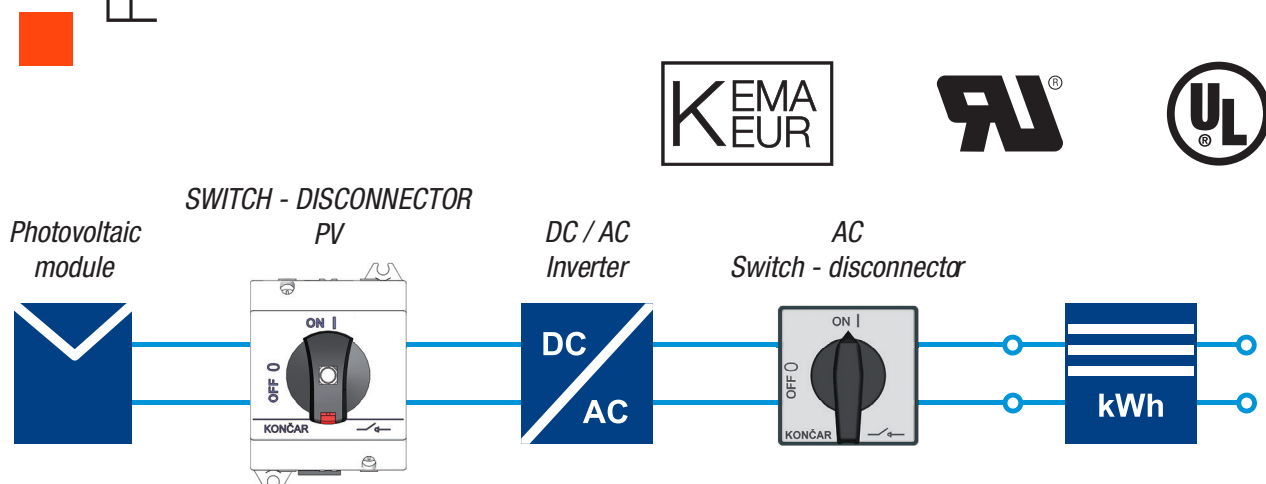


SWITCH-DISCONNECTORS FOR PHOTOVOLTAIC LOADS



Lovato
electric

ENERGY AND AUTOMATION

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The products described in this document are subject to updates or modifications at any time. The descriptions, technical and functional information, illustrations and instructions in the leaflet are to be considered as purely illustrative, and consequently have no contractual relevance. Remember also that the products themselves must be used by qualified personnel, in compliance with current plant engineering and installation standards, in order to avoid injury to persons or damage to property.

SWITCH-DISCONNECTORS FOR PHOTOVOLTAIC LOADS PV SERIES



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Razvoj obnovljivih izvora energije na osnovi fotonaponskih panela ima za posljedicu razvoj rastavnih sklopki koje služe za sklanjanje istosmjernih krugova.

Prema normi IEC 60364-7-712 za fotonaponske instalacije, mora se osigurati izoliranje što sklopke serije PV, s posebno oblikovanim kontaktima, u potpunosti zadovoljavaju.

Sa nazivnim pogonskim strujama do 40A u kategoriji upotrebe DC21B, te nazivnim pogonskim naponom do 1000V DC (1500V DC), ovaj tip sklopki može ispuniti sve zahtjeve izolacija.

Rastavne sklopke serije PV konstruirane su tako da se mogu postaviti između fotonaponskih ćelija i DC/AC pretvarača.

U skladu s normama IEC/EN 60947-3 i UL508i.

The development of renewable energy sources on the basis of photovoltaic panels has resulted with the development of switchdisconnectors which are used for switching off DC circuit. Switch-disconnectors series PV with double breaking system completely fulfil requirements for isolation according to IEC 60364-7-712 for photovoltaic installations.

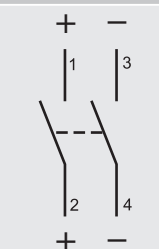
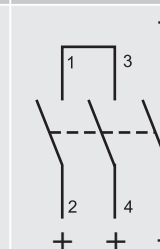
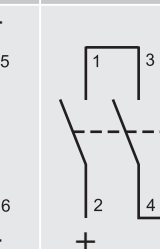
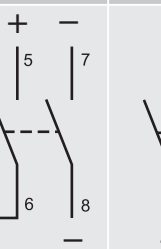
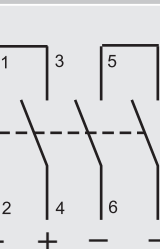
PV type of switch-disconnectors can meet all requirements of installation with rated operational voltage up to 1000V (1500V) and operational currents up to 40A in utilization category DC21B.

Switch-disconnectors are designed to be placed between photovoltaic cells and DC/AC inverter.

According to IEC/EN 60947-3 and UL508i.

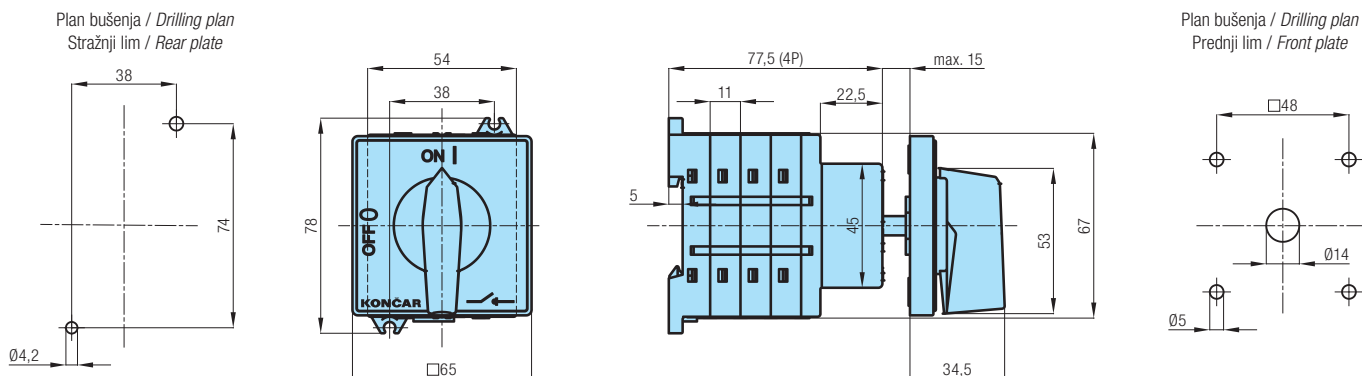
TEHNIČKE KARAKTERISTIKE <i>TECHNICAL DATA</i>				PV25	PV32	PV40
Nazivni izolacijski napon <i>Rated insulation voltage</i>	U _i	IEC/EN	V	1000 (1500*)	1000 (1500*)	1000 (1500*)
		UL	V	600	600	600
Nazivni udarni podnosivi napon <i>Rated impulse withstand voltage</i>	U _{imp}	IEC/EN	kV	8	8	8
Nazivna termička struja <i>Rated thermal current</i>	I _{th}	IEC/EN	A	25	32	40
			UL	25	32	40
Nazivna kratkotrajno podnosiva struja <i>Rated short-time withstand current</i>	I _{cw}		1 sec	A	500	500
Nazivna kratkotrajna uklopna moć <i>Rated short-circuit making capacity</i>	I _{cm}			A	550	550
Nazivna pogonska struja <i>Rated operational current</i>	I _e	IEC/EN DC21B	300 V	A	25/2p	32/2p
			400 V	A	25/2p	32/2p
			600 V	A	25/2p	32/2p
			800 V	A	25/2p	32/3p
			1000 V	A	16/2p; 25/3p	32/3p
			1200 V	A	20/4p	25/4p
			1500 V	A	16/4p	20/4p
Mehanička trajnost <i>Mechanical durability</i>		Broj uklopa <i>Switching cycles</i>		1,5 x 10 ⁴	1,5 x 10 ⁴	1,5 x 10 ⁴
Stupanj mehaničke zaštite <i>IP Rating</i>		S prednje strane / <i>Front protection</i>		IP65	IP65	IP65
		Sa stražnje strane / <i>Rear protection</i>		IP20	IP20	IP20
Priključni vijak <i>Terminal screw</i>			M	4	4	4
Moment pritezanja priključnog vijka <i>Terminal tightening torque</i>		(IEC/EN)	Nm	1,2	1,2	1,2
Presjek vodiča <i>Conductor size</i>	max. r/f		2 x $\frac{\text{mm}^2}{\text{AWG}}$	10/6 8/10	10/6 8/10	10/6 8/10
			2 x $\frac{\text{mm}^2}{\text{AWG}}$	1,5/1,5 16/16	1,5/1,5 16/16	1,5/1,5 16/16

*stupanj zagađenja 2 / *pollution degree 2*

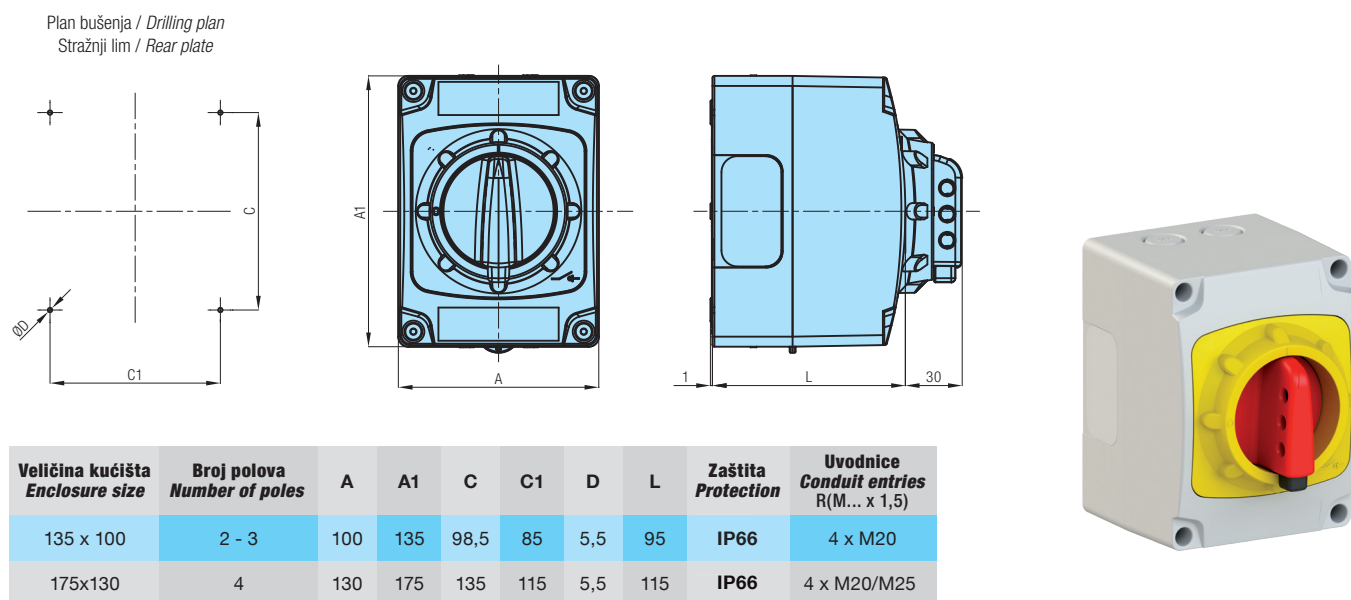
Broj polova <i>Number of poles</i>	2P	3P	4P		2 x 2P
Schema <i>Schema</i>	11	21	31	22	2 x 11
Schema spoja <i>Connecting diagram</i>					

MJERNE SKICE *DIMENSIONAL DRAWINGS (mm)*

O - Rastavna sklopka za odvojenu ugradnju *Rear mounting*



P - Rastavna sklopka u plastičnom kućištu *Switch-disconnector in plastic enclosure*



NARUDŽBENI KOD *ORDERING CODE*

Primjer narudžbenog koda za rastavnu sklopku PV40, odvojena ugradnja, shema 21, specijalna izvedba 102:

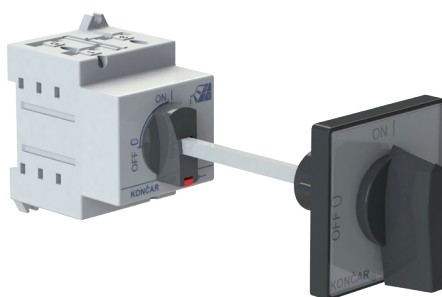
PV40-21-0102

Ordering code example for switch-disconnector PV40, rear mounting, scheme 21, optional extra 102:

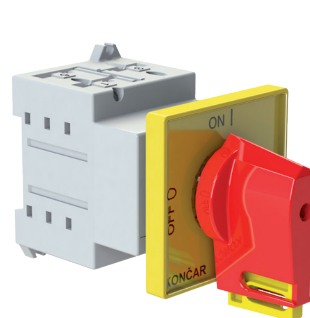
PV40-21-0102



PV40-21-0



PV40-21-0102



PV40-21-075