

Switch-disconnector, 4p, 4000A, fixed

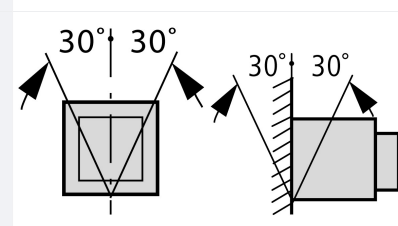
Part no. **IN40H4-40F**  
 Catalog No. **124192**

**Delivery program**

|  |             |    |   |
|--|-------------|----|---|
| Product range  |             |    | Air circuit-breakers/switch-disconnectors |
| Product range  |             |    | Open switch-disconnectors                 |
| Current Range  |             |    | 4000 to 6300 A                            |
| Protective function  |             |    | without protection                        |
| Installation type  |             |    | Fixed                                     |
| Construction size  |             |    | IN40                                      |
| Standard/Approval  |             |    | IEC                                       |
| Number of poles  |             |    | 4 pole                                    |
| Degree of Protection   |             |    | IP20, IP55 with protective cover          |
| Rated current = rated uninterrupted current  | $I_n = I_u$ | A  | 4000                                      |
| up to 440 V 50/60 Hz   | $I_{cm}$    | kA | 138                                       |
| t = 1 s  | $I_{cw}$    | kA | 100                                       |
| t = 3 s  | $I_{cw}$    | kA | 65  |
| <b>Notes</b>   |             |    |   |
| Including rear connection main terminals and secondary terminal blocks according to ordered breaker options. |             |    |   |

**Technical data**

**General**

|                              |          |    |  |
|------------------------------|----------|----|--|
| Standards                    |          |    | IEC/EN 60947   |
| Ambient temperature          |          |    |  |
| Storage                      | $\theta$ | °C | -40 - +70  |
| Operating (open)             |          | °C | -25 - +70  |
| Mounting position            |          |    |  |
| Utilization category         |          |    | B  |
| Degree of Protection         |          |    | IP20, IP55 with protective cover   |
| Direction of incoming supply |          |    | as required  |

**Main conducting paths**

|   |             |      |       |
|---|-------------|------|-------|
| Rated current = rated uninterrupted current         | $I_n = I_u$ | A    | 4000  |
| Rated uninterrupted current at 50 °C                | $I_u$       | A    | 4000  |
| Rated uninterrupted current at 60 °C                | $I_u$       | A    | 4000  |
| Rated uninterrupted current at 70 °C                | $I_u$       | A    | 3776  |
| Rated impulse withstand voltage                     | $U_{imp}$   | V AC | 12000 |
| Rated operational voltage                           | $U_e$       | V AC | 690   |
| Use in IT electrical power networks up to U = 440 V | $I_{IT}$    | kA   | 48    |
| Overvoltage category/pollution degree               |             |      | III/3 |
| Rated insulation voltage                            | $U_i$       | V    | 1000  |

**Switching capacity**

|   |          |    |     |
|---|----------|----|-----|
| Rated short-circuit making capacity         | $I_{cm}$ |    |     |
| up to 440 V 50/60 Hz                        | $I_{cm}$ | kA | 138 |
| up to 690 V 50/60 Hz                        | $I_{cm}$ | kA | 220 |
| Rated short-time withstand current 50/60 Hz |          |    |     |
| t = 1 s                                     | $I_{cw}$ | kA | 100 |

|  |                 |        |       |
|--|-----------------|--------|-------|
| t = 3 s  | I <sub>cw</sub> | kA     | 65    |
| <b>Operating times</b>                                 |                 |        |       |
| 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 |
| <b>Maximum operating frequency</b>                     |                 | Ops./h |       |
| Maximum operating frequency                            | Operations/h    |        | 60    |
| <b>Heat dissipation at rated current I<sub>n</sub></b> |                 |        |       |
| Fixed mounting   |                 | W      | 560   |
| Withdrawable units (switch with cassette)              |                 | W      | 1100  |

### Weight

|                       |  |    |     |
|-----------------------|--|----|-----|
| <b>Fixed mounting</b> |  |    |     |
| 3-pole                |  | kg | 83  |
| 4-pole                |  | kg | 105 |
| <b>Withdrawable</b>   |  |    |     |
| 3-pole                |  | kg | 98  |
| 4-pole                |  | kg | 121 |
| <b>Cassette</b>       |  |    |     |
| 3 pole                |  | kg | 55  |
| 4 pole                |  | kg | 64  |

### Terminal capacities

|   |  |    |              |
|---|--|----|--------------|
| <b>Copper bar</b>   |  |    |              |
| <b>Fixed mounting</b>   |  |    |              |
| Black   |  | mm | 4 x 10 x 100 |
| <b>Withdrawable units</b>   |  |    |              |
| Black   |  | mm | 4 x 10 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

|   |  |    |     |
|---|--|----|-----|
| <b>Technical data for design verification</b> |  |    |     |
| Operating ambient temperature max.            |  | °C | -25 |
| Operating ambient temperature max.            |  | °C | 70  |