



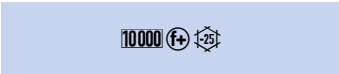
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DATA SHEET

switch-disconnectors

DHS 4-125 FANA24DC

Compact switches to isolate the supply for system parts with EMERGENCY SHUT-OFF function and remote actuator
Article number 09900018



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 FANA variant DHS 4 allows devices to be switched on and off remotely. Control elements, such as push-buttons for disconnecting the switch-disconnector in emergency situations, can also be connected via the compact, factory-installed additional module. It is even possible to parallel wire multiple DHS 4s. The LED integrated in the switch-disconnector not only indicates tripping by a control element but also any possible wire breakage. In this state, it is not possible to reclose the switch-disconnector.

Features

With emergency switching off function for tripping or disconnection by means of control elements, Monitoring of emergency switching off function for wire breakage and signalling by LED, In the event of a power failure, the EMERGENCY OFF function does not trigger, High short-circuit resistance and high switching capacity, Double-sided two-tier terminals for large conductor cross-section and busbars

Mounting

quick fastening to mounting rail , supply from top , any installation position

Applications

Particularly suitable for facilities such as training rooms and classrooms. The remote operator with emergency switching off function enables the power supply to be switched on again, e.g. using a key switch, without having to leave the room and/or open the electrical distribution board.

Notes

According to EN 60947-3, switch-disconnectors combine the function of a load-break switch that can switch on, conduct and switch off a current (including a specified operational overload) under operating conditions, as well as the function of a disconnecter that ensures safe disconnection by means of a sufficient contact gap when switched off. The DHS 4 provides FELV (functional extra-low voltage) to the emergency shut-off circuit. For this reason, the emergency shut-off circuit must be rated for a voltage of 230 VAC. The DHS 4 can also be locked with the light disc. The remote actuator must be supplied externally with 24 VDC.

Accessories

terminal caps KA

Technical Data

Technical Data	DHS 4-125 FANA24DC
Series	DHS FANA
Handling	complete device in housing auxiliary device (Emergency shut-off device)
Additional device AE1 operating voltage	50 V ... 440 V (AC)
Auxiliary device AE1 Voltage of the monitoring circuit	12 V (DC)

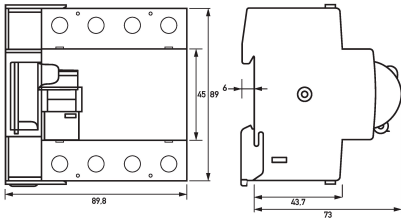
Subject to technical changes

Technical Data	DHS 4-125 FANA24DC
Auxiliary device AE1 Voltage of the monitoring circuit	max. 1 mA (DC)
max. Auxiliary device AE1 Cable length of the monitoring circuit	500 m
	auxiliary device (Remote actuator)
Auxiliary device AE2 version	Motor drive
Additional device AE2 operating voltage	24 V (21.6 V ... 26.4 V) (DC)
max. Additional device AE2 current consumption	2 A
	Control input (remote actuator)
Rated voltage (DC)	24 V (21.6 V ... 26.4 V)
Bounce time of push buttons	10 ms
min. Pulse duration control input	60 ms
	load circuit
Specification	load disconnect contact
Number of poles (total)	4
min. Contact opening	4 mm
Rated voltage (AC)	230 V, 400 V
Rated current (AC)	125 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	11.2 W
Thermal Backup-fuse OCPD	80 A
Short-circuit backup-fuse SCPD	125 A
Back-up fuse type	gG
	Remote actuator feedback output
Specification	semiconductor
Rated voltage (DC)	24 V (21.6 V ... 26.4 V)
Rated current (DC)	max. 0.2 A
Rated power	max. 4.8 VA
	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 ² ... 50 mm ² ; 2-wire: 1.5 mm ² ... 16 mm ²
Connecting capacity flexible	1-wire: 1.5 mm ² ... 35 mm ² ; 2-wire: 1.5 mm ² ... 16 mm ²
Cross section stranded	1-wire: 1.5 mm ² ... 50 mm ² ; 2-wire: 1.5 mm ² ... 16 mm ²
Cross section AWG, solid	15 ... 1
Cross section AWG, stranded	15 ... 1
Cross section AWG, flexible	15 ... 1
Tightening torque	2.5 Nm ... 3 Nm
	screw-type terminal (Emergency shut-off device, Remote actuator)
Clamping area	0.3 mm ² ... 1.5 mm ²
Cross section AWG, solid	22 ... 16

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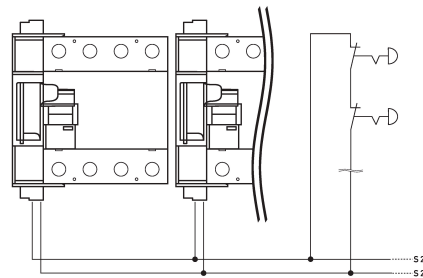
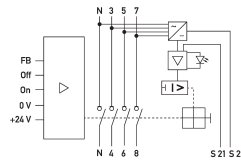
Technical Data	DHS 4-125 FANA24DC
Cross section AWG, stranded	22 ... 16
Cross section AWG, flexible with ferrule	22 ... 16
Tightening torque	max. 0.25 Nm
General data	
max. Operating altitude above MSL	2000 m
Mechanical endurance	min. 5000 switching cycles
Electrical endurance	min. 2000 switching cycles
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	89.8 mm
Height	85 mm
Depth	75 mm
Installation depth	69 mm
Module widths	5
Weight	0.549 kg
Design requirements/Standards	EN 60947-3, EN 60068-2-30, EN 63024, EN 55014

Dimensions



Dimensional drawing Group view

Wiring example



Wiring diagram

Wiring diagram additional file

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