



10000

**DATA SHEET**  
Article number : 09900008



**switch-disconnectors**  
**DHS 4-o8o**  
*compact switches to isolate the supply for system parts*

**Function**  
Switch-disconnectors and main switches are able to separate electrical devices or even system parts from the mains completely at all poles for maintenance purposes, even under load or overload. For safe, reliable disconnection, the isolating distances run from pole to pole and also from input to output, importantly. Main switches are prescribed for these purposes in some areas by the technical connection conditions of the electrical supply company. Devices in the DHS 4 family are load isolators and main switches with a four-pole design, for which the N-contact is switched on in advanced mode and switched off in lagging mode. Their design makes them excellent for integration in the optics of the DFS residual current circuit-breakers. The DHS devices can be extended by an auxiliary or error signal switch, which allows for the display and further processing of the switch position.

**Features**  
high short-circuit resistance and high switching capacity, double-sided two-tier terminals for large conductor cross-section and busbars, switch position indicator

**Mounting**  
quick fastening to mounting rail, any installation position

**Applications**  
especially suitable for use in main distribution boards in power supplies to large areas, such as campsites, marinas, allotment gardens and showrooms.

**Notes**  
In practice, load switches, disconnectors and switch-disconnectors are used as main switches under EN 60947-3. The load switch must switch on, direct and switch off currents under operating conditions in the circuit (including a fixed operation-compatible overload). When switched off, no isolating function is required. A load switch is therefore not suitable for safe disconnection as understood in international installation regulations. Disconnectors must meet the required criteria for an isolating function when switched off, but must switch only currents of insignificant size during operation. The combination of both designs is known as a switch-disconnector, which combines both properties in one and can therefore be used universally for the safe release of electrical systems.

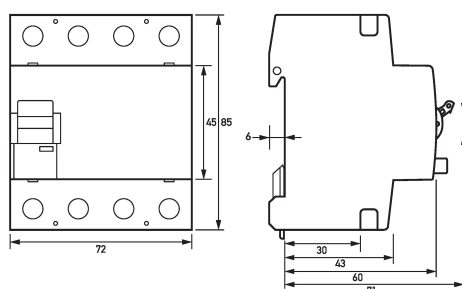
**Accessories**  
automatic reclosing devices DFA, terminal caps KA, auxiliary switches DHi, restart locks DFS WES, software DBS

**Technical data**

|                                     |                         |
|-------------------------------------|-------------------------|
| Series                              | DHS 4                   |
|                                     | load circuit            |
| Specification                       | load disconnect contact |
| Polzahl (gesamt)                    | 4                       |
| Rated voltage (AC)                  | 230 V, 400 V            |
| Rated current (AC)                  | 80 A                    |
| Rated short-circuit current         | 10 kA                   |
| max. Total rated switching capacity | 10 kA                   |
| Rated insulation voltage            | 400 V                   |
| Rated impulse withstand voltage     | 4 kV                    |
| Rated frequency                     | 50 Hz, 60 Hz            |
| Allowed utilization category        | AC-22a                  |
| Current heat loss per current path  | 5 W                     |
| Thermal Backup-fuse OCPD            | 80 A                    |
| Short-circuit backup-fuse SCPD      | 125 A                   |
| Back-up fuse type                   | gG                      |

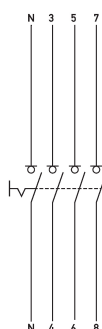
|                                                         | screw-type terminal top and bottom (load circuit)                                                       |
|---------------------------------------------------------|---------------------------------------------------------------------------------------------------------|
| Neutral conductor position                              | left                                                                                                    |
| Connection C1 Maximum number of conductors per terminal | 2 (conductors of same type and cross-section)                                                           |
| Cross section solid                                     | 1-wire: 1.5 mm <sup>2</sup> ... 50 mm <sup>2</sup> ; 2-wire: 1.5 mm <sup>2</sup> ... 16 mm <sup>2</sup> |
| Connecting capacity flexible                            | 1-wire: 1.5 mm <sup>2</sup> ... 35 mm <sup>2</sup> ; 2-wire: 1.5 mm <sup>2</sup> ... 16 mm <sup>2</sup> |
| Cross section stranded                                  | 1-wire: 1.5 mm <sup>2</sup> ... 50 mm <sup>2</sup> ; 2-wire: 1.5 mm <sup>2</sup> ... 16 mm <sup>2</sup> |
| Cross section AWG, solid                                | 15 ... 1                                                                                                |
| Cross section AWG, stranded                             | 15 ... 1                                                                                                |
| Cross section AWG, flexible                             | 15 ... 1                                                                                                |
|                                                         | <b>General data</b>                                                                                     |
| Storage temperature                                     | -40 °C ... 70 °C                                                                                        |
| Ambient temperature                                     | -25 °C ... 40 °C                                                                                        |
| Climate resistance                                      | as per IEC 60068-2-30: damp/heat, cyclical (25°C/55°C; 93%/97% rel. humidity, 28 cycles)                |
| Housing type                                            | distribution board housing                                                                              |
| Installation type                                       | Mounting rail (35 mm)                                                                                   |
| Housing material                                        | thermoplastic                                                                                           |
| Protection class                                        | IP20                                                                                                    |
| sealable                                                | true                                                                                                    |
| Width                                                   | 72 mm                                                                                                   |
| Height                                                  | 85 mm                                                                                                   |
| Depth                                                   | 75 mm                                                                                                   |
| Installation depth                                      | 69 mm                                                                                                   |
| Module widths                                           | 4                                                                                                       |
| Weight                                                  | 0.368 kg                                                                                                |
| Design requirements/Standards                           | EN 60947-3, EN 60068-2-30                                                                               |

## Dimensions



Dimensioned drawing switch-disconnectors DHS 4-o80

## Wiring example



Wiring example switch-disconnectors DHS 4-o80