

# Miniature Circuit Breakers - DC

**NOARK**

## MCB Ex9BP-N

Range and technical specifications.

Non polarized DC MCB's for isolation and protection of DC systems, including PV (Solar).

| Poles                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 1                                                                                     | 2                                 | 3    | 4    |      |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|-----------------------------------|------|------|------|
| <div>AS60947.2 2005</div> <div>Approval No. SAA101238EA</div> <div>(IEC/EN 60947-2 GB 14048.2)</div> <div></div> |                                                                                       |                                   |      |      |      |
| Rated frame current(A)                                                                                                                                                                                                                                                                                                                                                                                                                                   | 63                                                                                    |                                   |      |      |      |
| Electrical Specifications                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                       |                                   |      |      |      |
| Rated working voltage (V DC)                                                                                                                                                                                                                                                                                                                                                                                                                             | Ue                                                                                    | 250                               | 500  | 750  | 1000 |
| Rated current (A)                                                                                                                                                                                                                                                                                                                                                                                                                                        | In                                                                                    | 10-16-20-25-32-40-50-63           |      |      |      |
| Rated insulation voltage (V DC)                                                                                                                                                                                                                                                                                                                                                                                                                          | Ui                                                                                    | 1000                              |      |      |      |
| Rated implused voltage (kV)                                                                                                                                                                                                                                                                                                                                                                                                                              | Uimp                                                                                  | 4                                 |      |      |      |
| Type of breaking                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                       | N                                 | N    | N    | N    |
| Ultimate breaking capacity (kA)                                                                                                                                                                                                                                                                                                                                                                                                                          | Icu                                                                                   | 6                                 | 6    | 6    | 6    |
| Service breaking capacity (%Icu)                                                                                                                                                                                                                                                                                                                                                                                                                         | Ics                                                                                   | 100%                              | 100% | 100% | 100% |
| Curve type                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                                                       | K                                 |      |      |      |
| Tripping type                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                       | Thermal magnetic type             |      |      |      |
| Service Life - Mechanical                                                                                                                                                                                                                                                                                                                                                                                                                                | Actual Value                                                                          | 20000                             |      |      |      |
| "                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Standard Value                                                                        | 8500                              |      |      |      |
| Service Life Electrical                                                                                                                                                                                                                                                                                                                                                                                                                                  | Actual Value                                                                          | 2500                              |      |      |      |
| "                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Standard Value                                                                        | 1500                              |      |      |      |
| Connection and installation                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                       |                                   |      |      |      |
| Lockable                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                       | OFF position                      |      |      |      |
| Conductor size (mm²)                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                       | ≤ 32A, 1~25mm²; ≥ 40A, 10~35mm²   |      |      |      |
| Temperature (C)                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                       | -20 to +70                        |      |      |      |
| Resistance to humidity and heat                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                       | Class 2                           |      |      |      |
| Altitude (m) above sea                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                       | ≤2000m                            |      |      |      |
| Relative humidity                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                       | ≤95%                              |      |      |      |
| Protection degree                                                                                                                                                                                                                                                                                                                                                                                                                                        | All sides                                                                             | IP40                              |      |      |      |
| Connection terminal                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                       | IP20                              |      |      |      |
| Pollution degree                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                       | 3                                 |      |      |      |
| Installation environment                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                       | Avoid obvious shock and vibration |      |      |      |
| Installation class                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                       | Class III                         |      |      |      |
| Mounting                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                       | DIN35 rail                        |      |      |      |
| Dimensions (mm)<br>(WxHxL)                                                                                                                                                                                                                                                                                                                                                                                                                               |  a | 18                                | 36   | 54   | 72   |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                          | b                                                                                     | 89                                | 89   | 89   | 89   |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                          | c                                                                                     | 72                                | 74   | 74   | 74   |
| Weight (kg)                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                       | 0.12                              | 0.24 | 0.36 | 0.48 |

## Additional modules

Control and Indication.

|                      |                |
|----------------------|----------------|
| Shunt release        | See page 18,19 |
| Undervoltage release | See page 18,19 |
| Auxilliary contact   | See page 18,19 |
| Alarm contact        | See page 18,19 |

# Miniature Circuit Breakers - DC

**NOARK**

## MCB Ex9BP-N for PV - K Curve : 6kA

Non polarized DC MCB's for isolation and protection of PV systems.

| Part No. | Poles | Rated current (A) | Rated voltage (V AC) | Width (mm) | Type code        |
|----------|-------|-------------------|----------------------|------------|------------------|
| 88063    | 1     | 10                | 250                  | 18         | Ex9BP-N 1P K 10A |
| 88064    | 1     | 16                | 250                  | 18         | Ex9BP-N 1P K 16A |
| 88065    | 1     | 20                | 250                  | 18         | Ex9BP-N 1P K 20A |
| 88066    | 1     | 25                | 250                  | 18         | Ex9BP-N 1P K 25A |
| 88127    | 1     | 32                | 250                  | 18         | Ex9BP-N 1P K 32A |
| 88128    | 1     | 40                | 250                  | 18         | Ex9BP-N 1P K 40A |
| 88129    | 1     | 50                | 250                  | 18         | Ex9BP-N 1P K 50A |
| 88130    | 1     | 63                | 250                  | 18         | Ex9BP-N 1P K 63A |
| 88067    | 2     | 10                | 500                  | 36         | Ex9BP-N 2P K 10A |
| 88068    | 2     | 16                | 500                  | 36         | Ex9BP-N 2P K 16A |
| 88069    | 2     | 20                | 500                  | 36         | Ex9BP-N 2P K 20A |
| 88070    | 2     | 25                | 500                  | 36         | Ex9BP-N 2P K 25A |
| 88131    | 2     | 32                | 500                  | 36         | Ex9BP-N 2P K 32A |
| 88132    | 2     | 40                | 500                  | 36         | Ex9BP-N 2P K 40A |
| 88133    | 2     | 50                | 500                  | 36         | Ex9BP-N 2P K 50A |
| 88134    | 2     | 63                | 500                  | 36         | Ex9BP-N 2P K 63A |
| 88071    | 3     | 10                | 750                  | 54         | Ex9BP-N 3P K 10A |
| 88072    | 3     | 16                | 750                  | 54         | Ex9BP-N 3P K 16A |
| 88073    | 3     | 20                | 750                  | 54         | Ex9BP-N 3P K 20A |
| 88074    | 3     | 25                | 750                  | 54         | Ex9BP-N 3P K 25A |
| 88135    | 3     | 32                | 750                  | 54         | Ex9BP-N 3P K 32A |
| 88136    | 3     | 40                | 750                  | 54         | Ex9BP-N 3P K 40A |
| 88137    | 3     | 50                | 750                  | 54         | Ex9BP-N 3P K 50A |
| 88138    | 3     | 63                | 750                  | 54         | Ex9BP-N 3P K 63A |
| 88075    | 4     | 10                | 1000                 | 72         | Ex9BP-N 4P K 10A |
| 88076    | 4     | 16                | 1000                 | 72         | Ex9BP-N 4P K 16A |
| 88077    | 4     | 20                | 1000                 | 72         | Ex9BP-N 4P K 20A |
| 88078    | 4     | 25                | 1000                 | 72         | Ex9BP-N 4P K 25A |
| 88139    | 4     | 32                | 1000                 | 72         | Ex9BP-N 4P K 32A |
| 88140    | 4     | 40                | 1000                 | 72         | Ex9BP-N 4P K 40A |
| 88141    | 4     | 50                | 1000                 | 72         | Ex9BP-N 4P K 50A |
| 88142    | 4     | 63                | 1000                 | 72         | Ex9BP-N 4P K 63A |

