



## Features :

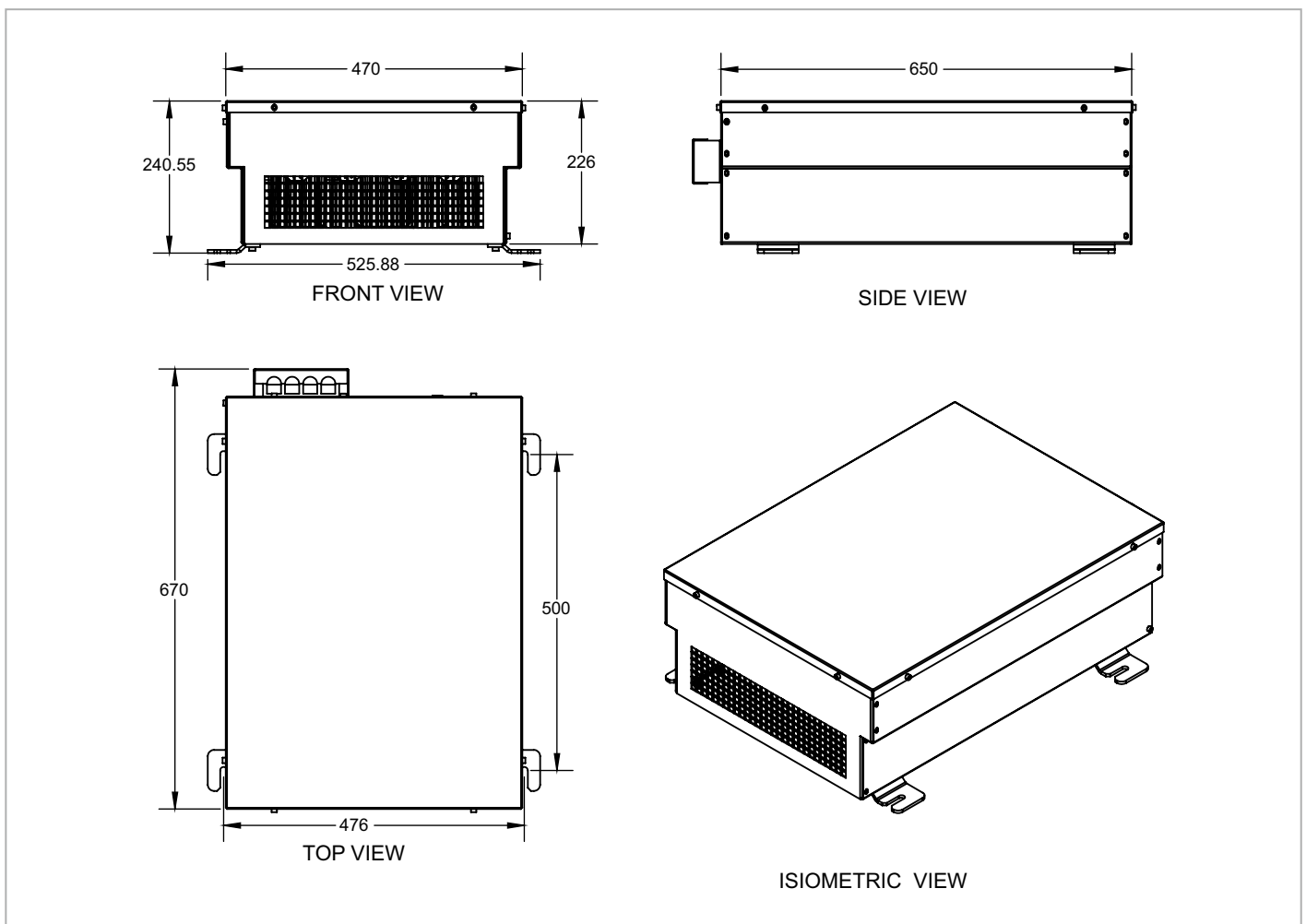
- ▶ Real time, dynamic step-less compensation
- ▶ Instant response time of 50  $\mu$ sec & full response in less than 1 cycle
- ▶ Capacitive (Leading) & Inductive (Lagging) reactive power mitigation
- ▶ Harmonic correction up to 51<sup>th</sup> order
- ▶ RS485, Optional Wi-Fi / Ethernet modular arrangement-parallel operation up to 8 module
- ▶ Can be installed with conventional capacitor banks

## Technical specifications

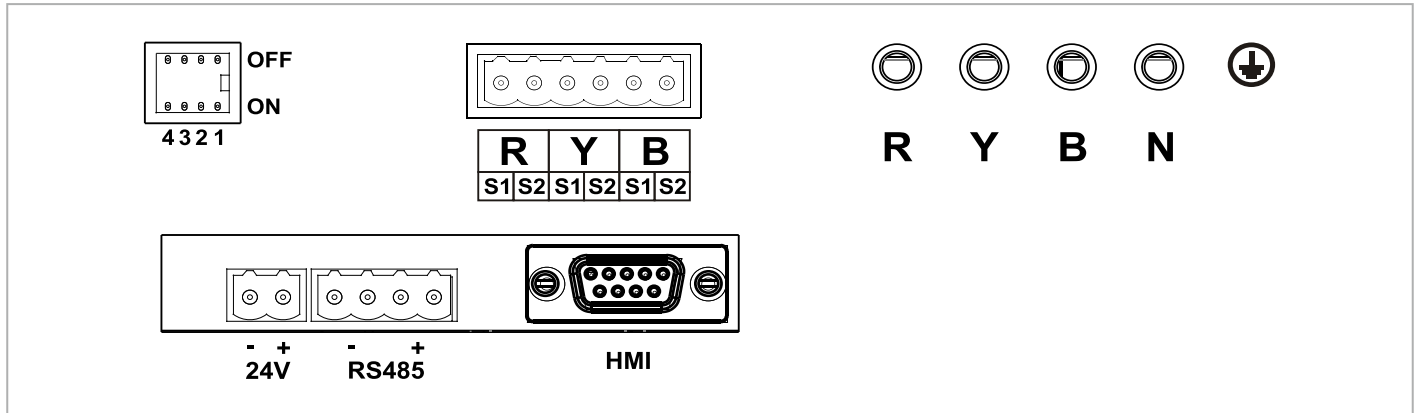
Main	
Product name	AHF
Product or component type	Active harmonic filter
Complementary	
Network type	3P
Network configuration	3P-3W / 3P-4W
Network rated voltage	308V to 460V
Network frequency	50/60HZ (2.5Hz)
Nominal voltage	415
Maximum permissible voltage	1.1 x Un
Neutral connection	Provided
RMS Output current rating	50A
Current transformer	Settable through HMI up to 10000 / 5A
CT Location	Grid side / Load side
Topology	Three level topology
Reactive power rating	36kVAr at 415V
Advance functions	
Harmonic mitigation	Upto 51 <sup>th</sup> order for max current rating of 50A
Operating modes	Harmonic cancellation, Load Balancing, Power factor correction
Mechanicals and installation	
Installation location	Indoor
Enclosure mounting	Wall mounted / Rack mounted / Floor mounted
Protection type	Over-voltage protection, Under-voltage protection, Inverter bridge inverse protection, Over compensation protection, over-current protection
Heat dissipation	Rear plenum with forced ventilation for high heat flow
Cooling	151L / Sec
Dimensions (W x D x H) mm	470*240*670
Colour	RAL7035
Performance	
Parallel operations	Upto 8 units
Efficiency	$\geq 97\%$
Losses	$< 3\%$
Response time	$< 50\mu$ s
Overall response time	$< 5$ ms
Target PF	-1~1 Adjustment

Communication	
Communication port	RS485, Ethernet & WiFi (Optional)
Communication protocol	MODBUS-RTU (Default), MODBUS TCP-IP (Optional)
Display interface	4.3 inch HMI (Optional)
Accessibility for operation	Through HMI & Remote
Certification	
Electromagnetic compatibility	Conducted EMC, Class A conforming to EN 61000-6-4
Environment	
Enclosure degree of protection	IP 20
Environmental characteristic	Operating: 3C2 conforming to IEC 60721-3-3 Storage: 3C3 conforming to IEC 60721-3-3
Operating altitude	<2000m
Ambient air temperature or operation	-10 to 45°C
Relative humidity	0...95 %
PCBA Protection	Conformal coated
Standards	EN 61000-6-4
Ambient air temperature for storage	-----
Contractual warranty	
Warranty	12 months

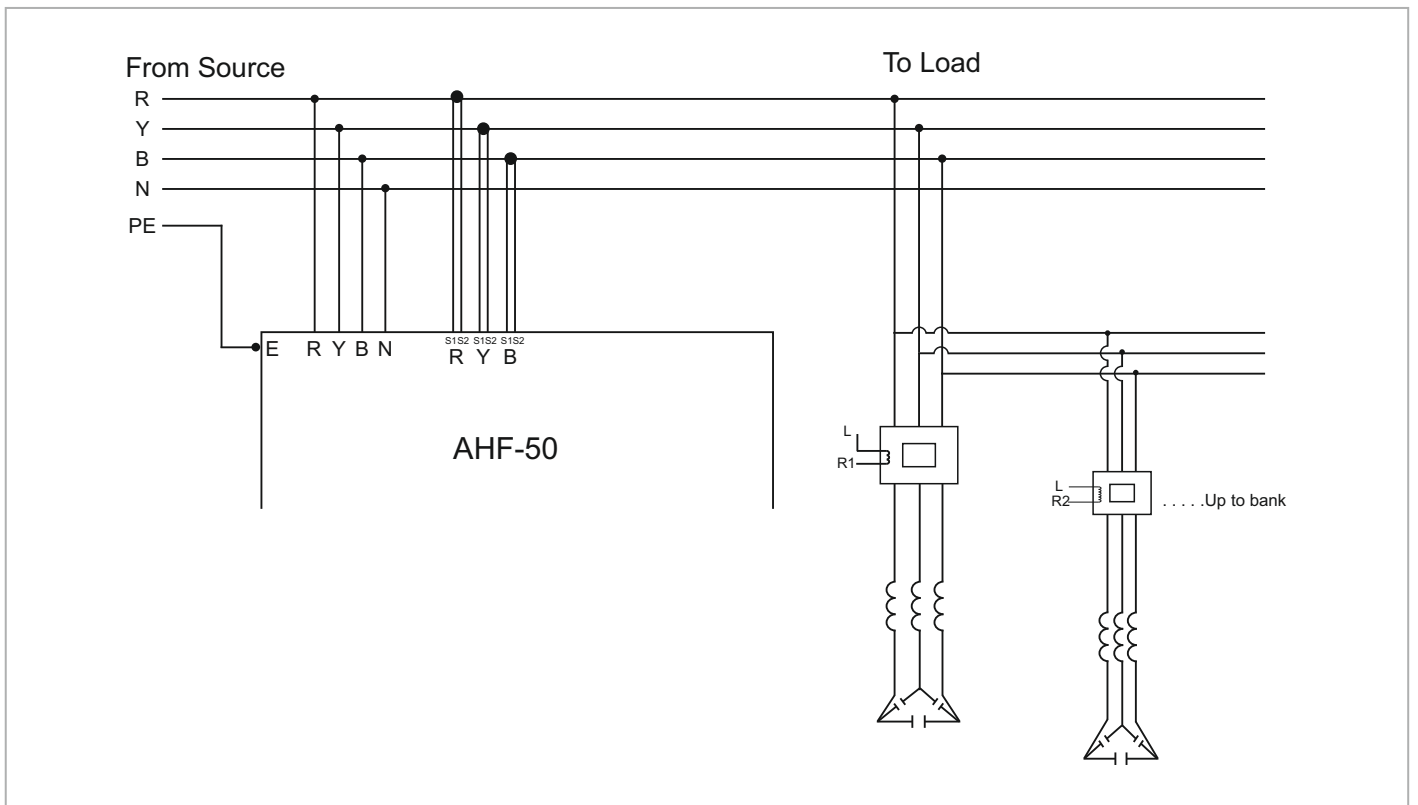
## Mechanical dimensions



## Terminal diagram



## Terminal connection



## Ordering information

Product code	Description
AHF-050-RCK-4P-04	Active harmonic filter 50A, Rack mounted, 3P-4W with 4.3 inch HMI
AHF-050-WLL-4P-04	Active harmonic filter 50A, Wall mounted, 3P-4W with 4.3 inch HMI
AHF-050-WLL-4P-XX	Active harmonic filter 50A, Wall mounted, 3P-4W without display

**Note :** For XX Model separate common controller is mandatory