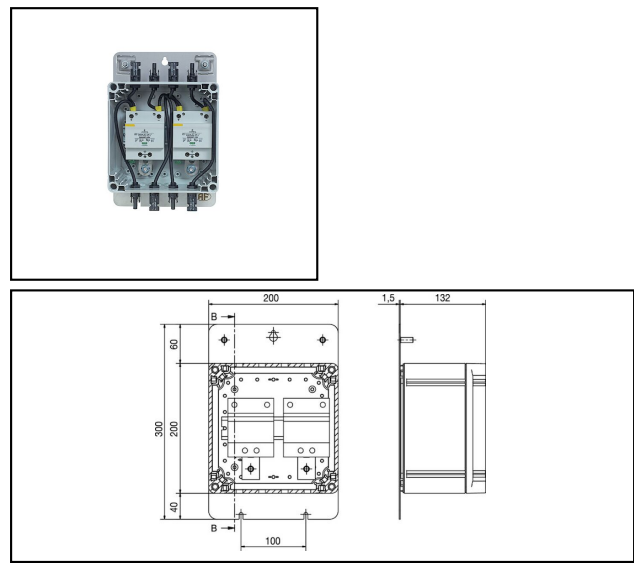


Generators combiner boxes

GAK 210-MC4 s Junction box PV



**Characteristics**  
Generator boxes with preassembled surge protection and grounding plate:

- Legend**
- a) type 1 + 2 GAK + 60 VGPVS-1000-2ST-2MPP
  - b) type 1+2 GAK + 50 PVS-1000-2ST-2MPP
  - c) type 1+2 GAK + 50 VGPVS-1000-2ST-2MPP
  - d) type 2 GAK + 50 PV-1000-2ST-2MPP

| Article-Nr. | E-Number    |  | <div>V</div> <div>U<sub>C</sub></div> | <div>kA</div> <div>I<sub>imp</sub></div> | <div>kA</div> <div>I<sub>max</sub></div> | <div>ns</div> <div>t<sub>A</sub></div> | <div>kV</div> <div>U<sub>P</sub></div> | <div>mm²</div>  |  |  |
|-------------|-------------|-----------------------------------------------------------------------------------|---------------------------------------|------------------------------------------|------------------------------------------|----------------------------------------|----------------------------------------|----------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| 296.050.252 | 296.050.202 | T1 / T2                                                                           | ≤1200VDC                              | 12.5                                     | 40                                       | ≤25                                    | 2.8                                    | 6 - 35                                                                                             | a)                                                                                  | 1                                                                                   |
| 296.050.852 | 969 112 154 | T1 / T2                                                                           | ≤1200VDC                              | 6.25                                     | 40                                       | ≤25                                    | 2.6                                    | 2.5 - 25                                                                                           | b)                                                                                  | 1                                                                                   |
| 296.050.452 | 969 111 814 | T1 / T2                                                                           | ≤1200VDC                              | 6.25                                     | 40                                       | ≤25                                    | 2.8                                    | 2.5 - 25                                                                                           | c)                                                                                  | 1                                                                                   |
| 296.050.652 | 969 111 924 | T2                                                                                | ≤1200VDC                              | 5                                        | 40                                       | ≤25                                    | 2.6                                    | 2.5 - 25                                                                                           | d)                                                                                  | 1                                                                                   |

## Technical Specifications: Junction box PV GAK 210-MC4 s

|                                                             |                                      |                                      |                                      |                                      |
|-------------------------------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|
|                                                             | 296.050.252                          | 296.050.852                          | 296.050.452                          | 296.050.652                          |
| SPD type                                                    | T1 / T2                              |                                      |                                      | T2                                   |
| Number of poles                                             | 2                                    |                                      |                                      |                                      |
| max. discharge current (I <sub>max</sub> )                  | 40 kA                                |                                      |                                      |                                      |
| Nominal line voltage U <sub>n</sub> DC                      | 1000 V                               |                                      |                                      |                                      |
| Impulse current [I <sub>imp</sub> ] (10/350)                | 12.5 kA                              | 6.25 kA                              |                                      | 5 kA                                 |
| Discharge current max. (8/20) μs [I <sub>max</sub> ]        | 40 kA                                |                                      | 60 kA                                |                                      |
| Nominal discharge surge current (8/20)                      | 20 kA                                | 15 kA                                |                                      | 15 kA                                |
| Voltage protection level [U <sub>p</sub> ]                  | 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 <sub>c</sub> ]                    | ≤1200VDC                             |                                      |                                      |                                      |
| Operating current [I <sub>c</sub> ]                         | 0 kA                                 |                                      | 0 kA                                 |                                      |
| Follow current [I <sub>F</sub> ]                            | 0 kA                                 |                                      |                                      |                                      |
| follow current extinguishing capability [I <sub>fi</sub> ]  | Unendlich kA eff                     |                                      | Unendlich kA eff                     |                                      |
| Response time [t <sub>a</sub> ]                             | ≤25 ns                               |                                      |                                      |                                      |
| Short circuit resistance (I <sub>cw</sub> )                 | 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                                 |                                      |                                      |                                      |
| 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 <sub>n</sub> ]                 | 20/Pol                               | 15/Pol                               |                                      |                                      |
| Nominal cross section conductor                             | 6 - 35 mm²                           | 2.5 - 25 mm²                         | 2.5 - 25                             | 2.5 - 25 mm²                         |
| Integrated backup fuse                                      | No                                   |                                      |                                      |                                      |
| Exhausting                                                  | No                                   |                                      |                                      |                                      |
| Mounting method                                             | DIN rail (top hat rail) 35 mm        |                                      |                                      |                                      |
| Degree of protection (IP)                                   | IP20                                 |                                      |                                      |                                      |
| Casing                                                      |                                      |                                      |                                      |                                      |
| degree of protection                                        | IP65                                 |                                      |                                      |                                      |
| number of modules                                           | 9                                    |                                      |                                      |                                      |
| contract rail                                               | DIN-Schiene                          |                                      |                                      |                                      |
| String / MPP                                                | 2ST-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                                                  | 3.394 kg                             |                                      | 3.02 kg                              |                                      |

