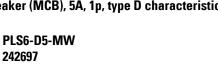
DATASHEET - PLS6-D5-MW

Part no. Catalog No.



Miniature circuit breaker (MCB), 5A, 1p, type D characteristic

242697





Similar to illustration

| Delivery program | | | |
|--|-----------------|----|--|
| Basic function | | | Miniature circuit-breakers |
| Number of poles | | | 1 pole |
| Tripping characteristic | | | D |
| Application | | | Switchgear for residential and commercial applications |
| Rated current | I _n | А | 5 |
| Rated switching capacity according to IEC/EN 60898-1 | I _{cn} | kA | 6 |
| Product range | | | PLS6 |

Technical data

| Electrical | | | |
|--|-----------------|----|---|
| Rated switching capacity according to IEC/EN 60898-1 | I _{cn} | kA | 6 |

Design verification as per IEC/EN 61439

| Technical data for design verification | | | |
|--|-------------------|----|---|
| Rated operational current for specified heat dissipation | In | А | 5 |
| Heat dissipation per pole, current-dependent | P _{vid} | W | 0 |
| Equipment heat dissipation, current-dependent | P _{vid} | W | 1.7 |
| 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 | 75 |
| | | | linear, per +1 °C, results in a 0.5% reduction of current carrying capacity |
| 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

| (sci8x1bû1-27-14-19-01 (ABB0B014)) P 0 Release characteristic 0 | Circuit breakers and fuses (EG000020) / Miniature circuit breaker (MCB) (EC000042) | | | | |
|--|---|-----------------|----------|--|--|
| Number of poles (total)Image of poles (total)Image of poles (total)Image of poles (total)Number of protected polesImage of poles (total)Image of poles (total)Image of poles (total)Rated vortageImage of poles (total)Image of poles (total)Image of poles (total)Rated vortage UimpImage of poles (total)Image of poles (total)Image of poles (total)Rated short-circuit breaking capacity loc IEC 60947-2 at 230 VImage of poles (total)Image of poles (total)Rated short-circuit breaking capacity loc IEC 60947-2 at 230 VImage of poles (total)Image of poles (total)Rated short-circuit breaking capacity loc IEC 60947-2 at 230 VImage of poles (total)Image of poles (total)Notage typeImage of poles (total)Image of poles (total)Image of poles (total)Notage typeImage of poles (total)Image of poles (total)Image of poles (total)Notage typeImage of poles (total)Image of poles (total)Image of poles (total)Notage typeImage of poles (total)Image of poles (total)Image of poles (total)Notage typeImage of poles (total)Image of poles (total)Image of poles (total)Notage typeImage of poles (total)Image of poles (total)Image of poles (total)Notage typeImage of poles (total)Image of poles (total)Image of poles (total)Notage typeImage of poles (total)Image of poles (total)Image of poles (total)Notage typeImage of poles (total)Image of poles (total)Image of poles (total)< | Electric engineering, automation, process control engineering / Electrical installation, device / Miniature circuit breaker system (MCB) / Miniature circuit breaker (MCB) (ecl@ss10.0.1-27-14-19-01 [AAB905014]) | | | | |
| Number of protected polesImage: state currentImage: state current | Release characteristic | | D | | |
| Rede current A S Rede duitage V 30 Rede duitage Lin V 40 Reted short-circuit breaking capacity Lon EN 60989 at 230 V K 4 Reted short-circuit breaking capacity Lon EN 60989 at 400 V KA 6 Reted short-circuit breaking capacity Lon EN 60989 at 400 V KA 6 Reted short-circuit breaking capacity Lon EC 60947-2 at 230 V KA 0 Reted short-circuit breaking capacity Lon EC 60947-2 at 230 V KA 0 Voltage type KA 0 0 Voltage type KA 0 0 Frequency KA 0 0 Coursent liniting class KA 0 0 Suitable for flush-mounted installation KA 0 0 Ourser Unsgo extegory KA 0 0 Pollution degree KA 0 0 Additional equipment possible KA 0 0 With in number of modular spacings KA 0 0 Nothettin unsgo extering ope | Number of poles (total) | | 1 | | |
| Rated woldsge V 30 Rated insulation voltage Uin V 40 Rated insulation voltage Uinp V 40 Rated insulation voltage Uinp V 40 Rated short-circuit breaking capacity Lon EN 60898 at 230 V KA 6 Rated short-circuit breaking capacity Lon EC 60947-2 at 200 V KA 0 Rated short-circuit breaking capacity Lon EC 60947-2 at 200 V KA 0 Voltage type KA 0 0 Voltage type KA 0 0 Voltage type KA 0 0 Current limiting class V X 0 Subble for flush-mounted installation Y X 0 Outrountly switching N-neutral Y X 0 Vidtinian unmber of modular spacings Y X X Vidtinian unmber of modular spacings Y X X Nuith in number of modular spacings Y X X Nuith in number of modular spacings Y X X N | Number of protected poles | | 1 | | |
| Action worksige Ui V 40 Rated insulse withstand voltage Uimp K0 4 Rated short-circuit breaking capacity Icn EN 60989 at 230 V K0 6 Rated short-circuit breaking capacity Icn EN 60989 at 400 V K0 6 Rated short-circuit breaking capacity Icn EC 60947-2 at 200 V K0 6 Notage type K0 6 6 Voltage type K0 6 6 Voltage type K0 6 6 Current limiting class K0 6 6 Subble for flush-mounted installation K0 6 6 Outrouting category K0 6 6 Voltage type K0 6 6 Outrouting category K0 6 6 Voltage tategory K0 6 | Rated current | А | 5 | | |
| Rated impulse withs and voltage Uimp IV I Rated short-circuit breaking capacity Len K0898 at 20 V KA 6 Rated short-circuit breaking capacity Len K0698 at 400 V KA 6 Rated short-circuit breaking capacity Len K0698 at 400 V KA 6 Rated short-circuit breaking capacity Len K0698 at 400 V KA 6 Rated short-circuit breaking capacity Len K0698 at 400 V KA 6 Voltage type KA 0 6 Voltage type KA 0 6 Frequency KA 0 6 Current limiting class KA 0 6 Suitab for flus-mounted installation KA 0 6 Concurrently switching N-neutral KA 0 6 Outro ubage category KA 0 6 0 6 Voltage category KA S 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 | Rated voltage | V | 230 | | |
| Rated short-circuit breaking capacity lcn EN 00998 at 200 V Ka 6 Rated short-circuit breaking capacity lcn EC 00947-2 at 200 V Ka 0 Rated short-circuit breaking capacity lcn EC 00947-2 at 200 V Ka 0 Voltage type Ka 0 0 Frequency Ka 0 0 Outrant limiting class Voltage type So 0 0 Outrant limiting class Voltage type No 0 Outrant limiting class Voltage type No 0 Outrant limiting class Voltage type No 0 0 Notage category Voltage type No No 0 | Rated insulation voltage Ui | V | 440 | | |
| Rated short-circuit breaking capacity lon EN 60898 at 400 V KA 6 Rated short-circuit breaking capacity lou IEC 60947-2 at 230 V KA 0 Rated short-circuit breaking capacity lou IEC 60947-2 at 230 V KA 0 Voltage type KA 0 Voltage type KA 0 Frequency KA 0 Current limiting class Frequency 50-60 Suitable for flush-mounted installation Frequency 0 Concurrently switching N-neutral Frequency No Over voltage category Frequency No Pollution degree Frequency Suitable for flush-mounted installation Suitable of mounted installation Frequency No Over voltage category Frequency Suitable for flush mounted installation Suitable for flush mounted installation Frequency Suitable for flush mounted installation Suitable for flush mounted installation Frequency Suitable for flush mounted installation Suitable for flush mounted installation Suitable for flush mounted installation Suitable for flush mounted installation | Rated impulse withstand voltage Uimp | kV | 4 | | |
| Rated short-circuit breaking capacity lcu IEC 60947-2 at 230 V KA 0 Rated short-circuit breaking capacity lcu IEC 60947-2 at 400 V KA 0 Voltage type KA C Frequency KA Co-0 Current limiting class So So Suitable for flush-mounted installation Fee So Corcurrently switching N-neutral So So Over voltage category So So Pollution degree So So Additional equipment possible Management So Buit-in depth Management So Degree of protection (IP) Management So Anbient temperature during operating Ca So Rome So So Rom | Rated short-circuit breaking capacity Icn EN 60898 at 230 V | kA | 6 | | |
| Rated short-circuit breaking capacity lou IEC 60947-2 at 400 V KA C Voltage type KA C Frequency KA So - 60 Current limiting class So - 60 So - 60 Suitable for flush-mounted installation Mo So - 60 Concurrently switching N-neutral Mo So - 60 Over voltage category So - 60 So - 60 Pollution degree So - 60 So - 60 Additional equipment possible Mo So - 60 Width in number of modular spacings Mo So - 60 Built-in depth Mo So - 60 Degree of protection (IP) Mo So - 60 Ambient temperature during operating Co So - 50 Connectable conductor cross section multi-wired Mo So - 50 | Rated short-circuit breaking capacity Icn EN 60898 at 400 V | kA | 6 | | |
| Voltage type AC Frequency Hz 50-60 Current limiting class 3 3 Suitable for flush-mounted installation No 3 Concurrently switching N-neutral No 3 Over voltage category Sole Sole Pollution degree Sole Sole Additional equipment possible Yes Sole With in number of modular spacings Man Sole Built-in depth Man Sole Polgree of protection (IP) Man Sole Anbient temperature during operating Concertable Sole Sole Sole Sole Sole Sole of the temperature during operating Sole Sole Sole Sole of the temperature during operating Sole Sole Sole | Rated short-circuit breaking capacity Icu IEC 60947-2 at 230 V | kA | 0 | | |
| Frequency Hz 5 - 60 Current limiting class 5 - 60 Suitable for flush-mounted installation 5 3 Concurrently switching N-neutral No No Concurrently switching N-neutral No No Over votage category S S Pollution degree S S S Additional equipment possible Manage S S With in number of modular spacings Manage S S Built-in depth Manage No S Degree of protection (IP) Manage S S Anbient emperature during operating C S S Concectable conductor cross section multi-wired manage S S | Rated short-circuit breaking capacity Icu IEC 60947-2 at 400 V | kA | 0 | | |
| Current limiting class Image: Sector of lush-mounted installation Image: Sector of lush-mounted installation Suitable for flush-mounted installation Image: Sector of lush-mounted installation Image: Sector of lush-mounted installation Concurrently switching N-neutral Image: Sector of lush-mounted installation Image: Sector of lush-mounted installation Over voltage category Image: Sector of lush-mounted installation Image: Sector of lush-mounted installation Pollution degree Image: Sector of lush-mounted installation Image: Sector of lush-mounted installation Additional equipment possible Image: Sector of lush-mounted installation Image: Sector of lush-mounted installation Built-in depth Image: Sector of lush-mounted installation Image: Sector of lush-mounted installation Ambient temperature during operating Image: Sector of lush-mounted installation Image: Sector of lush-mounted installation Ambient temperature during operating Image: Sector of lush-mounted installation Image: Sector of lush-mounted installation Ambient temperature during operating Image: Sector of lush-mounted installation Image: Sector of lush-mounted installation Ambient temperature during operating Image: Sector of lush-mounted installation Image: Sector of lush-mounted installation Ambient temperature during operating Image: Sector of lush-mounted installation Image: Sector of lush-mounted installation | Voltage type | | AC | | |
| Suitable for flush-mounted installation No Soccurrently switching N-neutral No Over voltage category Sitable Pollution degree Sitable Additional equipment possible Yes Width in number of modular spacings Mo Buit-in depth To Degree of protection (IP) Polo Ambient temperature during operating Co Soccurrently switching N-neutral Site Site Site Site Site Site Site Site | Frequency | Hz | 50 - 60 | | |
| Concurrently switching N-neutral No Over voltage category 3 Pollution degree 2 Additional equipment possible Yes Witch in number of modular spacings mm Built-in depth 70.5 Appender of protection (IP) °C Ambient temperature during operating °C Soncetable conductor cross section multi-wired mm² Intervent 1.25 | Current limiting class | | 3 | | |
| Nor voltage category 3 Pollution degree 2 Additional equipment possible Yes With in number of modular spacings mm Built-in depth No Degree of protection (IP) Mm Ambient temperature during operating C Sonders definition S Polution degree S Ambient temperature during operating mm ² Imm ² 125 | Suitable for flush-mounted installation | | No | | |
| Pollution degree2Additional equipment possibleYesWidth in number of modular spacingsmmBuilt-in depthmmDegree of protection (IP)°CAmbient temperature during operating°CConnectable conductor cross section multi-wiredmm²1 25 | Concurrently switching N-neutral | | No | | |
| Additional equipment possible Yes Width in number of modular spacings 1 Built-in depth mm 7.5 Degree of protection (IP) C 25 - 55 Ambient temperature during operating mm² 1.25 | Over voltage category | | 3 | | |
| Width in number of modular spacings Image: March and the spacing spacing space | Pollution degree | | 2 | | |
| Built-in depth mm 70.5 Degree of protection (IP) C -25 - 55 Ambient temperature during operating mm² 1 - 25 | Additional equipment possible | | Yes | | |
| Degree of protection (IP) IP20 Ambient temperature during operating °C -25 - 55 Connectable conductor cross section multi-wired mm ² 1 - 25 | Width in number of modular spacings | | 1 | | |
| Ambient temperature during operating °C -25 - 55 Connectable conductor cross section multi-wired mm ² 1 - 25 | Built-in depth | mm | 70.5 | | |
| Connectable conductor cross section multi-wired mm ² 1 - 25 | Degree of protection (IP) | | IP20 | | |
| | Ambient temperature during operating | °C | -25 - 55 | | |
| Connectable conductor cross section solid-core mm ² 1 - 25 | Connectable conductor cross section multi-wired | mm ² | 1 - 25 | | |
| | Connectable conductor cross section solid-core | mm ² | 1 - 25 | | |