



Automatic transfer switch controller for 3 power sources and two tie-breakers, three phase control, with LCD display, built-in RS485, expandable ATL900

Product designation

Product type designation

General characteristics

Number of controlled power sources	Nr.	3
Number of tie-breaker controlled	Nr.	2
Display		Backlit LCD graphic display 128x112 pixel
Languages	Nr.	8
Expandability		3 expansion slot for EXP... Modules

AC Power supply

Rated supply voltage AC	VAC	100...240
Operating supply voltage range AC	VAC	90...264
Rated frequency	Hz	50/60
Operating frequency range	Hz	45...66
Immunity time for microbreakings		
	110VAC	ms ≤40
	220VAC	ms ≤200

Immunity time for microbreakings (with EXP expansions)

	110VAC 220VAC	ms ms	≤20 ≤100
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Power consumption AC (Max)	VA	16.5
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DC Power supply

Rated supply voltage DC	VDC	12-24-48
Operating supply voltage range DC	VDC	7.5...57.6

Current consumption Max	mA	510mA at 12VDC, 260mA at 24VDC, 135mA at 48VDC
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Maximum power consumption / dissipation	W	6.5
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Voltage inputs

Maximum rated voltage Ue		100...600VAC L-L (346VAC L-N)
Measurement range	V	50...720VAC L-L (415VAC L-N)

Frequency range	Hz	45...66Hz - 360...440Hz
Measurement method		True root mean square (TRMS)
Input impedance	phase-phase phase-neutral	>1.10MΩ >0.55MΩ
Measuring accuracy		±0.25% f.s. ±1 digit
Wiring mode		Single-phase, two-phase, three-phase line with or without neutral and balanced three-phase system

Current inputs

Measurement range		for scale 5A: 0.02 - 6A~ for scale 1A: 0.02 - 1.2A~
Type of input		Shunt supplied by external current transformer (low voltage) 5A max
Measurement method		True root mean square (TRMS)
Overload capacity		1.2 Ie
Overload peak	A	50A for 1 second
Burden per phase	W	<0.6VA

Digital inputs

Number of digital input	Nr.	12
Type of digital input		Negative
Digital current inputs	mA	≤8
Low input signal	VDC	≤2.2
High input signal	VDC	≥3.4
Input signal delay	ms	≥50

Calendar clock

Backup reserve power		Backup capacitor
Operating without power voltage		14 days approximately

Relay outputs

Number of relay output	Nr.	10
Contact arrangement		6 x 1NO-SPST + 4 x C/O-SPDT
Electrical life	cycles	10 ⁵
Mechanical life	cycles	10 ⁷

Static Outputs

Number of static output		1 (OUT8)
Static output type		NO
Operating voltage	V	10...30
Maximum current	mA	50

Interface

NFC interf.		Yes
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AUTOMATIC TRANSFER SWITCH CONTROLLER WITH OPTICAL PORT FOR 3 POWER SOURCES AND 2 TIE BREAKERS (180X240MM), POWER SUPPLY 110...240VAC AND 12/24/48VDC, EXPANDABLE WITH EXP... EXPANSION MODULES, BUILT-IN RS485, 3PH+N CURRENT INPUTS

Front optical USB communication port	Yes, with CX01 USB dongle (optional)
Front optical Wi-Fi communication port	Yes, with CX02 Wi-Fi dongle (optional)
USB communication	EXP1010 (optional)
RS232 communication	EXP1011 (optional)
RS485 communication	Built-in or EXP1012 (optional)
Ethernet communication	EXP1013 (optional)
Profibus communication	EXP1014 (optional)
Communication via Modem	EXP1015 (optional)

Functions

Number of tie breakers that can be managed	2
Programmable source type	Yes
Closed transition	Yes
Non-priority load management	Yes
Switching management with power thresholds	Yes
PLC logic	Yes
Timer	Yes
System layout available on display	14
Custom system layouts	Yes
User alarms	Yes
Limits	Yes
Event logging	250
Real time clock with backup reserve energy	Yes
Acoustic alarms	Yes
Analogue inputs	EXP1004 (optional)
Analogue outputs	EXP1005 (optional)
Accessory for alarm remoting	RGKRR (optional)

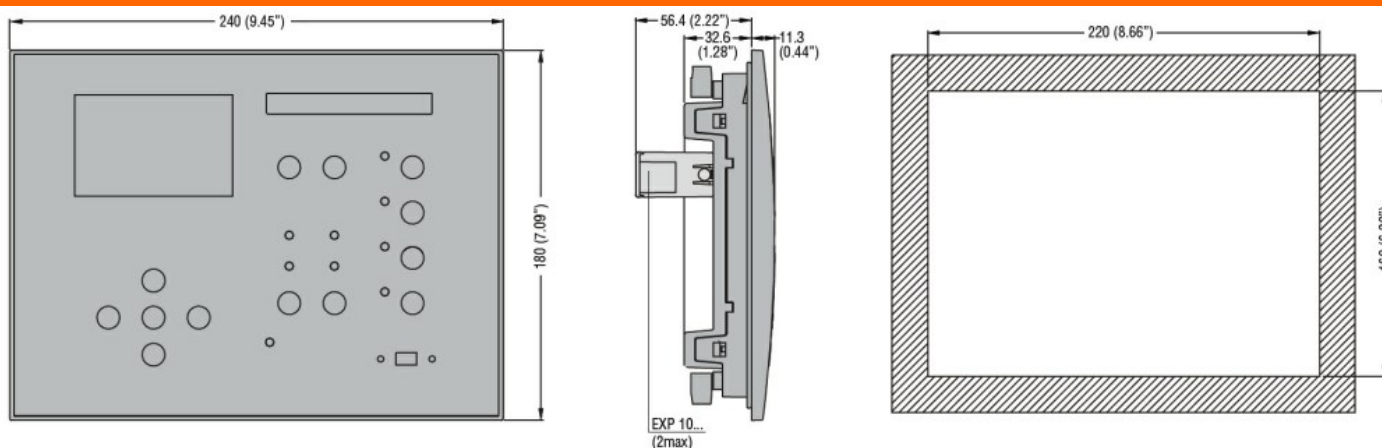
Ambient conditions

Temperature				
Operating temperature				
		min	°C	-30
		max	°C	+70
Storage temperature				
		min	°C	-30
		max	°C	+80
Relative humidity			%	<80%
Maximum Pollution degree				2
Overvoltage category				3
Measurement category				III
Climatic sequence				Z/ABDM (IEC/EN 60068-2-61)

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Shock resistance	15g (IEC/EN 60068-2-27)
Vibration resistance	0.7g (IEC/EN 60058-2-6)
Housing	
Execution	Flush mount
Material	Polycarbonate
Mounting	Flush mount - panel cut-out 220x160 mm
Degree of protection	IP65 on front, IP20 on terminals
Dimensions (W x H x D)	mm 240 x 180 x 43.9
Weight	g 1800

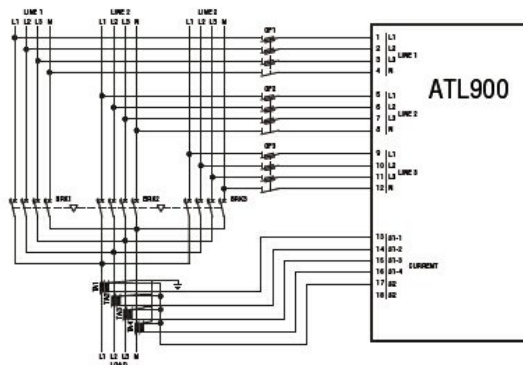
Dimensions



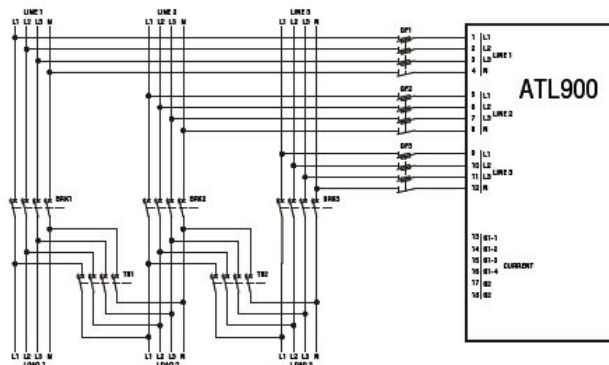
Wiring diagrams

AUTOMATIC TRANSFER SWITCH CONTROLLER WITH OPTICAL PORT FOR 3 POWER SOURCES AND 2 TIE BREAKERS (180X240MM), POWER SUPPLY 110...240VAC AND 12/24/48VDC, EXPANDABLE WITH EXP... EXPANSION MODULES, BUILT-IN RS485, 3PH+N CURRENT INPUTS

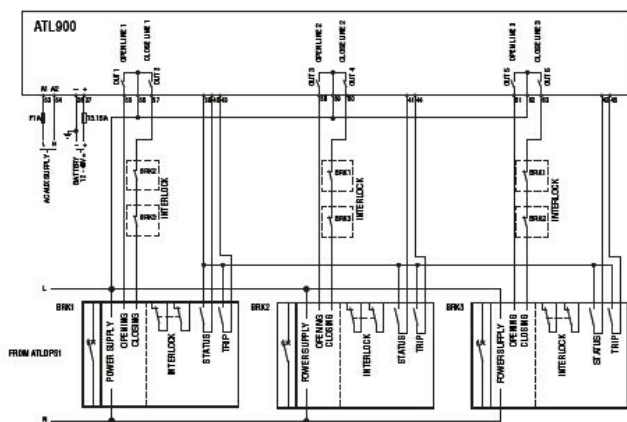
Power connection diagrams
Three breakers



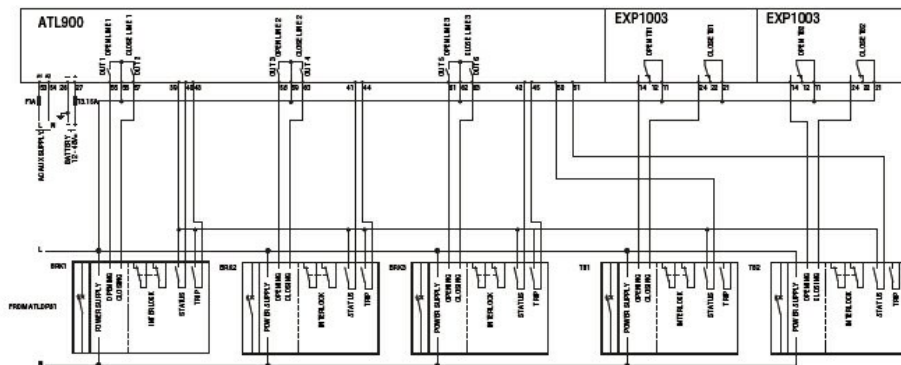
Power connection diagrams
Three breakers and two tie breakers



Control connection diagrams
Three breakers



Control connection diagrams
Three breakers and two tie breakers



Certifications and compliance

Compliance

CSA C22.2 n° 14

IEC/EN 60947-1

IEC/EN 60947-6-1

IEC/EN 61000-6-2

IEC/EN 61000-6-4

IEC/EN 61010-1

IEC/EN 61010-2

UL508

Certificates

cULus

EAC

RCM

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ETIM classification

ETIM 8.0

EC000236 - PLC
CPU-module