

BK series (AC / DIN type)

Product description

The BK Series AC / DIN type surge protect protects a 50/60Hz electric system from surge voltages. Also, the system allows replacement of the protective element (MOV), ensuring convenience and economy. However, as only the protective module is provided, other components should be added when the system is installed in accordance with the site condition. When the protective device is activated (in an anomaly or an accident), the red lever in the status indicator protrudes.



Product rating (Uc: 385V)

Item		AC Type						
		BK05S-T3	BK10S-T2	BK20S-T2	BK30S-T2	BK40S-T2	BK12S-T1 ^{Note4)}	
No. of poles	[Pole]	2, 4P	1, 1+N, 2, 3, 3+N, 4P					
Rated voltages	Un [V]	230/440V						
Max. continued-operation voltage	Uc [V]	-	385	385	385	385	385	
		N-PE		255	255	255	255	255
Voltage protection level	Up [kV]	-	≤0.8	≤1.5	≤1.8	≤2.0	≤2.5	
		N-PE	-	≤1.0	≤1.2	≤1.5	≤2.0	≤2.5
	Up [kV] [⊗]	-	≤2.0	≤1.5	≤1.8	-	≤2.5	-
		N-PE	-	≤2.5	≤2.5	-	≤3.5	-
Nominal discharge current	In [kA]		10	20	30	40	-	
Max. discharge current	I _{max} [kA]	-	20	40	60	80	-	
Impulse current	I _{imp} [kA]	-	-	-	-	-	12.5(10/350)	
Open circuit voltage	Uoc [kV]	10	-	-	-	-	-	
Grades	Test class	Class III	Class II				Class I (Built-in type)	
Reaction time		< 25ns						
Status indication ^{Note2)}		Have Status indication						
Operating temperature range		-40°C~80°C						
Cross-sectional area of the connecting wires		6~16mm ²	6~32mm ²				16~32mm ²	
Accessories		AL ^{Note3)}					-	
Standard		IEC 61643-11 / KS C IEC 61643-11 / UL1449						
Certification ^{Note5)}		CE, UL, KS, S	CE, UL, KS, S	CE, UL, KS, S	CE, UL	CE, UL, KS, S	CE	

Note)

- When the protective device is activated (in an anomaly or an accident) in products with Class II and III indication features, the red lever in the status indicator protrudes.
- With a product with Class I indication feature, a green light will turn on when the protective device is in a normal condition. The green light will go off when the protective device is activated (for an anomaly or an accident.)
- The AL contact accessories are not sold separately. You need to choose these accessories when you place your order for the product. Please be mindful of this fact when you place your order.
- The Class I products are integrated with the MOVs, which cannot be detached.
- Depending on the authentication will be separated by CE / KS or UL / S separate products. Please be mindful of this fact when you place your order.

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Product rating (Uc: 460V)

Item		AC Type				
		BK10S-T2	BK20S-T2	BK30S-T2	BK40S-T2	
No. of poles	[Pole]	1, 1+N, 2, 3, 3+N, 4P				
Rated voltages	Un [V]	254/440V				
Max. continued-operation voltage	Uc [V]	-	460	460	460	460
		N-PE	255	255	255	255
Voltage protection level	Up [kV]	-	≤1.5	≤2.0	≤2.2	≤2.5
		N-PE	≤1.0	≤1.2	≤1.5	≤2.0
	Up [kV] Ⓢ	-	-	-	-	-
		N-PE	-	-	-	-
Nominal discharge current	In [kA]	10	20	30	40	
Max. discharge current	I _{max} [kA]	20	40	60	80	
Impulse current	I _{imp} [kA]	-	-	-	-	
Open circuit voltage	Uoc [kV]	-	-	-	-	
Grades	Test class	Class II				
Reaction time		< 25ns				
Status indication ^{Note2)}		Have Status indication				
Operating temperature range		-40°C~80°C				
Cross-sectional area of the connecting wires		6~32mm ²				
Accessories		AL ^{Note3)}				
Standard		IEC 61643-11, UL1449				
Certification ^{Note4)}		CE, S	CE, S, UL	CE, S, UL	CE, S, UL	

Note)

- When the protective device is activated (in an anomaly or an accident) in products with Class II and III indication features, the red lever in the status indicator protrudes.
- With a product with Class I indication feature, a green light will turn on when the protective device is in a normal condition. The green light will go off when the protective device is activated (for an anomaly or an accident.)
- The AL contact accessories are not sole separately. You need to choose these accessories when you place your order for the product. Please be mindful of this fact when you place your order.
- Depending on the authentication will be separated by CE / KS or UL / S separate products. Please be mindful of this fact when you place your order.

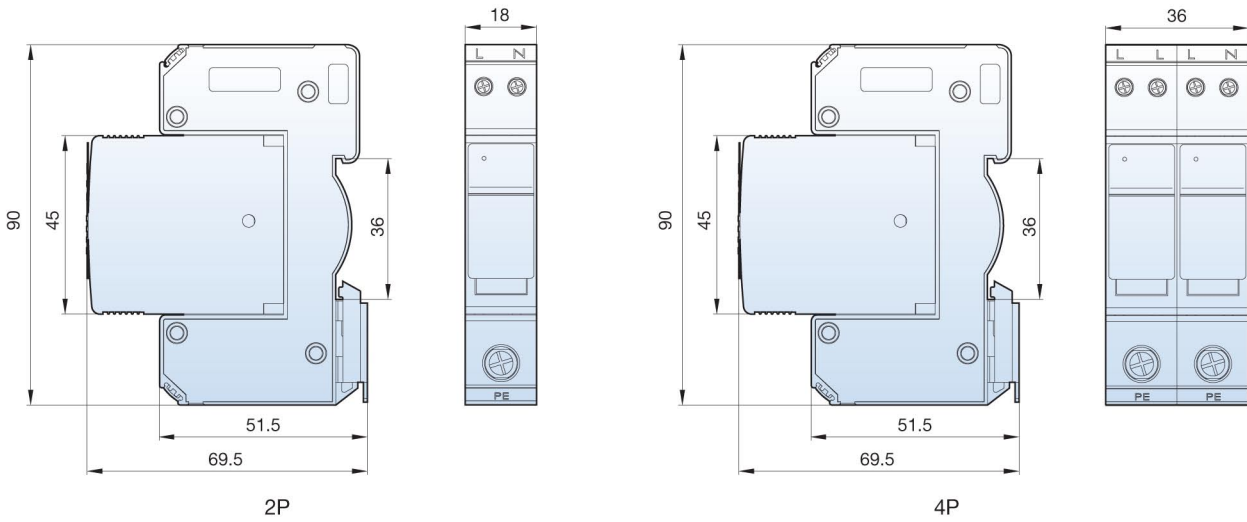


BK series (AC / DIN type)

External dimension

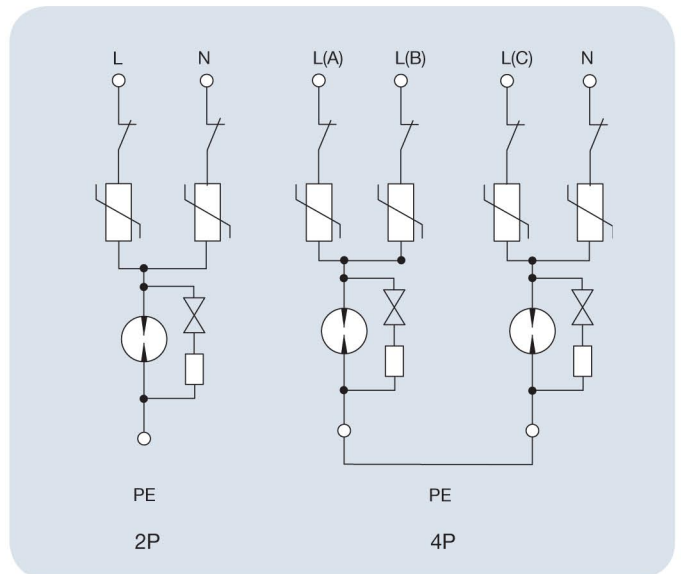
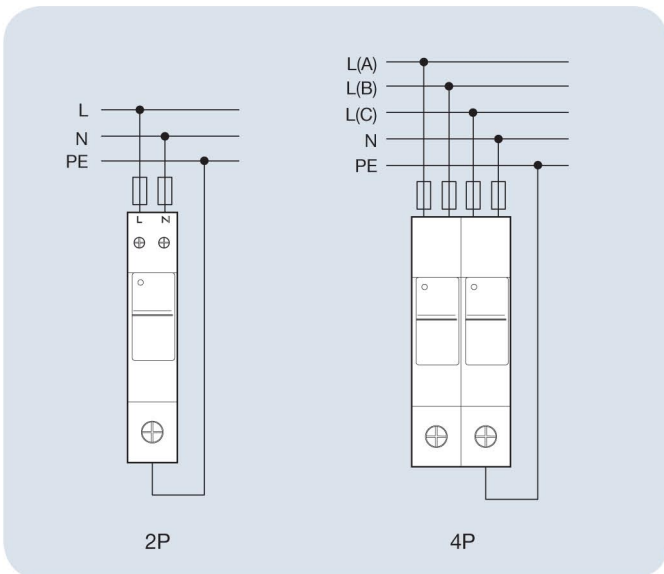
BK05S-T3

[Unit : mm]



Installation wiring method

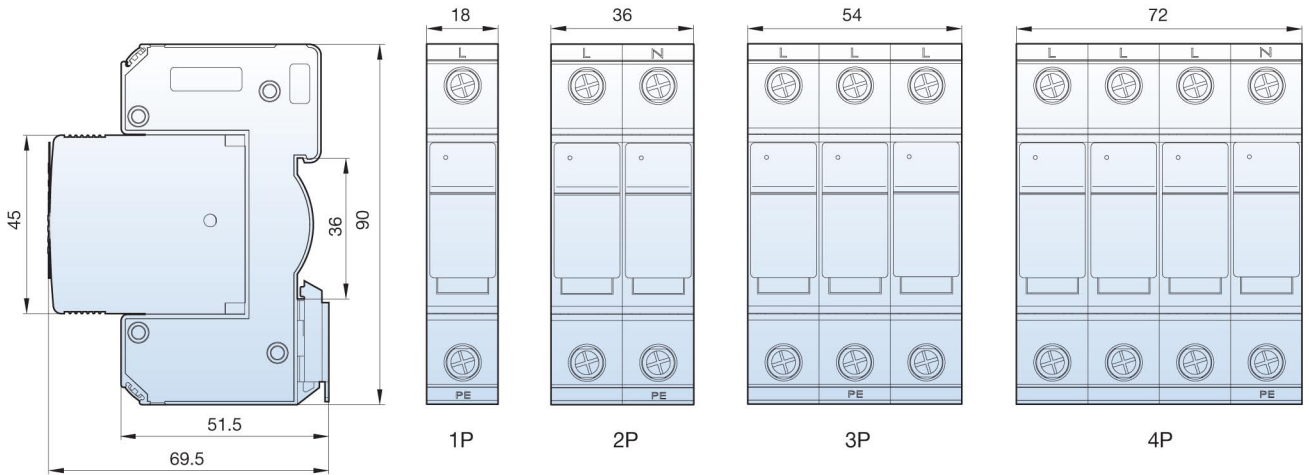
Wiring diagram



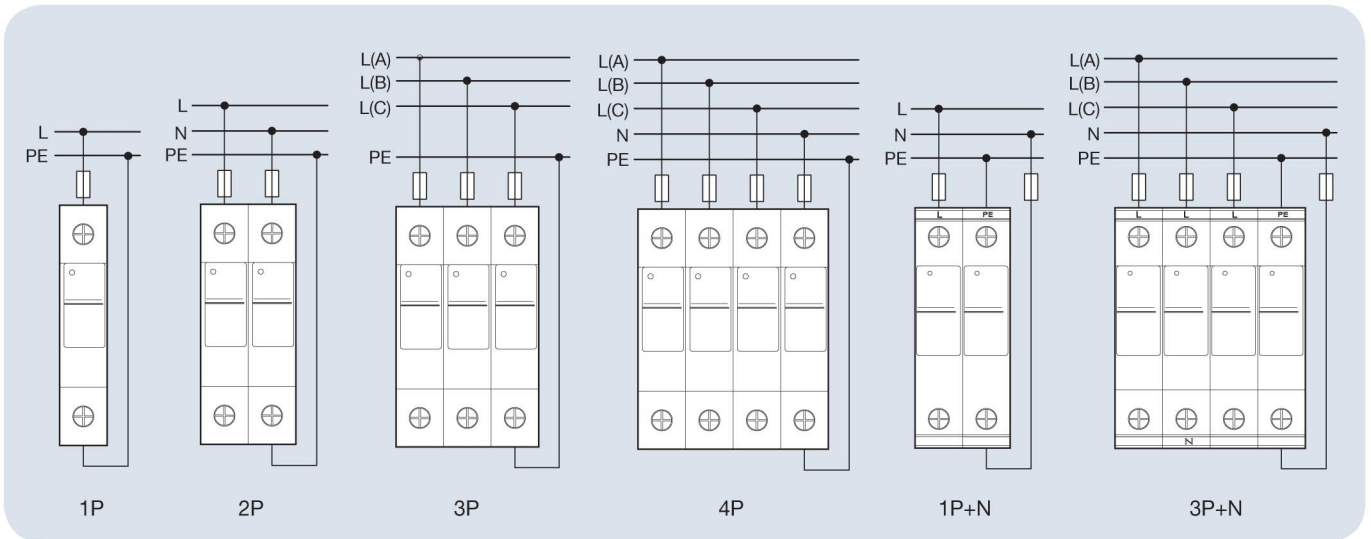
External dimension

BK10S/20S/30S/40S-T2

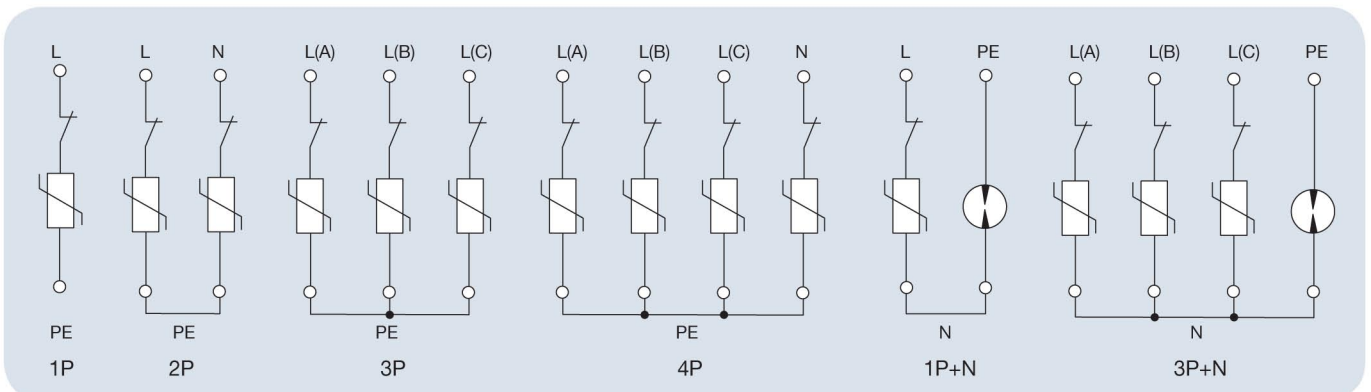
[Unit : mm]



Installation wiring method



Wiring Diagram

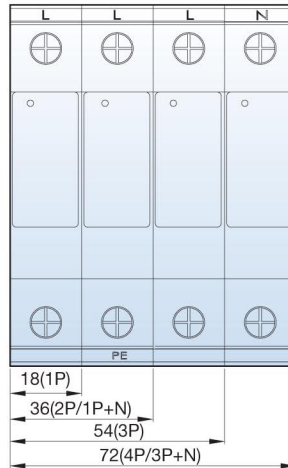
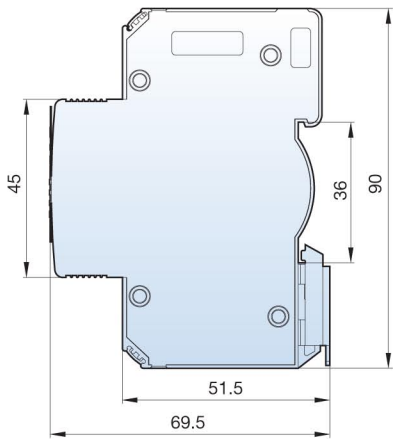


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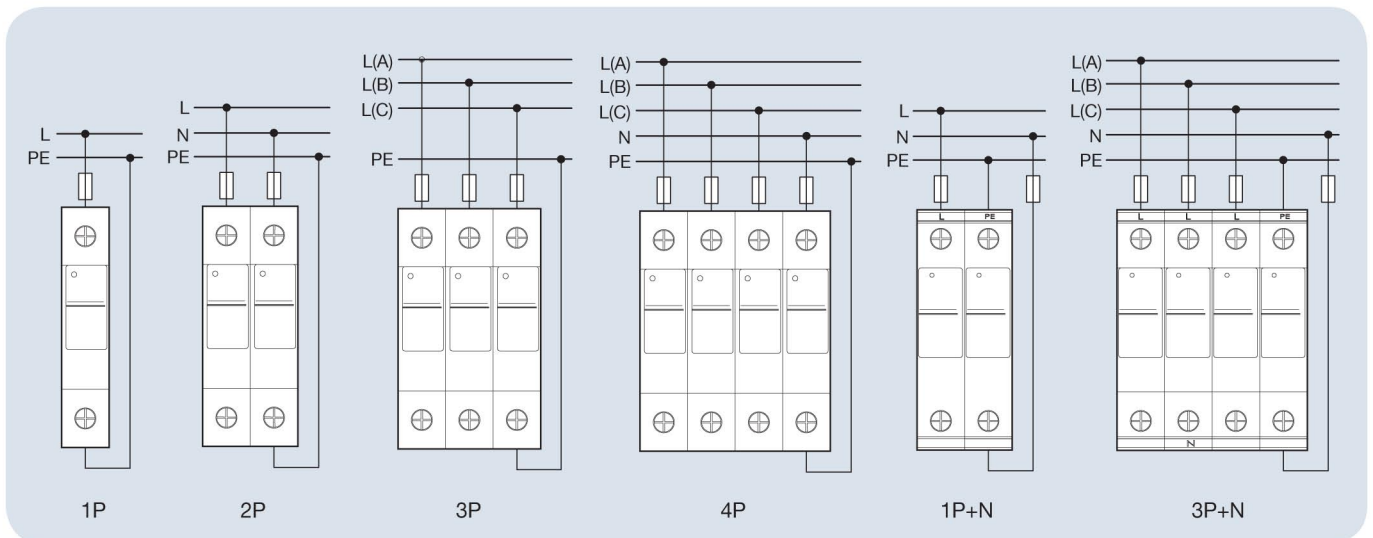
External dimension

BK12S-T1

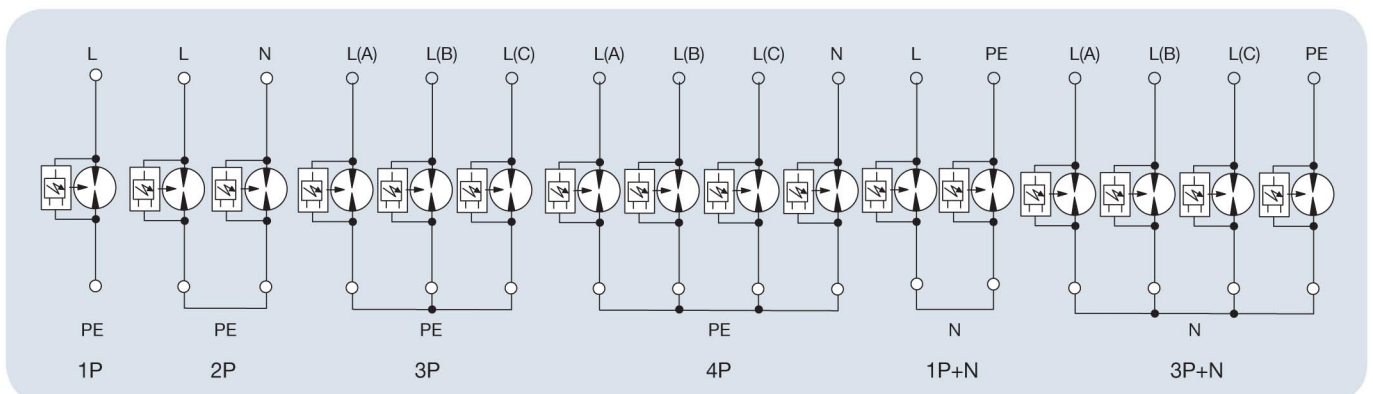
[Unit : mm]



Installation wiring method



Wiring Diagram



Ordering

BK	20	S	T2	2P	385V	40kA	AL	CE/KS
Basic type	In/limp (kA)	Type	Class level	Poles	Uc	I _{max}	Option	Certification ⁵⁾
BK	05 ¹⁾	S Din-rail	T1 Class I	1P	385V	10kV ³⁾	- None	UL/S CE, S-Mark, UL
	10		T2 Class II	2P	460V	20kA	AL Alarm	CE/KS CE, KS
	20		T3 Class III	3P		40kA		
	30			4P		60kA		
	40			1P+N		80kA		
	12.5 ²⁾			3P+N		50kA ⁴⁾		

- * Note) 1. Class III product. Indicate as I_{max} 5kA.
 2. Class I product. Indicate as I_{imp} 12.5kA.
 3. Class III product. Indicate as U_{oc} 10kV.
 4. Class I product
 5. Depending on the authentication separated into two products.