

# Accessories for MCCBs Ex9MV2S



- Accessories for Ex9MV2S line devices
- Auxiliary contacts synchronous with main contacts
- Signal contacts active on electrical tripping of the circuit breaker (tripping signal contacts)
- Shunt trip releases
- Rotary handles

Accessories suitable for PV Moulded Case Circuit Breakers Ex9MV2S. It is possible to supplement or modify functions of a basic circuit breaker by the installation of suitable accessories.

Circuit breakers can be equipped with auxiliary contacts AX22V (or 2AX22V) and one unit of signal contact AL22 or a combination of both AX+AL22V. Accessories are mounted into specific positions, for this reason parts mounted on the right side are named with a -R in the product name (2AX22VR). One unit of shunt trip release SHT22VR can be installed in the breaker.

The circuit breakers can also be equipped with an extended rotatory handle for different operation of the toggle, e.g. for door coupling.

Mounting of the device onto plate can be done directly.

# Accessories for MCCBs Ex9MV2S

## Auxiliary and signal contact units

- Auxiliary contacts synchronous with main contacts of the circuit breaker
- Signal contacts active on electrical tripping of the circuit breaker (tripping signal contacts)



| Function           | Suitable MCCB | Contacts | Article No. | Type     | Packing |
|--------------------|---------------|----------|-------------|----------|---------|
| Auxiliary          | Ex9MV2S       | 1 CO     | 110199      | AX22V    | 1/8     |
| Auxiliary          | Ex9MV2S       | 2 CO     | 110200      | 2AX22V   | 1/8     |
| Signal             | Ex9MV2S       | 1 CO     | 110201      | AL22V    | 1/8     |
| Auxiliary + Signal | Ex9MV2S       | 2 CO     | 110202      | AX+AL22V | 1/8     |
| Auxiliary          | Ex9MV2S       | 1 CO     | 110206      | AX22VR   | 1/8     |
| Auxiliary          | Ex9MV2S       | 2 CO     | 110207      | 2AX22VR  | 1/8     |

## Shunt trip releases

- It is possible to use one unit of shunt trip release SHT22VR on the right side of the MCCB



| Aux. cont. | Suitable MCCB | Operating Voltage | Article No. | Type           | Packing |
|------------|---------------|-------------------|-------------|----------------|---------|
| -          | Ex9MV2S       | 24V DC            | 110208      | SHT22VR DC24V  | 1/8     |
| -          | Ex9MV2S       | 230V AC           | 110209      | SHT22VR AC230V | 1/8     |
| -          | Ex9MV2S       | 400V AC           | 110210      | SHT22VR AC400V | 1/8     |

## Extended rotary handles

- Rotary handle with extension shaft (extension shaft can be shortened)
- Scope of delivery: mechanism block, extension shaft, rotary handle
- Indication of connected breaker status ON-OFF-TRIP
- Can be locked in ON and OFF position



| Suitable MCCB | Length | Colour | Article No. | Type  | Packing |
|---------------|--------|--------|-------------|-------|---------|
| Ex9MV2S       | 300 mm | Black  | 110211      | ERH21 | 1       |

# Technical Data Ex9MV2S Accessories

## Accessories for Moulded Case Circuit Breakers Ex9MV2S

### Auxiliary and signal contact units AX22V, AL22V and combinations

#### General parameters

Contact units for auxiliary and signal contact functions are suitable for all MCCB frame sizes

Auxiliary contacts synchronous with main contacts of the circuit breaker

Signal contacts active on electrical tripping of the circuit breaker (tripping signal contacts)

With connection wires

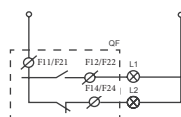
#### Electrical parameters

|   | AX22V                       | 2AX22V             | AL22V              | AX+AL22V                | AX22VR             | 2AX22VR            |
|---|-----------------------------|--------------------|--------------------|-------------------------|--------------------|--------------------|
| Contacts  | 1 change-over (CO)          | 2 change-over (CO) | 1 change-over (CO) | 2 change-over (CO)      | 1 change-over (CO) | 2 change-over (CO) |
| Contact function                                  | auxiliary left              | auxiliary left     | signal left        | auxiliary + signal left | auxiliary right    | auxiliary right    |
| Maximum op. voltage U                             | AC400V/DC220V               |                    |                    |                         |                    |                    |
| Rated frequency                                   | 50/60 Hz                    |                    |                    |                         |                    |                    |
| Rated op. current I <sub>e</sub> AC               | 1.5A                        |                    |                    |                         |                    |                    |
| Rated op. current I <sub>e</sub> DC               | 0.15A                       |                    |                    |                         |                    |                    |
| Rated thermal current I <sub>th</sub>             | 3 A                         |                    |                    |                         |                    |                    |
| Rated op. current I <sub>e</sub> , ut. cat. AC-15 | 5 A (240 V), 2 A (415 V)    |                    |                    |                         |                    |                    |
| Rated op. current I <sub>e</sub> , ut. cat. DC-13 | 1 A (110 V), 0.25 A (220 V) |                    |                    |                         |                    |                    |
| Rated insulation voltage U <sub>i</sub>           | 400 V                       |                    |                    |                         |                    |                    |

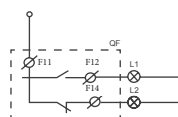
#### Mechanical parameters

|              | AX22V                          | 2AX22V | AL22V | AX+AL22V | AX22VR | 2AX22VR |
|--------------|--------------------------------|--------|-------|----------|--------|---------|
| Suitable for | Ex9MV2S                        |        |       |          |        |         |
| Connection   | Equipped with connection wires |        |       |          |        |         |

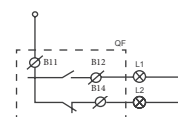
#### Wiring diagrams



2AX22V  
2AX22VR



AX22V  
AX22VR  
AX+AL22V



AL22V  
AX+AL22V

# Technical Data Ex9MV2S Accessories

## Accessories for Moulded Case Circuit Breakers Ex9MV2S

### Shunt trip releases SHT22VR

#### General parameters

It is possible to use one unit of shunt trip release SHT22VR on the right side of the MCCB

Can be used for remote switch off

With connection wires

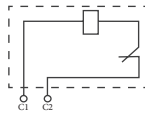
#### Electrical parameters

|  | <b>SHT22VR</b>                  |
|--|---------------------------------|
| Rated operating voltage $U_e$<br>(according to type) | 24 V DC<br>230 V AC<br>400 V AC |
| Rated frequency                                      | 50/60 Hz                        |
| Rated insulation voltage $U_i$                       | 400 V                           |
| Tripping time  | $\leq 500$ ms                   |

#### Mechanical parameters

|              | <b>SHT22VR</b>                 |
|--------------|--------------------------------|
| Suitable for | Ex9MV2S                        |
| Connection   | Equipped with connection wires |

#### Wiring diagrams



SHT22VR

# Technical Data Ex9MV2S Accessories

## Accessories for Moulded Case Circuit Breakers Ex9MV2S

### Extended rotary handles ERH-1

#### General parameters

Rotary handle with extension shaft

Scope of delivery: mechanism block, extension shaft, rotary handle

Can be locked in ON and OFF position with padlocks (not in the scope of delivery)

Extension shaft can be shortened

#### Electrical parameters

|                      |              |
|----------------------|--------------|
|                      | <b>ERH-1</b> |
| Degree of protection | IP20         |

#### Mechanical parameters

|                               |                                      |
|-------------------------------|--------------------------------------|
|                               | <b>ERH-1</b>                         |
| Suitable for                  | Ex9MV2S                              |
| Length of the extension shaft | 300 mm (min 50 mm if shorted)        |
| Indication                    | Connected breaker status ON-OFF-TRIP |
| Mounting                      | Directly onto breaker                |
| Toggle colour                 | Black                                |

#### Dimensions

