

AUTOMATIC
RECLOSERS

AMP



AMPERA

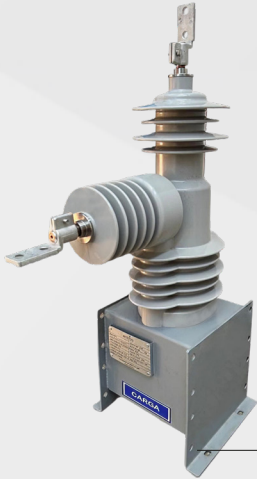
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AMP AUTOMATIC RECLOSERS

The **AMP Automatic Recloser** line is designed for critical applications in primary distribution networks up to 38 kV, available in **single-phase and three-phase configurations**, integrating advanced protection, automation, and control functions. AMP reclosers combine electromechanical robustness with digital intelligence, enhancing power system reliability, service continuity, and operational efficiency.



Three-Phase Recloser **AMP27**



MAIN BENEFITS AND FEATURES

Vacuum interruption technology, ensuring high switching capability and reliable performance under severe operating conditions.

High-precision current and voltage sensors, epoxy-encapsulated, providing metrological stability and extended service life.

Solid polymeric insulation with high resistance to ozone, pollution, humidity, and ultraviolet radiation.

Bistable magnetic actuator, delivering precise synchronization, smooth operations, and extended mechanical lifetime.

Stainless steel construction, ensuring high corrosion resistance and long-term structural durability.

Single-Phase Recloser **AMP27-M**

CHARACTERISTIC	AMP27-M	AMP27	AMP38
Configuration	Single-phase	Three-phase	Three-phase
Voltage class	Up to 27 kV	Up to 27 kV	Up to 38 kV
Rated current	800 A	800 A	800 A
Short-circuit withstand current	16 kA / 3 s	16 kA / 3 s	16 kA / 3 s
Approximate weight	45 kg	120 kg	150 kg
Applicable standards	IEC 62271-111 / ANSI C37.60		

PEXTRON® R550 CONTROL UNIT

The **PEXTRON® R550 Control Unit** integrates advanced protection, metering, control, and communication functions within a high-performance architecture. It is compatible with the AMP Recloser line across different configurations and voltage classes, enabling efficient network automation, real-time monitoring, and seamless integration with supervision and automation systems, with high reliability and robustness to meet the operational demands of modern distribution networks.



PEXTRON® R550
IED Control Unit

MAIN BENEFITS

- Compatibility with single-phase and three-phase AMP series reclosers.
- Stainless steel enclosure with IP65 protection rating.
- Human-machine interface with touchscreen display and functional keypad.
- Event recording, oscillography, and load profiles for analysis and diagnostics.
- Integration with standard market communication protocols and SCADA systems.



TECHNICAL SPECIFICATIONS – FUNCTIONALITY

FUNCTIONALITIES	DESCRIPTION	AVAILABLE
Operating Mode	Three-phase or Single-phase	Yes
HCL	High Current Lock (Closing Block due to High Current)	Yes
CLP	Cold Load Pickup (Cold Load Pickup Function)	Yes
IR	Inrush (Pickup Shift for a Defined Time During Closing)	Yes
DFT	Harmonic Filter	Yes
2H	Second Harmonic Blocking	Yes
TRAD	Decentralized Automatic Transfer	Yes
SEC	Sectionalizer	Yes
PCV	Live Line Protection (Closing Block due to Voltage Presence)	Yes
HLT	Hot Line Tag (Fast Operation with Defined Time)	Yes
I ² t	Electrical Wear Accumulator (Amperes Squared × Arc Extinction Time)	Yes
Source Side	ABC or RST	Yes
Phase Sequence	ABC / ACB / BAC / BCA / CAB / CBA	Yes
MAT	Maximum Operations per Time (Closing Block due to Excessive Operations per Hour)	Yes
Fault Locator	Fault Locator with Distance Indication in Kilometers	Yes
I/O Programming	Matrix Logic	Yes
Setting Groups (Setup)	6 Groups	Yes
Mass Memory	2,048 Event Records	Yes
Load Profile	4,096 Memory Records	Yes
Oscillography (COMTRADE file)	Memory for 32 s of Oscillography Pre-fault and Post-fault of 1 s each Resolution of 32 samples per cycle	Yes
Local Serial Port (Front)	USB Type A (flash drive) / USB Type B (computer)	Yes
Remote Serial Port (Rear)	Remote Serial Port (Rear): 2 × RS232 and 1 × RS485	Yes
Ethernet Port (Rear)	3 × RJ45	Yes
Communication Protocols	DNP3 Level 2 Modbus RTU / IEC 61850 (Upon Request)	Yes
TIME SYNCHRONIZATION (NTP/DNP/SNTP)	Clock Screens, DNP/TCP, Load Profiles / Oscillography with Timestamp	Yes
Auxiliary Power Supply	24 Vdc	Yes
Current Inputs	3 Inputs (IA, IB, IC – phase and IN/IG – neutral/ground sensor)	Yes
Current Measurement	CT In = 1 A – range from 20 mA to 12 A	Yes
Voltage Inputs	6 Voltage Inputs (VA, VB, VC – source and VR, VS, VT – load)	Yes
Voltage Measurement	Resistive Divider (mΩ)	Yes
Logic Inputs	8 Binary Logic Inputs (6 isolated and 2 common)	Yes
Relay Outputs	11 Configurable Outputs (7 signaling and 4 power)	Yes
I/O Module (Optional)	12 Digital Inputs (3 groups of four independent channels) 12 Bistable Digital Outputs (3 groups of four independent channels)	Yes
HMI	LCD Touchscreen Display	Yes
LEDs	38 Indications	Yes
Keypad	2 Switch Control Keys 1 Local/Remote Key 2 Programmable Keys 5 Navigation Keys 9 Function Keys 16 Programmable Keys (Touchscreen)	Yes



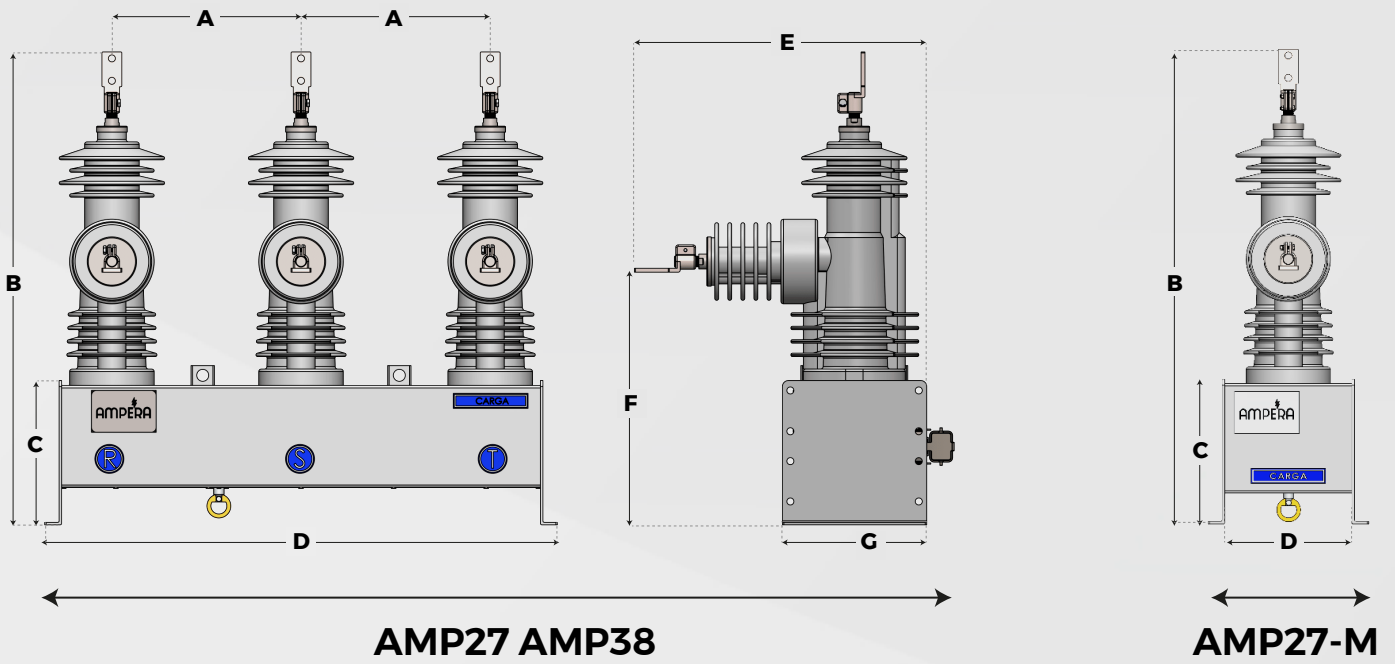
TECHNICAL SPECIFICATIONS - PROTECTION FUNCTIONS

PROTECTION FUNCTIONS	DESCRIPTION	AVAILABLE
30	Annunciator	1
50 / 51	Phase Instantaneous / Time Overcurrent	1
50N / 51N	Neutral Instantaneous / Time Overcurrent	1
50Q / 51Q (46)	Negative Sequence Phase Instantaneous / Time Overcurrent	1
50SEF / 51SEF	Sensitive Earth Fault Instantaneous / Time Overcurrent	1
50V/51V	Phase Overcurrent with Voltage Restraint	1
67	Directional Phase Overcurrent	4
67N	Directional Neutral Overcurrent	4
27 / 27-0	Undervoltage / Auxiliary Power Supply Undervoltage	2
59	Phase Overvoltage	2
59N (64C)	Neutral Overvoltage (Residual Overvoltage)	1
32P	Directional Active Power (Single-phase / Three-phase)	2
32Q (40)	Directional Reactive Power	1
25	Synchronism Check	1
47 (48)	Voltage Phase Sequence (Phase Loss)	1
62BF (50BF/51BF)	Time-Delayed Breaker Failure	1
78	Vector Shift (Three-phase / Positive Sequence)	1
79I	Automatic Reclosing	1
81U / 81UR	Underfrequency / Rate of Change of Underfrequency (df/dt)	3
81O / 81OR	Overfrequency / Rate of Change of Overfrequency (df/dt)	2
86	Lockout	Yes
98	Oscillography	Yes
99	Logic Selectivity	Yes

RECLOSER MANUFACTURING MODEL	AMP27-M	AMP27	AMP38
Applied Standards (Configuration)	1 (Single-phase)	3 (Three-phase)	
Weight	45 kg	120 kg	150 kg
Rated Voltage	13.8 kV 24.2KV	34.5KV	
Maximum Rated Voltage	15.5kV 27KV	38KV	
Power Frequency Withstand Voltage	60 kV	70 kV	
Lightning Impulse Withstand Voltage (BIL)	150 kVp	170 kVp	
Rated Current	800 A		
Short-Time Withstand Current	16 kA for 3 seconds		
Maximum Interrupting Current	16 kA		
Peak Making Current	40 kAp		
Rated Frequency	50 / 60 Hz		
Interrupting Medium	Vacuum		
Insulation Material	Polymeric		
Mechanism Type	Single-Solenoid Magnetic Actuator		
Mechanical Operations at Rated Load	10,000		
Operating Temperature (Ambient)	-30 °C to +50 °C		
Operating Altitude	Up to 2.000 m		
Applicable Standards	IEC 62271-111 / ANSI C37.60		



DIMENSIONS - AMP RECLOSERS



	A	B	C	D	E	F	G
AMP27-M	-	950	290	325	560	520	290
AMP27	380	950	290	1030	560	520	290
AMP38	380	1033	290	1030	580	600	290

