

Technical Data

	ATS-C 96	ATS-C 144
Power supply		
Rated operating voltage (Us)	12 – 24 – 48 V $\overline{\text{---}}$	12 – 24 – 48 V $\overline{\text{---}}$, 220 – 240 V~
Operating range	9 – 70 V $\overline{\text{---}}$	9 – 70 V $\overline{\text{---}}$, 187 – 264 V~
Maximum current consumption	250 mA 12 V $\overline{\text{---}}$; 130 mA 24 V $\overline{\text{---}}$; 70 mA 48 V $\overline{\text{---}}$	300 mA 12 V $\overline{\text{---}}$; 180 mA 24 V $\overline{\text{---}}$; 90 mA 48 V $\overline{\text{---}}$
Maximum power consumption	3,3 W	9 VA (Us = 240 V~)
Max. heat dissipation	3 W	6,3 W (Us = 240 V~) 4,1 W (Us = 48 V)
Safety on short-term interruption	50 ms	50 ms
Measuring inputs		
Maximum rated operating voltage (U _e)	400 V~ L-L (220 V~ L-N)	690V~ L-L (400V~ L-N)
Measuring procedure	TRMS (RMS value)	TRMS (RMS value)
Measurement input impedance	> 1,1 M Ω L-L	> 1,1 M Ω L-L
	and > 570 k Ω L-N	and > 0,5 M Ω L-N
Connection procedure	Single-phase, two-phase, three-phase system with or without neutral conductor	Single-phase, two-phase, three-phase system with or without neutral conductor
Measuring range	50 - 576 V~ L-L	80 - 800 V (L-L)
Frequency	45 - 66 Hz	45 - 65 Hz
Measurement error	0,25 % $\pm$ 1 digit	0,25 % $\pm$ 1 digit
Communication cables		
Serial interface RS232	Connection through RJ6/6. USB-adapter in ATS-SW enclosed.	Connection through RJ6/6. USB-adapter in ATS-SW enclosed.
Serial interface RS485		Connection through plug-in terminals
Real-time clock		
Charging reserve		Storage capacitor
Operation without supply supply		Approx. 12 to 15 days
Insulation		
Rated insulation voltage Ui	480 V	690 V
Environmental Conditions		
Operating temperature	-20 – +60 °C	-20 – +60 °C
Storage temperature	-30 – +80 °C	-30 – +80 °C
Relative humidity	< 90 % (IEC/EN 60068-2-78)	< 90 % (IEC/EN 60068-2-78)
Maximum pollution degree 3	3	3
Overvoltage category 3	III	III
Measurement category	III	III
Installation altitude	$\leq$ 2000 m	$\leq$ 2000 m
Climate sequence	Z/ABDM (IEC/EN 60068-2-61)	Z/ABDM (IEC/EN 60068-2-61)
Mechanical shock resistance	10 g (IEC/EN 60068-2-27)	15 g (IEC/EN 60068-2-27)
Vibration resistance	0,7 g (IEC/EN 60068-2-6)	0,7 g (IEC/EN 60068-2-6)
Connections		
Terminal type	Bolt on	Bolt on
Conductor cross-section (Min/Max)	0,2 - 2,5 mm ²	0,2 - 2,5 mm ²
Tightening torque	0,5 Nm	0,5 Nm
Housing		
Model	Flush mounting	Flush mounting
Degree of protection	IP54 front - IP20 at terminals	IP41 front, IP20 at terminals
Weight	470 g	1050 g
Approvals and conformity		
Fulfills standards	IEC/EN 60947-6-1	IEC/EN 60947-6-1
	IEC/EN 61000-6-2, IEC/EN 61000-6-3	IEC/EN 61000-6-2, IEC/EN 61000-6-3
	IEC/EN 61010-1	IEC/EN 61010-1

Control Parameters (einstellbar)

Phase-phase voltages
Phase-neutral voltages
Voltage asymmetry
Frequency
Battery voltage
Phase loss
Phases sequence

Alarms (konfigurierbar)

Low battery voltage
High battery voltage
Line 1 switch fault
Line 2 switch fault
Line 1 wrong phase sequence
Line 2 wrong phase sequence
Generator not ready

Functions

TECHNICAL CHARACTERISTICS	ATS-C96	ATS-C144
Programmable Inputs	✓	✓
Programmable Outputs	✓	✓
Line to Line Function	✓	✓
Line to Generator Function	✓	✓
Generator to Generator Function		✓
Auto Mode with Manual Return to Mains Function	✓	✓
Automatic test on-load or off-load	✓	✓
Programmable Alarms Property	✓	✓
Events Logging	✓	✓
Operational Statistic Data Recording		✓
Alarm Relay	Programmable	Programmable
Alarms Text Display	✓ (5 languages)	
Set-up Mode	Manual or via PC	Manual or via PC
Mod-Bus RTU or ASCII Protocols	✓	✓
Remote Control PC SW availability		✓
RS232	✓	✓
RS485 (opto-insulated)		✓
Real Time Clock with Energy Backup		✓
Non Volatile Memory for Event/Statistic-Data	✓ (only events)	✓



Selection information

Type designation	Article No.	Dimensions (mm)
NZM-XATS-C96	164330	96 x 96 x 94 mm
NZM-XATS-C144	164331	144 x 144 x 94 mm
NZM-XATS-CSOFT	164332	