



Force

60-300 KVA

Features

- High frequency and double conversion on-line technology
- Advanced PFC technology
- 3U frame, rack-mounted and tower convertible
- EPO function
- Wide input voltage range
- Fully digitized microprocessor control
- Parallel redundancy
- Advanced battery management
- Lightning and surge protection, short circuit and overload protection
- Multilingual LCD and LED display
- EMI/RFI noise filter
- Smart RS232 communication with monitoring software
- Optional SNMP card slot



UPS Cabinet Control Panel



Module Control Panel



Battery Cabinets(Optional)



3 U Battery Box Optional



6kVA /10kVA 1:1 phase
6kVA /10kVA 3:1 phase

10kVA /15kVA / 20kVA / 25kVA
/ 30kVA 3:3 phase

40kVA 3-3 phase

Force 60-300 KVA Specification

Model		3FCM-60K	3FCM-100K	3FCM-200K	3FCM-250K	3FCM-90K	3FCM-150K	3FCM-300K
Capacity (VA/WATT)	UPS cabinet	10~60KVA/9~54KW	10~100KVA/9~90KW	10~200KVA/9~180KW	250KVA/225KW	90KVA/81KW	150KVA/135KW	300KVA/270KW
	HPM module	10KVA/9KW, 15KVA/13.5KW, 20KVA/18KW			25KVA/22.5KW	25KVA/22.5KW, 30KVA/27KW		
Input								
Nominal Input Voltage		380/400/415Vac, (3Ph+N+PE)						
Input Voltage range		208~478Vac						
Input Frequency range		40 ~70Hz						
Input Power factor		≥0.99						
Bypass								
Bypass Voltage		Max.voltage: 380V: +25%(optional +10%, +15%, +20%)						
		400V: +20%(optional +10%, +15%)						
		415V: +15%(optional +10%)						
Bypass Frequency range		Min. voltage: -45% (optional -20%, -30%)						
Transfer time		Frequency protection range: ± 10%						
Generator Input (Soft start)		Mains to Battery:0ms; Mains to Bypass:0ms						
Support								
Output								
Output Voltage		380/400/415Vac, (3Ph+N+PE)						
Voltage regulation		± 1%						
Output Frequency		1.Line Mode: ±1%, ±2%, ±4%, ±5%, ±10% of the rated frequency(optional) 2.Battery Mode: 50/60(±0.1)Hz						
Crest Factor		3:1						
Harmonic distortion (THDv)		≤2% with linear load, ≤5% with non-linear load						
Efficiency		95.5%			95%			
Output Power Factor		0.9/1(Optional)						
Battery								
Battery DC Voltage		±192Vdc/±204Vdc/±216Vdc/±228Vdc/±240Vdc; battery quantity(optional)						
Battery Type		sealed lead acid						
Backup time		Depends on the capacity of external batteries.						
Charge current	UPS cabinet	18A (Max.)	30A (Max.)	60A (Max.)	60A (Max.)	30A (Max.)	50A (Max.)	100A (Max.)
	module	6A (Max.) (charge current can be set according to battery capacity installed)						
System Features								
Overload capacity	Line Mode	Loads≤ 110%:60min; ≤ 125%:last 10min; ≤ 150%:last 1min; ≥ 150% turn to bypass mode immediately						
	Bat. Mode	Loads≤ 110%:last 10min, ≤ 125%:last 1min, ≤ 150%:last 1s, ≥ 150% shut down UPS immediately						
	Bypass Mode	Breaker(10KVA: 20A/15KVA: 32A/20KVA:40A)		Breaker(25KVA:40A)		Breaker(25KVA:40A/ 30KVA:60A)		
Short circuit		Hold Whole System						
Communication interface		1. UPS cabinet : RS232, RS485, Dry contact, Intelligent slot x 2(SNMP card, Relay card optional) UPS module: RS232						
Physical								
Dimension (DxWxH)mm.	UPS cabinet	840 x 600 x 1400		1100 x 600 x 2000	600 x 1100 x 2000	600 x 840 x 1400		1100 x 600 x 2000
	module	443 x 580 x 131 (3U)						
Net Weight (KGs)	UPS cabinet	149	152	290	290	158	170	307
	module	10KVA/26; 15KVA/30; 20KVA/31			32	25KVA/32; 30KVA/33.5		
Environmental								
Operation temperature		0°C ~40°C						
Storage Temperature		-25°C ~55°C						
Humidity Range		0 ~95% (non-condensing)						
Noise level		<65dB			<70dB			
Altitude		< 1500m						
Standards								
Safety		IEC/EN62040-1,IEC/EN60950-1						
EMC		IEC/EN62040-2,IEC61000-4-2,IEC61000-4-3,IEC61000-4-4,IEC61000-4-5,IEC61000-4-6,IEC61000-4-8						
Design		IEC/EN 62040-3						
IP Rating		IP20						