#### Switch-disconnector, DC current, 30 A

Powering Business Worldwide

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P-SOL30 Part no. Catalog No. 120935 **Alternate Catalog** P-SOL30

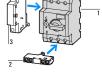
**EL-Nummer** 4300314

(Norway)

## **Delivery program**

Product range			Switchgear for photovoltaic systems
Subrange			DC switch-disconnectors
Rated operational voltage	U <sub>e</sub>	V	1000
Protection class			2
Number of conductors			2 pole
Rated operational current at DC-21A	l <sub>e</sub>	Α	26
Rated operational current at DC-PV1	l <sub>e</sub>	Α	26
Rated operational current at DC-PV2	l <sub>e</sub>	Α	10
			DC-PV1: 30 A when using the BK25/3-PKZ0 (032720) feed-in terminal and wires with a cross-section of 10 $\rm mm^2$ on the feed-in side.
Design			open





Accessories 2 Hilfsschalter NHI-E 3 Arbeitsstromauslöser A-PKZO 3 Unterspannungsauslöser U-PKZO

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### Technical data

Height

Depth

Top-hat rail Weight

03/27/2023

l <sub>e</sub>	Α	26
l <sub>e</sub>	Α	26
		DC-PV1: 30 A when using the BK25/3-PKZ0 (032720) feed-in terminal and wires with a cross-section of $10~\rm{mm}^2$ on the feed-in side.
I <sub>e</sub>	Α	10
		2 pole
U <sub>e</sub>	V	1000
		yes
		IEC/EN 60947-3
Operations		100000
	Operation	ond 500
	0ps/h	120
		Damp heat, constant, to IEC 60068-2-78 Damp heat, cyclic, to IEC 60068-2-30
	°C	-25 - +60
		As required
	mm	58
	I <sub>e</sub> I <sub>e</sub>	I <sub>e</sub> A  I <sub>e</sub> A  U <sub>e</sub> V  Operations  Operation  Ops/h

Eaton 120935 ED2022 V93.0 EN

kg

mm

mm

93

76

35 mm

0.32

#### **Terminal capacities**

The state of the s			
Flexible with ferrule		mm <sup>2</sup>	1 x (1 - 6) 2 x (1 - 6)
Solid or stranded		AWG	18 - 14
Rated short-time withstand current (t=1s)	I <sub>cw</sub>	kA	0.36
up to 440 V 50/60 Hz	I <sub>cm</sub>	kA	0.32
Internal resistance		mΩ	5

# Design verification as per IEC/EN 61439

besign vermoution as per 120/211 01-103			
Technical data for design verification			
Rated operational current for specified heat dissipation	In	Α	25
Heat dissipation per pole, current-dependent	P <sub>vid</sub>	W	1.5
Equipment heat dissipation, current-dependent	P <sub>vid</sub>	W	4.5
Static heat dissipation, non-current-dependent	$P_{vs}$	W	0
Heat dissipation capacity	P <sub>diss</sub>	W	0
Operating ambient temperature min.		°C	-25
Operating ambient temperature max.		°C	60
IEC/EN 61439 design verification			
10.2 Strength of materials and parts			
10.2.2 Corrosion resistance			Meets the product standard's requirements.
10.2.3.1 Verification of thermal stability of enclosures			Meets the product standard's requirements.
10.2.3.2 Verification of resistance of insulating materials to normal heat			Meets the product standard's requirements.
10.2.3.3 Verification of resistance of insulating materials to abnormal heat and fire due to internal electric effects			Meets the product standard's requirements.
10.2.4 Resistance to ultra-violet (UV) radiation			Meets the product standard's requirements.
10.2.5 Lifting			Does not apply, since the entire switchgear needs to be evaluated.
10.2.6 Mechanical impact			Does not apply, since the entire switchgear needs to be evaluated.
10.2.7 Inscriptions			Meets the product standard's requirements.
10.3 Degree of protection of ASSEMBLIES			Does not apply, since the entire switchgear needs to be evaluated.
10.4 Clearances and creepage distances			Meets the product standard's requirements.
10.5 Protection against electric shock			Does not apply, since the entire switchgear needs to be evaluated.
10.6 Incorporation of switching devices and components			Does not apply, since the entire switchgear needs to be evaluated.
10.7 Internal electrical circuits and connections			Is the panel builder's responsibility.
10.8 Connections for external conductors			Is the panel builder's responsibility.
10.9 Insulation properties			
10.9.2 Power-frequency electric strength			Is the panel builder's responsibility.
10.9.3 Impulse withstand voltage			Is the panel builder's responsibility.
10.9.4 Testing of enclosures made of insulating material			Is the panel builder's responsibility.
10.10 Temperature rise			The panel builder is responsible for the temperature rise calculation. Eaton will provide heat dissipation data for the devices.
10.11 Short-circuit rating			Is the panel builder's responsibility. The specifications for the switchgear must be observed.
10.12 Electromagnetic compatibility			Is the panel builder's responsibility. The specifications for the switchgear must be observed.
10.13 Mechanical function			The device meets the requirements, provided the information in the instruction leaflet (IL) is observed.

### **Technical data ETIM 8.0**

Low-voltage industrial components (EG000017) / Switch disconnector (EC000216)

Electric engineering, automation, process control engineering / Low-voltage switch technology / Off-load switch, circuit breaker, control switch / Switch disconnector (ecl@ss10.0.1-27-37-14-03 [AKF060013])

	No
	No
	No
	No
	No
	1
V	1000
	V

Rated operating voltage	V	1000 - 1000
Rated permanent current lu	Α	30
Rated permanent current at AC-23, 400 V	Α	0
Rated permanent current at AC-21, 400 V	Α	0
Rated operation power at AC-3, 400 V	kW	0
Rated short-time withstand current lcw	kA	0.36
Rated operation power at AC-23, 400 V	kW	0
Switching power at 400 V	kW	30
Conditioned rated short-circuit current Iq	kA	0
Number of poles		2
Number of auxiliary contacts as normally closed contact		0
Number of auxiliary contacts as normally open contact		0
Number of auxiliary contacts as change-over contact		0
Motor drive optional		No
Motor drive integrated		No
Voltage release optional		Yes
Device construction		Built-in device fixed built-in technique
Suitable for floor mounting		Yes
Suitable for front mounting 4-hole		No
Suitable for front mounting centre		No
Suitable for distribution board installation		Yes
Suitable for intermediate mounting		Yes
Colour control element		Black
Type of control element		Turn button
Interlockable		No
Type of electrical connection of main circuit		Clamp bracket
Degree of protection (IP), front side		IP20
Degree of protection (NEMA)		Other