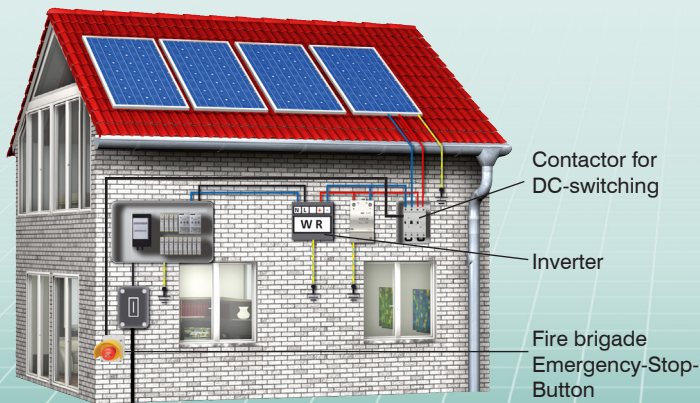


Contactors for DC-Switching for PV-installations, as remote controlled fire protection defeat devices



In most Photovoltaic-installations, the switch disconnectors according to IEC 60364-7-712 are integrated into DC/AC-inverters.

The power cables between solarpanels and inverters are continuously under voltage.

According to ÖVE-R11-1: 2013, Photovoltaic-installations must have a fire protection defeat device.

For this purpose, BENEDICT contactors for DC-switching, used as fire protection defeat devices, can switch off the Photovoltaic-installation with a remote controlled fire brigade Emergency-Stopbutton.



Technical Data

| Type | | K3DC-20.. | K3DC-48.. | K3DC-80.. | K3DC-100.. | K3PV-30.. | K3PV-60.. | K3PV-80.. | K3PV-100.. | K3PV-150.. | K3PV-200.. | K3PV-240.. | K3PV-300.. | K3PV-400.. | K3PV-450.. |
|---|-----------------|--|----------------|---------------|------------|-----------------|--------------|------------------------------|------------|------------|------------------------------|------------|------------|------------|------------|
| Ratings | | | | | | | | | | | | | | | |
| pole in series | | 3 | 3 | 3 | 3 | 6 | 6 | 4 | 4 | 3 | 3 | 3 | 3 | 3 | 3 |
| DC1 600V dc | I_e A | | 48 | 80 | 100 | 30 | 60 | 80 | 100 | 150 | 200 | 240 | 300 | 400 | 450 |
| DC1 700V dc | I_e A | | - | 80 | 100 | 30 | 60 | 80 | 100 | 150 | 200 | 240 | 300 | 400 | 450 |
| DC1 1000V dc | I_e A | | - | 35 | - | 30 | 60 | 80 | 100 | 150 | 200 | 240 | 300 | 400 | 450 |
| DC3/5 310V dc | I_e A | | - | - | 90 | 15 | 24 | - | 90 | 125 | 170 | 200 | 230 | 270 | 300 |
| DC3/5 460V dc | I_e A | | - | - | - | 15 | 24 | - | 30 | 125 | 170 | 200 | 230 | 270 | 300 |
| DC3/5 600V dc | I_e A | | - | - | - | - | - | - | - | 50 | 60 | 75 | 120 | 135 | 150 |
| Rated insulated voltage | V= | | 600 | 1000 | 600 | | | | 1000 | | | | | | |
| Rated impulse withstand U_{imp} kV | | 8 | | | | | | | | | | | | | |
| Making and breaking capacity (4x I_e at DC3/5) acc. to IEC60947-4-1 | | | | | | | | | | | | | | | |
| at 310V dc | A | - | - | - | - | 60 | 96 | - | 360 | 500 | 680 | 800 | 920 | 1080 | 1200 |
| at 460V dc | A | - | - | - | - | 60 | 96 | - | 120 | 500 | 680 | 800 | 920 | 1080 | 1200 |
| at 600V dc | A | - | - | - | - | - | - | - | - | 200 | 240 | 300 | 480 | 540 | 600 |
| Main pole resistance | m Ω | 2,5 | 2,3 | - | 3 | 8,5 | 8,5 | - | 4 | 1,5 | 1,5 | 1,5 | 0,85 | 0,85 | 0,85 |
| Mechanical life | 10 ⁶ | 10 | | | 10 | | | 10 | | | 8 | | | | |
| Protection degree | | IP20 | | | IP20 | | | IP00, IP20 with terminal lug | | | IP00, IP20 with terminal lug | | | | |
| Weight | kg | 0,45 | 1,17 | 1,8 | 0,9 | 1,35 | 2,3 | 5 | | 7,5 | | | | | |
| Cable cross-sections | mm ² | 2x1,5-10 | 2,5-35 +1-4 | 4-35 +4-50 | 2x1,5-10 | 2,5-35 +4-50 | 4-35 +1-4 | 2x16-120 | | 2x150 | | | | | |
| Tightening torque | Nm | 2,3 | 5 | 8 | 2,3 | 5 | 8 | 17 | | 35 | | | | | |
| Mounting | | DIN-rail | | Srews | DIN-rail | | Screws | | | | | | | | |
| Operation range of coils | U_c | 0,85-1,1 | | | | | | | | | | | | | |
| Drop out voltage ac | U_c | 0,2-0,75 | | | | | | | | | | | | | |
| Drop out voltage dc | U_c | 0,1-0,6 | | | | | | | | | | | | | |
| Ambient temperature | | -25 ÷ +70 °C > 40 °C derating of 1%/°C | | | | | | | | | | | | | |

Technical data are subject to change without notice

Benedict GmbH
Liebiggasse 7, A-1220 Vienna

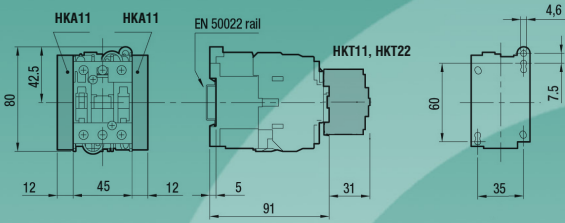
Tel.: +43 (1) 251 51-0
Fax: +43 (1) 251 51-89

e-mail: sales@benedict.at
www.benedict.at

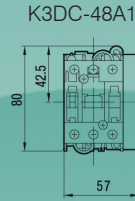
BENEDICT
GMBH

Dimensions (mm)

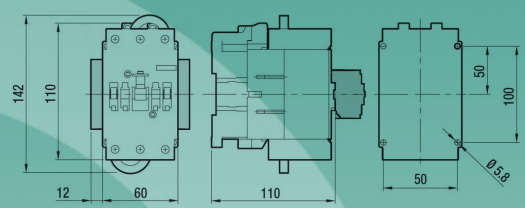
K3DC-20A00, K3DC-48A00



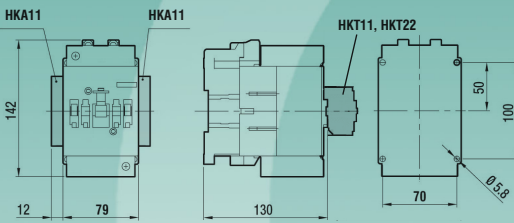
K3DC-20A10=, K3DC-48A10=



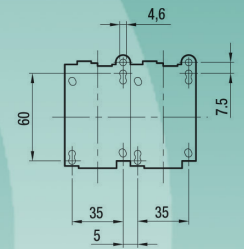
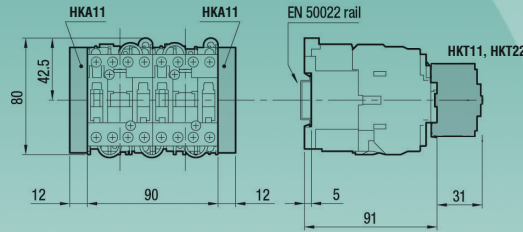
K3DC-80A00(=)



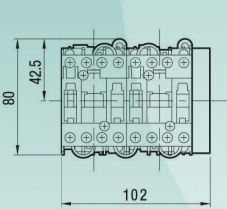
K3DC-100A00(=)



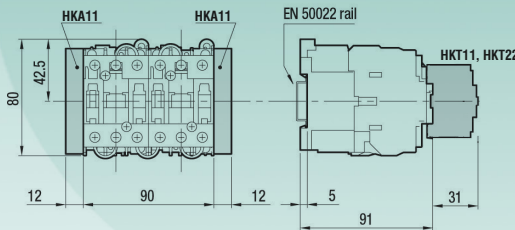
K3PV-12A00



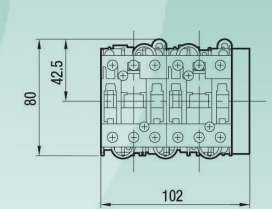
K3PV-12A10=



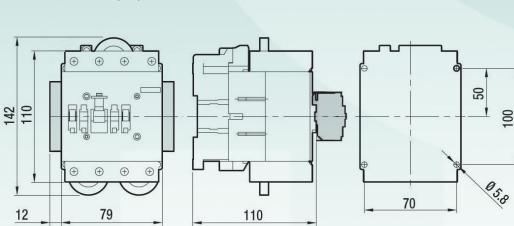
K3PV-30A00, K3PV-60A00



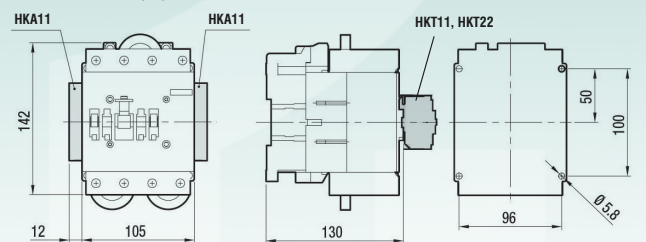
K3PV-30A10=, K3PV-60A10=



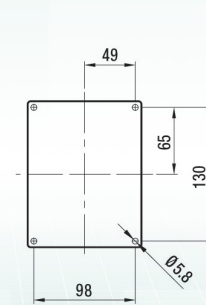
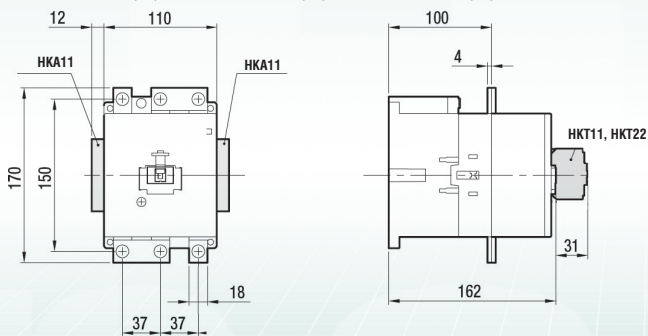
K3PV-80A00(=)



K3PV-100A00(=)



K3PV-150A00(=), K3PV-200A00(=), K3PV-240A00(=)



K3PV-300A00(=), K3PV-400A00(=), K3PV-450A00(=)

