

Generators combiner boxes

GAK 210-MC4 b Junction box PV



Characteristics
Generator boxes with preassembled surge protection:

- Legend**
- a) type 1+2 GAK + 60 VGPVS-1000-4ST-2MPP
 - b) type 1+2 GAK + 50 PVS-1000-4ST-2MPP
 - c) type 1+2 GAK + 50 VGPVS-1000-4ST-2MPP
 - d) type 2 GAK + 50 PV-1000-4ST-2MPP
 - e) type 1+2 GAK + 60 VGPVS-1000-3ST-1MPP/1ST-1MPP
 - f) type 1+2 GAK + 50 PVS-1000-3ST-1MPP/1ST-1MPP
 - g) type 1+2 GAK + 50 VGPVS-1000-3ST-1MPP/1ST-1MPP
 - h) type 2 GAK + 50PV-1000-3ST-1MPP/1ST-1MPP

Article-Nr.	E-Number	Typ/Type	V U _C	kA I _{imp}	kA I _{max}	ns t _A	kV U _P	mm²		
296.050.250	969 112 314	T1 / T2	≤1200VDC	12.5	40	≤25	2.8	6 - 35	a)	1
296.050.850	969 112 464	T1 / T2	≤1200VDC	6.25	40	≤25	2.6	2.5 - 25	b)	1
296.050.450	969 112 364	T1 / T2	≤1200VDC	6.25	40	≤25	2.8	2.5 - 25	c)	1
296.050.650	969 112 414	T2	≤1200VDC	5	40	≤25	2.6	2.5 - 25	d)	1
296.050.272	969 112 324	T1 / T2	≤1200VDC	12.5	40	≤25	2.8	6 - 35	e)	1
296.050.872	969 112 474	T1 / T2	≤1200VDC	6.25	40	≤25	2.6	2.5 - 25	f)	1
296.050.472	969 112 374	T1 / T2	≤1200VDC	6.25	40	≤25	2.8	2.5 - 25	g)	1
296.050.672	969 112 424	T2	≤1200VDC	5	40	≤25	2.6	2.5 - 25	h)	1

Technical Specifications: Junction box PV GAK 210-MC4 b

	296.050.250	296.050.850	296.050.450	296.050.650
SPD type	T1 / T2			T2
Number of poles	2			
max. discharge current (I _{max})	40 kA			
Nominal line voltage U _n DC	1000 V			
Impulse current [I _{imp}]_(10/350)	12.5 kA	6.25 kA		5 kA
Discharge current max. (8/20) μs [I _{max}]	40 kA		60 kA	
Nominal discharge surge current (8/20)	20 kA	15 kA		15 kA
Voltage protection level [U _p]	2.8 kV	2.6 kV	2.8 kV	2.6 kV
Protection level max. (at 5kA)	2.1 kV			
Protection level max. (at 12.5kA)	2.3 kV			
Operation voltage max. [U _c]	≤1200VDC			
Operating current [I _c]	0 kA		0 kA	
Follow current [I _F]	0 kA			
follow current extinguishing capability [I _{fi}]	Unendlich kA eff		Unendlich kA eff	
Response time [t _a]	≤25 ns			
Short circuit resistance (I _{cw})	25 kA	1 kA	10 kA	1 kA
Fault indication	Mechanisch, Rot	mechanisch, Rot	Mechanisch, Rot	mechanisch, Rot
Temperature range	-40 - 85			
Total discharge current (8/20) (L N-PE)		60 kA		60 kA
Degree of protection	IP20			
Material housing	Thermoplastik UL-94-V0	Thermoplastik PEI UL-94-V0		
Signaling on the device	Optic			
Signaling contact	Yes			
Connection cross section solid / stranded max.	1.5 mm²			
Switching capacity signaling contact	250 V / 0,5 A (AC) - 30 V / 2 A (DC)	250 V/0,5 A (AC) / - 30 V / 2 A (DC)	250 V / 0,5 A (AC) - 30 V / 2 A (DC)	250 V/0,5 A (AC) / - 30 V / 2 A (DC)
Energetically coordinated protective effect to the terminal	Yes			
System configuration DC	Yes			
Construction size	4 modular spacing	3 modular spacing		
Nominal discharge current [I _n]	20/Pol	15/Pol		
Integrated backup fuse	No			
Nominal cross section conductor	6 - 35 mm²	2.5 - 25 mm²	2.5 - 25	2.5 - 25 mm²
Exhausting	No			
Mounting method	DIN rail (top hat rail) 35 mm			
Degree of protection (IP)	IP20			
Casing				
degree of protection	IP65			
number of modules	20			
contract rail	DIN-Schiene			
String / MPP	4ST-2MPP			
inputs PG / MC4	MC 4			
outputs PG / MC4	MC 4			
Ground base plate	Yes			
Standards				
Test standards USA	UL 1449 ed.3			
Test standards Europe	FprEN 50539-11	EN 50539-11		
Test standards France	UTE C61-740-51			
Homologation	VDE, ÖVE und UL		VDE, ÖVE und UL	
Commercial specification				
Customs number	85372000			
country of origin	CH			
Logistic specification				
VPE Weight	5.295 kg		4.95 kg	

	296.050.272	296.050.872	296.050.472	296.050.672
SPD type	T1 / T2			T2
Number of poles	2			
max. discharge current (I _{max})	40 kA			
Nominal line voltage U _n DC	1000 V			
Impulse current [I _{imp}]_(10/350)	12.5 kA	6.25 kA		5 kA
Discharge current max. (8/20) μs [I _{max}]	40 kA		60 kA	
Nominal discharge surge current (8/20)	20 kA	15 kA		15 kA
Voltage protection level [U _p]	2.8 kV	2.6 kV	2.8 kV	2.6 kV
Protection level max. (at 5kA)	2.1 kV			
Protection level max. (at 12.5kA)	2.3 kV			
Operation voltage max. [U _c]	≤1200VDC			
Operating current [I _c]	0 kA		0 kA	
Follow current [I _F]	0 kA			
follow current extinguishing capability [I _{fi}]	Unendlich kA eff		Unendlich kA eff	
Response time [t _a]	≤25 ns			
Short circuit resistance (I _{cw})	25 kA	1 kA	10 kA	1 kA
Fault indication	Mechanisch, Rot	mechanisch, Rot	Mechanisch, Rot	mechanisch, Rot
Temperature range	-40 - 85			
Total discharge current (8/20) (L N-PE)		60 kA		60 kA
Degree of protection	IP20			
Material housing	Thermoplastik UL-94-V0	Thermoplastik PEI UL-94-V0		
Signaling on the device	Optic			
Signaling contact	Yes			
Connection cross section solid / stranded max.	1.5 mm²			
Switching capacity signaling contact	250 V / 0,5 A (AC) - 30 V / 2 A (DC)	250 V/0,5 A (AC) / - 30 V / 2 A (DC)	250 V / 0,5 A (AC) - 30 V / 2 A (DC)	250 V/0,5 A (AC) / - 30 V / 2 A (DC)
Energetically coordinated protective effect to the terminal	Yes			
System configuration DC	Yes			
Construction size	4 modular spacing	3 modular spacing		
Nominal discharge current [I _n]	20/Pol	15/Pol		
Integrated backup fuse	No			
Nominal cross section conductor	6 - 35 mm²	2.5 - 25 mm²	2.5 - 25	2.5 - 25 mm²
Exhausting	No			
Mounting method	DIN rail (top hat rail) 35 mm			
Degree of protection (IP)	IP20			
Casing				
degree of protection	IP65			
number of modules	20			
contract rail	DIN-Schiene			
String / MPP	4ST-2MPP			
inputs PG / MC4	MC 4			
outputs PG / MC4	MC 4			
Ground base plate	Yes			
Standards				
Test standards USA	UL 1449 ed.3			
Test standards Europe	FprEN 50539-11	EN 50539-11		
Test standards France	UTE C61-740-51			
Homologation	VDE, ÖVE und UL		VDE, ÖVE und UL	
Commercial specification				
Customs number	85372000			
country of origin	CH			
Logistic specification				
VPE Weight	5.252 kg			