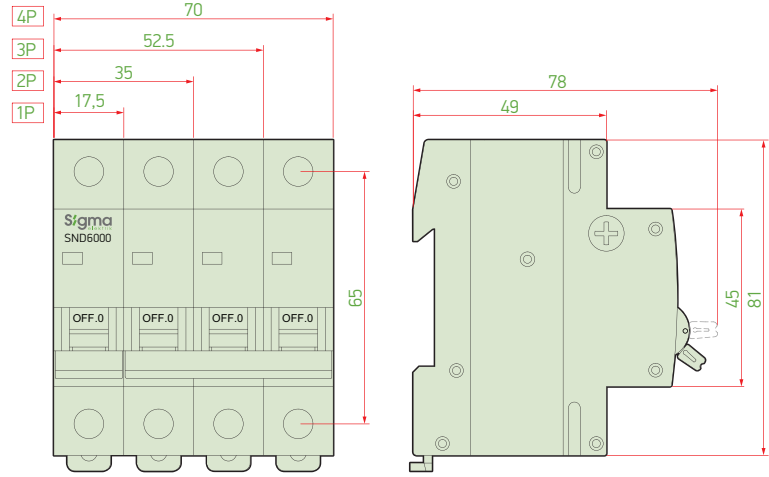


SND 16000

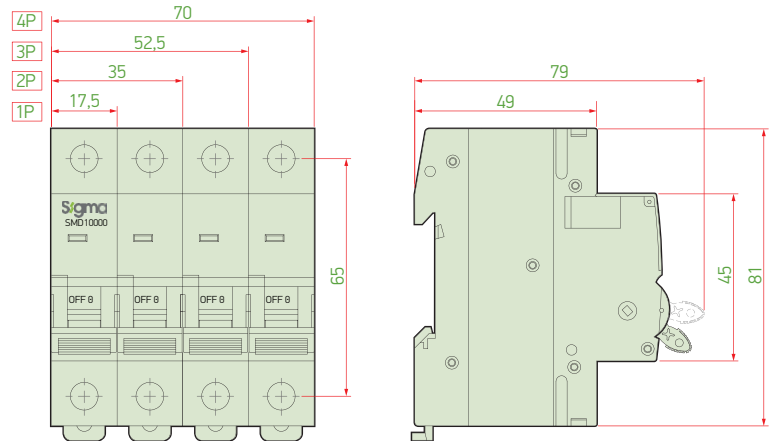


ÖLÇÜLER

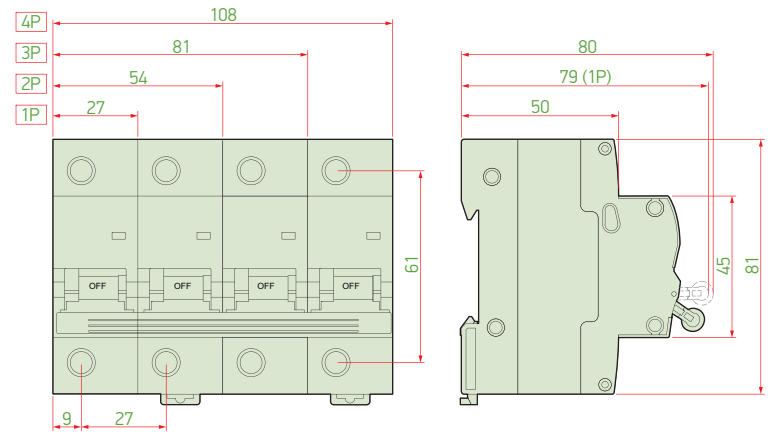
4,5 kA - 6 kA (1A-63A) [SND 4500, SND 6000]
6 kA (80A-100A-125A) [SKD 6000]



10 kA (2A-63A) [SMD 10000]



10kA (80A-100A-125A) [SLD 10000]



4,5 kA Otomatik Sigorta / SND 4500



Kutup Sayısı	Anma Akımı In (A)	Minimum Sip. Adedi	Koli Adedi	B Eğrisi İçin Sipariş Kodu	C Eğrisi İçin Sipariş Kodu
1P	2	12	240	4SM102B	4SM102C
	4	12	240	4SM104B	4SM104C
	6	12	240	4SM106B	4SM106C
	10	12	240	4SM110B	4SM110C
	16	12	240	4SM116B	4SM116C
	20	12	240	4SM120B	4SM120C
	25	12	240	4SM125B	4SM125C
	32	12	240	4SM132B	4SM132C
	40	12	240	4SM140B	4SM140C
	50	12	240	4SM150B	4SM150C
	63	12	240	4SM163B	4SM163C



2P	2	6	120	4SM202C
	4	6	120	4SM204C
	6	6	120	4SM206C
	10	6	120	4SM210C
	16	6	120	4SM216C
	20	6	120	4SM220C
	25	6	120	4SM225C
	32	6	120	4SM232C
	40	6	120	4SM240C
	50	6	120	4SM250C
	63	6	120	4SM263C



3P	2	4	80	4SM302C
	4	4	80	4SM304C
	6	4	80	4SM306C
	10	4	80	4SM310C
	16	4	80	4SM316C
	20	4	80	4SM320C
	25	4	80	4SM325C
	32	4	80	4SM332C
	40	4	80	4SM340C
	50	4	80	4SM350C
	63	4	80	4SM363C



4P	2	3	60	4SM402C
	4	3	60	4SM404C
	6	3	60	4SM406C
	10	3	60	4SM410C
	16	3	60	4SM416C
	20	3	60	4SM420C
	25	3	60	4SM425C
	32	3	60	4SM432C
	40	3	60	4SM440C
	50	3	60	4SM450C
	63	3	60	4SM463C

6 kA Otomatik Sigorta / SND 6000



Kutup Sayısı	Anma Akımı In (A)	Minimum Sip. Adedi	Koli Adedi	B Eğrisi İçin Sipariş Kodu	C Eğrisi İçin Sipariş Kodu	D Eğrisi İçin Sipariş Kodu
1P	1	12	240	6SM101B	6SM101C	6SM101D
	2	12	240	6SM102B	6SM102C	6SM102D
	3	12	240	6SM103B	6SM103C	6SM103D
	4	12	240	6SM104B	6SM104C	6SM104D
	5	12	240	6SM105B	6SM105C	6SM105D
	6	12	240	6SM106B	6SM106C	6SM106D
	10	12	240	6SM110B	6SM110C	6SM110D
	16	12	240	6SM116B	6SM116C	6SM116D
	20	12	240	6SM120B	6SM120C	6SM120D
	25	12	240	6SM125B	6SM125C	6SM125D
	32	12	240	6SM132B	6SM132C	6SM132D
	40	12	240	6SM140B	6SM140C	6SM140D
	50	12	240	6SM150B	6SM150C	6SM150D
	63	12	240	6SM163B	6SM163C	6SM163D



2P	2	6	120		6SM202C	6SM202D
	4	6	120		6SM204C	6SM204D
	6	6	120		6SM206C	6SM206D
	10	6	120		6SM210C	6SM210D
	16	6	120		6SM216C	6SM216D
	20	6	120		6SM220C	6SM220D
	25	6	120		6SM225C	6SM225D
	32	6	120		6SM232C	6SM232D
	40	6	120		6SM240C	6SM240D
	50	6	120		6SM250C	6SM250D
	63	6	120		6SM263C	6SM263D



3P	2	4	80		6SM302C	6SM302D
	4	4	80		6SM304C	6SM304D
	6	4	80		6SM306C	6SM306D
	10	4	80		6SM310C	6SM310D
	16	4	80		6SM316C	6SM316D
	20	4	80		6SM320C	6SM320D
	25	4	80		6SM325C	6SM325D
	32	4	80		6SM332C	6SM332D
	40	4	80		6SM340C	6SM340D
	50	4	80		6SM350C	6SM350D
	63	4	80		6SM363C	6SM363D



4P	2	3	60		6SM402C	6SM402D
	4	3	60		6SM404C	6SM404D
	6	3	60		6SM406C	6SM406D
	10	3	60		6SM410C	6SM410D
	16	3	60		6SM416C	6SM416D
	20	3	60		6SM420C	6SM420D
	25	3	60		6SM425C	6SM425D
	32	3	60		6SM432C	6SM432D
	40	3	60		6SM440C	6SM440D
	50	3	60		6SM450C	6SM450D
	63	3	60		6SM463C	6SM463D

10 kA Otomatik Sigorta / SMD 10000 [TÜV Onaylı]

TÜVRheinland®



Kutup Sayısı	Anma Akımı In (A)	Minimum Sip. Adedi	Koli Adedi	B Eğrisi İçin Sipariş Kodu	C Eğrisi İçin Sipariş Kodu	D Eğrisi İçin Sipariş Kodu
1P	2	12	240	1SMD102B	1SMD102C	1SMD102D
	4	12	240	1SMD104B	1SMD104C	1SMD104D
	6	12	240	1SMD106B	1SMD106C	1SMD106D
	10	12	240	1SMD110B	1SMD110C	1SMD110D
	16	12	240	1SMD116B	1SMD116C	1SMD116D
	20	12	240	1SMD120B	1SMD120C	1SMD120D
	25	12	240	1SMD125B	1SMD125C	1SMD125D
	32	12	240	1SMD132B	1SMD132C	1SMD132D
	40	12	240	1SMD140B	1SMD140C	1SMD140D
	50	12	240	1SMD150B	1SMD150C	1SMD150D
	63	12	240	1SMD163B	1SMD163C	1SMD163D



2P	2	6	120		1SMD202C	1SMD202D
	4	6	120		1SMD204C	1SMD204D
	6	6	120		1SMD206C	1SMD206D
	10	6	120		1SMD210C	1SMD210D
	16	6	120		1SMD216C	1SMD216D
	20	6	120		1SMD220C	1SMD220D
	25	6	120		1SMD225C	1SMD225D
	32	6	120		1SMD232C	1SMD232D
	40	6	120		1SMD240C	1SMD240D
	50	6	120		1SMD250C	1SMD250D
	63	6	120		1SMD263C	1SMD263D



3P	2	4	80		1SMD302C	1SMD302D
	4	4	80		1SMD304C	1SMD304D
	6	4	80		1SMD306C	1SMD306D
	10	4	80		1SMD310C	1SMD310D
	16	4	80		1SMD316C	1SMD316D
	20	4	80		1SMD320C	1SMD320D
	25	4	80		1SMD325C	1SMD325D
	32	4	80		1SMD332C	1SMD332D
	40	4	80		1SMD340C	1SMD340D
	50	4	80		1SMD350C	1SMD350D
	63	4	80		1SMD363C	1SMD363D



4P	2	3	60		1SMD402C	1SMD402D
	4	3	60		1SMD404C	1SMD404D
	6	3	60		1SMD406C	1SMD406D
	10	3	60		1SMD410C	1SMD410D
	16	3	60		1SMD416C	1SMD416D
	20	3	60		1SMD420C	1SMD420D
	25	3	60		1SMD425C	1SMD425D
	32	3	60		1SMD432C	1SMD432D
	40	3	60		1SMD440C	1SMD440D
	50	3	60		1SMD450C	1SMD450D
	63	3	60		1SMD463C	1SMD463D

80-100-125A Otomatik Sigortalar 6 kA / SKD 6000



Kutup Sayısı	Anma Akımı In (A)	Minimum Sip. Adedi	Koli Adedi	Sipariş Kodu
1P	80	12	240	6SK180C
	100	12	240	6SK100C
	125	12	240	6SK112C
2P	80	6	120	6SK280C
	100	6	120	6SK200C
	125	6	120	6SK212C
3P	80	4	80	6SK380C
	100	4	80	6SK300C
	125	4	80	6SK312C
4P	80	3	60	6SK480C
	100	3	60	6SK400C
	125	3	60	6SK412C

80-100-125A Otomatik Sigortalar 10 kA / SLD 10000



Kutup Sayısı	Anma Akımı In (A)	Minimum Sip. Adedi	Koli Adedi	Sipariş Kodu
1P	80	12	120	1SL180C
	100	12	120	1SL100C
	125	12	120	1SL112C
2P	80	6	60	1SL280C
	100	6	60	1SL200C
	125	6	60	1SL212C
3P	80	4	40	1SL380C
	100	4	40	1SL300C
	125	4	40	1SL312C
4P	80	3	30	1SL480C
	100	3	30	1SL400C
	125	3	30	1SL412C

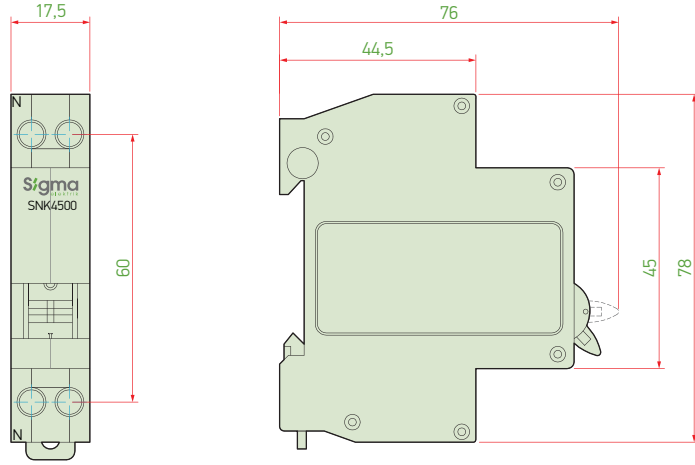
4.5 kA Nötr Kesmeli (18 mm Genişlik) 1P+N Otomatik Sigortalar



1P+N

Kutup Sayısı	Anma Akımı In (A)	Minimum Sip Adedi	Koli Adedi	Sipariş Kodu
1P+N	6	12	240	4SN106C
	10	12	240	4SN110C
	16	12	240	4SN116C
	20	12	240	4SN120C
	25	12	240	4SN125C
	32	12	240	4SN132C

SNK 4500



Otomatik Sigorta Aksesuarları



Tip Kodu	Açıklama	Sipariş Kodu
SEYK011	1NO+1NC Yardımcı kontak (SND 6000 ve SDC 10000 için)	SEYK011
SMDYK	1NO+1NC Yardımcı kontak (SND 4500 ve SMD 10000 için)	SMDYK011
SLDYK	1NO+1NC Yardımcı kontak (Ith: 3A, 415V AC) (SLD 10000 için)	SLDYK011
SND6AK	1NO+1NC Alarm/ihbar kontak (Ith: 4A, 250V AC) (SND 6000 ve SDC 10000 için)	SND6AK
SMDAK	1NO+1NC Alarm/ihbar kontak (Ith: 4A, 250V AC) (SND 4500 ve SMD 10000 için)	SMDAK
SND6AB	24-48 V AC-DC Açtırma bobini (SND 6000 için)	SND6AB024
SND6AB	230V AC Açtırma bobini (SND 6000 için)	SND6AB230
SMDAB	230V AC Açtırma bobini (SND 4500 ve SMD 10000 için)	SMDAB
SNDDG	230V AC Düşük gerilim bobini (SND 6000 için)	SNDDG230
SMDDG	230V AC Düşük gerilim bobini (SND 4500 ve SMD 10000 için)	SMDDG
SMEK	Emniyet Kilidi (tüm tipler için ortak kullanım)*	SMEK
SMDRD1	Motor mekanizması (1 kutuplu SMD 10000 için)	SMDRD1
SMDRD2	Motor mekanizması (2 kutuplu SMD 10000 için)	SMDRD2
SMDRD3	Motor mekanizması (3 kutuplu SMD 10000 için)	SMDRD3
SMDRD4	Motor mekanizması (4 kutuplu SMD 10000 için)	SMDRD4

GARANTİ BELGESİ

1. Garanti süresi, malın teslim tarihinden itibaren başlar ve iki yıldır.
2. Ürünün bütün parçaları dahil olmak üzere tamamı firmamızın garanti kapsamı içerisinde (bobinler bu kapsamın dışındadırlar).
3. Ürünün garanti süresi içinde arızalanması durumunda, tamirde geçen süre garanti süresine eklenir. Ürünün tamir süresi en fazla 30 iş günüdür. Bu süre, ürünün servis istasyonuna, servis istasyonunun olmaması durumunda, ürünün satıcısına, bayiine, temsilciliğine, ithalatçısına veya imalatçısından birine bildirim tarihinden başlar.
4. Ürünün garanti süresi içerisinde, gerek malzeme ve işçilik, gerekse montaj hatalarından dolayı arızalanması halinde, işçilik masrafı, talep etmeksizin tamiri yapılacaktır.
5. Ürünü;
 - Teslim tarihinden itibaren garanti süresi içinde kalmak kaydıyla bir yıl içerisinde, aynı arızayı ikiden fazla tekrarlaması veya farklı arızaların dörtten fazla olması ortaya çıkması sonucu, üründen yararlanamamanın süreklilik kazanması,
 - Tamiri için gerekli azami sürenin aşılması;
 - Servis istasyonunun mevcut olmaması halinde sırasıyla satıcısı, bayii, acentası, temsilcisi, ithalatçısı veya imalatçısından birinin düzenleyeceği raporla arızanın tamirinin mümkün olmadığının belirlenmesi halinde, ücretsiz olarak değiştirme işlemi yapılacaktır.
6. Ürünün kullanma kılavuzunda yer alan hususlara aykırı kullanılmasından kaynaklanan arızalar garanti kapsamı dışındadır. Ürünün değişimi veya onarımı için yapılacak tüm masraflar kullanıcıya aittir.
7. Garanti belgesi ile ilgili olarak çıkabilecek sorunlar için T.C. Sanayi ve Teknoloji Bakanlığı, Tüketicinin ve Rekabetin Korunması Genel Müdürlüğü'ne başvurulabilir.

Yetkili Satıcı	
Ürün Tipi	
Ürün Seri No	
Fatura Tarihi	
Fatura No	
İmalatçı Firma Yetkilisi İmza-Kaşe	SİGMA ELEKTRİK SAN. ve TİC.A.Ş. Emek Mah. Sivast. Cad. No:78/1 Sarıyer/İSTANBUL Tel:0216 432 09 00 Fax:0216 484 41 04 Sultanbeyli V.D. 770 040 1025

TECHNICAL SPECIFICATIONS

			SND 4500				SND 6000				SKD 6000			
Number of poles			1	2	3	4	1	2	3	4	1	2	3	4
Rated nominal current (at 30°C) In A			2, 4, 6, 10, 16, 20, 25, 32, 40, 50, 63				1, 2, 3, 4, 5, 6, 10, 16, 20, 25, 32, 40, 50, 63				80, 100, 125			
Instantaneous tripping class			B : (3-5)xIn C : (5-10)xIn				B : (3-5)xIn C : (5-10)xIn D: (10-20)xIn				C : (5-10)xIn			
Power supply			AC				AC				AC			
Rated operating voltage Ue V AC			230/400	400			230/400	400			230/400	400		
Rated insulation voltage Ui V			750				750				750			
Rated impulse withstand voltage Uimp kV			6				6				6			
Rated short circuit capacity kA			4,5				6				6			
Energy limiting class			3				3				3			
Electrical life (No. operation) op. 230V			4.000				6.000				5.000			
Mechanical life (No. operation) op.			20.000				20.000				20.000			
Protection class			IP 20				IP 20				IP 20			
Operating temperature °C			-30 ... +60				-30 ... +60				-30 ... +60			
Storage temperature °C			-40 ... +70				-40 ... +70				-40 ... +70			
Relative Humidity			%90				%90				%90			
Assembly (EN 60715)			35mm. DIN Rail				35mm. DIN Rail				35mm. DIN Rail			
Min. Max. Connection section mm²			1 – 25				1 – 25				25 – 50			
Max. Clamping torque Nm			2				2				3,5			

			SMD 10000				SLD 10000				SND 16000	
Number of poles			1	2	3	4	1	2	3	4	1	
Rated nominal current (at 30°C) In A			2, 4, 6, 10, 16, 20, 25, 32, 40, 50, 63				80, 100, 125				40, 50, 63, 80, 100, 125	
Instantaneous tripping class			B : (3-5)xIn C : (5-10)xIn D: (10-20)xIn				C : (5-10)xIn				C : (5-10)xIn	
Power supply			AC				AC				AC	
Rated operating voltage Ue AC (V)			230/400	400			230/400	400			230/400	
Rated insulation voltage Ui V			750				750				750	
Rated impulse withstand voltage Uimp kV			6				6				6	
Rated short circuit capacity kA			10				10				16	
Energy limiting class			3				3				3	
Electrical life (No. operation) op. 230V			6.000				5.000				4.000	
Mechanical life (No. operation) op.			20.000				20.000				15.000	
Protection class			IP 20				IP 20				IP 20	
Operating temperature °C			-30 ... +60				-30 ... +60				-30 ... +60	
Storage temperature °C			-40 ... +70				-40 ... +70				-40 ... +70	
Relative Humidity			%90				%90				95	
Assembly (EN 60715)			35mm. DIN Rail				35mm. DIN Rail				35mm DIN Rail	
Min. Max. Connection section mm²			1 – 25				25 – 50				2,5 – 50	
Max. Clamping torque Nm			2				3,5				3,5	

DEFINITION OF THE PRODUCT

Sigma Mini Circuit Breakers (MCB) are switching devices that opens the circuit automatically and consist of switching unit when overload and/or short circuit occurs. In this way MCB protects its feeding circuits against overload and/or short circuit. For protecting against Isolation failures, separate residual current relays can be used. MCB also may supply control and allocation functions.

- ▶ Cutting the circuit when overloading
- ▶ Cutting the circuit when short circuit occurs
- ▶ Working on rated operating conditions
- ▶ Energizing of the circuits and cutting the energy under load
- ▶ Supply the continuity of the energy

SELECTION OF MCB

Network Informations in the Product Selection Line

- ▶ Earth Systems (TT, TN, IT)
- ▶ The short Circuit Current in the place where the MCBs are put, should be less than breaking capacity of the MCB.
- ▶ Nominal network voltage

Information On Circuit To Be Protected

- ▶ MCB Trip Curve
- ▶ Number of poles required by load
- ▶ Nominal Current
- ▶ Expected short circuit current

STANDARDS

MCB's manufactured accordance to IEC 60898 (EN 60898-1) standards.

INSTALLATION OF MCB

For your safety, cut off all energy before assembly and disassembly.

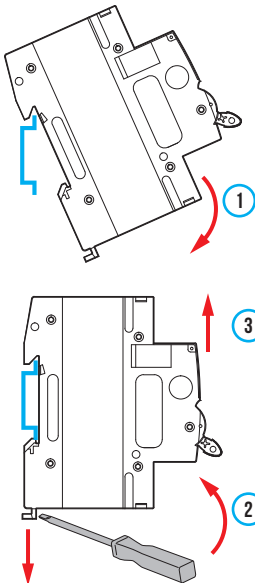
In case of a technical problem, please do not interfere with the device and contact the technical service as soon as possible.

Montage:

- ▶ The top slide in the back of MCB is to put on to the DIN Rail and by turning (1) to the arrow direction and set the locking latch to the DIN Rail.
- ▶ After mounting In order to supply energy follow, get the MCB to ON position.

Disassembly:

Put the screw driver or test light to the place in the locking latch and turn (2) to arrow direction. Move the MCB to arrow direction (3).



CAUTION!

- ▶ Over confidence, risky, reckless, unwary and hasty actions of the person performing the mounting may lead to unwanted accidents.
- ▶ Misusing this device may lead to material damage, serious injuries and even death.

MCB MAGNETIC TRIPPING CHARACTERISTICS**B Curve:**

- ▶ Magnetic trip : $I_n \times 3\sim5$ (IEC 60898-1)
- ▶ Akkor Flamanlı Lamba, Isıtıcılar

C Curve:

- ▶ Magnetic trip: $I_n \times 5\sim10$ (IEC 60898-1)
- ▶ Fluorescent lamps, power socket circuits, low-power motors, power distribution panels

D Curve:

- ▶ Magnetic trip: $I_n \times 10\sim20$ (IEC 60898-1)
- ▶ High power motors, pumps, compressors

MATTERS TO BE CONSIDERED DURING MAINTENANCE, REPAIR AND USING

- ▶ MCBs are to be used surely in the protection box (Fuse box or panel) in order not to cleave on the contacts of the MCBs' in the humidity & dusty ambient.
- ▶ Installation, assembly and disassembly of this device must be carried out by an authorized personnel in accordance with safety regulations and instructions. In order to constrain the usage of the unauthorized people, fuse box or panels which contains MCBs may be locked. Also the handle which protect the special circuit may be locked by special locking systems.
- ▶ When electric flows, you should not touch to the connection terminals of MCB and cable input/output otherwise you may exposed to electric shock.
- ▶ MCB should not touch with water. When there is a risk to touch with water, then the MCBs are to be used in a protection box whose IP lever is high.
- ▶ Terminal screws must be tightened according to the tightening torque specified in the table. If the heated cables become easier, this may lead to unwanted electrical accidents and fires.
- ▶ If the MCB trip constant, then there is either short circuit or overload in the system. In this case please apply to your authorized electrician for controlling isolation and load distribution.

MATTERS TO BE CONSIDERED DURING TRANSPORTAION AND CARRIAGE

Contactors are appropriately wrapped up by manufacturer and should be transported with their original packing. There are no other precaution for transportation.

Storing temperature : $-40^{\circ}\text{C} \sim +70^{\circ}\text{C}$

PERIODICAL MAINTENANCE

Miniature circuit breakers require a periodical maintenance in every 5 years. Periodical maintenance may be done by an authorized electrician.

INFORMATIONS ON UTILIZATION ERROR

- ▶ Do not put any conductive object in to the MCB's terminals under voltage
- ▶ The cables are to be connected according to the tightening torque specified in the table. If the cables become easier, this may lead to unwanted electrical accidents.
- ▶ MCB should not touch with water directly. The MCBs are to be kept in a fuse box or panels
- ▶ If the MCB trip constant, the solution is not rear the handle up. In this case there is either isolation failure or overload in the system and you should apply to your electrician.

CARE AND MAINTENANCE OPERATIONS WHICH CAN BE MADE BY USERS

In the time for periodical maintenance, for maintenance and repair (when required) please apply to your electricians for checking your systems.

INFORMATION ON PRODUCT IN TERMS OF USING THE ENERGY EFFICIENTLY

The products are to be used according to operating manual. When provided this ambient, the products will operate most efficiently.

Physical Life : 10 years

Warranty period : 2 years

WARNING!



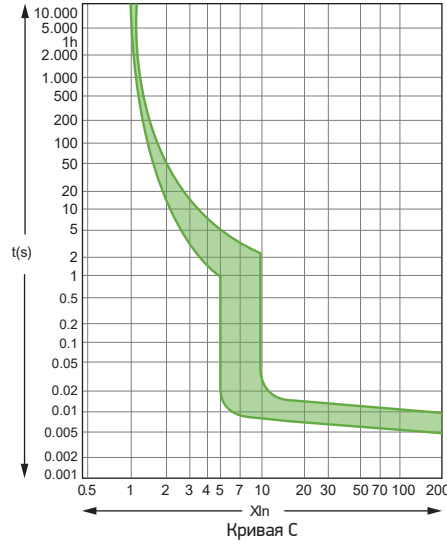
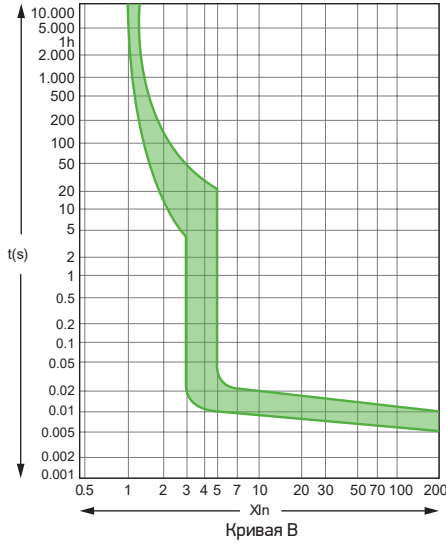
Sigma Elektrik do not guarantee any responsibility against unwanted situations that may arise as a result of not applying the specified measures.

WARNING!

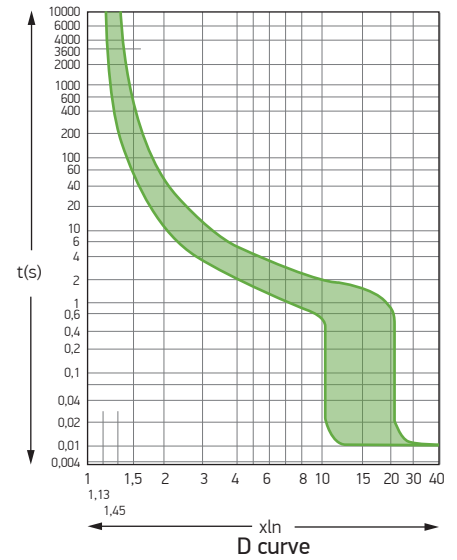
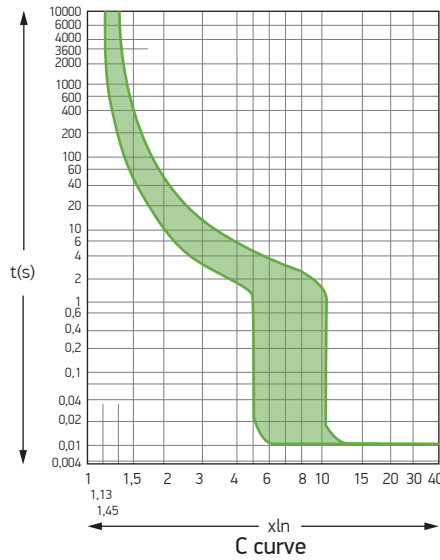
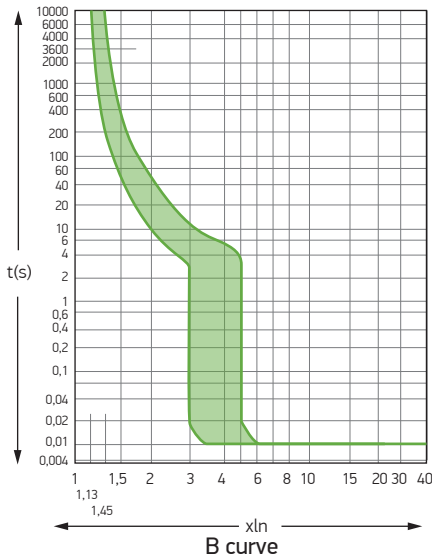


Once the equipment design life expired, the equipment must be comprised separately in a waste group within Eupean Union. The equipment must be dispatched to the electrical@electronics collection and conversion centers. It can not be disposed.

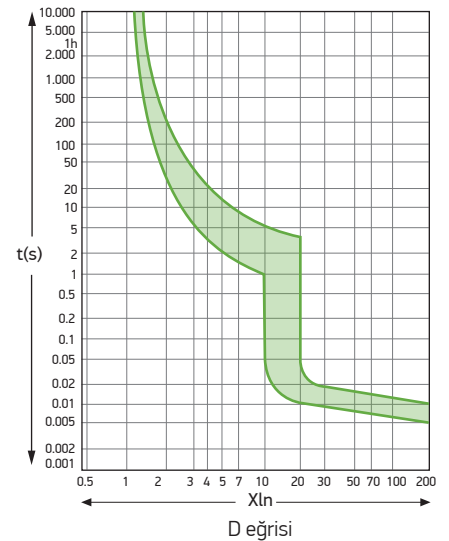
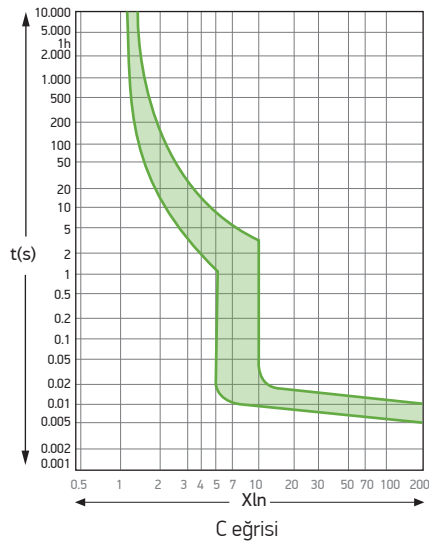
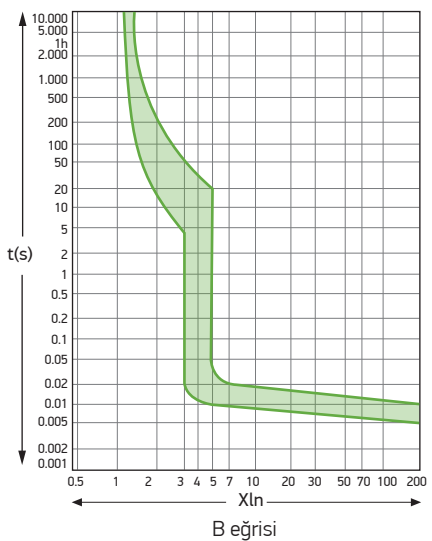
SND 4500



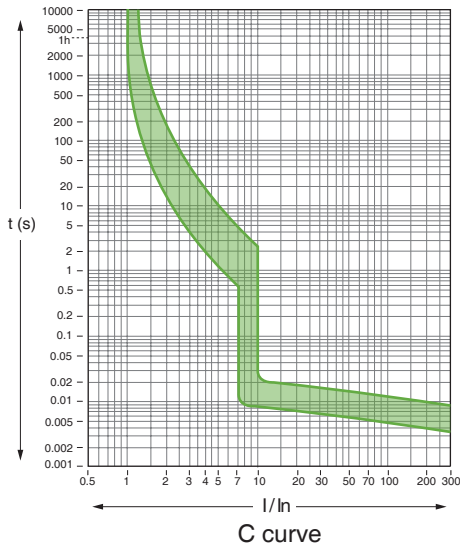
SND 6000



SMD 10000 (TÜV Approved)

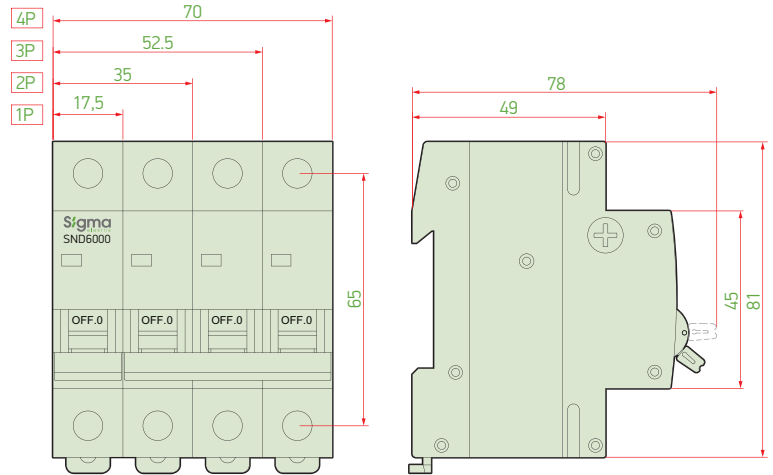


SKD 6000

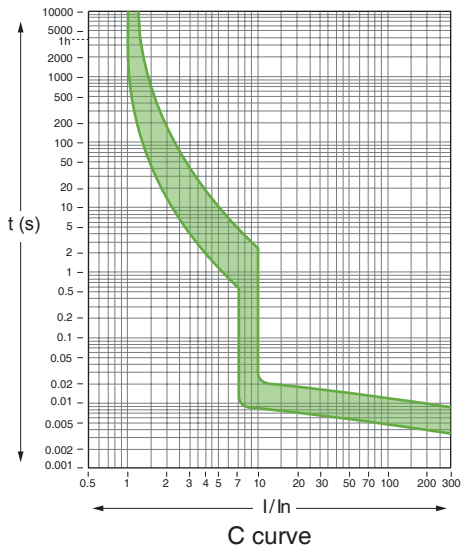


DIMENSIONS

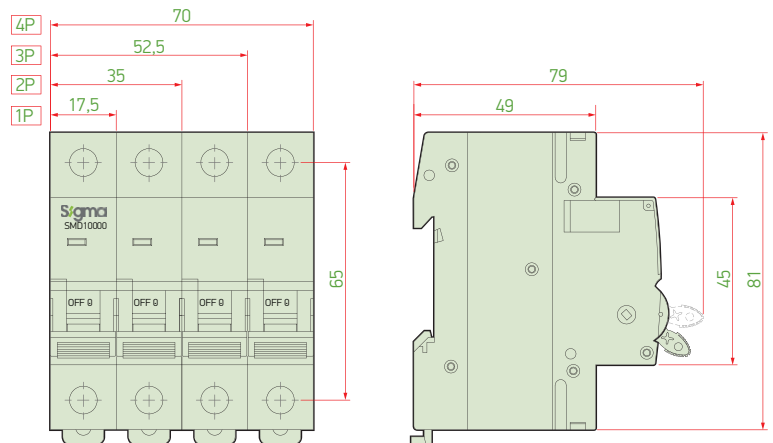
4,5 kA - 6 kA (1A-63A) [SND 4500, SND 6000]
6 kA (80A-100A-125A) [SKD 6000]



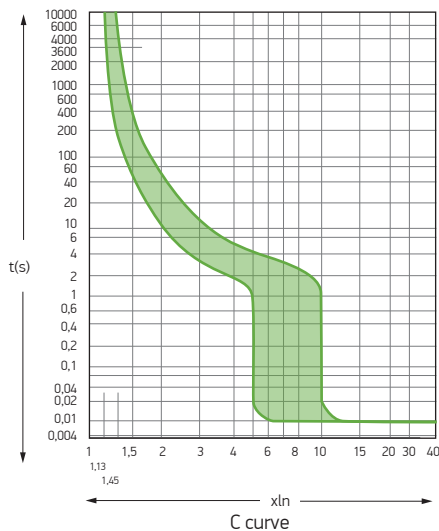
SLD 10000



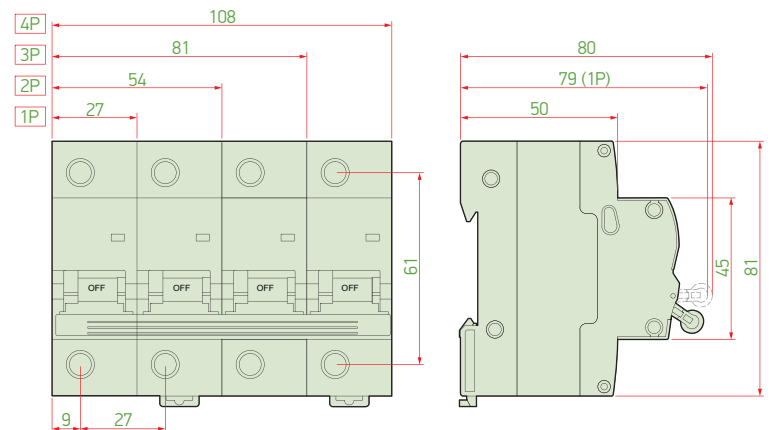
10 kA (2A-63A) [SMD 10000]



SND 16000



10kA (80A-100A-125A) [SLD 10000]



4.5 kA MCB / SND 4500

Number of poles	Rated Current In (A)	Min. Order Quantity	Pcs in a Box	Order Code for B Type	Order Code for C Type
1P	2	12	240	4SM102B	4SM102C
	4	12	240	4SM104B	4SM104C
	6	12	240	4SM106B	4SM106C
	10	12	240	4SM110B	4SM110C
	16	12	240	4SM116B	4SM116C
	20	12	240	4SM120B	4SM120C
	25	12	240	4SM125B	4SM125C
	32	12	240	4SM132B	4SM132C
	40	12	240	4SM140B	4SM140C
	50	12	240	4SM150B	4SM150C
	63	12	240	4SM163B	4SM163C
2P	2	6	120		4SM202C
	4	6	120		4SM204C
	6	6	120		4SM206C
	10	6	120		4SM210C
	16	6	120		4SM216C
	20	6	120		4SM220C
	25	6	120		4SM225C
	32	6	120		4SM232C
	40	6	120		4SM240C
	50	6	120		4SM250C
	63	6	120		4SM263C
3P	2	4	80		4SM302C
	4	4	80		4SM304C
	6	4	80		4SM306C
	10	4	80		4SM310C
	16	4	80		4SM316C
	20	4	80		4SM320C
	25	4	80		4SM325C
	32	4	80		4SM332C
	40	4	80		4SM340C
	50	4	80		4SM350C
	63	4	80		4SM363C
4P	2	3	60		4SM402C
	4	3	60		4SM404C
	6	3	60		4SM406C
	10	3	60		4SM410C
	16	3	60		4SM416C
	20	3	60		4SM420C
	25	3	60		4SM425C
	32	3	60		4SM432C
	40	3	60		4SM440C
	50	3	60		4SM450C
	63	3	60		4SM463C



6 kA MCB / SND 6000



Number of poles	Rated Current In (A)	Min. Order Quantity	Pcs in a Box	Order Code for B Type	Order Code for C Type	Order Code for D Type
1P	1	12	240	6SM101B	6SM101C	6SM101D
	2	12	240	6SM102B	6SM102C	6SM102D
	3	12	240	6SM103B	6SM103C	6SM103D
	4	12	240	6SM104B	6SM104C	6SM104D
	5	12	240	6SM105B	6SM105C	6SM105D
	6	12	240	6SM106B	6SM106C	6SM106D
	10	12	240	6SM110B	6SM110C	6SM110D
	16	12	240	6SM116B	6SM116C	6SM116D
	20	12	240	6SM120B	6SM120C	6SM120D
	25	12	240	6SM125B	6SM125C	6SM125D
	32	12	240	6SM132B	6SM132C	6SM132D
	40	12	240	6SM140B	6SM140C	6SM140D
	50	12	240	6SM150B	6SM150C	6SM150D
	63	12	240	6SM163B	6SM163C	6SM163D



2P	2	6	120		6SM202C	6SM202D
	4	6	120		6SM204C	6SM204D
	6	6	120		6SM206C	6SM206D
	10	6	120		6SM210C	6SM210D
	16	6	120		6SM216C	6SM216D
	20	6	120		6SM220C	6SM220D
	25	6	120		6SM225C	6SM225D
	32	6	120		6SM232C	6SM232D
	40	6	120		6SM240C	6SM240D
	50	6	120		6SM250C	6SM250D
	63	6	120		6SM263C	6SM263D



3P	2	4	80		6SM302C	6SM302D
	4	4	80		6SM304C	6SM304D
	6	4	80		6SM306C	6SM306D
	10	4	80		6SM310C	6SM310D
	16	4	80		6SM316C	6SM316D
	20	4	80		6SM320C	6SM320D
	25	4	80		6SM325C	6SM325D
	32	4	80		6SM332C	6SM332D
	40	4	80		6SM340C	6SM340D
	50	4	80		6SM350C	6SM350D
	63	4	80		6SM363C	6SM363D



4P	2	3	60		6SM402C	6SM402D
	4	3	60		6SM404C	6SM404D
	6	3	60		6SM406C	6SM406D
	10	3	60		6SM410C	6SM410D
	16	3	60		6SM416C	6SM416D
	20	3	60		6SM420C	6SM420D
	25	3	60		6SM425C	6SM425D
	32	3	60		6SM432C	6SM432D
	40	3	60		6SM440C	6SM440D
	50	3	60		6SM450C	6SM450D
	63	3	60		6SM463C	6SM463D

Türkçe

English

العربية

10 kA MCB / SMD 10000 [TÜV Approved]



1P

Number of poles	Rated Current In (A)	Min. Order Quantity	Pcs in a Box	Order Code for B Type	Order Code for C Type	Order Code for D Type
1P	2	12	240	1SMD102B	1SMD102C	1SMD102D
	4	12	240	1SMD104B	1SMD104C	1SMD104D
	6	12	240	1SMD106B	1SMD106C	1SMD106D
	10	12	240	1SMD110B	1SMD110C	1SMD110D
	16	12	240	1SMD116B	1SMD116C	1SMD116D
	20	12	240	1SMD120B	1SMD120C	1SMD120D
	25	12	240	1SMD125B	1SMD125C	1SMD125D
	32	12	240	1SMD132B	1SMD132C	1SMD132D
	40	12	240	1SMD140B	1SMD140C	1SMD140D
	50	12	240	1SMD150B	1SMD150C	1SMD150D
	63	12	240	1SMD163B	1SMD163C	1SMD163D



2P

2P	2	6	120		1SMD202C	1SMD202D
	4	6	120		1SMD204C	1SMD204D
	6	6	120		1SMD206C	1SMD206D
	10	6	120		1SMD210C	1SMD210D
	16	6	120		1SMD216C	1SMD216D
	20	6	120		1SMD220C	1SMD220D
	25	6	120		1SMD225C	1SMD225D
	32	6	120		1SMD232C	1SMD232D
	40	6	120		1SMD240C	1SMD240D
	50	6	120		1SMD250C	1SMD250D
	63	6	120		1SMD263C	1SMD263D



3P

3P	2	4	80		1SMD302C	1SMD302D
	4	4	80		1SMD304C	1SMD304D
	6	4	80		1SMD306C	1SMD306D
	10	4	80		1SMD310C	1SMD310D
	16	4	80		1SMD316C	1SMD316D
	20	4	80		1SMD320C	1SMD320D
	25	4	80		1SMD325C	1SMD325D
	32	4	80		1SMD332C	1SMD332D
	40	4	80		1SMD340C	1SMD340D
	50	4	80		1SMD350C	1SMD350D
	63	4	80		1SMD363C	1SMD363D



4P

4P	2	3	60		1SMD402C	1SMD402D
	4	3	60		1SMD404C	1SMD404D
	6	3	60		1SMD406C	1SMD406D
	10	3	60		1SMD410C	1SMD410D
	16	3	60		1SMD416C	1SMD416D
	20	3	60		1SMD420C	1SMD420D
	25	3	60		1SMD425C	1SMD425D
	32	3	60		1SMD432C	1SMD432D
	40	3	60		1SMD440C	1SMD440D
	50	3	60		1SMD450C	1SMD450D
	63	3	60		1SMD463C	1SMD463D

80-100-125A MCB 6 kA / SKD 6000



Number of poles	Rated Current In (A)	Min. Order Quantity	Pcs in a Box	Order Code
1P	80	12	240	6SK180C
	100	12	240	6SK100C
	125	12	240	6SK112C
2P	80	6	120	6SK280C
	100	6	120	6SK200C
	125	6	120	6SK212C
3P	80	4	80	6SK380C
	100	4	80	6SK300C
	125	4	80	6SK312C
4P	80	3	60	6SK480C
	100	3	60	6SK400C
	125	3	60	6SK412C

80-100-125A MCB 10 kA / SLD 10000



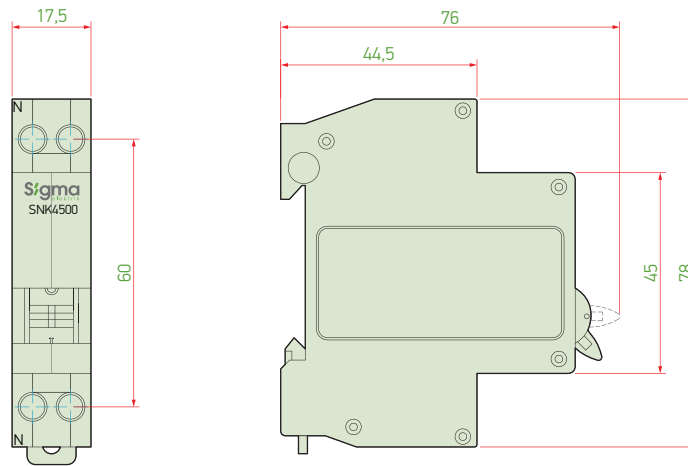
Number of poles	Rated Current In (A)	Min. Order Quantity	Pcs in a Box	Order Code
1P	80	12	120	1SL180C
	100	12	120	1SL100C
	125	12	120	1SL112C
2P	80	6	60	1SL280C
	100	6	60	1SL200C
	125	6	60	1SL212C
3P	80	4	40	1SL380C
	100	4	40	1SL300C
	125	4	40	1SL312C
4P	80	3	30	1SL480C
	100	3	30	1SL400C
	125	3	30	1SL412C

4.5 kA Phase-Neutral MCB 1P+N (18mm) / SNK 4500



Number of poles	Rated Current In (A)	Min. Order Quantity	Pcs in a Box	Order Code
1P+N	6	12	240	4SN106C
	10	12	240	4SN110C
	16	12	240	4SN116C
	20	12	240	4SN120C
	25	12	240	4SN125C
	32	12	240	4SN132C

SNK 4500



Accessories



Type Code	Description	Order Code
SEYK011	1NO+1NC Aux Contact (for SND 6000 and SDC 10000)	SEYK011
SMDYK	1NO+1NC Aux Contact (for SND 4500 and SMD 10000)	SMDYK011
SLDYK	1NO+1NC Aux Contact (Ith:3A, 415V AC) (for SLD 10000)	SLDYK011
SND6AK	1NO+1NC Alarm Contact (Ith:4A, 250V AC) (for SND 6000 - SDC10000)	SND6AK
SMDAK	1NO+1NC Alarm Contact (Ith:4A, 250V AC) (for SND 4500 - SMD 10000)	SMDAK
SND6AB	24-48 V AC-DC Shunt Trip Release (for SND 6000 - SDC 10000)	SND6AB024
SND6AB	230V AC Shunt Trip Release (for SND 6000 - SDC 10000)	SND6AB230
SMDAB	230V AC Shunt Trip Release (for SND 4500 - SMD 10000)	SMDAB
SNDDG	230V AC Under Voltage Release (for SND 6000 - SDC 10000)	SNDDG230
SMDDG	230V AC Under Voltage Release (for SND 4500 - SMD 10000)	SMDDG
SMEK	Safety Lock (for all type MCB)	SMEK
SMDRD1	Motor operator (for 1 P SMD 10000)	SMDRD1
SMDRD2	Motor operator (for 2 P SMD 10000)	SMDRD2
SMDRD3	Motor operator (for 3 P SMD 10000)	SMDRD3
SMDRD4	Motor operator (for 4 P SMD 10000)	SMDRD4

GUARANTEE CERTIFICATE

1. Guarantee starts with delivery date and continues two years.
2. Whole product including all its parts is under guarantee (coils are out of this scope).
3. If the product gets out of order during the guarantee period. The repair time is maximum 30 business days. This time starts with the announcement to the one of the followings, product service, if there is no product service to the product seller, agency, representative, importer or manufacturer.
4. When the product gets out of order because of the failures in material or workmanship or in assembly during the guarantee period it shall be repaired without getting the costs of workmanship or material.
5. For the following reasons;
 - ▶ From the delivery date if the product repeats the same failures occurred in one year, when uselessness gets continuity
 - ▶ Exceeding maximum period of repair
 - ▶ If there is no service when reported orderly from one of the seller, agency, representative, importer or manufacturer that it is impossible to repair the product, product shall be changed free of charge.
6. Product failures are out of guarantee when using against the instructions written in the using guide. Costs of changing expenses when changing and repairing the product is under user's responsibility.
7. It is kindly requested to apply to the Turkish Republic Ministry of Industry and Commerce or to the international courts for the problems that can be occurred relevant to the guarantee certificate.

Authorized Dealer

Product Type

Product Serial Number

Invoice Date

Invoice Number

Manufacturer Representative

Signature-Stamp

SİGMA ELEKTRİK SAN. VE TİC. A.Ş.
Emek Mah. Sıvaz Çıd. No:75/1
Sancaktepe / İSTANBUL
Tel: 0216 431 09 00 Fax: 0216 484 41 04
Sultanbeyli V.D. 770 040 1025

Türkçe

English

العربية

تعريف المنتج

قواطع تأمين سيغما في حال ارتفاع التيار وتحول التيار الى درجة الفصل يتم فصل التيار عبر القاطع اوتوماتيكيا عن طريق المفتاح التفعيل في داخل الدارة، وفي هذه الحالة يتم الحفاظ على المنتجات التي يتم نقل التيار اليها

يتم حماية خطوط العزل و حماية ريليه المزدوج او المفردة او حماية ضد اي من تسرب التيار الكهر بائي وبنفس الوقت يمكن لدارة التأمين ان تتحكم او تفصل اوتوماتيكيا.

- فصل التيار في حال ارتفاعه
- فصل التيار في حال تسرب الكهر بائي
- فصل التيار في حال سحب طاقة زائده
- مساعد على تواصل التيار

اختيار قاطع التأمين

اختيار القواطع حسب أجزاء من الشبكة

- نظام ترابي (TT, TN, IT)
- قديم قصر تيار في المكان الذي يتم وضع قاطع التأمين فيه، يجب أن يكون أقل من قدرة القاطع تقييم امدادات التيار الكهربائي

الدارة التي يجب حمايتها

- التشغيل الاوتوماتيكي للدارة
- عدد الاقطاب المطلوبة من قبل الحمل
- التصنيف الحالي
- تيار الدائرة القصيرة المتوقع

المعايير التي يحملها قاطع التأمين الاوتوماتيكي

IEC 60898 (EN 60898-1)

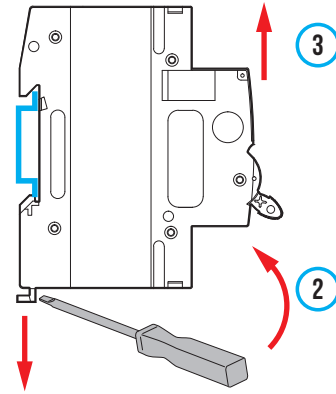
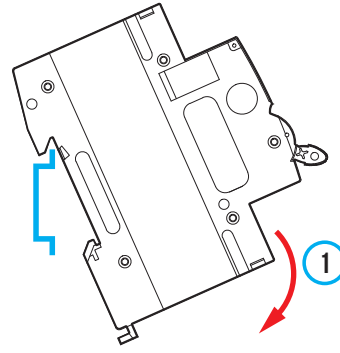
طريقة تركيب قاطع التأمين الاوتوماتيكي

من أجل سلامتك قم بقطع كل الطاقة أثناء التجميع والتفكيك. في حال واجهتك مشكلة فنية يرجى عدم التدخل في الجهاز والاتصال بالخدمة الفنية في أسرع وقت ممكن.

- يجب اولاً اتجاه المؤشر العلوي من الخاف ببتجاه السهم (١) و ثم تحريك القفل الى السكة الموجودة
- بعد عملية التركيب يجب تشغيل القاطع لكي يتم مرور التيار من خلاله

عملية نزع القاطع

- يجب استعمال مفك يدوي و ادخاله بتجاه السهم و تحريكه بتجاه السهم (٢).
- ومن ثم تحريك القاطع بتجاه السهم و نزعها من مكانه (٣).



انتبيه !



- قد تتؤدي ثقة القائم بعمل التركيب بنفسه بشكل مفرط وتحمل المخاطر وعدم تنبيهه وتصرفه باستعجال او بدون تدبير الى حوادث غير مرغوب فيها.
- قد يؤدي استخدام هذا الجهاز استخداماً خاطئاً الى اضرار مادية واصابات خطيرة بل وقد يؤدي الى الموت.

قاطع التأمين فتح الطاقة المغناطيسية

B منحنى

- لتعثر المغناطيسي : (IEC 60898-1) 3~5 In x
- مصباح الشعيرة المتوهج، سخانات

C منحنى

- لتعثر المغناطيسي : (IEC 60898-1) 5~10 In x
- المصابيح الفلورية، دوائر مقاييس الطاقة، المحركات منخفضة الطاقة، لوحات توزيع الطاقة، آلات التبريد

D منحنى

- لتعثر المغناطيسي : (IEC 60898-1) 10~20 In x
- محركات عالية الطاقة، مضخات، ضواغط

اعطال الناتجة بصيب الاستخدام

- في حال مرور التيار داخل القاطع لا يجب ادخال اي من مواد صلبه داخله
- يجب توصيل الكابلات بأطراف التوصيل وفالغزم الربط المذكور.
- يجب دائما احكام المسامير بشكل جيد عند تثبيت الكابلات في نقطة دخولها الى القاطع لكي لا يحدث اي من حوادث كهربائية خطيرة في حال عدم احكامها بشكل جيد
- لا يجب التماس الماء المباشر ابدا الى القو اطع او علبه القو اطع
- لا يجب رفع القاطع دائما عند فصله المتكرر بل
- يجب الاستعانة بخبير للكشف على العطل او الاعطال التي تشب
- فصل التيار عبر القاطع الاوتوماتيكي

الاصلاحات والصيانات و عمليات التنظيف التي يمكن القيام بها من قبل المستخدم

- في وقت الصيانة الدورية، للصيانة والإصلاح (عند الحاجة، يرجى تقديم طلب إلى فنيي الكهرباء لفحص أنظمتك).

معلومات حول المنتج على توفير الطاقة من حيث الاستخدام

المنتجات، يجب استخدام دليل وفقا للشروط المحددة . و في حال التقييد في شروط الاستعمال و توفير البيئة المناسبة يعمل المنتج بشكل جيد براحة و توفير

عمر الاستعمال ١٠ اعوام
الضمانة ٢ عامين

صيانة واصلاح وشروط التي يجب اتباعها لقو اطع سيغما التامين الاوتوماتيكية

- يجب عزل القو اطع التامين عن الغبار و الرطوبة بشكل تام
- ومحافظة بعيدا عن هذه الاماكن (في داخل علبه قو اطع مثلا)
- يجب أن يتم تركيب هذا الجهاز وتجميعه وتفكيكه بواسطة موظف معتمد وفقاً لأنظمة وتعليمات السلامة. يجب دائما الحفاظ القواطع بداخل علبه قواطع ذات قفل لكي تجنب اشخاص للعب بالقواطع وابعاده عنهم
- حين استعمال القواطع ووجود تيار في الكابلات لا يجب لمس الكابلات او مركز دخول الكابلات باليد العارية
- لا يجب لمس الماء ابدا الى القو اطع في حين استعمال القو اطع في اماكن تدخلها مياه يجب ان يستعمل علبه قواطع ذات درجة عزل عالية
- يجب شد براغي التوصيل حسب عزم الربط المذكور. يجب دائما احكام المسامير بشكل جيد عند تثبيت الكابلات في نقطة دخولها الى القاطع لكي لا يحدث اي من حوادث كهربائية خطيرة في حال عدم احكامها بشكل جيد
- في حال قطع التيار الدائم من قبل قاطع الامان يجب كشف الكابلات او التحمل الذائد على القاطع و كشف العطل من قبل كهربائي ذات خبرة في المجال

الشروط التي يجب تنفيذها اثناء عملية الشحن ونقل قواطع التامين الاوتوماتيكية

يتم تغليف و تعبئة القواطع من قبل الشركة المصنعة بشكل تام بحيث يكون كل من الغلاف والشكل مطابق لكماليات الشركة الاساسية فقط

درجة حرارة التخزين : $-40^{\circ}\text{C} \sim +70^{\circ}\text{C}$

الصيانة المتتالية

يجب ان يتم كشف و عملية صيانة للقو اطع الاوتوماتيكي في ٥ سنوات مرة واحدة من قبل كهربائي خبير في هذا المجال

انتبيه !



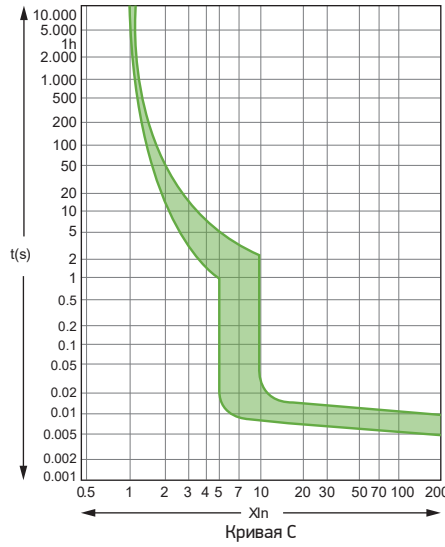
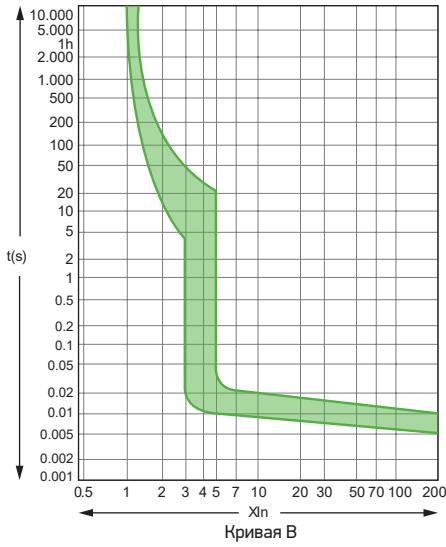
أي مسؤولية تجاه Sigma Elektrik لا تضمن الحالات غير المرغوب فيها التي قد تنشأ نتيجة عدم تطبيق التدابير المحددة

انتبيه !

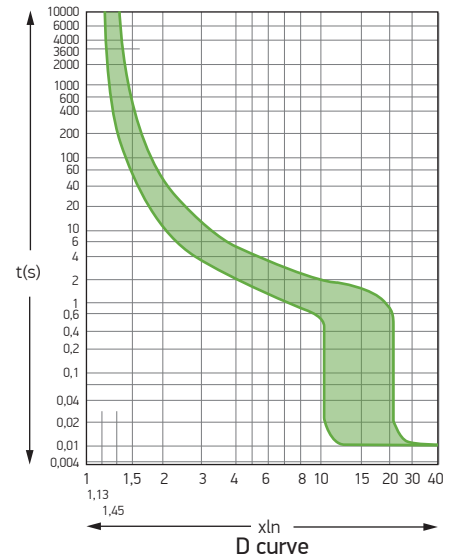
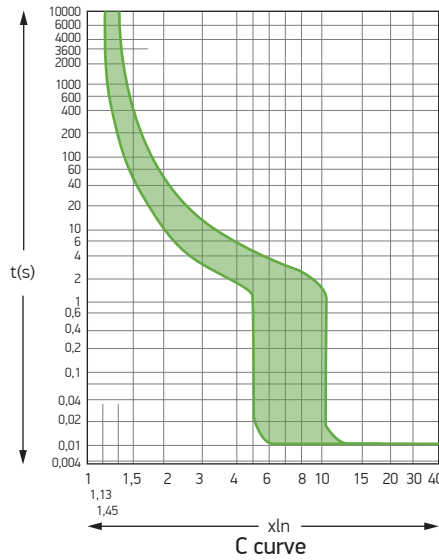
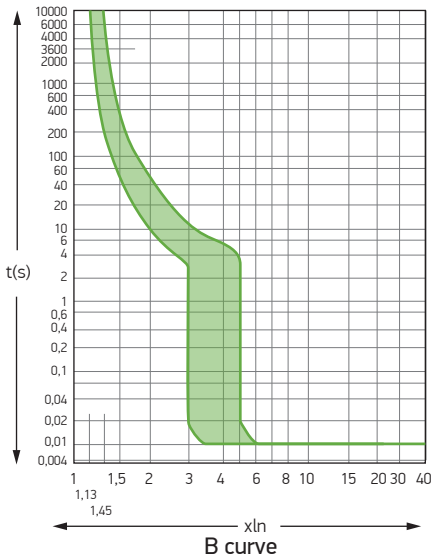


بمجرد انتهاء عمر المعدات ، يجب أن يتم تضمين المعدات بشكل منفصل في مجموعة نفايات بما في ذلك الاتحاد الأوروبي. يجب إرسال المعدات إلى مراكز التجميع والتحويل الكهربائية والإلكترونية. لا يمكن التخلص منها

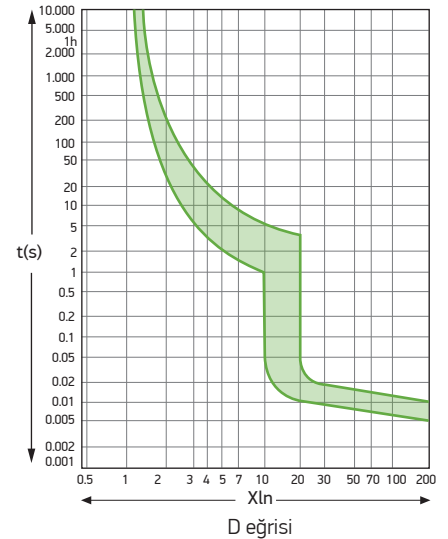
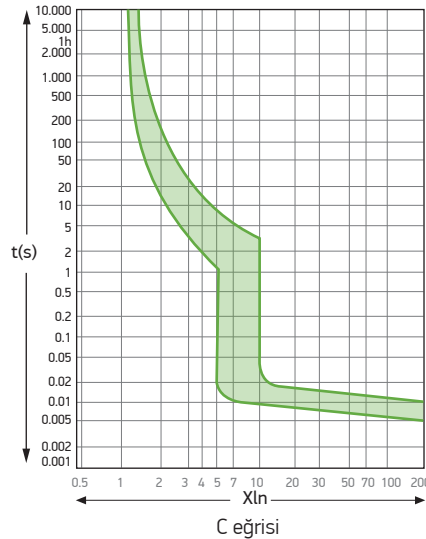
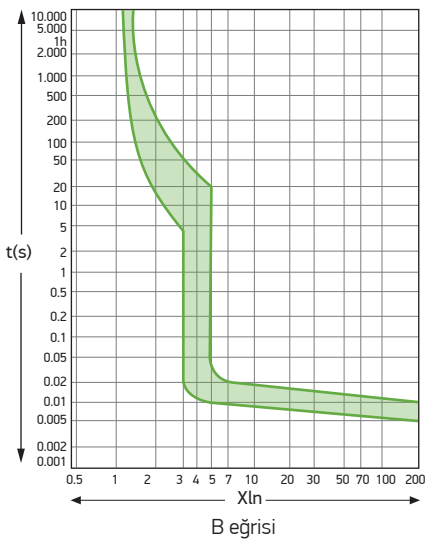
SND 4500



SND 6000

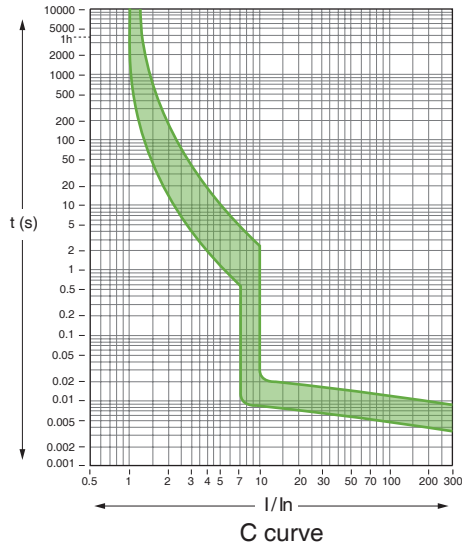


SMD 10000 (TÜV Approved)

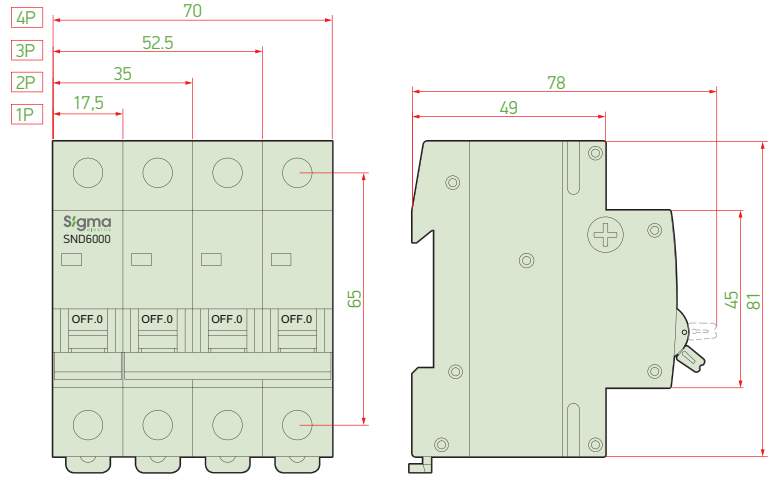


SKD 6000

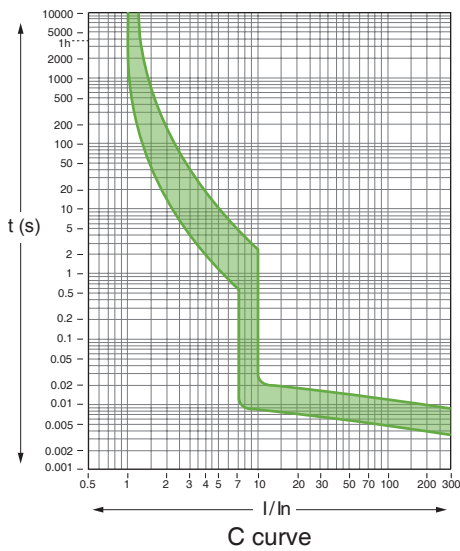
القياسات



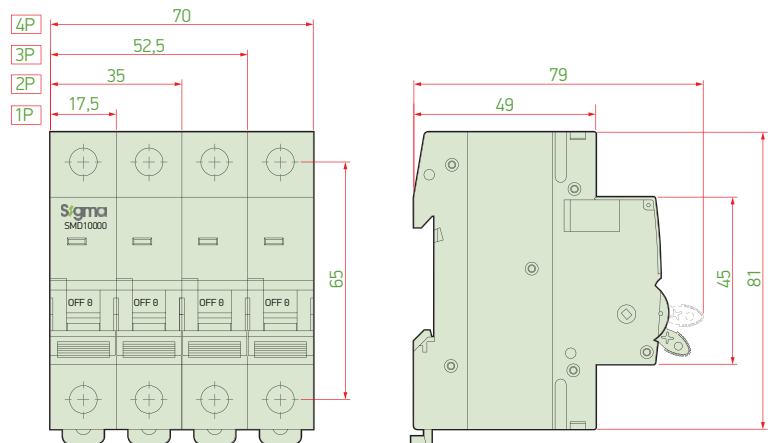
4,5 kA - 6 kA (1A-63A) [SND 4500, SND 6000]
6 kA (80A-100A-125A) [SKD 6000]



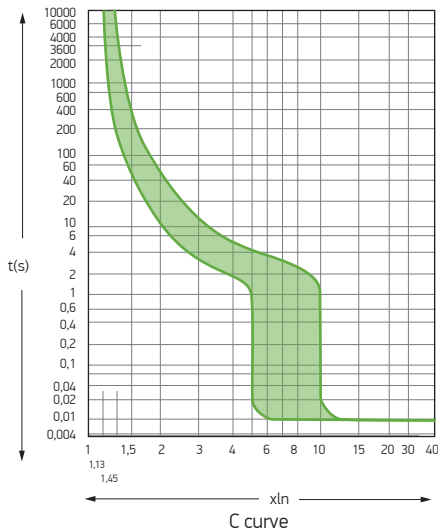
SLD 10000



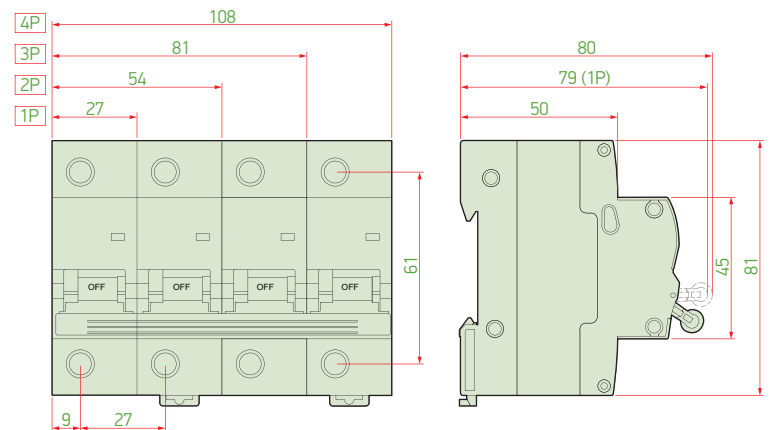
10 kA (2A-63A) [SMD 10000]



SND 16000



10kA (80A-100A-125A) [SLD 10000]



شهادة الضمان

1. تبدأ مدة الضمان من تاريخ تسليم المنتج وتستمر لمدة سنتين.
2. يشمل الضمان جميع أجزاء المنتج دون استثناء، بما في ذلك القطع الداخلية، (باستثناء الملفات الكهربائية الكويلات).
3. في حالة حدوث عطل في المنتج خلال فترة الضمان، سيتم إضافة الوقت المستغرق في الإصلاح إلى فترة الضمان. أقصى مدة لإصلاح المنتج هي ٣٠ يوم عمل. وتحتسب هذه المدة اعتباراً من تاريخ إخطار مركز الخدمة، أو في حال عدم وجود مركز خدمة، إخطار البائع أو الوكيل أو الممثل أو المستورد أو المصنّع.
4. في حال حدوث عطل نتيجة خلل في المواد أو التصنيع أو التركيب خلال فترة الضمان، يتم إصلاحه مجاناً دون المطالبة بأي تكلفة على المستخدم.
5. يتم استبدال المنتج مجاناً في الحالات التالية، بشرط أن يكون ضمن فترة الضمان من تاريخ التسليم؛
 - ◀ تكرار نفس العطل أكثر من مرتين خلال سنة واحدة، أو ظهور أكثر من أربعة أعطال مختلفة تؤدي إلى عدم الاستفادة المستمرة من المنتج.
 - ◀ تجاوز الحد الأقصى للوقت المطلوب للإصلاح.
 - ◀ في حال عدم توفر مركز خدمة، يجب تقديم تقرير من البائع أو الوكيل أو الممثل أو المستورد أو المصنّع يُثبت استحالة إصلاح العطل.
6. لأعطال الناتجة عن الاستخدام المخالف لتعليمات دليل الاستخدام تُستثنى من الضمان، ويتحمل المستخدم جميع تكاليف الإصلاح أو الاستبدال في هذه الحالات.
7. في حالة وجود أي مشاكل قد تنشأ فيما يتعلق بشهادة الضمان، يمكنكم التقدم بطلب إلى المديرية العامة لحماية المستهلك والمنافسة التابعة لوزارة الصناعة والتكنولوجيا في جمهورية تركيا.

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