DATASHEET - NZMH3-AX600-NA



NZM3 PXR10 circuit breaker, 600A, 3p, Screw terminal, UL/CSA

Powering Business Worldwide*

Part no. NZMH3-AX600-NA Catalog No. 192498

Delivery program

| Delivery program | | | |
|---|---------------------|----|--|
| Product range | | | Circuit-breaker |
| Protective function | | | System and cable protection |
| Standard/Approval | | | UL/CSA, IEC |
| Release system | | | Electronic release |
| Installation type | | | Fixed |
| Description | | | Switches conform to UL/CSA as well as the IEC regulations. IEC switching performance values are contained on the rating plate. |
| Frame size | | | NZM3 |
| Number of poles | | | 3 pole |
| Switching capacity | | | |
| SCCR 480Y/277 V 60 Hz | Icu | kA | 100 |
| SCCR 480 V 60 Hz | I _{cu} | kA | 100 |
| SCCR 600Y/347 V 60 Hz | I _{cu} | kA | 50 |
| SCCR 600 V 60 Hz | I _{cu} | kA | 50 |
| Rated current = rated uninterrupted current | | | |
| Rated current = rated uninterrupted current | $I_n = I_u$ | Α | 600 |
| Setting range | | | |
| Overload trip | | | |
| 中 | I _r | A | 240 - 600 |
| Short-circuit releases | | | |
| Non-delayed | $I_i = I_n x \dots$ | | 2-8 |

Technical data

General

| | °C | - 40 - + 70 |
|-----------------|-----------------|-------------------------|
| | °C | -25 - +70 |
| | | |
| Ui | V | 690 |
| | | |
| | | |
| I _{cu} | kA | 100 |
| I _{cu} | kA | 100 |
| I _{cu} | kA | 50 |
| I _{cu} | kA | 50 |
| | I _{cu} | °C Ui V Icu kA Icu kA |

Design verification as per IEC/EN 61439

| · · · · · · · · · · · · · · · · · · · | | |
|--|--|--|
| Technical data for design verification | | |

| Rated operational current for specified heat dissipation | In | Α | 600 |
|--|------------------|----|--|
| Equipment heat dissipation, current-dependent | P _{vid} | W | 108 |
| Operating ambient temperature min. | | °C | -25 |
| Operating ambient temperature max. | | °C | 70 |
| 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 switch gear must be observed. $\label{eq:specification}$ |
| 10.12 Electromagnetic compatibility | | | Is the panel builder's responsibility. The specifications for the switch gear must be observed. $\label{eq:specification}$ |
| 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) / 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])

| protection (eci@8810.0.1-27-37-04-03 [A32710013]) | | |
|---|----|--|
| Rated permanent current lu | А | 600 |
| Rated voltage | V | 690 - 690 |
| Rated short-circuit breaking capacity Icu at 400 V, 50 Hz | kA | 150 |
| Overload release current setting | А | 240 - 600 |
| Adjustment range short-term delayed short-circuit release | А | 0 - 0 |
| Adjustment range undelayed short-circuit release | А | 2 - 800 |
| 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 | | No |
| DIN rail (top hat rail) mounting optional | | No |
| 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 integrated under voltage release | | No |
| Number of poles | | 3 |
| Position of connection for main current circuit | | Front side |
| Type of control element | | Rocker lever |
| | | |

| Complete device with protection unit | Yes |
|--------------------------------------|------|
| Motor drive integrated | No |
| Motor drive optional | Yes |
| Degree of protection (IP) | IP20 |

Approvals

| Product Standards | UL 489; CSA-C22.2 No. 5-09; IEC 60947-2; CE marking |
|--------------------------------------|---|
| UL File No. | E31593 |
| UL Category Control No. | DIVQ |
| CSA File No. | 022086 |
| CSA Class No. | 1432-01 |
| North America Certification | UL listed, CSA certified |
| Specially designed for North America | Yes |
| Suitable for | Feeder circuits, branch circuits |
| Current Limiting Circuit-Breaker | Yes |
| Max. Voltage Rating | 600 V |
| Degree of Protection | IEC: IP20; UL/CSA Type: - |

Additional product information (links)

| additional technical information for NZM power switch | https://es-assets.eaton.com/DOCUMENTATION/PDF/nzm_technic_de_en.pdf |
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