

# 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 <sub>e</sub> A	20	50	80	100	30	60	80	100	150	200	240	300	400	450
DC1 700V dc	I <sub>e</sub> A	-	-	80	-	30	60	80	100	150	200	240	300	400	450
DC1 1000V dc	I <sub>e</sub> A	-	-	60	-	30	60	80	100	150	200	240	300	400	450
DC3/5 310V dc	I <sub>e</sub> A	-	-	40	60	15	24	40	90	125	170	200	230	270	300
DC3/5 460V dc	I <sub>e</sub> A	-	-	-	-	15	24	40	40	125	170	200	230	270	300
DC3/5 600V dc	I <sub>e</sub> A	-	-	-	-	-	-	-	-	50	60	75	120	160	200
Rated insulated voltage	V=	600			1000	600	1000								
Rated impulse withstand U <sub>imp</sub>	kW	8													
Making and breaking capacity (4 x I <sub>e</sub> 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	mΩ	1,8	1,8	1,2	1	1,8	1,8	1,2	1	0,5	0,5	0,35	0,15	0,15	0,15
Mechanical life	10 <sup>6</sup>	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 <sup>2</sup>	2 x 1,5-10		2,5-35 + 1-4	4-35 + 4-50	2 x 1,5-10		2,5-35 + 4-50	4-35 + 1-4	2 x 16-120			2 x 150		
Tightening torque	Nm	2,3-2,7		5-6	8-9,6	2,3-2,7		5-6	8-9,6	17-20			35-42		
Mounting		DIN-rail			Screws	DIN-rail			Screws						
Operation range of coils	U <sub>c</sub>	0,85-1,1													
Drop out voltage ac	U <sub>c</sub>	0,2-0,75													
Drop out voltage dc	U <sub>c</sub>	0,1-0,6													
Ambient temperature		-25 ÷ +70°C > 40°C derating of 1%/°C													

Technical data are subject to change without notice

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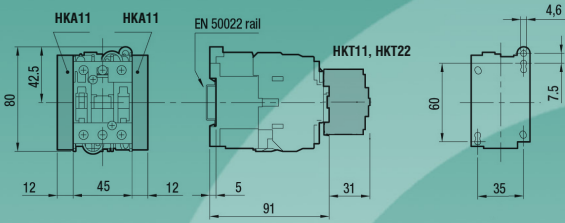
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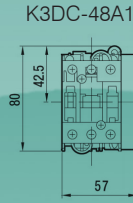
**BENEDICT**  
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# Dimensions (mm)

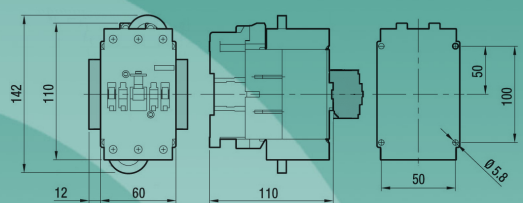
K3DC-20A00, K3DC-48A00



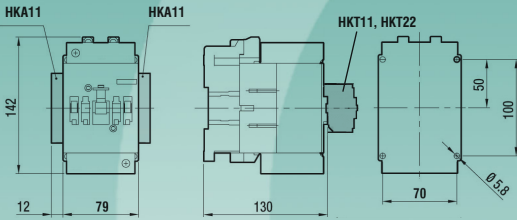
K3DC-20A10=, K3DC-48A10=



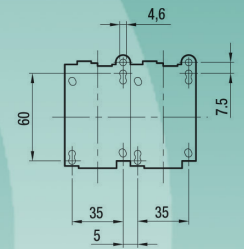
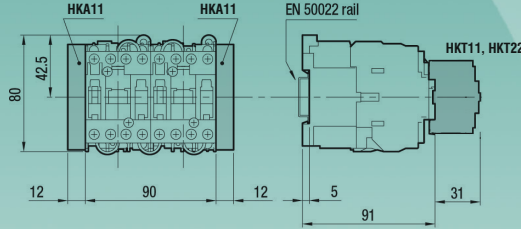
K3DC-80A00(=)



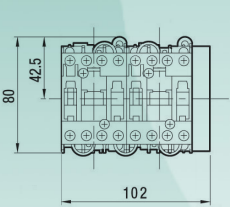
K3DC-100A00(=)



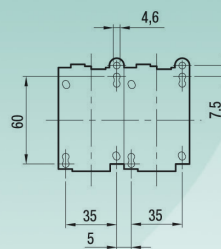
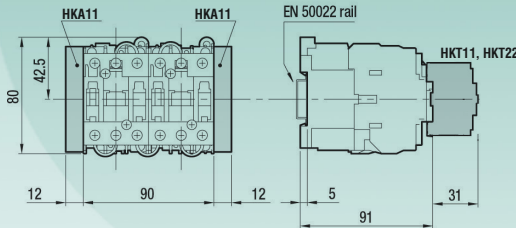
K3PV-12A00



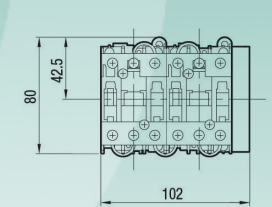
K3PV-12A10=



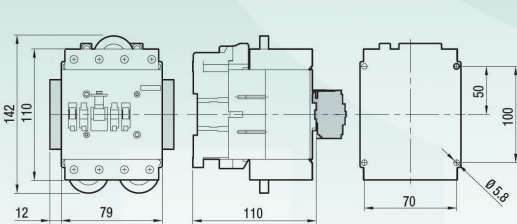
K3PV-30A00, K3PV-60A00



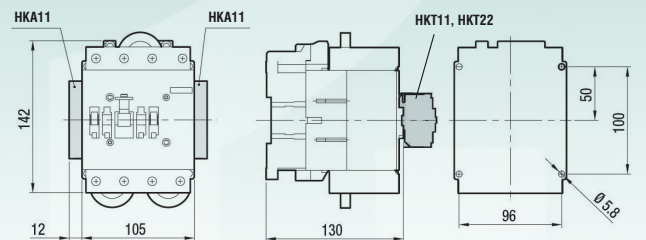
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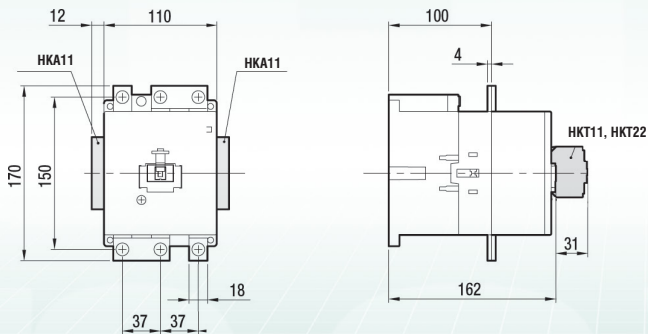
K3PV-80A00(=)



K3PV-100A00(=)



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



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

