



V SERIES

THREE-PHASE **INVERTER**



...>>> **50kW**



PV STRING MONITORING

Real time PV string current sampling and monitoring, with string performance analysis and report abnormal condition capability.



PID RECOVERY

Improving panel efficiency over life time and prevents further degradation with auto detection and adjustment.



AFCI FUNCTION

Providing safe and reliable protection against arc, and accurate and fast response to ensure man and device safety.



IP66 RATED

Reliable performance under extreme environment and temperature condition, extending product life with minimum effort.

REFINED – POWERFUL – FLEXIBLE

The V Series inverter range is aimed at three-phase domestic commercial installations, offering unrivalled performance and versatility for increased yield potential and longer generation windows.



For more about the Fox ESS range of three-phase inverters, visit:
www.fox-ess.com



TECHNICAL SPECIFICATIONS

MODEL	V50
INPUT(PV)	
Max. Recommended DC Power [kW]	100
Max. Input Voltage [V]	1100
Start-up Input Voltage [V]	250
Rated Input Voltage [V]	600
MPPT Operating Voltage Range [V]	200 ~ 1000
MPPT Voltage Range [V] (Full load)	550 ~ 800
Max. Input Current per MPPT [A]	40
Max. Short-circuit Current [A]	50
No. of MPP Trackers	4
Strings per MPP Tracker	2
OUTPUT(AC)	
Nominal Output Power [kW]	50
Nominal Output Apparent Power [kVA]	50
Max. AC Active Power [kW]	55
Max. AC Apparent Power [kVA]	55
Nominal Output Voltage [V]	380/400, 3W+N+PE
Nominal AC Grid Frequency [Hz]	50/60
AC Grid Frequency Range [Hz]	45 ~ 55 / 55 ~ 65
Max. Output Current [A]	83.6
Output Power Factor	0.8 leading to 0.8 lagging
THDi [%]	<3 at Nominal Output Power
EFFICIENCY	
European Efficiency [%]	98.1
Max. Efficiency [%]	98.5
PROTECTION	
DC Switch	YES
DC Reverse Polarity Protection	YES
AC Short-circuit Protection	YES
AC Overcurrent Protection	YES
Insulation Monitoring	YES
Residual Current Monitoring	YES
PV String Current Monitoring	YES
Surge Protection	DC Type II / AC Type II
PID Recovery	YES
AFCI	YES
Anti-islanding Protection	YES
Grid monitoring	YES
Night SVG	YES
Anti-Corrosion	C5
GENERAL DATA	
Dimensions (W*H*D) [mm]	640*430*243
Weight [kg]	50
Cooling Method	Smart air cooling / FAN
Max. Operating Altitude [m]	4000
Operating Temperature Range [°C]	-30 ~ 60
Humidity [%]	0 ~ 100 (No Condensation)
Ingress Protection	IP66
Pollution Degree	PD 2 (inside), PD 3 (outside)
Protective class	Class I
Over Voltage Category	II (DC), III (AC)
Communication	RS485/USB/Wi-Fi+LAN
Display	LED, Wi-Fi+APP
STANDARD COMPLIANCE	
Grid Regulation	EN50549-1