



DATA SHEET
automatic reclosing devices
DFA 2-1



for RCCB DFS 2/4 up to 63 A, 24 V AC/DC, switch-on attempts: 1
Article number 09100112



Function

Automatic reclosing devices (ARDs) or remote actuators are generally used to increase system availability. Usually flange-mounted to the side of the corresponding circuit-breaker devices, they are able to reclose or open these devices remotely. According to the relevant device standard, ARDs must be capable of blocking if an installation fault is detected. In this case, remote switching is not possible and manual intervention is necessary. Series DFA devices are only designed for operation on Doepke residual current circuit-breakers DFS 2 or DFS 4. Depending on the design, the DFA devices are operated with different supply voltages, are fitted with relays to report the switching or locked status and either do not carry out any switch-on attempts or perform one or three attempts. The DFA devices are mounted to the RCCBs on the left. The number of restart attempts is fixed at "1". The switch-on attempts in automatic mode are performed 15 seconds after a trip. This one can be decommissioned using a rotary switch on the housing cover so that no inadvertent remote operation, e.g. during maintenance work on the distribution board, is possible. This variant is supplied power from a voltage source of either 24 V AC or DC. Remote tripping through a residual current simulation is also possible. The current switch position of the protective switch ("switched on", "tripped" or "switched off") is indicated by three integrated relay switching contacts.

Features

retro-fittable remote actuator for Doepke residual current circuit-breakers of series DFS 2 and DFS 4, variants for different power supplies, compact design

Mounting

mounting by clamping to the left of the residual current circuit-breaker , quick fastening to mounting rail, any installation position

Applications

Remote actuators can be used anywhere where electrical installation are difficult to access or where high system availability should be achieved, This might be on agricultural premises, in small wind power stations, photovoltaic installations, charging stations for electric vehicles, pump stations, sewage treatment plants and telecommunications systems.

Notes

According to the standard, automatic restart is only permitted in areas where only trained electricians have access. The remote actuator does not affect the function of the residual current circuit-breaker.

Accessories

doorbell transformers RK

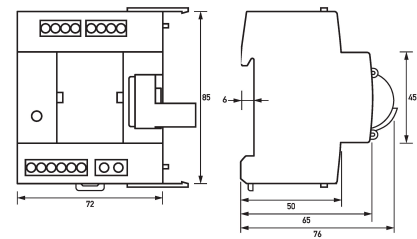
Technical Data

Technical Data	DFA 2-1
Series	DFA 2 - 1
Test residual operating current adjustable	0.03 A, 0.1 A, 0.3 A, 0.5 A
Specification drive mechanism	Motor drive
max. Rated current main contact unit	63 A
Number of automatic switch-on attempts	1
Remote release	true
Remote disconnection	true
Remote connection	true

Technical Data	DFA 2-1
Mounting side	left
Number of (n.o, n.c., change-over)	3 0 0
Operating voltage (AC)	24 V (21.6 V ... 30 V)
Operating voltage (DC)	24 V (21.6 V ... 26.4 V)
Current consumption (AC)	0.07 A ... 0.64 A
Current consumption (DC)	0.035 A ... 0.5 A
Operating frequency	50 Hz
Display (status output)	
Number	1
Type	LED (green)
control input	
Rated voltage (DC)	24 V
Tolerance of rated voltage	-10 % ... 10 %
Rated current I _n	1 mA
Rated power	0.024 VA
Bounce time of push buttons	10 ms
min. Pulse duration control input	60 ms
switching output	
Specification	relays
Rated voltage (AC)	24 V
Rated voltage (DC)	24 V
Rated current (AC)	1 A
Rated current (DC)	1 A
Rated power	max. 24 VA
mains relay output	
Specification	relays
Rated voltage (AC)	230 V ... 250 V
Rated current (AC)	0.03 A ... 0.5 A
Rated frequency	50 Hz
max. Switching time	400 ms
Output for external operating display	
Specification	semiconductor
Rated voltage (DC)	24 V
Tolerance of rated voltage	-10 % ... 10 %
Rated current (DC)	0.05 A
screw-type terminal top and bottom (control input, switching output, mains relay)	
Clamping area	0.4 mm ² ... 2.5 mm ²
Tightening torque	max. 0.64 Nm
General data	
Duty cycle	continuous operation
Recovery time	15 s
Operating position	optional
Ambient temperature	-25 °C ... 60 °C
Permissible humidity	max. 85 %
Housing type	distribution board housing
Installation type	Mounting rail (35 mm), Device extension
Housing material	thermoplastic
Protection class	IP20
Width	72 mm

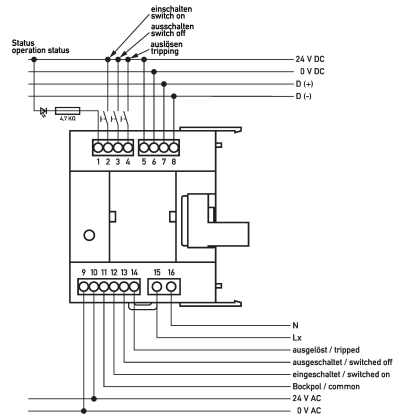
Technical Data		DFA 2-1
Height		85 mm
Depth		76 mm
Installation depth		70 mm
Module widths		4
Weight		0.4 kg
Design requirements/Standards		EN 55014, EN 63024

Dimensions



Dimensional drawing Group view

Wiring example



Wiring diagram