




String circuit-breaker, DC current, 2p, 30A

Part no. **PKZ-SOL30**
 Catalog No. **120939**
 Alternate Catalog No. **PKZ-SOL30**
 EL-Nummer (Norway) **4300318**

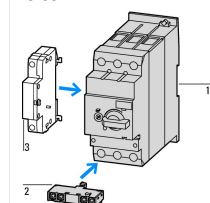
Delivery program

| | | | |
|--|----------|---|-------------------------------------|
| Product range | | | Switchgear for photovoltaic systems |
| Subrange | | | String circuit-breakers |
| Product range | | | String circuit-breakers |
| Application field | | | Utility buildings Open areas |
| Rated operational voltage | U_e | V | 900 |
| Protection class | | | 2 |
| Number of conductors | | | 2 pole |
| Rated operational current at DC-21A | I_e | A | 30 |
| Admissible short-circuit current for solar modules | I_{SC} | A | 15 - 22 |

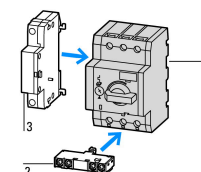
Setting range

| | | | |
|---|--|---|------|
| Overload releases | | | |
|  | | | |
| Overload release max. | | A | 30 |
| Design | | | open |

Notes



Accessories
 2 auxiliary contacts NHI-E
 3 shunt releases A-PKZO
 3 undervoltage releases U-PKZO

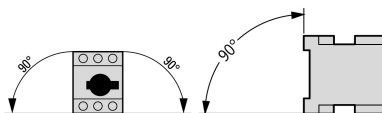


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Technical data

| | | | |
|-------------------------------------|-------|---|--|
| Rated operational current at DC-21A | I_e | A | 30 |
| Number of poles | | | 2 pole |
| Rated operational voltage | U_e | V | 900 |
| Thermal trip | | | 1.05 - 1.3 x I_e |
| Electromagnetic trip block | | | 6 x I_e |
| Standards | | | IEC/EN 60947-2 TÜV-certified |
| Climatic proofing | | | Damp heat, constant, to IEC 60068-2-78 Damp heat, cyclic, to IEC 60068-2-30 |

Ambient temperature

| | | | |
|-------------------|--|----|--|
| Open | | °C | -25 - +60 |
| Mounting position | | |  |

Dimensions

| | | | |
|--------|--|----|----|
| Width | | mm | 58 |
| Height | | mm | 93 |
| Depth | | mm | 76 |

| | | | |
|----------------------------|--|-----------------|----------------------------|
| Top-hat rail | | | 35 mm |
| Weight | | kg | 0.32 |
| Terminal capacities | | | |
| Flexible with ferrule | | mm ² | 1 x (1 - 6) 2 x (1 - 6) |
| Solid or stranded | | AWG | 18 - 14 |
| Internal resistance | | mΩ | 7 |

Design verification as per IEC/EN 61439

| | | | |
|--|-------------------|----|--|
| Technical data for design verification | | | |
| Rated operational current for specified heat dissipation | I _n | A | 30 |
| Heat dissipation per pole, current-dependent | P _{vid} | W | 2.1 |
| Equipment heat dissipation, current-dependent | P _{vid} | W | 6.3 |
| Static heat dissipation, non-current-dependent | P _{vs} | W | 0 |
| Heat dissipation capacity | P _{diss} | 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 7.0

| | | | |
|---|--|----|-----------|
| Low-voltage industrial components (EG000017) / Power circuit-breaker for trafo/generator/installation protection (EC000228) | | | |
| Electric engineering, automation, process control engineering / Low-voltage switch technology / Circuit breaker (LV < 1 kV) / Circuit breaker for power transformer, generator and system protection (ecl@ss10.0.1-27-37-04-09 [AJZ716013]) | | | |
| Rated permanent current I _u | | A | 30 |
| Rated voltage | | V | 900 - 900 |
| Rated short-circuit breaking capacity I _{cu} at 400 V, 50 Hz | | kA | 0 |
| Overload release current setting | | A | 23 - 30 |
| Adjustment range short-term delayed short-circuit release | | A | 0 - 0 |
| Adjustment range undelayed short-circuit release | | A | 180 - 180 |

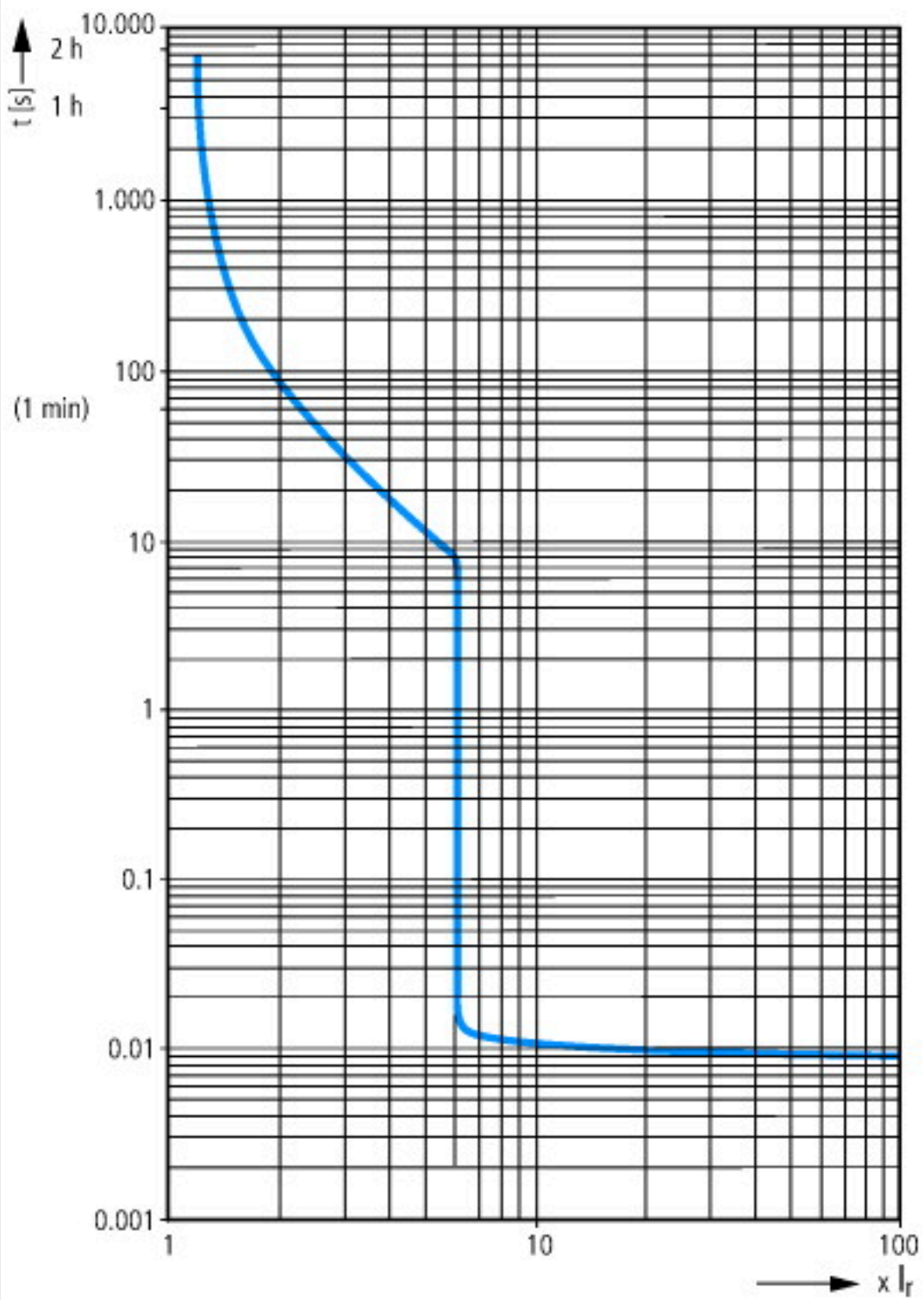
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| Integrated earth fault protection | | | No |
| Type of electrical connection of main circuit | | | Screw connection |
| Device construction | | | Built-in device fixed built-in technique |
| Suitable for DIN rail (top hat rail) mounting | | | Yes |
| DIN rail (top hat rail) mounting optional | | | Yes |
| 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 |
| With switched-off indicator | | | No |
| With under voltage release | | | No |
| Number of poles | | | 2 |
| Position of connection for main current circuit | | | Other |
| Type of control element | | | Turn button |
| Complete device with protection unit | | | Yes |
| Motor drive integrated | | | No |
| Motor drive optional | | | No |
| Degree of protection (IP) | | | IP00 |

Approvals

| | | | |
|--------------------------------------|--|--|----|
| Specially designed for North America | | | No |
|--------------------------------------|--|--|----|

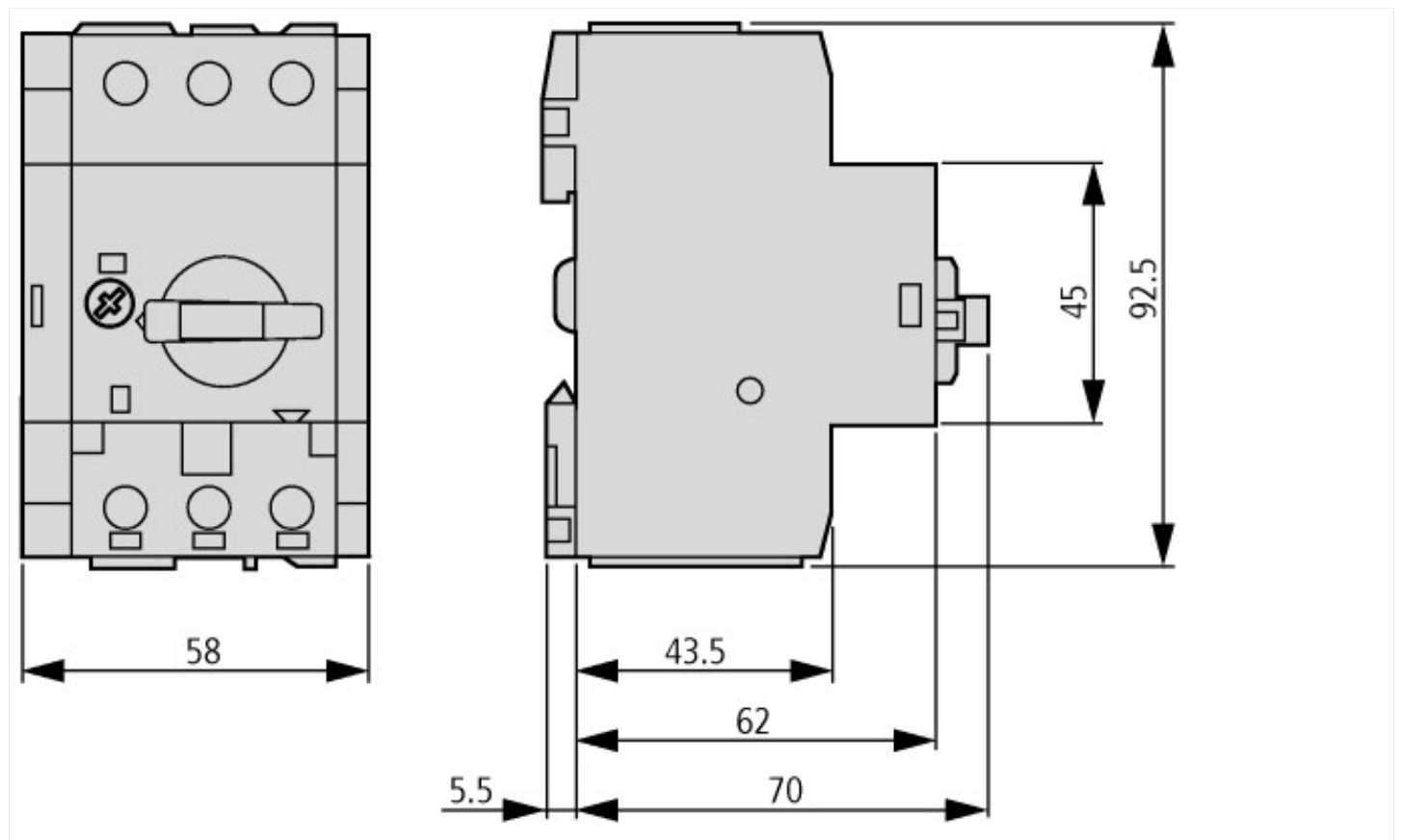
Characteristics

| | | | |
|-----------------------|--|--|--|
| Characteristic curves | | | |
|-----------------------|--|--|--|



tripping characteristics

Dimensions



Additional product information (links)

IL03402020Z DC switch-disconnector, DC-String circuit-breaker

IL03402020Z DC switch-disconnector, DC-String circuit-breaker https://es-assets.eaton.com/DOCUMENTATION/AWA_INSTRUCTIONS/IL03402020Z2018_06.pdf

Motor starters and "Special Purpose Ratings" for the North American market http://www.eaton.eu/ecm/groups/public/@pub/@europe/@electrical/documents/content/pct_3258146.pdf

Busbar Component Adapters for modern Industrial control panels http://www.moeller.net/binary/ver_techpapers/ver960en.pdf