- Supervision of two three-phase supply lines
- Emergency demand supervision for stand-by generating set
- Control of contactors, motorised circuit breakers or motorised changeover switches
- Event logging
- TRMS measurements of voltage values
- Microprocessor remote control and supervision
- RS232 and RS485 ports
- Modbus<sup>®</sup>-RTU and *Modbus<sup>®</sup>-ASCII communication protocols*
- Real time clock.



# **Automatic transfer s** Automatic transfer switch con Automatic transfer switch con





### ATL10

• Automatic transfer switch controller with RS232 port

PAGE 19-2

- DC auxiliary supply
- 6 programmable digital inputs
- 6 programmable relay outputs.





- ATL20
- · Automatic transfer switch controller with RS232 port
- AC/DC auxiliary supply
- 8 digital inputs; 6 programmable
- 7 relay outputs; 5 programmable.

### ATL30

- Automatic transfer switch controller with RS232 and RS485 ports
- Real time clock
- AC/DC auxiliary supply
- 8 digital inputs; 6 programmable
- 7 relay outputs; 5 programmable.



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Automatic transfer switch controllers		Page
Automatic transfer switch controller ATL10 type		
Automatic transfer switch controller ATL20 and ATL30 type	19-	3
Accessories	19-	3

ATL10

# Automatic transfer switch controllers





Order code	Description	Qty per pkg	Weight
		n°	[kg]
ATL10	Automatic transfer switch controller with RS232 port; 96x96mm	1	0.480

# **General characteristics**

The automatic transfer switch controller ATL10 is used for the automatic switching of the load from the MAIN LINE to a stand-by or emergency SECONDARY LINE and vice versa.

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 motorised circuit breakers. The transfer switch controller has the following main features:

- Supply input from battery supply 12-48VDC Measurement inputs of three-phase with neutral
- voltages, also suitable for 1 and 2-phase lines Display to view main and secondary line measurements
- 15 status LED indicators
- 6 digital inputs programmable
- 6 relay outputs programmable
- 3 operating modes: OFF-MAN-AUT Viewing of phase and phase-to-phase line voltage measurements
- Status viewing of motorised circuit breakers or contactors
- Configuration programming of lines and control parameters
- Emergency demand supervision parameter programming for stand-by generating sets
- Microprocessor supervision of functions
- RS232 communication interface
- Modbus<sup>®</sup>-RTU and Modbus<sup>®</sup>-ASCII communication protocols
- Set-up and remote control software via direct PC connection, analog or GSM modem or Ethernet network

CONTROL FUNCTIONS OF THE LINES

- Phase sequence and phase loss
- Minimum and maximum voltage
- Voltage asymmetry
- Minimum and maximum frequency.

**Operational characteristics** 

Auxiliary supply

- Auxiliary supply voltage: 12-48VDC
- Operating range: 9-70VDC
- Power consumption: 3W
- · Power dissipation: 3W
- Current consumption: 250mA at 12VDC; 130mA at
- 24VDC; 65mA at 48VDC. Voltage measurement inputs
- Rated voltage Ue: 480VAC phase-phase
- Measurement range: 50-576VAC phase-phase
- Frequency range: 45-65Hz.
- Digital inputs
- Negative type of inputs
- Input current: ≤10mA.
- Relay outputs
- 5 relay outputs, each with 1 NO contact
- 1 relay output with 1 changeover contact. Housing
- Flush-mount 96x96mm version
- Degree of protection:
- IP20 at rear
- IP54 on front.

#### Certifications and compliance

Certifications pending: cULus and GOST. Compliant with: IEC/EN 60947-1, IEC/EN 60947-6-1, IEC/EN 61000-6-3, IEC/EN 61000-6-2.

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Dimensions page D-56



# Automatic transfer switch controllers

# Automatic transfer switch controller



Qty Order Description Weight code per pkg n° [kg] ATL20 A240 Automatic transfer switch 0.700 1 controller with RS232 port; 144x144mm ATL30 A240 0.900 Automatic transfer switch 1 controller with RS232 and RS485 ports and real time clock; 144x144mm

### ATL20 A240 ATL30 A240

# Accessories

Order code	Description	Qty per pkg	Weight		
		n°	[kg]		
Software for ATL10, ATL20 A240 and ATL30 A240.					
ATL SW	Set-up and remote control software complete with 51 C2 cable	1	0.246		
Accessories a	Accessories and spare parts for ATL10.				
51 C2	PC ↔ ATL connecting cable, 1.8m long	1	0.090		
31 PA96X96	Front IP54 protective cover	1	0.077		
Accessories and spare parts for ATL20 A240 and ATL30 A240.					
51 C2	PC ↔ ATL connecting cable, 1.8m long	1	0.090		
31 PACR	Front IP54 protective cover	1	0.107		
Accessories a	nd spare parts for ATL30 A240				
51 C4	$PC \leftrightarrow 4 PX1$ converter connecting cable, 1.8m long	1	0.147		
51 C5	ATL ↔ analog modem connecting cable, 1.8m long	1	0.111		
51 C6	ATL $\leftrightarrow$ 4 PX1 converter connecting cable, 1.8m long	1	0.102		
51 C7	ATL ↔ GSM modem connecting cable, 1.8m long	1	0.137		
4 PX1	RS232/RS485 converter drive, opto-isolated, 220-240VAC	1	0.600		

O RS232/RS485 opto-isolated converter drive, 38,400 Baud rate maximum, automatic or manual TRANSMIT line supervision., 220-240VAC ±10% (110-120VAC supply on request).

# **General characteristics**

The automatic transfer switch controllers "ATL20" and "ATL30" are used for the automatic switching of the load from the MAIN LINE to a stand-by or emergency SECONDARY LINE and vice versa.

They are made of a single unit in an insulated housing and have two outputs for the "automatic" and/or "manual" control of contactors or motorised circuit breakers.

The transfer switch controllers have the following main features:

- Dual supply input, one for AC and the other for battery supply
- Measurement inputs of three-phase with neutral voltages, also suitable for 1 and 2-phase lines
- 2 displays to view main and secondary line
- measurements
- 22 status LED indicators
- 8 digital inputs, 6 of which programmable 7 relay outputs, 5 of which programmable
- 4 operating modes: OFF-MAN-AUT-TEST
- Viewing of phase and phase-to-phase line voltage measures
- Viewing of motorised circuit breakers or contactors status
- Configuration programming of lines and control narameters
- Emergency demand supervision parameter
- programming for stand-by generating set
- Microprocessor supervision of functions
- BS232 communication interface
- RS485 opto-isolated communication interface for ATL30 A240 only
- Modbus<sup>®</sup>-RTU and Modbus<sup>®</sup>-ASCII communication protocols
- Set-up and remote control software via direct PC connection, analog or GSM modem or Ethernet network.

CONTROL FUNCTIONS OF THE LINES

- Phase sequence and phase loss
- Minimum and maximum voltage
- Voltage asymmetry
- Minimum and maximum frequency.
- **Operational characteristics** 
  - Auxiliary supply
  - Auxiliary supply voltage: 12-48VDC and 220-240VAC@ • Operating range: 9-70VDC; 187-264VAC
  - Power consumption: 9VA at 240VAC
  - Power dissipation: 4.1W at 48VDC; 6.3W at 240VAC
  - Current consumption: 300mA at 12VDC; 180mA at 24VDC; 90mA at 48VDC
- Frequency range: 45-65Hz
- Voltage measurement inputs
- Rated voltage Ue: 690VAC phase-phase (400VAC phase-neutral)
- · Measurement range: 80-800VAC phase-phase
- Frequency range: 45-65Hz.
  Digital inputs
- Negative type of input
- Input current: ≤10mA
- Relay outputs
- 5 relay outputs, each with 1 NO contact
- 2 relay outputs, each with 1 changeover contact. Housing
- Flush-mount 144x144mm version
- · Degree of protection:
- IP20 at rear
- IP41 on front, without protective cover
- IP54 on front, complete with protective cover.

#### **Certifications and compliance**

Certifications obtained: cULus and GOST. Compliant with: IEC/EN 60947-1, IEC/EN 60947-6-1, IEC/EN 61000-6-3, IEC/EN 61000-6-2.

Other AC voltages are available on request

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