



**PAGE 19-2**

**ATK20**  
• 24VDC auxiliary supply.



**PAGE 19-3**

**ATK40**  
• 230VAC auxiliary supply.

- *Microprocessor supervision of functions*
- *Diagnostics*
- *RMS measurements and control of line voltage.*



**Automatic transfer switches**

	SEC.	PAGE
ATK20 series .....	19-	2
ATK40 series .....	19-	3

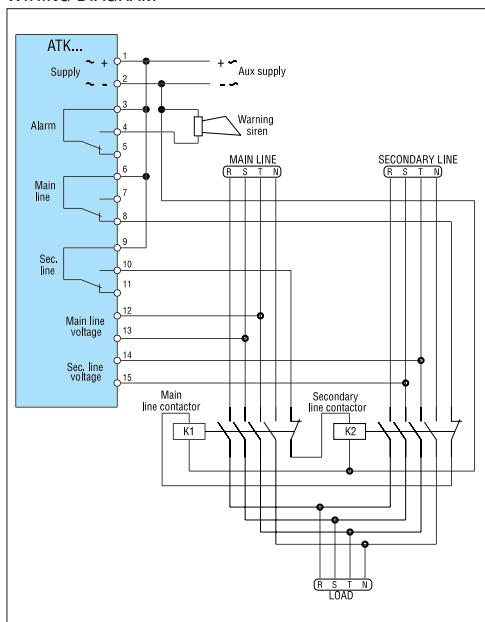
**Dimensions**



ATK20

Order code	Description	Qty per pkg	Weight
		n°	[kg]
ATK20	Automatic transfer switch, 24VDC auxiliary supply	1	0.700
31 PACR	Front IP54 protective cover	1	0.107

## WIRING DIAGRAM

**General characteristics**

The automatic transfer switch "ATK" is used for the automatic switching of the load from the MAIN LINE to a stand-by or emergency SECONDARY LINE.

It is made of a single unit in an insulated housing and has two outputs for the "automatic" and/or "manual" control of contactors or circuit breakers.

The transfer switch has the following main features:

- AUT-MAN-TEST-OFF operating mode
- Microprocessor supervision of functions
- Adjustable tripping limits and time
- Galvanic isolation between control network and internal circuits.

**MANUAL TRANSFER**

This mode requires the direct manual operation by personnel and consents to the manual transfer from one source to another and vice versa.

**AUTOMATIC TRANSFER**

This mode automatically enables the switching between the two line sources, within a time period, adjustable between 0.5 and 120 seconds.

The control of the two line contactors or circuit breakers is achieved in a safe and reliable manner by means of a safety system with internal electric interlock of the ATK unit.

**Operational characteristics****AUXILIARY SUPPLY**

- Rated supply voltage: 24VDC (battery supply) or 17VAC
- Operating range: 0.7-1.35 Us for 24VDC; 0.8-1.2 Us for 17VAC
- Maximum power consumption: 3W at 24VAC; 3.9VA at 17VAC
- Maximum power dissipated: 3W at 24VDC; 2.8W at 17VAC
- Connection: permanent
- Immunity time for micro breakings (MPU circuit):  $\geq 200$ ms.

**VOLTAGE CONTROL**

- Rated voltage control: 100-500VAC
- Rated frequency: 50Hz or 60Hz
- Full scale measurement accuracy:  $\pm 1\% \pm 1$  digit
- True RMS network voltage control
- 1 input for MAIN line voltage measurement / control
- 1 input for SECONDARY line voltage measurement / control.

**OUTPUTS**

- 2 output relays, each with one changeover contact, for the control of the MAIN and SECONDARY line switching contactors or breakers
- 1 output relay, with 8A lth changeover contact, for alarm conditions.

**AMBIENT OPERATIONS CONDITIONS**

- Operating temperature: -10 to +60°C
- Storage temperature: -20 to +70°C.

**CONNECTIONS**

- Type of termination: fixed
- Maximum cable section: 2.5mm<sup>2</sup>; 12 AWG.

**HOUSING**

- Flush-mount 144x144mm housing
- Degree of protection:
  - Rear IP20
  - Front IP41 without protective cover
  - Front IP54 complete with protective cover.

**Setup**

The setup includes the following setting parameters:

- Maximum voltage limit for MAIN and SECONDARY lines
- Minimum voltage limit for MAIN and SECONDARY lines
- Min / Max voltage limit tripping delay for MAIN and SECONDARY lines
- Voltage within Min / Max limit delay for MAIN and SECONDARY lines
- Delay time for transfer / SECONDARY-MAIN lines interlock.

**Reference standards:**

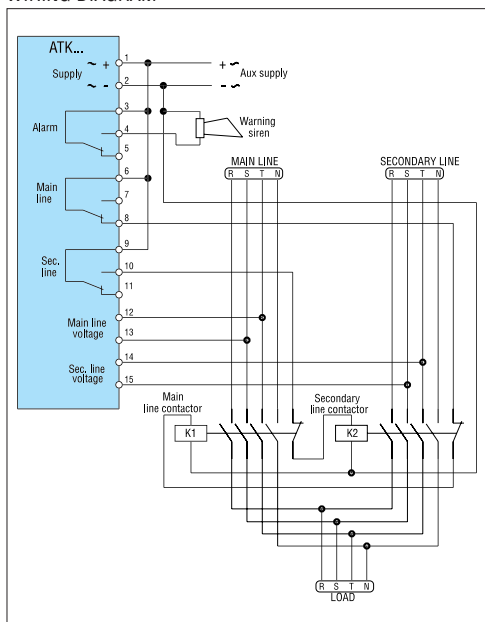
Compliant with: IEC/EN50081-1, IEC/EN50082-2, IEC/EN61010-1.



ATK40

Order code	Description	Qty per pkg	Weight
		n°	[kg]
ATK40	Automatic transfer switch, 230VAC auxiliary supply	1	0.900
31 PACR	Front IP54 protective cover	1	0.107

### WIRING DIAGRAM



### General characteristics

The automatic transfer switch “ATK” is used for the automatic switching of the load from the MAIN LINE to a stand-by or emergency SECONDARY LINE.

It is made of a single unit in an insulated housing and has two outputs for the “automatic” and/or “manual” control of contactors or circuit breakers.

The transfer switch has the following main features:

- AUT-MAN-TEST-OFF operating mode
- Microprocessor supervision of functions
- Adjustable tripping limits and time
- Galvanic isolation between control network and internal circuits.

### MANUAL TRANSFER

This mode requires the direct manual operation by personnel and consents to the manual transfer from one source to another and vice versa.

### AUTOMATIC TRANSFER

This mode automatically enables the switching between the two line sources, within a time period, adjustable between 0.5 and 120 seconds.

The control of the two line contactors or circuit breakers is achieved in a safe and reliable manner by means of a safety system with internal electric interlock of the ATK unit.

### Operational characteristics

#### AUXILIARY SUPPLY

- Rated supply voltage: 230VDC
- Operating range: 0.8-1.2 Us
- Maximum power consumption: 8VA
- Maximum power dissipated: 5.5W
- Connection: permanent
- Immunity time for micro breakings (MPU circuit):  $\geq 300$ ms.

#### VOLTAGE CONTROL

- Rated voltage control: 100-500VAC
- Rated frequency: 50Hz or 60Hz
- Full scale measurement accuracy:  $\pm 1\% \pm 1$  digit
- True RMS network voltage control
- 1 input for MAIN line voltage measurement / control
- 1 input for SECONDARY line voltage measurement / control.

#### OUTPUTS

- 2 output relays, each with one changeover contact, for the control of the MAIN and SECONDARY line switching contactors or breakers
- 1 output relay, with 8A lth changeover contact, for alarm conditions.

#### AMBIENT OPERATIONS CONDITIONS

- Operating temperature:  $-10$  to  $+60^\circ\text{C}$
- Storage temperature:  $-20$  to  $+70^\circ\text{C}$ .

#### CONNECTIONS

- Type of termination: fixed
- Maximum cable section:  $2.5\text{mm}^2$ ; 12 AWG.

#### HOUSING

- Flush-mount 144x144mm housing
- Degree of protection:
  - Rear IP20
  - Front IP41 without protective cover
  - Front IP54 complete with protective cover.

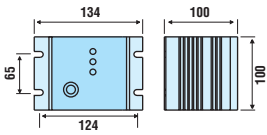
#### Setup

- The setup includes the following setting parameters:
- Maximum voltage limit for MAIN and SECONDARY lines
  - Minimum voltage limit for MAIN and SECONDARY lines
  - Min / Max voltage limit tripping delay for MAIN and SECONDARY lines
  - Voltage within Min / Max limit delay for MAIN and SECONDARY lines
  - Delay time for transfer / SECONDARY-MAIN lines interlock.

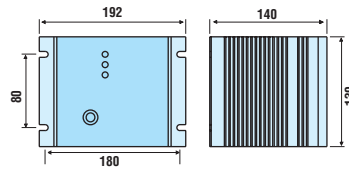
#### Reference standards:

Compliant with: IEC/EN50081-1, IEC/EN50082-2, IEC/EN61010-1.

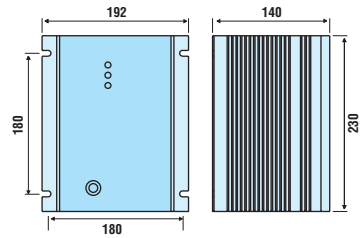
**BCE 0312 - BCE 2V524**



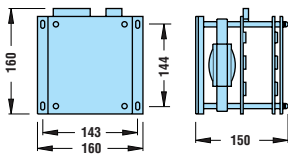
**BCE 0612 - BCE 0524**



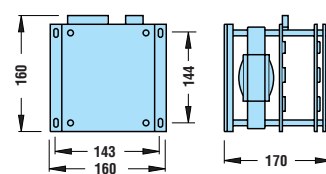
**BCE 1212 - BCE 1024**



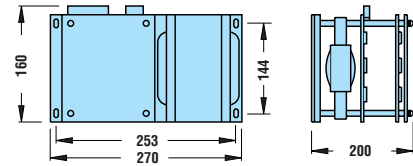
**PS 0612**



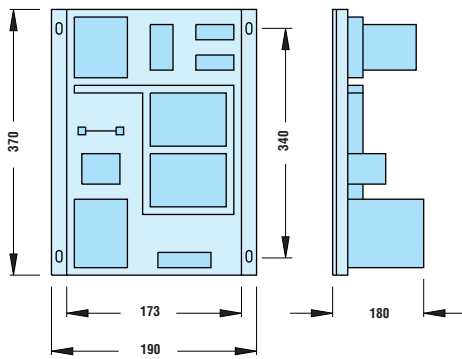
**PS 0624**



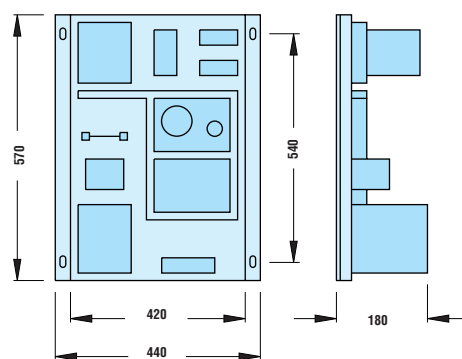
**PS 0648 - PS 1012/24**



**PS 1048**



**PS 1512/24/48**



## Automatic transfer switches

**ATK...**

