DATA SHEET

switch-disconnectors

DHS 4-063

compact switches to isolate the supply for system parts

Article number 09900007

10000

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

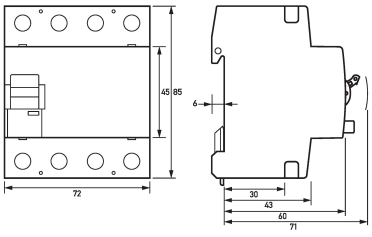
automatic reclosing devices DFA, terminal caps KA, auxiliary switches DHi, restart locks DFS WES, software DBS

Technical Data

Technical Data	DHS 4-063
Series	DHS 4
Handling	complete device in housing
	load circuit
Specification	load disconnect contact
Number of poles (total)	4
Rated voltage (AC)	230 V, 400 V
Rated current (AC)	63 A
Rated short-circuit current	10 kA
max. Total rated switching capacity	10 kA
Rated insulation voltage	400 V

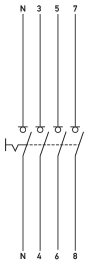
Technical Data	DHS 4-063
Rated impulse withstand voltage	4 kV
Rated frequency	50 Hz, 60 Hz
Allowed utilization category	AC-22a
Current heat loss per current path	3.1 W
Thermal Backup-fuse OCPD	63 A
Short-circuit backup-fuse SCPD	100 A
Back-up fuse type	gG
	screw-type terminal top and bottom (load circuit)
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 mm² ... 50 mm²; 2-wire: 1.5 mm² ... 16 mm²
Connecting capacity flexible	1-wire: 1.5 mm² ... 35 mm²; 2-wire: 1.5 mm² ... 16 mm²
Cross section stranded	1-wire: 1.5 mm² ... 50 mm²; 2-wire: 1.5 mm² ... 16 mm²
Cross section AWG, solid	15 ... 1
Cross section AWG, stranded	15 ... 1
Cross section AWG, flexible	15 ... 1
	General data
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	0.385 kg
Design requirements/Standards	EN 60947-3, EN 60068-2-30

Dimensions



Dimensional drawing Group view

Wiring example



Wiring diagram