## Switch-disconnector, 3p, 2000A, withdrawable part

Powering Business Worldwide\*

Part no. IN20N3-20W Article no. 123218

| IIIO PI   | program         |
|-----------|-----------------|
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| Product range                               |                 |    | Air circuit-breakers/switch-disconnectors |
|---|-----------------|----|---|
| Product range                               |                 |    | Open switch-disconnectors                 |
| Current Range                               |                 |    | 4000 to 6300 A                            |
| Protective function                         |                 |    | without protection                        |
| Installation type                           |                 |    | Withdrawable                              |
| Construction size                           |                 |    | IN20                                      |
| Standard/Approval                           |                 |    | IEC                                       |
| Number of poles                             |                 |    | 3 pole                                    |
| Degree of Protection                        |                 |    | IP20, IP55 with protective cover          |
| Rated current = rated uninterrupted current | $I_n = I_u$     | Α  | 2000                                      |
| up to 440 V 50/60 Hz                        | I <sub>cm</sub> | kA | 69  |
| t = 1 s                                     | I <sub>cw</sub> | kA | 65  |
| t = 3 s                                     | I <sub>cw</sub> | kA | 40  |

## Notes

Including rear connection main terminals and secondary terminal blocks according to ordered breaker options.

Note concerning the product

Cassette needs to be ordered separately.

## **Technical data**

| _    |   |   |   |
|------|---|---|---|
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| General   |                  |      |                                  |  |
|---|------------------|------|----------------------------------|--|
| Standards   |                  |      | IEC/EN 60947                     |  |
| Ambient temperature   |                  |      |                                  |  |
| Storage   | 9                | °C   | -40 - +70                        |  |
| Operating (open)  |                  | °C   | -25 - +70                        |  |
| Mounting position   |                  |      | 30° 30° 30° 30°                  |  |
| Utilization category  |                  |      | В                                |  |
| Degree of Protection  |                  |      | IP20, IP55 with protective cover |  |
| Direction of incoming supply                                  |                  |      | as required                      |  |
| Main conducting paths   |                  |      |                                  |  |
| Rated current = rated uninterrupted current                   | $I_n = I_u$      | Α    | 2000                             |  |
| Rated uninterrupted current at 50 °C                          | I <sub>u</sub>   | Α    | 2000                             |  |
| Rated uninterrupted current at 60 °C                          | I <sub>u</sub>   | Α    | 1800                             |  |
| Rated uninterrupted current at 70 °C                          | I <sub>u</sub>   | Α    | 1650                             |  |
| Rated impulse withstand voltage                               | U <sub>imp</sub> | V AC | 8000                             |  |
| Rated operational voltage                                     | U <sub>e</sub>   | V AC | 690                              |  |
| Use in IT electrical power networks up to U = $440 \text{ V}$ | I <sub>IT</sub>  | kA   | 32                               |  |
| Overvoltage category/pollution degree                         |                  |      | III/3                            |  |
| Rated insulation voltage                                      | Ui               | V    | 1000                             |  |
| Switching capacity  |                  |      |                                  |  |
| Rated short-circuit making capacity                           | I <sub>cm</sub>  |      |                                  |  |
| up to 440 V 50/60 Hz  | I <sub>cm</sub>  | kA   | 69                               |  |
| up to 690 V 50/60 Hz  | I <sub>cm</sub>  | kA   | 143                              |  |
| Rated short-time withstand current 50/60 Hz                   |                  |      |                                  |  |

| t = 1 s  | I <sub>cw</sub> | kA     | 65    |
|--|-----------------|--------|-------|
| t=3s   | I <sub>cw</sub> | kA     | 40    |
| Operating times                                  |                 |        |       |
| Closing delay via spring release                 |                 | ms     | 35    |
| Break times                                      |                 | ms     | 40    |
| Total opening delay via shunt release            |                 | ms     | 30    |
| Total opening delay via undervoltage release     |                 | ms     | 35/70 |
| Maximum operating frequency                      |                 | Ops./h |       |
| Maximum operating frequency                      | Operations/h    |        | 60    |
| Heat dissipation at rated current I <sub>n</sub> |                 |        |       |
| Fixed mounting                                   |                 | W      | 280   |
| Withdrawable units (switch with cassette)        |                 | W      | 560   |
| Weight   |                 |        |       |
| Fixed mounting                                   |                 |        |       |
| 3-pole   |                 | kg     | 43    |
| 4-pole   |                 | kg     | 54    |
| Withdrawable                                     |                 |        |       |
| 3-pole   |                 | kg     | 48    |
| 4-pole   |                 | kg     | 62    |
| Cassette   |                 |        |       |
| 3 pole   |                 | kg     | 34    |
| 4 pole   |                 | kg     | 38    |
| Terminal conscition                              |                 |        |       |

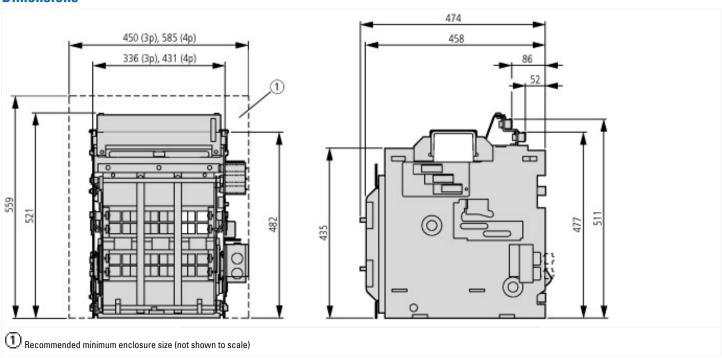
**Terminal capacities** 

| Copper bar         |    |   |
|--------------------|----|---|
| Fixed mounting     |    |   |
| Black              | mm | 3 x 5 x 100   |
| Withdrawable units |    |   |
| Black              | mm | 3 x 5 x 100   |
|                    |    | Permissible continuous current for circuit-breakers operating in switchboards at various internal ambient temperatures. The switchboard's internal ambient temperature should be estimated using the calculation methods of IEC regulation. |

Design verification as per IEC/EN 61439

| · · · · · · · · · · · · · · · · · · ·  |   |    |     |
|--|---|----|-----|
| Technical data for design verification |   |    |     |
| Operating ambient temperature min.     | · | °C | -25 |
| Operating ambient temperature max.     | C | °C | 70  |

## **Dimensions**



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